

Torch Lake Township Planning Commission (PC)

Regular Meeting Agenda

Wednesday, February 11, 2026

7:00 PM

Community Services Building, Torch Lake Township, Michigan

Please turn off cell phones.

Public Hearing/Public Comment Rules:

Fill out comment card at the back of the room if you wish to speak. Turn into the secretary.

Each member of the public will be given 3 minutes to address the Planning Commission.

Comments should be directed at the Chair.

Please no clapping or cheering.

1. Call to Order
2. Pledge of Allegiance
3. Consideration of Agenda
4. Conflict of Interest
5. Approval of Meeting Minutes from November 17, 2025
6. Public Comment on Agenda Items
7. Correspondence
8. Unfinished Business
9. New Business
 - a. **Introduction:** SPR 2026-01 Charles Loughrey at 3910 US 31 S, 313-004-00 & 313-004-10 for a restaurant, hotel, and live/work units
 - b. Master Plan Review
 - i. Chapters to date
 - ii. Implementation
10. On-Going Reports
 1. Zoning Administrator's Report
 2. PC Representative to ZBA Report
 3. TLT Board Representative on PC Report

11. Public Comment

12. Concerns of Commission

- A. Chair
- B. Members
- C. Consultant

13. Adjournment

TORCH LAKE TOWNSHIP
ANTRIM COUNTY, MICHIGAN

Torch Lake township
Planning Commission Meeting
Community Service Building
Draft Minutes
November 17, 2025

Present: Clarke, Walker, Carleton, Petersen

Absent: None

Others: S. Kopriva

Audience: 3

Recording Secretary: M. Merchant

1. **Call to Order Regular Meeting**-called to order at 7:00pm by Clarke
2. **Pledge of Allegiance**-recited
3. **Consideration of Agenda**-approved by consent
4. **Conflict of Interest**-none
5. **Approval of Minutes of October 20, 2025**-Approved as is. Clarke/Carleton 4-0
6. **Public Comment:**
 - Rita Service goes over the Parks and Rec Plan draft with concerns about typos, factual errors, and missing data in the document.
 - Sara Kopriva comments that the document is not yet final, must go through the board and a public hearing.
7. **Correspondence**-none
8. **Unfinished Business:**
 - a. Park and Recreation Plan: Tentatively adopted, going to the Board for review on November 18, 2025.
9. **New Business:**
 - a. Election of Officers-Walker makes motion to keep the current slate, second by Carleton. Passes 4-0.
 - b. Bylaw Review-just updated in June, no additional content changes at this time. Motion to adopt the bylaws. Clarke/Carleton. Passes 4-0.
 - c. 2026 Meeting Calendar-Meetings will continue to be 3rd Monday of the month 7:00pm. Motion by Petersen, second by Clarke. Passes 4-0.
10. **On-Going Reports:**

1. **Zoning Administrator's Report**-Haven't had a ZBA meeting since June, there will be one on November 19, 2025. There have been several enforcement items. 62 permits issued YTD, 45 last year at this time. Continuing work on the Master Plan.
 2. **PC Representative to ZBA**-none
 3. **TLT Board Representative on PC Report**-Bob Cook speaks in Graves absence. Thanks the PC Board for their work. Expresses concerns about having a public hearing with regards to the Parks and Rec Plan while 40% of the population is away.
- 11. Public Comment**-none
- 12. Concerns of Commission:**
- A. **Chair**-none
 - B. **Members**-Walker hopes to move forward with the PC's proposed timeline for the Parks and Rec Plan, having the public hearing in January.
- 13. Adjournment**-Motion by Petersen/Walker to adjourn at 7:30pm. Passes 4-0.

Please see full meeting online for more details.

i
initiative

General Description

The applicant has submitted a site plan review application for a multi-use property that will include a restaurant, hotel, and dwellings above commercial (live/work) units. This property currently contains a commercial building that has not been used commercially for many years. The applicant is proposing to use the existing building as a restaurant and hotel and add new live/work units.

Aerial Image



616.585.1295 ph



initiative

Subject Property Location	
Address	Parcel Number
3910 US 31	05-14-313-004-00 05-14-313-004-10
Legal Description	
COM AT N 1/4 COR, TH S 89 DEG E 741.19 FT TO NELY LINE OF HWY US 31, TH ALG SD HWY S 24 DEG E 155.72 FT TO POB, TH N 88 DEG E 252.89 FT, TH S 01 DEG E 16.92 FT TH N 88 DEG E 30.70 FT, TH S 09 DEG E 246.21 FT, TH S 89 DEG W 210.33 FT TO ELY LINE OF US 31, TH N 23 DEG W 38.44 FT, TH N 24 DEG W 241.88 FT ALG SD HWY TO THE POB, BEING PART OF GOV LOT 1 SEC 13 T31N R9W	

Existing Conditions of Subject Property	
Zoning	Area
Commercial	1.9 ac
Existing Uses	
Vacant Commercial Building-Former Restaurant	
Site Conditions	
Fairly level, Torch Lake	

Adjacent Zoning & Land Uses		
Location	Zoning	Land Use / Owner
North	R-1	Residential-Ronald Brunink
South	R-1	Residential- Keri Mann Trust
East	R-2	Vacant- Charles Loughrey Trust
West	R-1/Torch Lake	Residential- Multiple

Relationship to Master Plan
Future Land Use Category – Residential
Future land use at residential with acknowledgement that it is a commercial use on commercial zoned property. Pg 72 of Torch Lake Master Plan

§ 6.17 Motels and Hotels	
Standard	Site Plan
A. Motels and hotels shall have a minimum lot width of one hundred fifty (150) feet at road line.	Provided
B. There shall be at least eight hundred (800) square feet of lot area per guest room.	Provided
C. Each unit shall contain at least a bedroom and bathroom and a minimum gross floor area of two hundred fifty (250) square feet.	Provided
D. Motels and hotels shall provide customary motel services, such as maid service, linen, telephone and/or desk service, and the use of furniture.	Provided, additional details may be needed

Staff recommendations on additional details that are needed for the application:

Setback lines

Height details on structures

Dumpster details- Screening, location out of setbacks

Landscaping- Foundation, lot, and right-of way

Shoreland Protection Strip details

Buffering from neighboring residential uses

Outside agency review/permit- Health Department, Stormwater, Fire Department

Exterior lighting details, if being proposed

APPLICATION FOR ZONING PERMIT

PROPERTY INFORMATIONParcel #: 05-14- 313-004-00Property Address: 3910 US HWY 31 NORTH, KEWADIN, MI 49648Waterfront: Torch Lake ☐ GT Bay ☐ None ☒Within 500 feet of a Lake, River, or Stream? Yes ☒ No ☐Soil Erosion Permit #: N/AProperty contain: H.R.E.A.: ☐ Wetlands: ☐ Critical Dunes: ☐ NA: ☒Zoning District: VB ☐ VR ☐ R-1 ☐ R-2 ☐ R-3 ☐ AG ☐ C ☒ M ☐ Timber ☐**PROJECT INFORMATION**Type of Development: ☐ New Home ☐ Garage ☐ Acc. Bldg. ☐ Addition ☐ Deck ☒ other

Description/Intention:

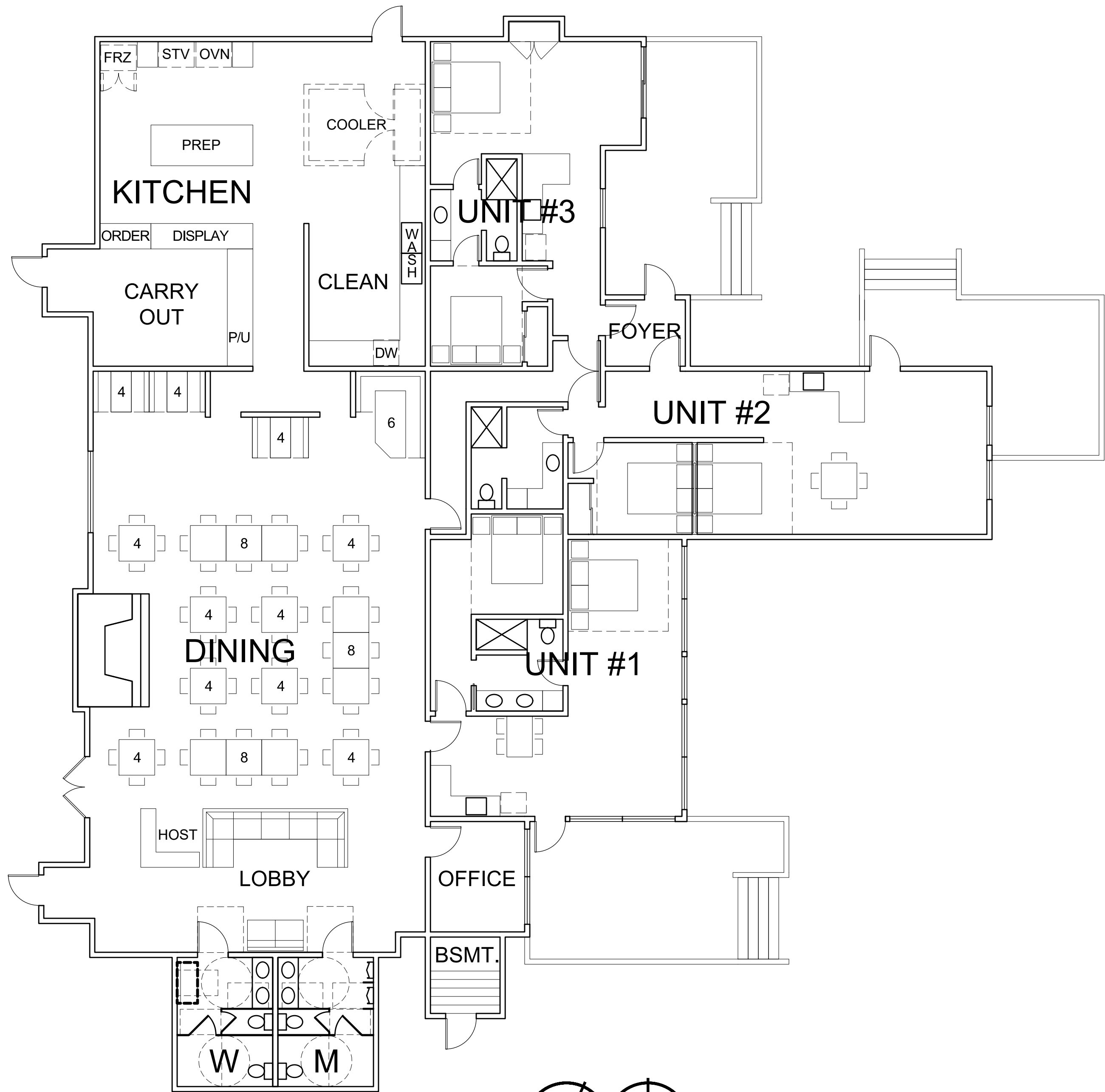
BUILD OUT OF BUILDING FOR RESTAURANT, KITCHEN, BATHROOM 2, 3 HOTELLot width: 280' depth: 283' area: 1.45 AC Width thru bldg. core: 101' UNITS.Setbacks from Prop. Line: front: 52' rear: 130' left: 24' right: 133'Structure width: 101' depth: 88' height: +/- 22'Foundation: Full Basement ☐ Partial Basement ☒ Crawl ☒ Slab ☐**APPLICANT INFORMATION**Owner Name: CHARLES LOUGHREY FAMILY TRUST 248.931.2100Mailing Address: 5271 PARK RIDGE CT. W. BLOOMFIELD, MI 48303Contractor: CHARLES LOUGHREY Phone: CWLDESIGN@ME.COMMailing Address: SAME Email: SAME

Application must be submitted with a drawing, showing the actual lines, angles and dimensions of the lot to be built upon or used, and the exact size and location on the lot of all existing and proposed structures and uses, together with specifications. Construction will agree with permit, plan, and township zoning ordinance, and will comply with local, state, and federal laws. Owner and applicant agree to halt construction if conflict arises. Contact zoning administrator for staking inspection prior to construction. Permit expires in 12 months if work not started and 18 months from date of issuance. If extension is needed contact zoning administrator. Setbacks are measured from farthest protrusion of structure such as eaves or balconies, but not gutters. Permission granted to Zoning Administrator to access property. Attach 8 1/2 x 11 Site Plan. Copy of permit to be posted on site.

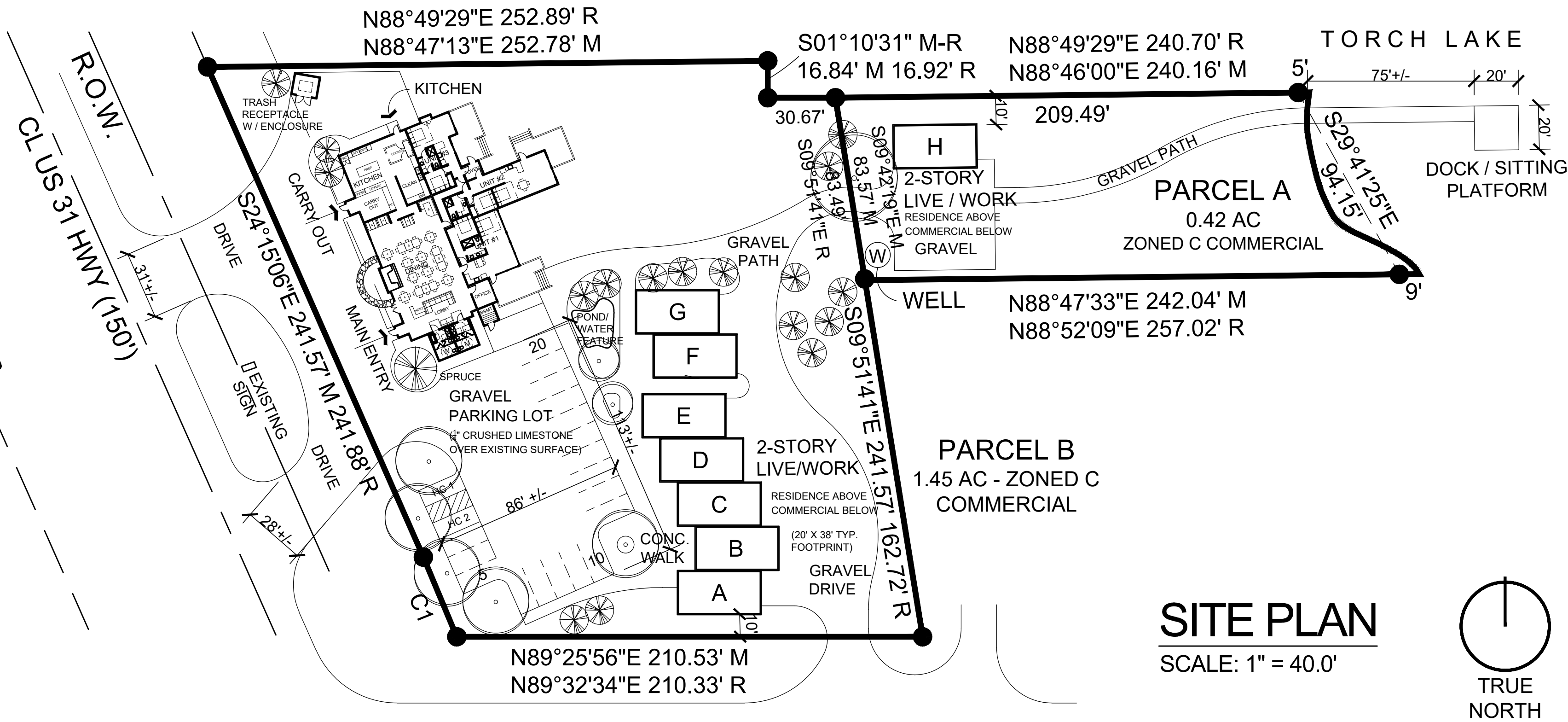
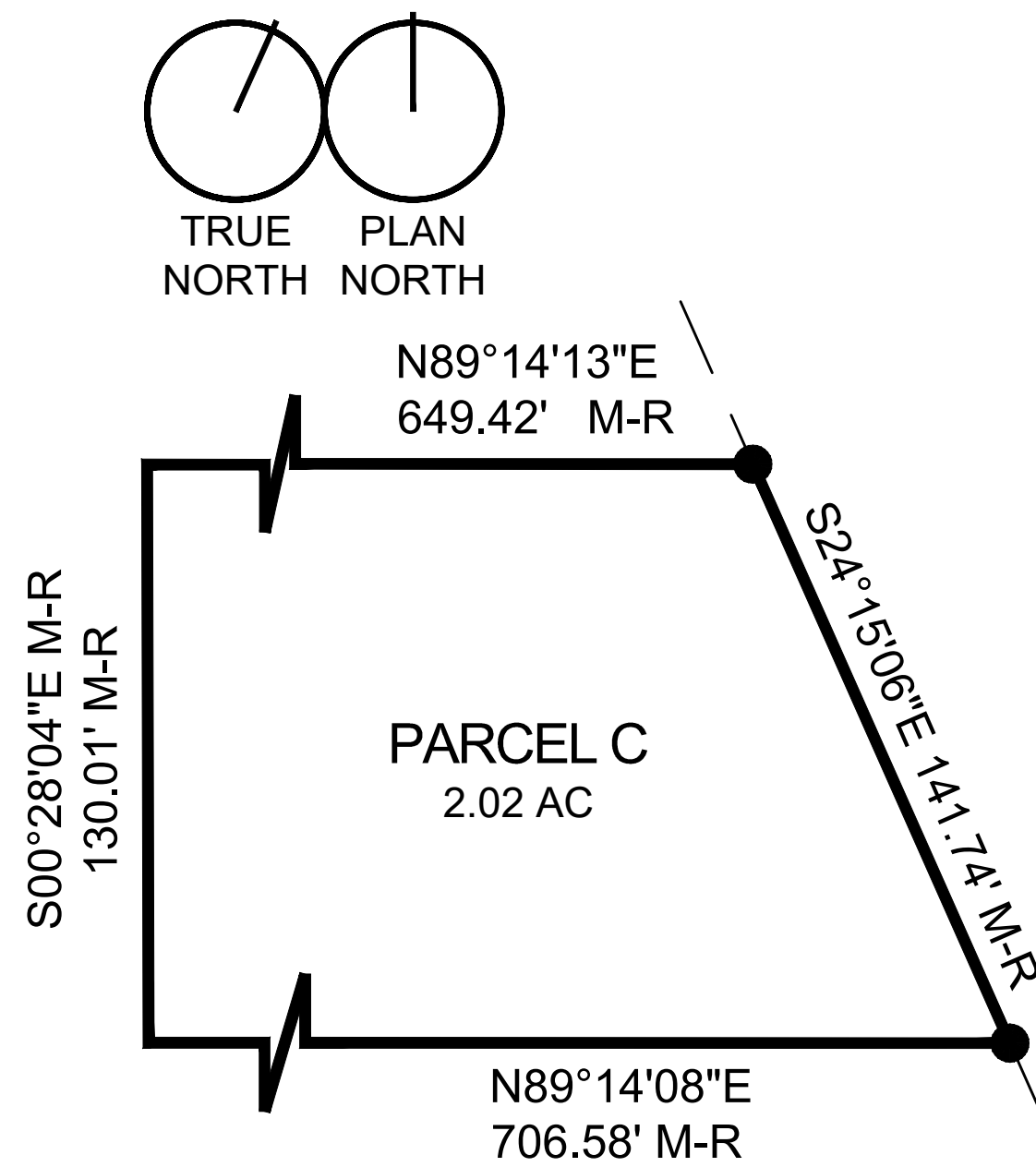
Applicant/Agent: Charles W. LoughreyDate: DEC. 10, 2025**OFFICE USE ONLY**Approved: ☐ Denied: ☐ Fee Paid: _____ Permit#: _____

Zoning Administrator: _____ Date: _____

COMMENTS: _____



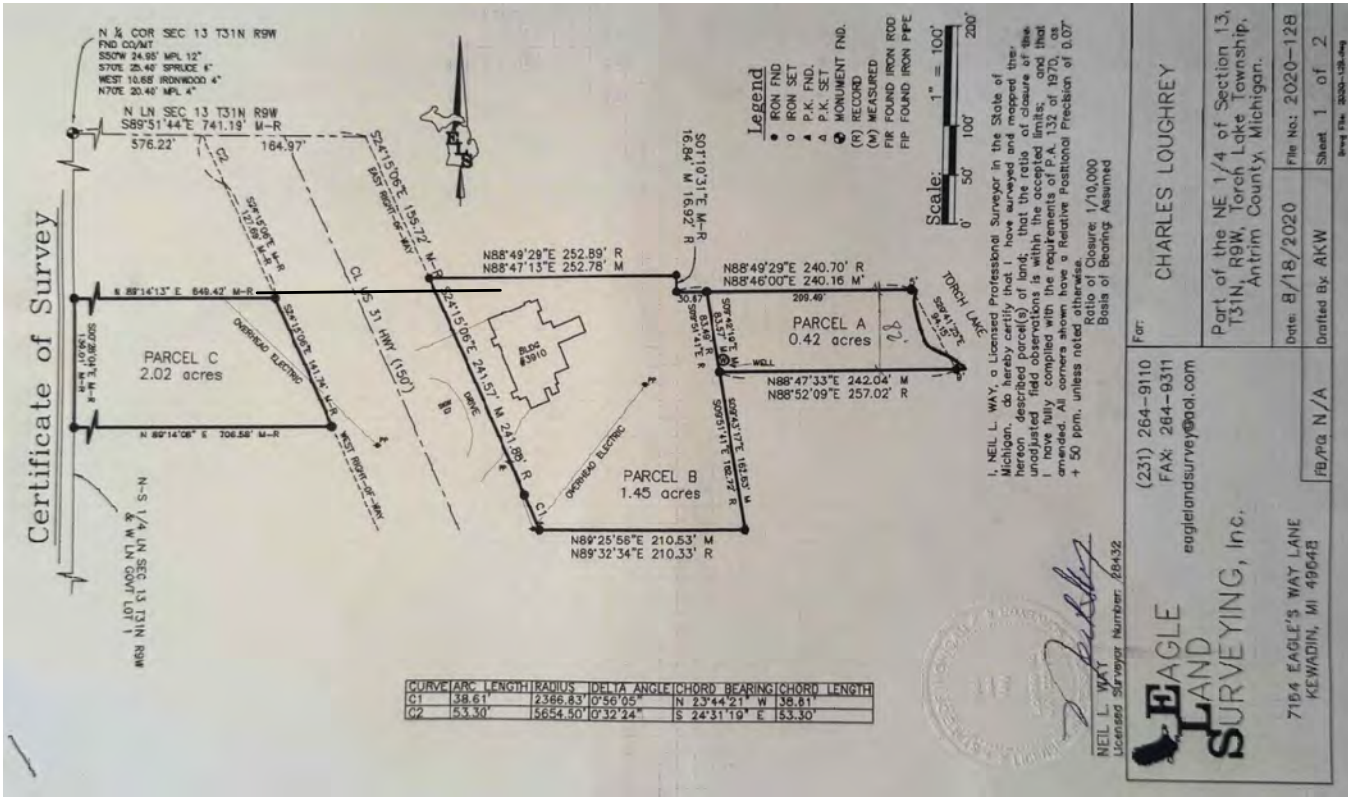
FLOOR PLAN
SCALE: $\frac{1}{8}" = 1'-0"$



SITE PLAN
SCALE: 1" = 40.0'



SITE LOCATION
NO SCALE



SITE SURVEY
SEE GRAPHIC SCALE

DESCRIPTION PARCEL B AS FURNISHED:
TOWNSHIP OF TORCH LAKE, COUNTY OF ANTRIM, STATE OF MICHIGAN:
Commencing at a concrete monument at the North $\frac{1}{4}$ corner of Section 13, Town 31 North, Range 9 West; thence along the North line of said Section (as monumented) South 89°51'44" East 741.19 feet to the Northeastery line of Highway US 31; thence along said Highway line South 24°15'06" East 155.72 feet (recorded as 150 feet) to a t-iron stake on the South line of the former Dorothy Forster property as described in Deed Liber 93, Page 208, being the Point of Beginning of this description; thence along the aforementioned line North 88°49'29" East 252.89 feet to a t-iron stake; thence South 01°10'31" East 16.92 feet to a t-iron stake; thence North 88°49'29" East 30.70 feet; thence South 09°51'41" East 246.21 feet to the South line of the North 12 acres of Government Lot 1 (as monumented); thence South 89°32'34" West 210.33 feet to the Northeastery line of Highway US 31 as set forth in Miscellaneous Liber 9, Page 35; thence along said Highway line on a curve to the left 38.44 feet (radius of said curve is 2366.83 feet and the chord bears North 23°47'11" West 38.44 feet); thence continuing along said Highway line North 24°15'06" West 241.88 feet to the Point of Beginning; being a part of Government Lot 1; Section 13, Town 31 North, Range 9 West. (Restaurant Parcel)

DESCRIPTION PARCEL C AS FURNISHED:
TOWNSHIP OF TORCH LAKE, COUNTY OF ANTRIM, STATE OF MICHIGAN:
Commencing at a concrete monument at the North $\frac{1}{4}$ corner of Section 13, Town 31 North, Range 9 West; thence along the North line of said Section (as monumented) South 89°51'44" East 576.22 feet to the Southwestery line of Highway US 31; thence along said Highway line on a curve to the right 53.30 feet (radius of said curve is 5654.50 feet and the chord bears South 24°31'19" East 53.30 feet); thence continuing along said Highway line South 24°15'06" East 127.69 feet to a t-iron stake being the Point of Beginning of this description; thence continuing along said Highway line South 24°15'06" East 141.74 feet to a t-iron stake; thence South 89°14'08" West 706.58 feet to the North-South $\frac{1}{4}$ line of said Section and West line of Government Lot 1 (as monumented); thence along said North-South $\frac{1}{4}$ line (West line of Government Lot 1) North 02°28'04" West 130.01 feet; thence North 89°14'13" East 649.42 feet to the Point of Beginning; being a part of Government Lot 1, Section 13, Town 31 North, Range 9 West. (Septic Parcel)

PARCEL DESCRIPTION
NO SCALE



2501 Stoner Avenue Los Angeles, CA 90064
jackrunkle@yahoo.com 734.660.2513

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CHARLES LOUGHREY DESIGN

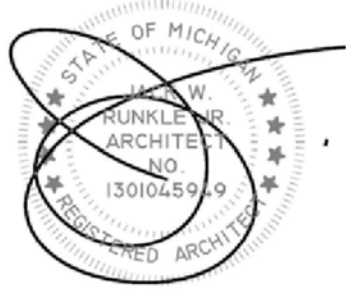
5271 PARK RIDGE COURT
WEST BLOOMFIELD, MI 48323
248.931.2100

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CHARLESLOUGHREYDESIGN.COM

RESTAURANT / BOUTIQUE HOTEL
3910 N. US31 EASTPORT, MICHIGAN
PART OF THE NE $\frac{1}{4}$ OF SECTION 13,
T31N, R9W, TORCH LAKE
TOWNSHIP, ANTRIM COUNTY,
MICHIGAN

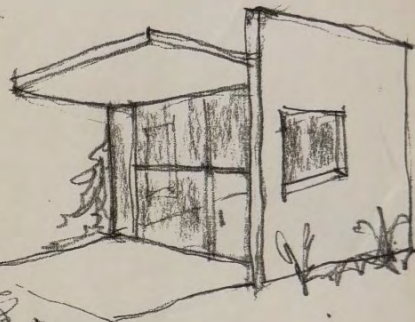
1-23-2026	WORK/LIVE UNITS RESUBMITTAL
1-1-2026	ZONING PERMIT PLAN ALT. A
12-26-2025	RESUBMITTAL
12-10-2025	ZONING PERMIT PLAN
DATE	ISSUE
SEAL	



DRAWING TITLE
SITE SURVEY, SITE
PLAN (PARCELS A,
B & C), FLOOR PLAN

DRAWING NUMBER
SP-1A

TINY HOME
20' x 20'



PRIMITIVE
CABINS



project memorandum



Date: 02.07.2026

From: Sara Kopriva, AICP
To: Torch Planning Commission

Project: Master Pan Future Land Use/Action Plan



Included in your packet is the draft master plan with chapters that have been completed and reviewed by the Planning Commission. The final items to complete are the future land use map and action plan. This portion of the existing plan is included in the packet for your review.

For the meeting we will want to discuss the future land use map, if any changes are needed for the future vision of the township. The action plan will also be discussed. While there are many things that the PC will want to accomplish, we will need to look at 4-7 items that the PC would like to accomplish in the next 5 years as well as what policies or guiding principles that the PC would like to consider when making planning decisions in the future.

Beckett & Raeder, Inc.
535 West William
Suite 101
Ann Arbor, MI 48103

734.663.2622 ph
734.663.6759 fx

Petoskey Office
113 Howard Street
Petoskey, MI 49770

231.347.2523 ph
231.347.2524 fx

Traverse City Office
148 East Front Street
Suite 207
Traverse City, MI 49684

231.933.8400 ph
231.944.1709 fx

Grand Rapids Office
100 Cesar E. Chavez Ave
SW Suite 300
Grand Rapids, MI 49503

616.585.1295 ph

Chapter 5: FUTURE LAND USE PLAN, POLICIES, GOALS, and ACTIONS

For the purposes of this Master Plan, goals, recommended actions, and policies have been identified by the Torch Lake Township Planning Commission and other participants in the Master Planning process concerning a number of interest areas within the Township.

“Policies” are guidelines to assist local decision-makers in implementing recommendations. “Goals” are defined here as broad-based statements of community policy interest and intent. “Actions” are stated means by which Torch Lake Township may reach its goals.

Future Land Use Map/Plan

The fundamental purpose of this Master Plan (and the process which created it) is to gather wide ranging data and observed trends related to community economics, employment, demographics, natural resources, physical setting, public and private infrastructure, history, character, land cover/land use, landowner and visitors opinions, community challenges, etc. to assist in the visioning of what Torch Lake Township could be in the year 2038, i.e. twenty years from the completion of this planning process. An important part of this process is the creation of a future land use map that embodies the vision to guide future land use decision-making within Torch Lake Township. Based on this Master Plan and the policy recommendations and goals detailed below, a Future Land Use Map is located on Page 72 of this Mater Plan Update.

General Policy Statements

Township planning is based upon and undertaken for the overall protection of the public health, safety, and welfare of residents of and visitors to Torch Lake Township.

The Township will enforce the principles of this plan as codified within Torch Lake Township Zoning Ordinance and other ordinance(s).

The Township will seek to manage and guide growth to maintain and enhance the rural quality of life for Torch Lake Township landowners, residents and visitors through the implementation of this Master Plan.

Within Torch Lake Township the long-term water quality and conservation of natural resources, and the sustainability of the environment shall be considered of significant importance when making land use decisions.

When considering land use decisions, Township decision-makers shall balance the public interest in sound land planning, as expressed by and embodied within in this Master Plan,

with the rights and interests of private property owners and renters.

The Township will work with residents, landowners, visitors and others to promote and provide continuous opportunity to inform residents and landowners, and visitors and gather public opinion and foster meaningful public participation in the community planning process.

General Goals

In order to achieve the above policies, Torch Lake Township shall:

Retain rural character by promoting the preservation of small community centers in Eastport and Village of Torch Lake, intact forest lots, high quality waters, and recreational resources, as well as minimizing negative impacts from junk yards, improper waste management and unguided growth.

Plan for and guide future growth consistent with this community-created Master Plan.

Maintain a current Township Master Plan by reviewing this Master Plan every five (5) years and updating when appropriate.

Improve and keep up top date the Township website for the public to obtain copies of the Master Plan, Zoning Ordinance, application forms, post the final decisions, and meeting times and dates, and other community activities. Streamline and simplify the zoning process through the creation of explanatory pamphlets and checklists.

Retain existing development densities, i.e. minimum lot sizes in Torch Lake Township zoning districts.

Explore the creation of light industrial district within the Township zoning district map.

Support the mix of residential and commercial development of the hamlets of Eastport and Torch Lake on a small-town, compact community scale.

Use public input, i.e., 2017 survey and three (3) community vision sessions, from this Master Plan when making land use decisions and/or considering new or amended Township regulations.

Post and promote community events at the Torch Lake Township Hall and other locations to encourage residents and others to engage in community activities and events. Post a map of Torch Lake Township at such locations.

Adopt and implement the concepts of community “place-making” in future planning and development within Torch Lake Township.

Recognize the appropriate role of zoning in guiding the future development of Torch Lake Township in compliance with the requirements of the federal Religious Land Use and Institutionalized Persons Act of 2000.

ACTIONS

1) Forest and Farm

To promote the maintenance and enhancement of productive farms and forests within Torch Lake Township, the Township shall:

- a) Promote the establishment and operation of farm stands; farmers markets; small-scale and organic farming operations; Community Support Agriculture (CSAs); farm to table operations; and specialty farms in Torch Lake Township.
- b) Support and promote voluntary efforts to preserve active farm and forestlands, such as conservation easements, the State of Michigan’s purchase and leasing of development rights program (P.A. 116), etc.
- c) Maintain the Township’s rural character by utilizing planning tools and techniques, including but not limited to the following:
 - Working with landowners to voluntarily protect, enhance, and conserve farm, forest, wetlands, shorelines, and other recreation lands.
 - Explore the use of the purchase of development rights, transfer of development rights, and explore the provision of providing density bonuses for development that voluntarily preserves natural and/or cultural resources.
 - Use and promote conservation design and low impact development techniques that allow development to occur while protecting and linking resources.
 - Continue to participate in and cooperate with Antrim County and other Townships, voluntary landowners participation in farmland and opens

space conservation through the Torch Lake Township Farmland and Open Space Development Rights Ordinance, No. 04-01, effective September 3, 2004.

- d) Encourage farm operations within the Township to utilize Generally Accepted Agricultural Management Practices (GAAMPS), as defined by the Michigan Department of Agriculture and Rural Development (MDARD), to legally protect farm operations from encroaching incompatible land use in accordance with the Michigan Right to Farm Act.
- e) Explore the use of innovative financing tools to facilitate voluntary farmland conservation, which may include, but are not limited to federal, state, and local grants; private and community foundations; and/or a local millage - if supported by resident opinion surveys and ballot measure(s).
- f) Support the exploration and establishment of voluntary farmland preservation tools in Antrim County and regionally, such as the purchase of development rights, transfer of development rights, agricultural overlay district, well-connected conservation/farmland conservation developments, the promotion of specialty/valued-added agriculture, and improved local markets for locally-grown agricultural products.
- g) Support a State constitutional amendment to tax farmland appropriately, i.e., not based on development market value.
- h) Partner with local, regional, and state governmental and nonprofit agencies and landowners to protect farm, open space and forestlands.
- i) Recognize the importance of healthy, intact forests in providing wildlife habitat, erosion control, groundwater recharge, recreational uses such as hunting, recreational vehicle travel and other enjoyment.
- j) Encourage forestland owners to enter into sustainable forest management and conservation plans.
- k) Encourage native tree reforestation and native plant revegetation of steep, sandy, wet, and other fragile soils.

2) Community

To maintain and enhance community well-being within Torch Lake Township, the Township shall:

- a) Promote the Township, new and existing community events (for all ages) and businesses through a variety of traditional and new media.
- b) Enhance and promote community identity through “branding” Torch Lake Township, and establishing a presence along the US-31 Highway corridor through “welcome” signage, events promotion/posting, etc. Work with MDOT and other existing agencies and businesses to achieve the enhancement and promotion of community identity.
- c) Explore ways to reach out to and welcome new landowners, residents and businesses within the Township.
- d) Work to foster the Township’s existing strong sense of community, promote a vibrant community, neighborhood connectivity and interaction, and interaction between youth and seniors to undertake, complete and/or participate in community events and projects. Encourage inter-generational activities, events and projects within the Township.
- e) Make available existing and/or improve Township facilities for youth and senior activities.
- f) Organize and support a community watch program to protect properties within the Township.
- g) Encourage landowners, mineral rights owners and developers; i.e., sand and gravel, wind electric generation, communication towers and infrastructure, and oil and gas exploration and production firms; to comply with state regulation and relevant local ordinances in the production and abandonment of mines, towers, wells, production facilities, and associated infrastructure, and site restoration.

3) Environment

To maintain and enhance environmental quality within Torch Lake Township, the Township shall:

- a) Promote the protection of sensitive environmental resources including but not limited to steep slopes, wetlands, wildlife habitat, springs/seeps, waterways and shorelines.
- b) Provide education materials to landowners, especially riparians, regarding ways to maintain water quality. Disseminate an informational packet (i.e., materials from the Tip of the Mitt Watershed Council, Three Lakes

Association, Torch Lake Protection Alliance, *et al.*) with every land use permit issued. Include such information on the Township website.

- c) Encourage the restoration, re-contouring, replanting with native plants and require the establishment of safe conditions at inactive or abandoned sand and gravel extraction sites.
- d) Utilize best management practices, including but not limited to promoting the use of native plants, management of invasive and exotic species, on-site treatment and disposal of storm water, soil conservation, sustainable forest yields, consideration of the impacts of climate change, and the restoration of damaged lands.
- e) Identify and preserve important wildlife habitat, migration corridors and natural buffer areas within the Township.
- f) Utilize an inventory of the Township's natural resource base for on-going development and land conservation decisions
- g) Protect groundwater, representing 100% of the Township's drinking water source, and surface waters from contamination, depletion and/or degradation.
- h) Recognize the importance of and promote the protection of wetlands in maintaining and improving water quality, sustaining diverse wildlife populations and managing invasive/exotic species, and thereby recreation/tourism, within the Township.
- i) Promote the protection of wetlands, springs, and ground water recharge areas by requiring efficient water use and septic treatment/disposal, and promote water resource protection in any plans.
- j) Recognize and protect quiet and air quality as essential components of the protection of public health, safety and general welfare, and to minimize the potential for public or private nuisance.

4) Economy

The Township recognizes that the high quality of its waters, rural/forested character and natural environment are among its most important economic assets. These assets provide economic opportunities, recreational enjoyment, public water views/viewsheds, wildlife habitat, and together create a desirable place to live, work and play.

To promote and sustain appropriate economic development within Torch Lake Township, the Township shall:

- a) Balance residential and commercial development, and promote the voluntary protection of natural resources, including productive forest, open spaces and active farmland.
- b) Assist willing landowners in the voluntary conservation of active farms, open spaces, forest lands and farmland.
- c) Encourage growers' diversification of products, including increasing value-added agriculture, farm stands, agriculture-based tourism, etc.
- d) Encourage improved local markets for agricultural products for growers to sell directly to customers.
- e) Support and guide home occupations and cottage industries as increasingly important and viable economic activities within the Township.
- f) Protect and enhance existing natural and cultural resources within the Township.
- g) Cooperate regionally with non-profits, governmental agencies, etc. to establish a "maker space" for shared business startup spaces, conference room(s), meeting spaces, equipment and mentorship within the Township or in the area.

5) Public Facilities, Infrastructure & Utilities

To promote and maintain the rural character within Torch Lake Township, i.e., rural yet close to regional resources, the Township shall:

- a) Consider the establishment of appropriate public infrastructure, adequate funding for public services that keep pace with the Township's needs.
- b) Maintain, appropriately fund and promote existing Township-based EMS and fire protection services within the Township.
- c) Enhance public safety through bolstering the police presence within the Township, especially marine patrol of Township waterways.
- d) Promote resident and visitor knowledge and use of the Torch Lake Township Community Center, and area recycling centers, libraries and

sport/recreation fields.

- e) Support the Elk Rapids and Central Lake public schools in future development and implementation school plans and activities.
- f) Encourage the location of future electric power, communication, and utility infrastructure in a manner that will not negatively impact rural character or fragment farmland, forestlands, open spaces or natural ecosystems.
- g) Encourage the underground installation of all utilities at future multi-family housing developments, and strongly encourage underground utility placement at single parcel residential developments.
- h) Encourage appropriate sewage/manure treatment, fertilizer use management, and water protection techniques for planned unit developments, animal feed lots, golf courses, etc.
- i) Enhance the availability and reliability of natural gas, cable television, wireless and high speed internet services throughout the Township.
- j) Encourage the clustering of utilities such as electrical substations, transmitter towers, cell phone or other towers, etc.
- k) Co-location on existing and future communication towers will be required. Co-location of emergency service communications on existing structures shall also be strongly encouraged.
- l) Require private road development in conformance with Township and County regulations.

6) Residential Development

To promote the maintenance and enhancement of the rural character of Torch Lake Township, while balancing the need for new residential development, the Township shall:

- a) Consider and provide for the housing needs of all income levels and ages, including first time home buyers, elder housing and/or assisted care facilities.
- b) Encourage and provide incentives for the construction of conventionally-built single family homes and cottages. Welcome but guide the placement of temporary dwellings and manufactured homes, campers or trailers.

- c) Encourage and provide incentives for the use of conservation design and low impact development standards for all new housing developments. Promote new housing developments having a minimum of 50% open space after excluding non-buildable areas. Non-buildable areas include but are not limited to slopes over 25%, wetlands, roadways, streams, and seeps/springs. Explore density bonuses for conservation developments that exceed these requirements and permanently protect natural and/or cultural resources.
- d) Guide the appropriate development of future special land uses such as mobile home parks and other multi-family housing, if any, within the Township. The Township seeks to ensure that such development adequately provides infrastructure (i.e., water, sewer, utilities, roads, etc.) to residents, and are appropriate in location, scale, density, design, screening, lighting, traffic patterns, etc.
- e) Require the appropriate construction and maintenance of private roads and support the efficient layout of public facilities within housing developments.
- f) Support programs to encourage home renovation and rehabilitation through obtaining grants for old water well abandonment, alternative energy, water conservation, home exterior upgrades, the demolition and removal of abandoned structures, blight control, and home insulation, etc.
- g) Seek to protect existing natural resources, especially productive forest and active farmland.

7) Waterfront Areas

To promote the maintenance and enhancement of high water quality, i.e., the main draw for community investment/economy and property values, within Torch Lake Township, the Township shall promote the following actions:

- a) Protect the water quality and near shore environment of Lake Michigan, lakes, ponds, streams, creeks, wetlands, etc. from degradation, siltation, pollution, and other human impacts.
- b) Protect existing native vegetation, water resources, fisheries, wildlife habitat, and unbroken forest canopy on shorelines and banks. Promote shoreline stabilization through bioengineering and biotechnical erosion control methods such as native plant buffer strips, planted rock revetments, coconut

coir/biolog revetments, shoreline preservation and management, exotic and invasive species control, bank re-contouring filter fabric coverage and native plantings, live stake/rock revetments, brush bundles and mats, etc.

- c) Encourage innovative storm water treatment and disposal such as rain gardens, constructed wetlands, bioswales, reduction of impervious surfaces, pervious pavements, and infiltration to groundwater, etc.
- d) Work with riparian landowners, agencies and visitors to preclude the use of private riparian bottomlands for multi-party mooring and informal public gatherings, of any size.
- e) Support the enforcement of existing federal, state, and local laws that protect waterfront resources and the environment.
- f) Support the distribution of existing brochures and other materials to educate property owners on waterfront properties. Distribute these materials through the Tip of the Mitt Watershed Council, MSU Extension, county and township agencies and departments, real estate offices, code enforcement officials, lake and property owners associations, etc. Explore and apply for grants from state, federal agencies and other sources to implement this effort.

8) Commercial Development

To guide the future commercial development of Torch Lake Township, the Township shall:

- a) Foster the future mixed residential and commercial development of the hamlets of Torch Lake and Eastport as attractive, diverse and compact communities. Such a commercial centers will be established in accordance to a community-derived plan promoting a unique community identity or “brand.”
- b) Direct future commercial develop to Village Business and Commercially zoning areas within Torch Lake and Eastport and away from the lakes shores within the Township.
- c) Explore the creation of a light industrial district within the zoning map in Township zoning regulations, and direct future light industrial land uses to that district.
- d) Encourage mixed land uses, such as residential and commercial developments that are connected by walk ways, use shared parking and

accesses, possess well-defined and slowed traffic flow, are safe for pedestrians including children, utilize signage appropriate with community character, are well-screened, and support and advance park maintenance and improvement at the William K. Day Park on Torch Lake.

- e) Encourage conventionally-built residential dwellings and of diverse price ranges, when constructed in the Township, especially in the existing community centers of Torch Lake and Eastport.
- f) Study the feasibility of sewer and/or water services for village business and commercially zoned areas.
- g) Consider design concepts and architectural styles that reflect community history, image, vision, and values.
- h) Incorporate best management practices and low impact development techniques to reduce amounts of impermeable surfaces, storm water runoff, and require on-site natural treatment of storm water.
- i) Discourage low density and strip development along US-31 Highway and M-88 Highway and County roads to minimize potential public costs.
- j) Encourage the establishment of and access to medical services within the Township, i.e., clinics, hospital satellite offices, “redi-meds,” etc.

9) Recreation

To promote recreational resource development, the Township shall:

- a) Recognize that recreation within the Township relies very heavily upon high quality waters within the Township, and plan for a variety of recreational needs and preferences.
- b) Promote resident and visitor knowledge and use of recreational resources in the Township, such as William K. Good Day Park, Barnes Park, and Torch Bay Beach and Nature Preserve, etc. Improve conditions of and work more closely with the Grand Traverse Regional Land Conservancy to maintain the Torch Bay Beach Preserve shoreline, drive and trails.
- c) Seek improved public and boating access to the Lake Michigan shoreline within the Township and in the region.

- d) Work with the Michigan Department of Natural Resources to maintain, improve and encourage the increased use of the boat launch in Eastport and other existing area boat launches. Discourage the construction of a new MDNR boat launch on Torch Lake in the southern portion of the Township.
- e) Support and promote the Michigan Department of Natural Resources, Grand Traverse Regional Land Conservancy and/or local acquisition/development of unique natural and/or cultural resources as public recreation lands (i.e., improved lake accesses, unique natural features, wildlife and fish habitat, etc.) and trails.
- f) Manage land within the Township for the conservation of natural resources as balanced with recreational uses, including Township-owned lands.
- g) Increase opportunities for children (i.e., playgrounds) and youth recreation (i.e., parks, pavilions, etc.) within the Township.
- h) Encourage communication and cooperate with the Michigan Department of Natural Resources to restock fish in Township lakes, improve/maintain game populations, and guide hunting policy as it affects the Township.
- i) Consider the development and linkage of non-motorized pedestrian trail(s), especially from Acme to Charlevoix and beyond along but separated from U.S. 31 Highway, State highways or County road right of ways.
- j) Consider the goals of the *Antrim County Recreation Plan*.
- k) Consider the development of a Torch Lake Township Recreation Plan, to be reviewed and approved by the MDNR to enable the Township to apply for and access State funds, i.e. Michigan Natural Resources Trust Fund, to acquire, develop and maintain recreational resources within the Township.

10) Transportation

To promote the maintenance and enhancement of transportation infrastructure within Torch Lake Township, the Township shall:

- a) Establish and maintain good communication with the Michigan Department of Transportation and the Antrim County Road Commission to ensure efficient transportation policy and future transportation improvement projects in accordance with the vision, goals, and objectives of this Master Plan.
- b) Maintain a local road network in a good condition that meets the needs of users.
- c) Adopt and apply the concepts and procedures of “complete streets” in future transportation planning within Torch Lake Township. Maintain a local road network that follows the principles of complete streets, and is safe (especially with paved roadways, without obstructed vision, with sufficient pedestrian/vehicle separation, and appropriately lighted) for vehicles, pedestrians (including children), and bicyclists.
- d) Work with the Michigan Department of Transportation to explore methods and resources for traffic calming in higher density sections of the highway and improve pedestrian and bicycle safety along US-31 and M-88 highway corridors through the incorporated hamlets of Torch Lake and Eastport.
- e) Enhance the sense of place and promote Torch Lake and Eastport through wayfinding signage.
- f) Retain and enhance the M-88 Highway corridor as the major east-west traffic route within the Township, and communicate with the State and County road agencies the Township’s community vision, goals, and objectives pertaining to transportation activities.
- g) Guide the flexible design and development of private roads within the Township to enhance road safety, visibility, lighting, maintenance, and efficiency in traffic flow, and ensure future development in accordance with this Master Plan.
- h) Encourage and cooperate with a County-wide access management plan for State highways and county roads to minimize congestion by implementing access management best practices to:
 - 1. Maintain efficient traffic flow.
 - 2. Reduce traffic congestion,
 - 3. Preserve the roadway’s capacity.
 - 4. Reduce deaths, injuries, crashes, and property damage; and

the frequency and severity of crashes while maintaining reasonable access to land uses.

This can be accomplished through adopting a zoning ordinance or policy reflected in the site plan review process for careful placement (or relocation) of access points to reduce conflicts. Some of the tools include:

- Placing driveways a sufficient distance from intersections to minimize impact to intersection operations.
- Proper spacing of access points along the same side of the street.
- Alignment or spacing from access points on the opposite side of the street.
- Geometric design to restrict certain turning movements (usually left turns).
- Shared access systems (connections between land uses, shared driveways, frontage roads or rear service drives).
- Location of traffic signals.

- i) Address parking needs by facilitating shared commercial and institutional parking, when appropriate.
- j) Support and assist in the planning for any future light rail network within the region and the State of Michigan.

11) Regional Planning

To support regional planning, the Township shall:

- a) Recognize that Torch Lake Township's natural resources and community are connected to and an important part of much larger systems, and that both often cross other boundaries and can impact other natural and human communities.
- b) Be aware that decisions in one community may affect other nearby communities, encourage and promote cooperation among local governments on development decisions that affect more than one community.
- c) Enhance communication and cooperate with adjacent Townships, Antrim County and nearby Counties on planning and other shared issues.

- d) Engage and fully utilize planning resources and assistance provided by the Antrim County Administration/Planning Department and regional planning agency, the Networks Northwest.
- e) Support regional strategies to better protect and preserve forestlands, waterways, active farmland, open spaces and other natural features along Township boundaries.
- f) Support and promote consistency between this Master Plan, the *2012 Antrim County Master Plan* and adjacent townships' Master Plans.
- g) Encourage county-wide and regional transportation and access management planning, and coordinate with adjacent counties as well as county, state and federal agencies on transportation planning and implementation.
- h) Encourage county-wide trails planning, and coordinate with adjacent counties as well as state and federal agencies on recreational resource planning and implementation.
- i) Direct future appropriate commercial uses to established, mixed residential and commercially zoned areas within the Township (i.e., compact, rural town centers of Torch Lake and Eastport).
- j) Cooperate with county, regional, state and federal agencies to facilitate a range of housing choices.
- k) Enhance and support regional efforts to develop public and pedestrian-oriented transportation choices and facilities.

12) Zoning Plan and Police Powers

To promote the community vision embodied within this Master Plan, the Township shall (Refer to Appendix B for a copy of the zoning schedule of regulations):

- a) Enhance zoning with additional water quality protection tools.
- b) Retain existing development densities, i.e., minimum lot sizes in Torch Lake Township zoning districts.
- c) Explore the creation of Township regulations regarding crowd control/outdoor events (i.e., Torch Lake sandbar); signs/

billboards; noise; private road standards; dark night sky; outdoor lighting; point of sale septic inspections; commercial wind energy conversion systems; and fences.

- d) Improve and implement a blight/junk ordinance in the Township.
- e) Explore the creation of light industrial district within the Township zoning map in zoning regulations.
- f) Explore and implement regulations for accessory dwelling units (ADUs).
- g) Continue to plan and zone at the Township level, in accordance with Township residents' opinions.
- h) Review, identify and eliminate significant regulatory obstacles, if any, for new business start-ups and/or business retention within the present day economy of the Township.
- i) Encourage and support continual, consistent and fairly applied zoning enforcement.
- j) Consider the role of Township zoning in enhancing and encouraging economic activity within the new information-based economy.
- k) Retain rural roadside image by encouraging:
 - Maintenance of building setbacks;
 - Increased natural buffers;
 - Increased shared access drives;
 - Increased rear parking;
 - Placement of large loading doors and general construction staging areas to the side or rear yards;
 - Placement of earthen berms with native vegetation and other effective visual screening;
 - Placement of junk/dismantled vehicles, campers/trailers, storage units, semi-trailers, scrap metal, etc. in rear yards and/or otherwise effectively screened from public thoroughfares and right of ways.
- l) Encourage the use of zoning incentives to promote conservation design/low impact development and facilitate resource protection by methods including but not limited to: 1) streamlining the review process for

conservation development; and 2) displaying design-based zoning regulations in a pictorial fashion to better illustrate development goals for this purpose.

- m) Consider and evaluate the use of density bonus incentives for future planned unit or site condominium housing projects to implement a conservation design and low impact development approach.
- n) Comply with the coordinated planning requirements of the Michigan Planning Enabling Act to enhance coordination with Antrim County and adjacent communities to advance the vision and goals stated in this Master Plan.
- o) Commit to, promote and maintain the principles of good governance within the Township.

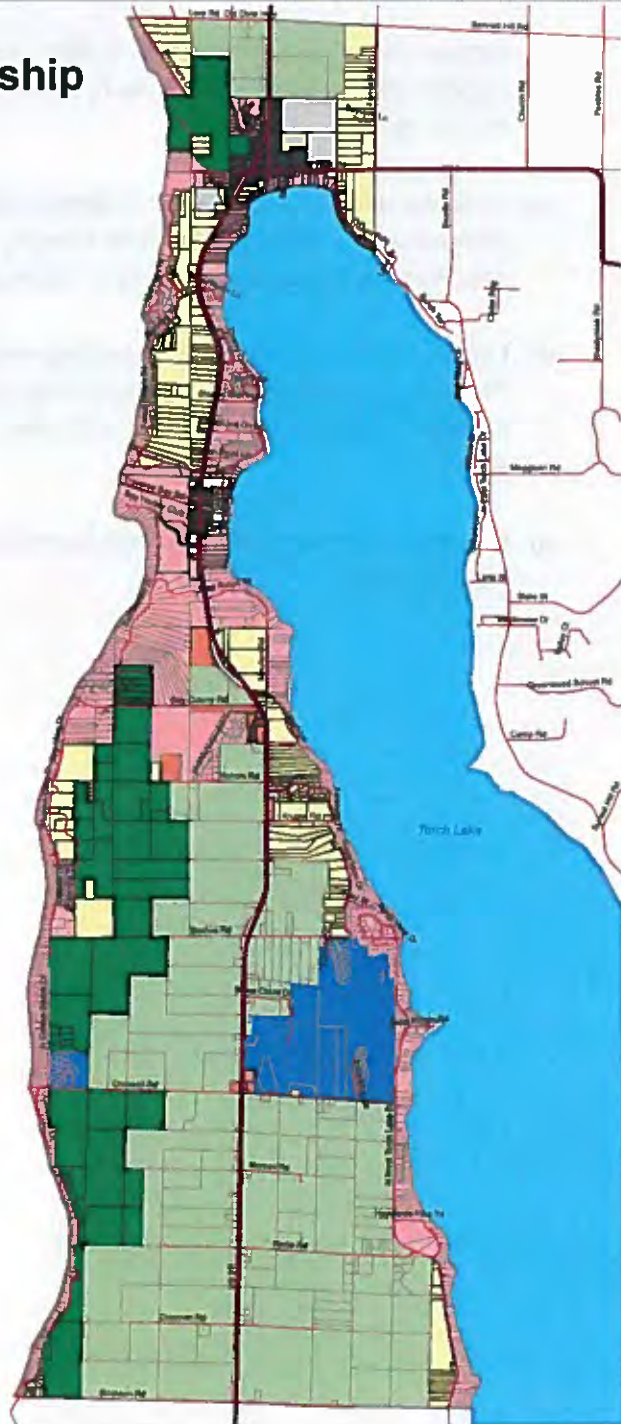
Torch Lake Township

Zoning Districts

- Agriculture
- Commercial
- PRD
- R-1
- R-2
- Timber Reserve
- Village Residential
- Village Business
- State Trunkline
- Roads
- Lakes

Approved by the Torch Lake Township Board on 3/19/2013

Map Date: June 2012
Map Produced By:



13) Future Land Use









To promote the Township's vision for future land uses, the Township shall:

- a) Encourage landowners to recognize the rural character and natural resource base of Torch Lake Township, and work with them to fit future development within the Township's existing character.
- b) Explore the creation of a light industrial district(s) within the zoning map in appropriate location(s) of the Township.
- c) Support the continued, appropriate-scale mixed residential and commercial development of Torch Lake and Eastport on a small town, compact community scale.
- d) Direct future residential and commercial development to existing community centers and away from narrow strip lots along road ways.
- e) Encourage new mixed use residential and commercial construction and the redevelopment of the existing compact community centers of Torch Lake and Eastport, and encourage new clustered rural residential development.
- f) Foster the retention and future development of compact rural community centers with distinct identities within Torch Lake and Eastport areas.
- g) Consider and implement Complete Streets planning processes and design concepts in guiding future growth, especially within the community centers of Torch Lake and Eastport.
- h) Identify large contiguous parcels currently in active forest and/or farm use, and work with landowners to encourage conservation, sustainable development, and the retention of rural character if divided or developed.
- i) Direct growth in such a manner as to discourage sprawling land uses.
- j) Preserve the high environmental quality, quiet and dark night sky through land use regulation and Township planning and zoning procedures.
- k) Work toward the improvement, enhancement and maintenance of the Day Park within Torch Lake Township.








Torch Lake Township

Future Land Use

Roads & Features

-  State Trunkline
-  County Primary
-  County Local
-  Not Act51 Certified
-  Township Boundaries
-  Rivers & Drains
-  Lakes
-  Existing Commercial Uses
(On Commercially Zoned Properties)

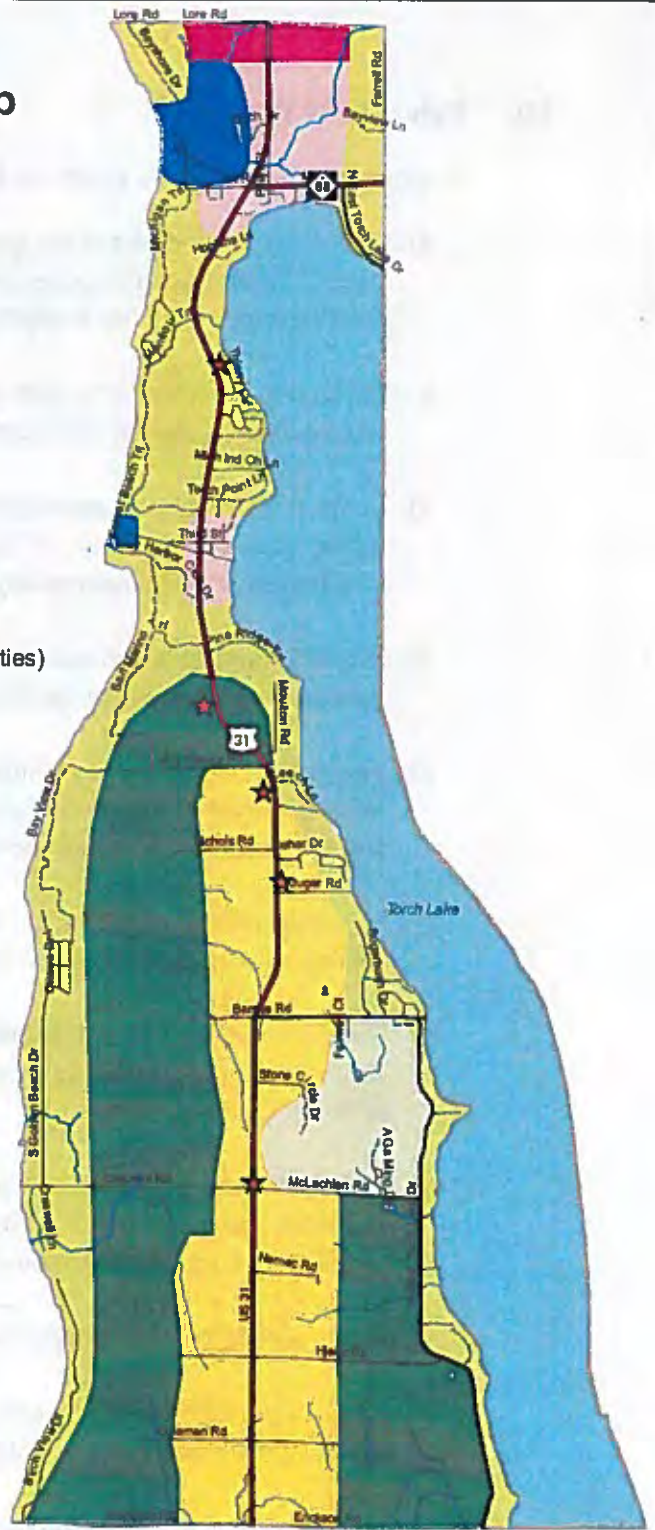
Future Land Use Class

-  Agriculture
-  Commercial/Industrial
-  Commercial/Residential
-  Residential
-  Recreation
-  Recreation/Residential
-  Timber

0 0.25 0.5 1 1.5 2 Miles



Map Date: 10 April 2007
Map Produced By:
 Northwest Michigan
Council of Governments





TORCH LAKE TOWNSHIP

Master Plan

Community Profile & Housing

1



Understanding the demographic makeup and current state of housing in Torch Lake Township is essential for planning its future. By examining this data over time, patterns and shifts become clear, offering valuable insight into how land use and community services may need to adapt. The following sections provide an overview of key demographic indicators, including population by age group (with a focus on older adults), employment and housing trends, population growth and projections, racial and ethnic composition, gender distribution, and income levels.

DATA SOURCES

The demographic information in this Plan came from the following sources, in this preferred order:

- » **US Decennial Censuses.** The decennial censuses are the most accurate source of demographic information in the United States, though the information is limited. Mandated by the United States Constitution, the aim of the decennial census is to count 100% of the US population. Because the decennial census has been operating since 1790, it offers a valuable reference point to illustrate how populations have changed over time. While the decennial census has been administered for over 200 years, the questions have shifted to reflect cultural changes. Information collected in the most recent counts includes information about age, sex, race, the relationship between household members, and household tenure.
- » **American Community Survey.** The American Community Survey (ACS) replaced the “long-form” Census questions beginning in 2000, collecting the same types of information about social, economic, and housing conditions on a continual basis. The ACS is not a complete survey of the United States but a sample. A random selection of households receives the ACS every year, and the Census Bureau uses the responses to create estimates for the rest of the population. Because the ACS is a sample, smaller communities require multiple years of sampling to create accurate estimates. Communities with fewer than 20,000 people must be sampled over 60 months to create estimates, and these estimates are referred to as 5-year estimates. This plan will use ACS 5-year estimates, as Torch Lake Township’s population is under 20,000 people.

POPULATION

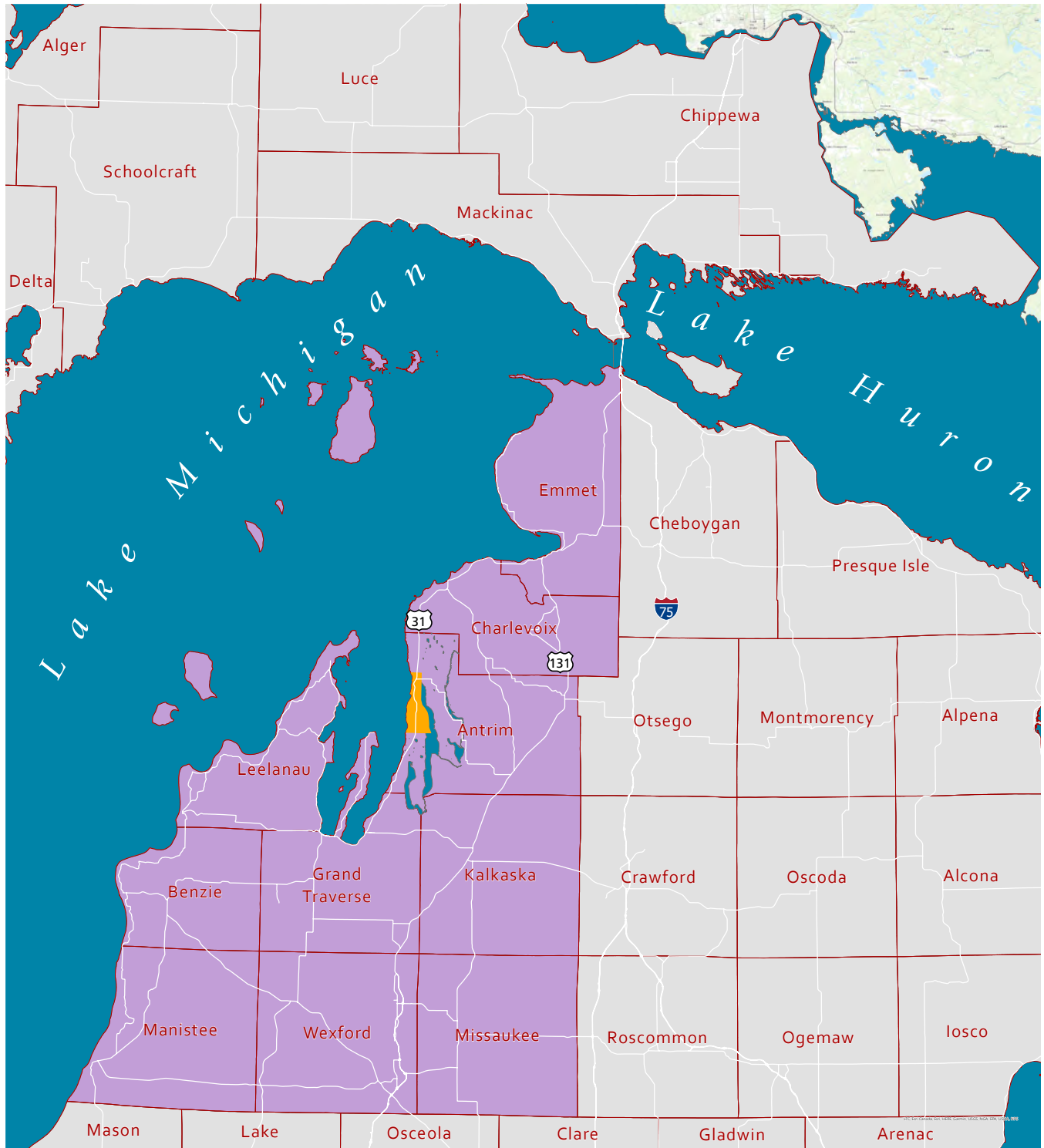
Torch Lake Township’s population has increased from the year 2000 when there were 1,159 residents to the 2020 Census when 1,212 residents were recorded, an overall growth of 4.6%.¹ Overall increases were observed across Antrim County as well as the State during this period.² American Community Survey figures place the 2023 population of Torch Lake Township at 1,564 residents.³ While the population is seeing possible increases due to remote work, this figure also has a high margin of error due to the small size of the Township population.

Table XX: Population 2000-2020

	2000	2010	2015	2020	% Change 2000-2020
Torch Lake Township	1,159	1,331	1,183	1,212	4.6%
Antrim County	23,110	23,975	23,267	23,431	1.4%
State of Michigan	9,295,297	9,938,444	9,990,571	10,077,331	8.4%

Source: U.S. Census Bureau, P1

Map XX: Regional Map



Regional Map

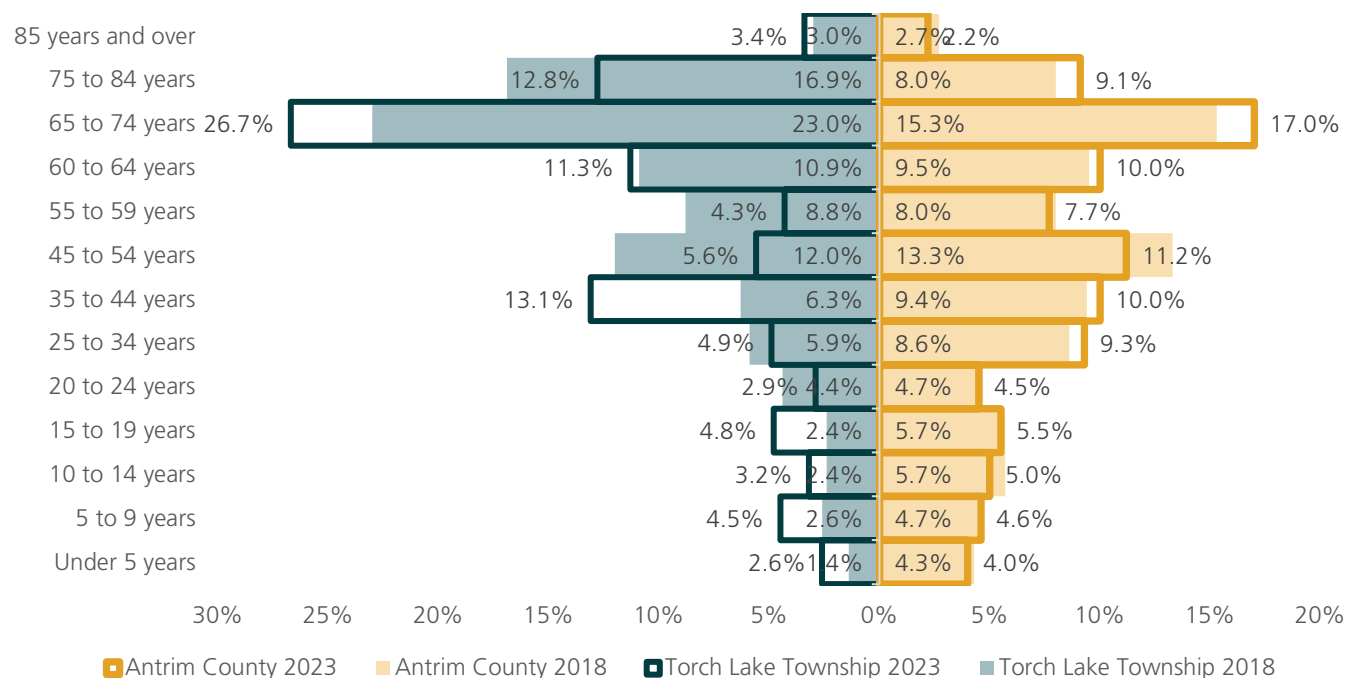
Sources: Michigan Open Data Portal, Networks Northwest

- Torch Lake Township
- Michigan Counties
- Networks Northwest

10 Miles
Beckett & Raeder, Inc.



Figure XX: Population Pyramid, 2018-2023



Source: American Community Survey, DP05

Table XX: Racial Composition in Torch Lake Township, 2023

	Torch Lake Township	Antrim County	State of Michigan
Total population	1,564	23,876	10,051,595
One race	98.4%	96.0%	93.7%
White	96.7%	93.9%	74.8%
Black or African American	0.0%	0.4%	13.4%
American Indian and Alaska Native	3.0%	1.4%	0.9%
Asian	0.3%	0.4%	3.3%
Some Other Race	0.0%	0.6%	1.8%
Two or More Races	1.6%	4.0%	6.3%

Source: American Community Survey, DP05

Age Distribution

The figure “Population Pyramid, 2018-2023” shows that the population in Torch Lake trends towards an older population. Nearly 43% of all residents were 65 and older in 2018 remained the same in 2023.⁴ In 2018, 19.1% of residents were under 35 years old, a figure that increased to 22.9% in 2023.⁵ This large population of elderly residents is noteworthy to Torch Lake Township as these residents require more specialized senior services like in home care, senior centers, and other community support services to ensure that they

can continue to live a healthy and independent lifestyle.⁶ Another notable statistic from this age distribution is in the 35-44 age cohort which saw an increase from 6.3% of the population in 2018 to 13.1% in 2023.⁷ This may indicate that there is an younger families in the Township since the younger cohorts are showing increases as well.

Racial Composition

The table “Racial Composition in Torch Lake Township, 2023” shows that both Torch Lake and Antrim County have a similar makeup of racial

composition with 96% or higher of residents identifying as white.⁸ The second largest group is American Indian or Alaskan Native at 3% of the Townships population. Both Torch Lake Township and Antrim County are significantly less diverse than the State.⁹

Seasonal Population

It's important to recognize that the Census and American Community Survey do not accurately capture Torch Lake Township's seasonal population, particularly during the summer months. Because the Census is conducted on April 1st, it excludes many seasonal residents who spend winters elsewhere. While respondents are instructed to report their primary residence as the place, they live for more than six months per year, this is often misunderstood—or intentionally avoided for tax-related reasons—resulting in undercounts.¹⁰ Networks Northwest tracks seasonal population trends across 10 counties in Northwest Lower Michigan, including Antrim County. According to its 2022 Seasonal Population Study for Lower Michigan, Antrim County had a permanent population of 23,431 but experienced a seasonal surge of over 150% during the summer, reaching nearly 60,000 residents.¹¹ A month-by-month breakdown of this trend is shown in the figure titled “Average Population of Antrim County by Month.”

Table XX: Labor Force Participation, 2023

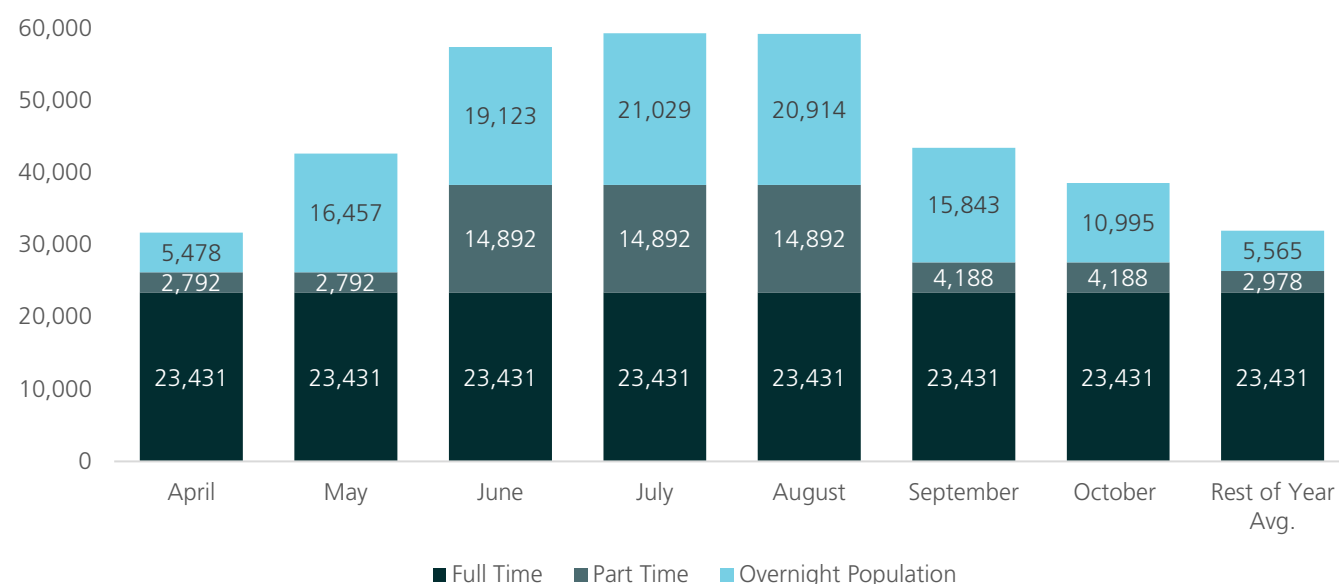
	Torch Lake Township
Population 16 years and over	1,395
Labor force	44.3%
Employed	44.0%
Unemployment rate	0.6%
Not in labor force	55.7%

Source: American Community Survey, DP03

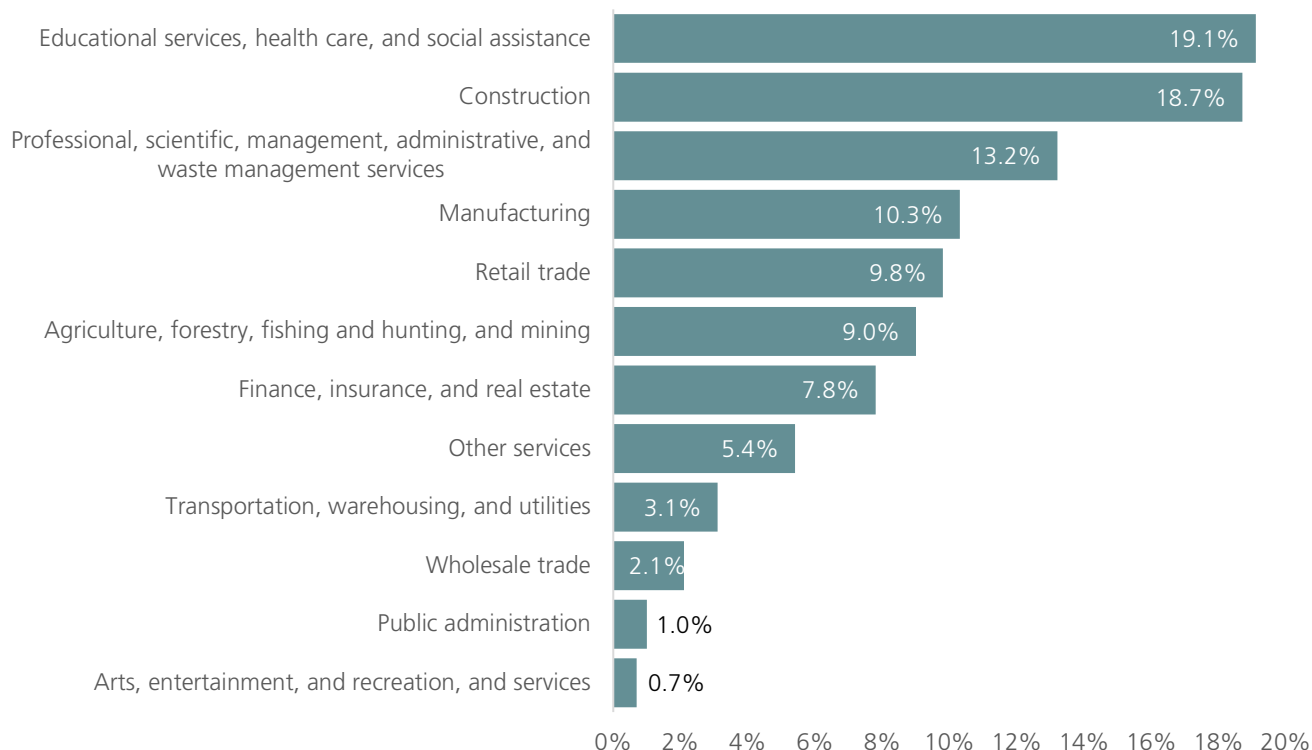
Employment

The U.S. Census Bureau defines the labor force as all people classified in the civilian labor force, plus members of the U.S. Armed Forces. The civilian labor force consists of people classified as employed or unemployed.¹² People who are 16 years or older are eligible to be in the labor force. The data says that 1,395 residents of Torch Lake were eligible to be in the labor force as of 2023, with a participation rate of 44.3%.¹³ Unemployment rate is defined as the number of unemployed people as a percentage of the civilian labor force; with a rate in Torch Lake Township of 0.6%.¹⁴ More than half (55.7%) of all residents in the Township are not currently in the labor force, a figure which is not surprising considering the high portion of residents who are senior citizens.¹⁵

Figure XX: Average Population of Antrim County by Month



Source: Networks Northwest

Figure XX: Employment Sector, 2023

Source: American Community Survey, DP03

Table XX: Education Attainment, 2023

	Torch Lake Township Total	Torch Lake Township %	Antrim County %	State of Michigan %
High school graduate or equivalent	1,260	98.10%	94.40%	91.90%
Bachelor's degree or higher	704	54.80%	34.30%	31.80%
Graduate or professional degree	300	23.40%	13.20%	12.50%

Source: American Community Survey, DP03

Among residents who are employed, the largest sectors of employment are Educational services, health care, and social assistance; Construction; Professional, scientific, management, administrative, and waste management services; and Manufacturing; all of which have 10% or higher of the labor force participants.¹⁶

Education Attainment

Education attainment, the level of schooling a person has completed, is an important statistic in planning because it has direct implications on community development, economic growth, public health, and civic engagement, ultimately leading to a more prosperous community.¹⁷ The U.S.

Census collects education status on community members who are 25 years and older. In Torch Lake Township, education attainment is higher than the rest of Antrim County and the State of Michigan with more than 98% of residents having finished a high school diploma of equivalent, over half (54.8%) having a bachelor's degree, and almost one-quarter (23.4%) with a graduate or professional degree.¹⁸

Income and Poverty

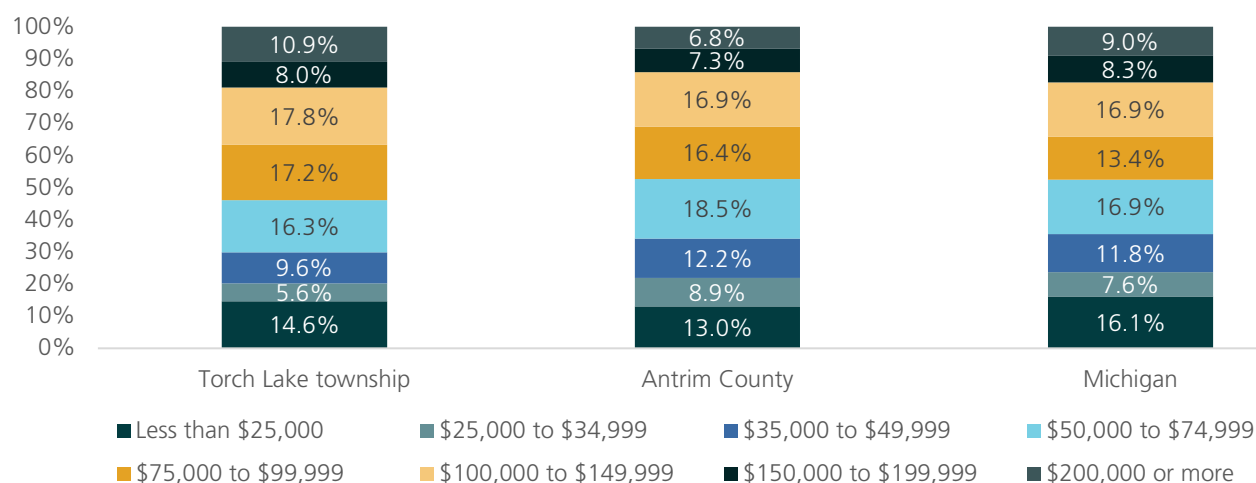
In 2023, the median household income in Torch Lake Township was \$85,972, up 16.6% from 2018 (when the median household income was \$73,750).¹⁹ The figure median represents the

Table XX: Median Household Income, 2018 & 2023

	Torch Lake Township	Antrim County	State of Michigan
2018	\$73,750	\$52,589	\$54,938
2023	\$85,972	\$71,421	\$71,149
% Increase	16.6%	35.8%	29.5%

Source: American Community Survey, DP03

Figure XX: Household Incomes, 2023



Source: American Community Survey, DP03

Table XX: Households in Poverty, 2023

	Torch Lake Township	Antrim County	State of Michigan
All people	11.0%	9.4%	13.1%
All families	6.2%	5.3%	8.8%
With related children of the householder under 18 years	14.8%	11.1%	14.4%
Married couple families	4.3%	3.0%	4.2%
Families with female householder, no spouse present	42.3%	20.5%	25.1%
Under 18 years	12.4%	13.4%	17.5%
65 years and over	11.6%	6.0%	9.3%

Source: American Community Survey, DP03

middle value in an ordered list of data values and is a more reliable figure than mean (average) of a dataset because it is not skewed by very high or very low figures in the dataset. Household Incomes in Torch Lake Township are significantly higher than Antrim County and the State of Michigan, although not growing as quickly.²⁰

The Federal Poverty Level (FPL), also known as the federal poverty guidelines, is an annual income threshold used to determine eligibility for various federal programs and benefits based on household size.²¹ In Torch Lake Township, 11.0% of all residents were below the FPL in 2023. Single female parent households experience poverty at four times the rate as “all people.”²²

Table XX: Household Survival Budget, Antrim County 2022

	Single Adult	One Adult One Child	One Adult One Childcare	Two Adults	Two Adults Two Children	Two Adults Two Childcare	Single Senior	Two Seniors
Housing - Rent	\$340	\$392	\$392	\$392	\$447	\$447	\$340	\$392
Housing - Utilities	\$163	\$258	\$258	\$258	\$310	\$310	\$163	\$258
Child Care	\$0	\$194	\$519	\$0	\$389	\$1,052	\$0	\$0
Food	\$541	\$918	\$823	\$992	\$1,668	\$1,474	\$499	\$915
Transportation	\$462	\$596	\$596	\$703	\$1,113	\$1,113	\$398	\$575
Health Care	\$174	\$383	\$383	\$383	\$601	\$601	\$523	\$1,045
Technology	\$86	\$86	\$86	\$116	\$116	\$116	\$86	\$116
Miscellaneous	\$177	\$283	\$306	\$284	\$464	\$511	\$201	\$330
Tax Payments	\$322	\$700	\$761	\$476	\$937	\$1,060	\$386	\$725
Tax Credits	\$0	(\$206)	(\$217)	\$0	(\$411)	(\$433)	\$0	\$0
Monthly Total	\$2,265	\$3,604	\$3,907	\$3,604	\$5,634	\$6,251	\$2,596	\$4,356
ANNUAL TOTAL	\$27,180	\$43,248	\$46,884	\$43,248	\$67,608	\$75,012	\$31,152	\$52,272
Hourly Wage	\$13.59	\$21.62	\$23.44	\$21.62	\$33.80	\$37.51	\$15.58	\$26.14

Source: ALICE

Table XX: Household Size, Torch Lake Township

	2013	2018	2023	Overall Change %
Total Households	502	548	749	49.2%
Average Household Size	1.95	2.03	2.09	7.2%
Living Alone	28.7%	19.7%	13.9%	-14.8%

Source: American Community Survey, DP02

Asset Limited, Income Constrained, Employed (ALICE)

The United Way provides a service known as Asset Limited, Income Constrained, Employed (ALICE). ALICE is intended to represent employed families who are unable to afford the basics of housing, childcare, food, transportation, health care, and technology. The United Way tracks this data at the County level and seeks to identify households that may be overlooked in traditional U.S. Census and American Community Survey data because they exceed income thresholds for poverty or housing cost burden but still struggle to pay the high costs of living.²³ In Antrim County, which Torch Lake is included within shows that 27% of all households fall into the ALICE category, just under the statewide figure of 28%.²⁴ The table “Household Survival Budget, Antrim County 2022” gives a breakdown

of average costs incurred by households of various sizes. ALICE figures show conservative estimates for housing costs, meaning that households likely need to earn more than the figures in the table to meet the household survival budget. As households grow, these costs increase and become increasingly difficult to cover. Figures in the table on the “Tax Credits” line are noted in red because they are a tax credit and not an added expense on households.

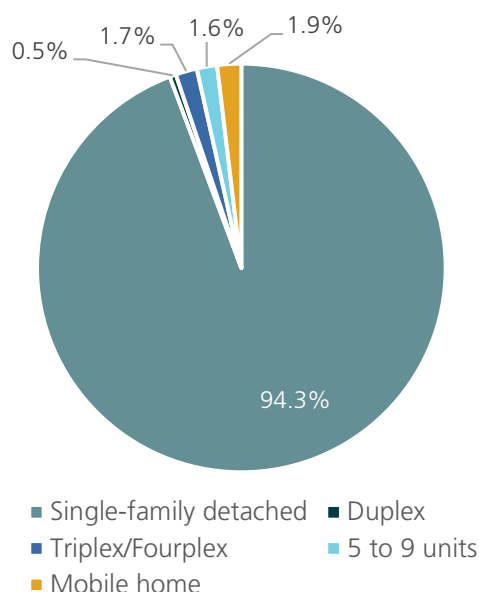
HOUSING ANALYSIS

Many communities across the State are transitioning to smaller household sizes.²⁵ Torch Lake Township, on the other hand, is showing a small increase of 7.2% in average household sizes for the 10 years between 2013 and the most recent data in 2023; while this figure has shown an increase it is still significantly below the average household size statewide of 2.43.

Most households (94.3%) in Torch Lake Township are single family detached homes, typical of rural communities.²⁶ Considering the large portion of the population that is elderly (42.9% of the Township was 65 years or older in 2023), as well as the relatively small household size overall these single family detached homes may not be the best option for the community, and more consideration should be given to smaller unit sizes, that are more densely built. These smaller units would help to accomplish several things that are needed by residents. The first item is that the large portion of elderly residents are likely (in part at least) to have difficulty maintaining their properties. The second is that these smaller units would be less costly, benefiting lower income households including those in the ALICE category; additionally smaller household sizes are more appropriate for the reasonable small households observed in Torch Lake Township.

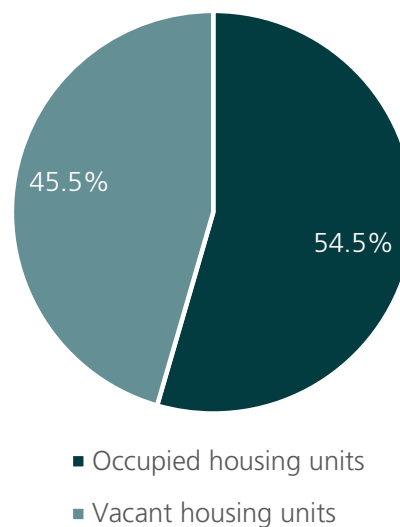
In the Township there is a large portion (45.5%) of vacant housing units, with just over half (54.5%) being occupied. Vacant does not necessarily mean that a housing unit is abandoned, in fact the U.S. Census Bureau defines a vacant unit where no one is living at the time of the census, or where the occupants are only temporarily absent, such as in the case of second homes.²⁷ A breakdown status of vacant units can be found in the table “Vacancy Status, 2023” The largest portion of vacant units in 2023 were used “for seasonal, recreational, or occasional use,” accounting for 95.0% of all vacant housing units in the Township.²⁸ This underscores the lure of this region to vacationers and tourists who cause a massive seasonal population increase during the peak season. When these units are taken off the market, this increases the demand pressure on the existing housing stock and could be part of the reason home values are increasing.

Figure XX: Housing Diversity, 2023



Source: American Community Survey, DP04

Figure XX: Occupied vs. Vacant Units, 2023

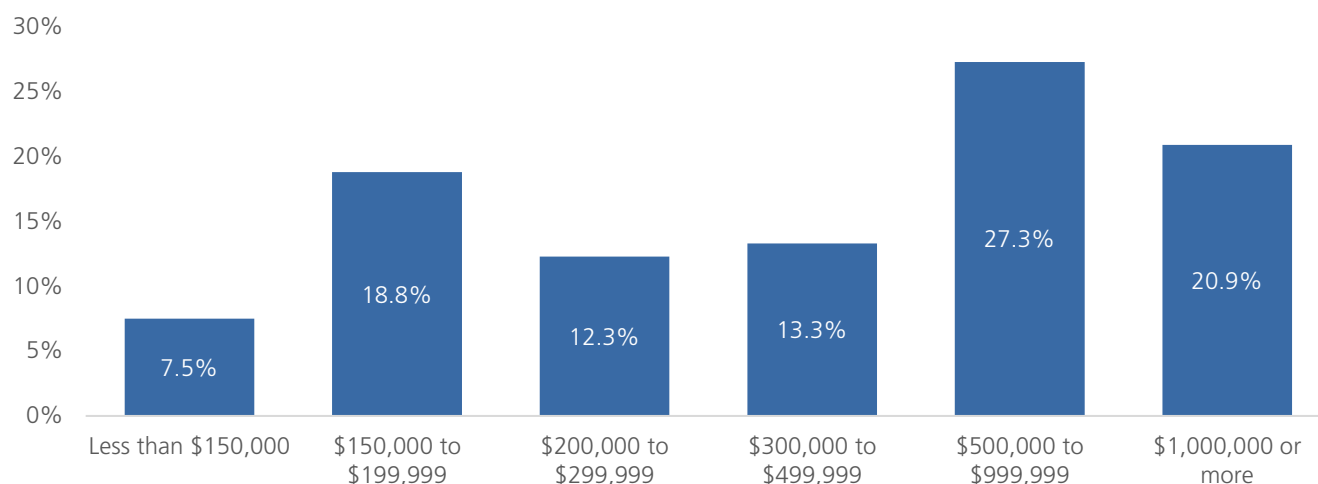


Source: American Community Survey, DP04

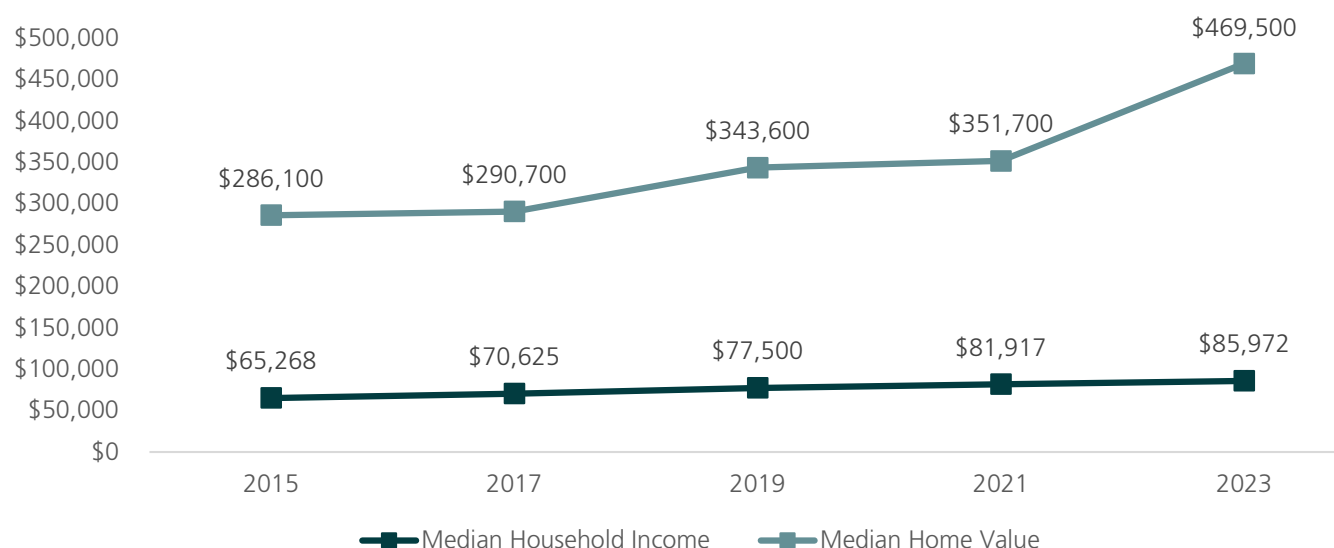
Table XX: Vacancy Status, 2023

	Torch Lake Township
Total:	625
For sale only	12
For seasonal, recreational, or occasional use	595
Other vacant	18

Source: American Community Survey, DP04

Figure XX: Home Values, 2023

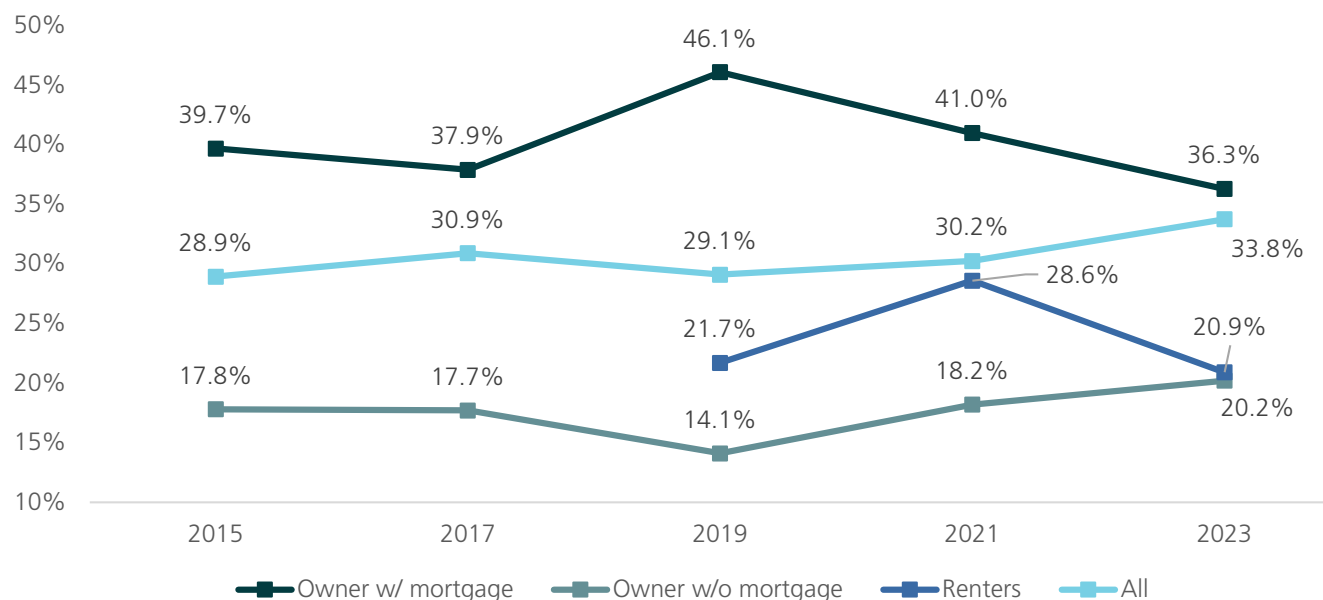
Source: American Community Survey, DP04

Figure XX: Median Home Value and Median Household Income, 2015-2023

Source: American Community Survey, DP03 & DP04

The median home value in Torch Lake Township was \$469,500 in 2023, a figure that is significantly higher than that of Antrim County (\$222,500) and the State (\$217,600).²⁹ The figure “Home Values, 2023” shows the distribution of values for all homes in the Township, with over 60% being valued higher than \$300,000.³⁰ These high values are influenced by many factors, one of them is the large portion of single-family detached homes that is largely prohibitive for residents who are not earning high incomes. By adding denser housing types like townhomes and smaller apartment buildings the Township could offer a greater variety of units that reach lower price points.

The figure “Median Home Value vs. Median Household Income, 2015-2023” compares the increase in household incomes to the increase in home values. In 2015, the median home value in Torch Lake Township was \$286,100, compared to the household income of \$65,268; the ratio of value to income was about 4.38.³¹ The same figures for 2023 formed a ratio of 5.46, showing that home values have outperformed the increase in incomes, making homeownership more difficult to attain in Torch Lake Township.³² If homeownership becomes less attainable, more households will have to rent for longer or move out of the community.

Figure XX: Portion of Households Cost-Burdened by Type, 2015-2023

Source: American Community Survey, DP03 & DP04

HOUSING AFFORDABILITY

The figure “Portion of Households Cost-Burdened by Type, 2015-2023” shows the portion of owner-occupied households with and without mortgages and renter-occupied households spending more than 30% of their incomes on housing costs. Once a household exceeds this threshold, they are defined as cost burdened.³³ While figures for all groups observed ups and downs during the period of measurement, they remained relatively stable over time. Households with mortgages and renter households saw a slight decrease in cost burden while households without a mortgage saw a slight increase. The overall rate for all groups combines increase from 28.9% in 2015 to 33.8% in 2023. This shows that more than one-third of all households in Torch Lake Township are having difficulty covering their housing costs.³⁴ It should be noted that data for renters was not available prior to 2019, and the American Community Survey stated the number of renters in Torch Lake Township before 2019 as 0.

KEY TAKEAWAYS

- » Torch Lake has a high portion of residents (42.9% of all residents are 65 or older) who are senior citizens. It is necessary that there are services in place to expand to assist those

who have a variety of needs. Torch Lake Township should consider partnering with other surrounding communities to ensure that needs are met while keeping in mind the cost of these services.

- » Just under 95% of all housing units are single-family detached units. At the same time, one-third of all households are finding themselves burdened by the cost of housing in the Township. More diverse housing options can help to reduce the cost burden on households as these units are typically less expensive to buy, rent, and maintain.
- » Additionally, smaller households are better suited to elderly residents who wish to age in place, because they can more effectively care for the needs of their homes compared to larger units, as well as being more suitable for smaller household sizes.
- » The median household income in Torch Lake Township was \$85,972 in 2023. This figure is significantly higher than the rest of Antrim County and the State. This combined with the fact that the poverty rate in Torch Lake is 11.0% shows the discrepancy in incomes across the Township. Services to support lower income residents can help to reduce housing burdens and improve the health of the Township’s most vulnerable residents.

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Natural Features & Community Facilities

2



NATURAL FEATURES

Torch Lake Township is considered a natural feature, the thin land strip between Grand Traverse Bay and Torch Lake shares more than 75% of its borders with a shoreline. The natural resources within Torch Lake and the region's varied climate support a wide range of year-round tourism. Both summer and winter activities are well represented in Torch Lake Township, with access to golf courses, tennis courts, marinas, boat charters, campgrounds, parks, and nature trails with access to ski resorts a short drive away. The area also offers opportunities for sailing, boating, hunting, fishing, and enjoying protected natural areas that contribute to the area's appeal as both a tourist destination and a vibrant community for outdoor enthusiasts.

Grand Traverse Bay

Grand Traverse Bay forms the western boundary of Torch Lake Township, stretching southward toward the Mission Peninsula and Traverse City. Like many water bodies in northern Michigan, Grand Traverse Bay is classified as an impaired waterway. It is listed under Section 303(d) of the Clean Water Act, which requires the development of a Total Maximum Daily Load (TMDL) restoration plan to address the impairments.¹ The primary concerns in the bay relate to fish consumption advisories due to the presence of harmful substances such as chlordane, dioxins, mercury, and PCBs in fish tissue. Additionally, PFOS (perfluorooctanesulfonic acid) contamination has been identified, though it is not currently subject to an established remediation plan.²

Torch Lake

Torch Lake is the Township's most prominent natural feature. It spans 18,473 acres with 41 miles of shoreline, making it the second-largest inland lake by surface area in the state. At a maximum depth of 302 feet, it is also the deepest and holds the greatest volume of water, resulting in a long flushing rate and infrequent freezing during winter.³

Once a deep bay of ancient Lake Michigan, Torch Lake became isolated when a sandbar formed at its northwest end where the Township now sits. Its shoreline consists mainly of cobble-sized rocks, with sandy areas at the north and south ends. The

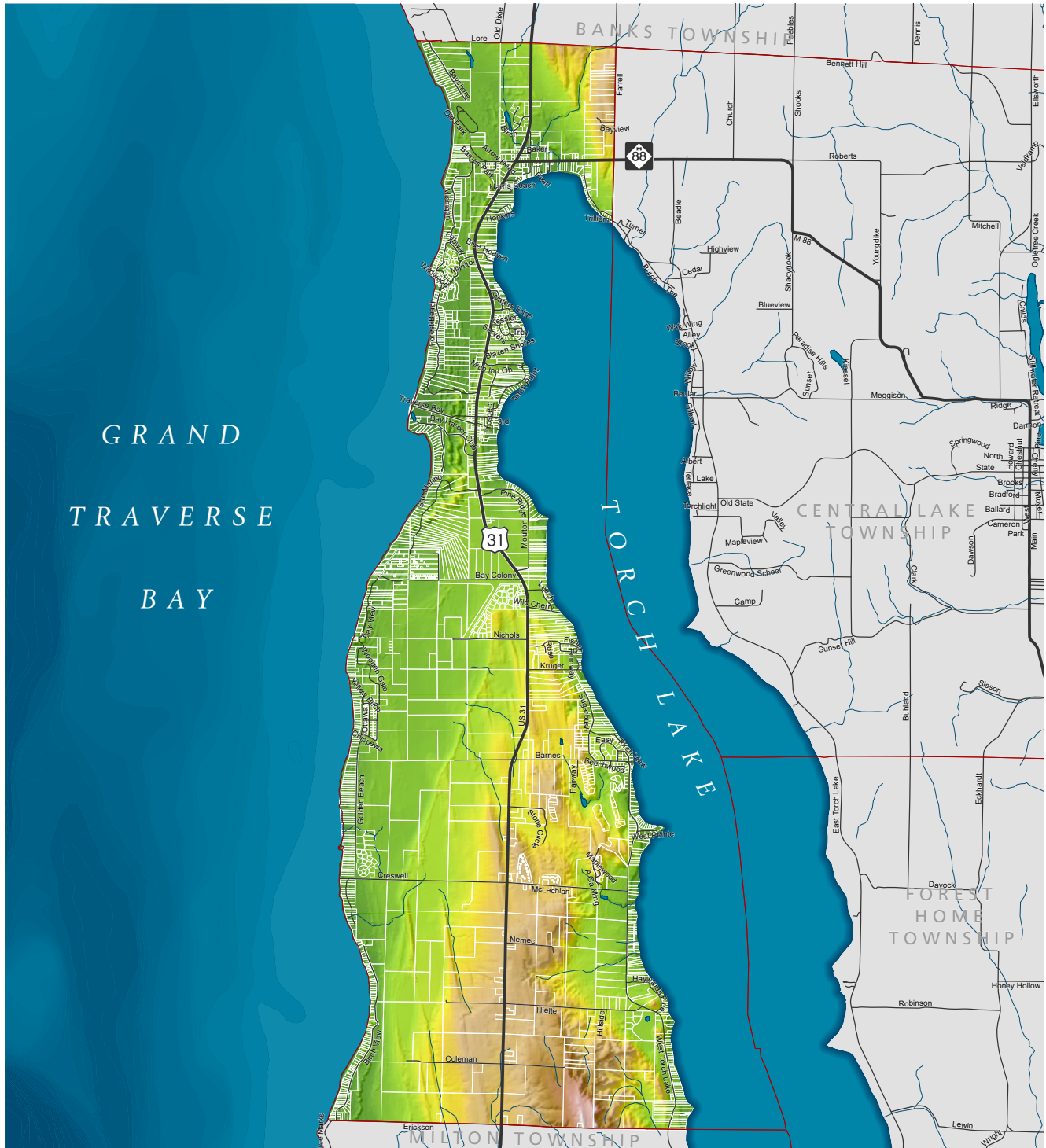
nearshore areas are typically shallow and sandy before dropping off steeply into deeper waters. Aquatic vegetation is limited. Muskgrass (*Chara*) is the most prevalent species, along with smaller amounts of pondweeds, water milfoil, and wild celery.⁴

The lake is part of the Elk River Chain of Lakes Watershed. Major inflows include the Clam River, with an outflow through the Torch River at the south end. Torch Lake supports a cold-water fishery, including naturally reproducing lake trout and whitefish, as well as smallmouth bass, yellow perch, and muskellunge. Despite its recreational value, fish consumption advisories are in place for several species due to elevated levels of mercury, PCBs, and dioxins. Torch Lake faces ongoing threats from aquatic invasive species, including Eurasian watermilfoil, zebra and quagga mussels, and round goby, which pose risks to native ecosystems and water quality. Continued environmental stewardship will be important to protect this critical natural resource.⁵

Topography

Torch Lake Township's landscape elevation ranges lake level (approximately 580 feet above sea level) around its shoreline and increases nearly 300 feet in its southern portion bordering Milton Township, as well in the northeast on the borders of Banks and Central Lake Townships. Its topography was shaped by glacial activity during the last ice age, known as the Wisconsinian glaciation, which occurred around 14,000 years ago. Prominent glacial ridges can be found along the western shore of Torch Lake and Torch River, while long, teardrop-shaped hills called drumlins are scattered throughout parts of the Township. These landforms were created as advancing glaciers deposited glacial till—a mixture of unsorted sand, silt, and gravel—beneath the ice to form drumlins, and along the ice fronts to form ridges called moraines.⁶ At the peak of the glacial period, ice sheets up to two miles thick covered the region, including what is now Torch Lake Township. These ice sheets not only blocked Lake Michigan's natural outflow through the Straits of Mackinac but also released massive volumes of meltwater into the ancient Lake Michigan basin. As a result, backed-up waters occasionally carved new drainage routes through present-day Chicago, Illinois, and North Bay, Ontario.⁷

Map XX: Topography

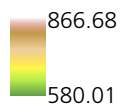


Topography

Sources: Michigan Open Data Portal, Torch Lake Township, U.S. Geological Survey (USGS)

 Torch Lake Township

Elevation (Ft) Value



4,000 Feet
Beckett & Raeder, Inc.



Wetlands

Torch Lake Township hosts wetlands all throughout its landscape, typical of low-lying areas largely surrounded by water bodies. The most prevalent wetland type in the area is Freshwater Forest/Shrub Wetlands which is characterized by waterlogged soils and plant species adapted to wet conditions where both trees and shrubs are present, but shrubs are more dominant than trees.

Wetlands play a vital role in the landscape by filtering pollutants from water, reducing the impacts of flooding, and supporting diverse plant and wildlife communities. Some areas, known as restorable wetlands, have been altered or degraded but retain the potential to regain their natural

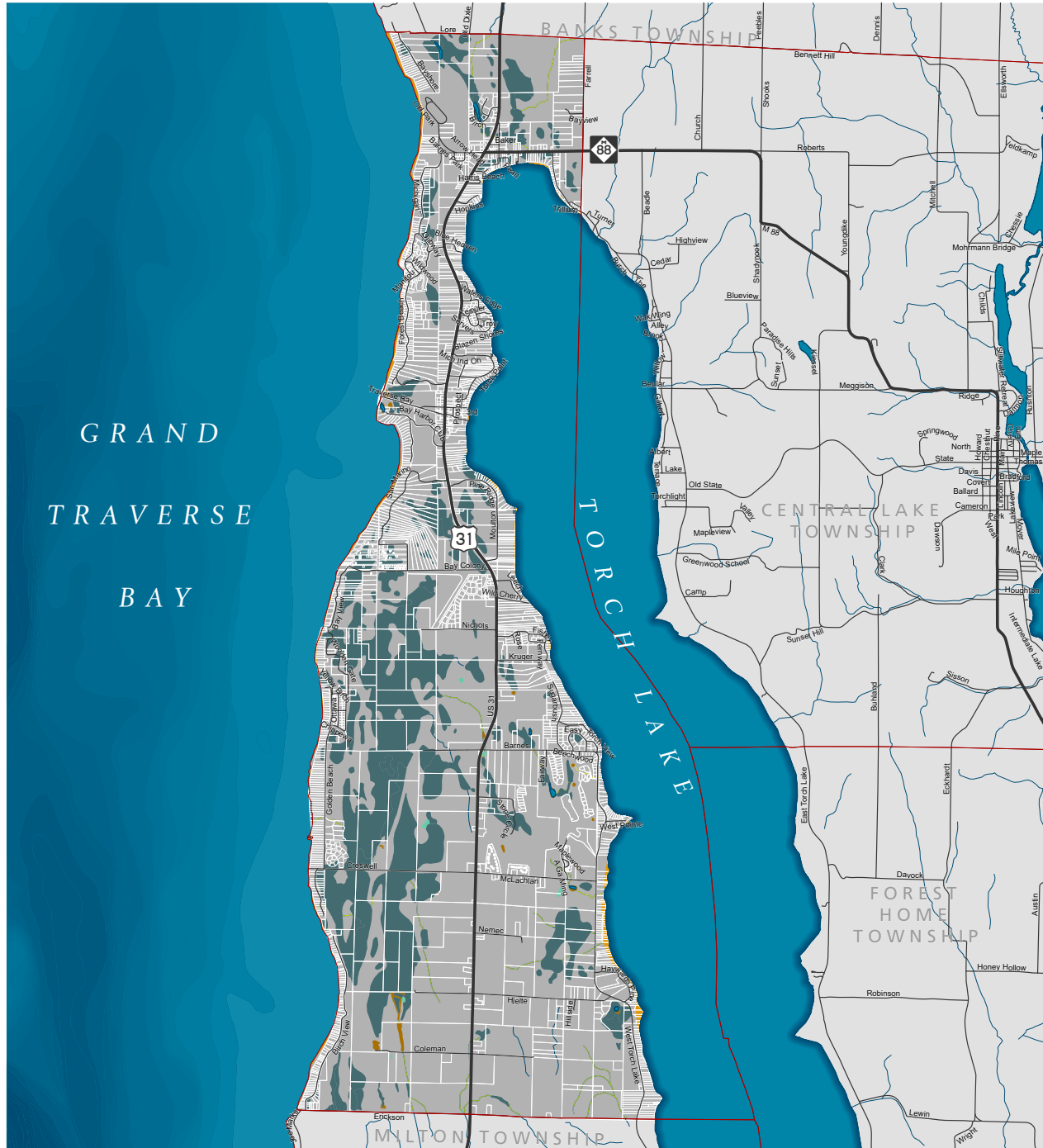
functions through targeted restoration activities. These activities may involve reintroducing native plant species, improving hydrology, and controlling invasive species. In Michigan, such restoration efforts are regulated and typically require permits from the Michigan Department of Environment, Great Lakes, and Energy (EGLE).⁸

Forested Areas

Forests and wooded areas cover large portions of Torch Lake Townships land area, in many of the same places as wetlands. Wooded wetland areas and deciduous forests are the most prevalent. Forests offer a wide range of ecological and community benefits. They help manage stormwater by increasing infiltration and reducing the risk

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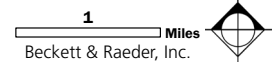
Map XX: Wetlands



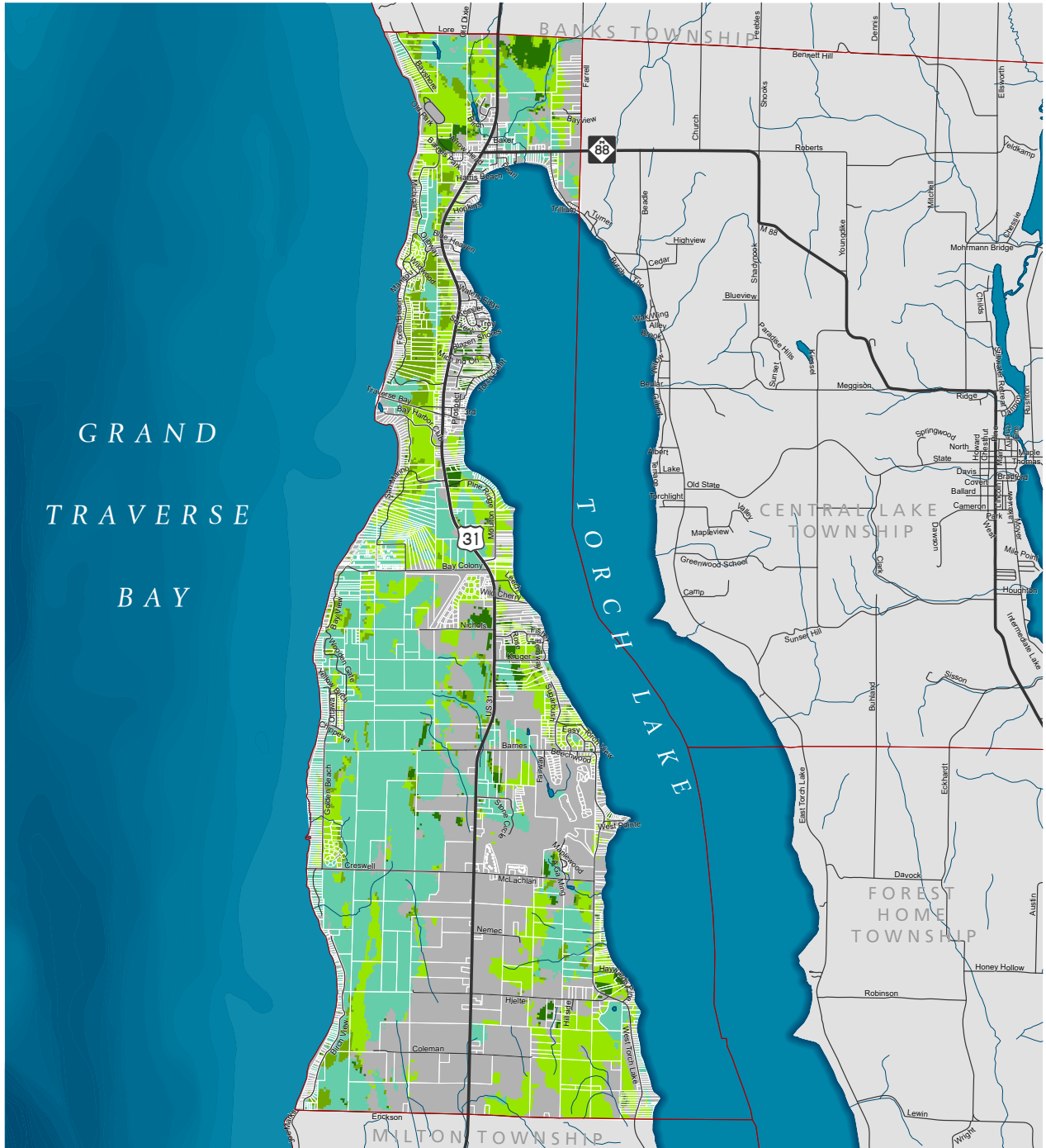
Wetlands

Sources: Michigan Department of Environment Great Lakes and Energy (EGLE) Open Data, Michigan Open Data Portal, Antrim County, Torch Lake Township

- Torch Lake Township
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond Wetland
- Lake Wetland
- Riverine Wetland



Map XX: Forest Land Cover, 2023



Forest Land Cover, 2023

Sources: Michigan Open Data Portal, Antrim County, Torch Lake Township, U.S. Geological Survey (USGS) National Land Cover Database (NLCD)

- Torch Lake Township
- Deciduous Forest
- Evergreen Forest
- Mixed Forest
- Woody Wetland

1 Miles
 Beckett & Raeder, Inc.



of flooding, while also supporting soil health and carbon storage. Forested areas serve as vital habitats for wildlife and contribute to maintaining biodiversity. Beyond their environmental value, woodlands provide important recreational opportunities and have been shown to enhance human well-being—improving mood, focus, and reducing stress levels. Because access to these areas is typically free and their ecosystem services are not monetized, the full value they offer is often underestimated, but their importance is widely experienced by those who spend time within them.⁹

Critical Dunes & High Risk Erosion Areas

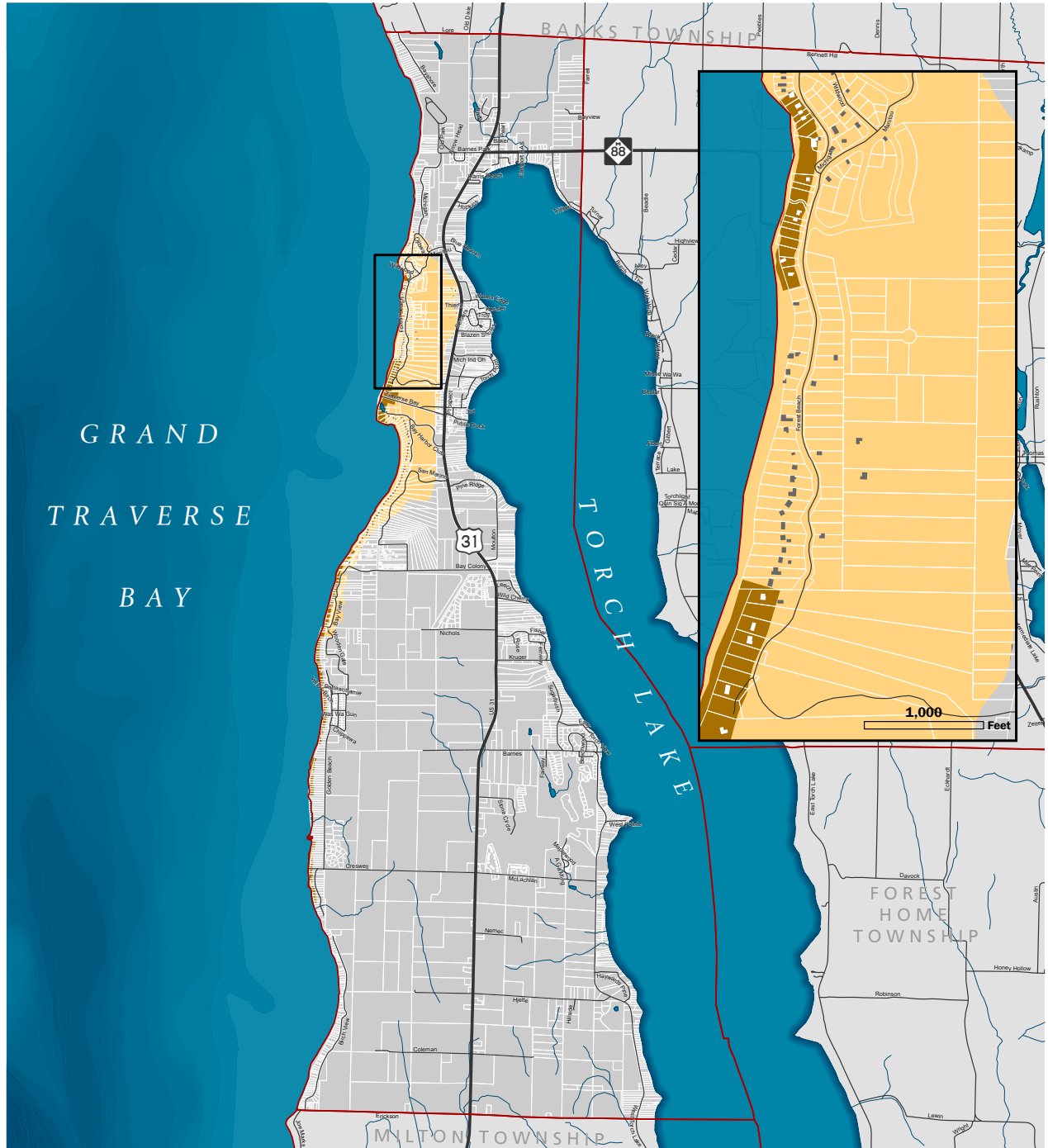
Torch Lake Township contains portions of Michigan's designated Critical Dune Areas (CDAs), which are part of the world's largest freshwater dune system. These dunes provide significant ecological, scenic, and recreational value and are protected under Part 353 (Sand Dune Protection and Management), of the Natural Resources and Environmental Protection Act. This legislation was

created in response to decades of damage from mining and development along the Great Lakes shoreline.¹⁰ The map "High Risk Erosion Zones & Critical Dunes" shows where these critical dunes are present in Torch Lake Township. Within these areas there are some High Risk Erosion Zones (HREAs), or areas along the Great Lakes (in this case, Lake Michigan) where the shoreline erodes at a rate of one foot or more each year.¹¹

Much like CDAs, High-Risk Erosion Areas (HREAs) along Michigan's Great Lakes shoreline require careful management. Erosion is a natural and ongoing process driven by water levels, wave action, and local geology. The state's HREA program identifies shorelines receding at a rate of one foot or more per year and sets minimum setback distances for new development based on projected erosion over 30- and 60-year periods. These regulations help ensure that new structures are situated a safe distance from vulnerable bluff edges and are either moveable or designed for long-term stability.¹²

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Map XX: High Risk Erosion Zones & Critical Dunes



High Risk Erosion Zones & Critical Dunes

Sources: Michigan Open Data Portal, Antrim County, Torch Lake Township, Bing Maps

- Township
- High Risk Erosion Zones (HREZ)
- Critical Dunes
- Building within HREZ
- Building within Critical Dune Area

1 Miles
Beckett & Raeder, Inc.



Protecting both Critical Dune Areas and High-Risk Erosion Zones is essential to preserving the Township's natural heritage, scenic beauty, and long-term resilience. Avoiding shoreline hardening and promoting low-impact development, invasive species control, and strategic setbacks will help maintain healthy dune and shoreline ecosystems.¹³ As shoreline conditions change, allowing natural processes to function without unnecessary interference will protect both the environment and nearby structures for generations to come.

Steep Slopes

Steep slopes are a significant natural feature that require careful planning and protection due to their susceptibility to erosion and instability. In Michigan, a slope is generally considered "steep" when it exceeds a 15% grade, meaning a 15-foot rise over a 100-foot horizontal distance. Steep slopes are often found in upland areas and along bluff edges near Lake Michigan, where they can reach grades of 40% to 80%. These areas are particularly vulnerable to failure when disturbed.¹⁴

Slope instability can be caused by both human activity and natural processes. Man-made causes include excessive weight near the bluff edge, poor grading or construction practices, removal of deep-rooted vegetation, redirected stormwater, and runoff from impervious surfaces or sump pumps. Natural factors such as wave erosion at the base of

slopes, saturated or weak soils, freeze-thaw cycles, and heavy rainfall or snowmelt can also trigger slope failure. Protecting steep slopes is critical to preventing erosion, protecting water quality, and avoiding property damage. Maintaining native vegetation, managing stormwater runoff, and limiting development on or near steep slopes are key strategies to preserving these sensitive areas and reducing the risk of slope failure.¹⁵

COMMUNITY FACILITIES

Torch Lake Township Hall

Located at 2355 N US-31 in Kewadin, Torch Lake's Township Hall is home to Township offices and services like Fire and EMS.

Torch Lake Township Fire Department & EMS

Torch Lake Township is served by Station 8800, in the same building as Township Hall, a dedicated Fire Department providing a wide range of emergency response services. The department's responsibilities include structural, grass, and wildland firefighting, water and ice rescues, vehicle extrications, and safety assistance at accident scenes. They also respond to fire and carbon monoxide (CO) alarms, help manage downed power lines and trees during storms, and support emergency medical response efforts.¹⁶



Torch Lake Township Hall – Fire Department & EMS

Source: Environment Architects

The Township's Emergency Medical Services (EMS) department, established in 1997, is a licensed Advanced Life Support (ALS) transporting ambulance service. This designation enables EMS staff to provide both emergency care and transportation to medical facilities.¹⁷

The EMS team is made up of more than 20 members, including paramedics, EMT specialists, EMT-basics, and medical first responders. While some crew members are residents, many come from nearby communities and serve in part-time roles.¹⁸ The primary ambulance is always staffed with at least two responders, ensuring an average response time of under four minutes and typical on-site arrival within nine minutes under normal conditions. Torch Lake Township's EMS is funded through a combination of service fees, taxpayer contributions, grants, and private donations. The department continually seeks to expand its roster and welcome new members interested in serving their community.¹⁹

Road Maintenance

Roads in Torch Lake Township are maintained by the Antrim County Road Commission, with the exception of US-31 which is under the jurisdiction of the Michigan Department of Transportation (MDOT).²⁰

Utilities

Electricity and Gas

Electric Utilities in Torch Lake are provided by Consumer Energy and Great Lakes Energy. Natural Gas is provided by DTE Energy.²¹

Broadband

Broadband internet is provided by a variety of private companies, at the discretion of the user.

KEY TAKEAWAYS AND RECOMMENDATIONS

- » The lakes that surround Torch Lake Township are integral to its charm and identity, as well as attracting tourists to the area which supports the economy. Ensuring that these resources are protected to the highest extent possible will ensure that they continue to be a staple of the region.
- » The greatest threats to Torch Lake and Lake Michigan are pollution and invasive species. While addressing these threats will require partnerships with other communities, the state, and organizations the Township can implement initiatives to educate the community on ways to mitigate these impacts.
- » Forested and Wetland areas in the Township are important to the ecosystem, providing significant biodiversity and wildlife habitats. Additionally, the value provided through carbon sequestration, water filtration, flood mitigation, and overall public health is of incredible value. These natural areas should be protected continuously and development near these areas needs to ensure that negative impacts are minimized.
- » The Township should ensure that development is kept at a safe distance from areas that are at a higher risk for erosion, especially along Lake Michigan where erosion rates are high, as well as areas where slopes are steep.

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Resiliency

3



Torch Lake and Torch Lake Township, looking north.

Source: Torch Lake Protection Alliance.

RISKS AND RESILIENCY

Torch Lake Township lies at the east end of Grand Traverse Bay, along 5.2 miles of its shoreline. Since the Grand Traverse Bay is part of the same water body as Lake Michigan, throughout this chapter, the terms, “Grand Traverse Bay” and “Lake Michigan” should be considered synonymous. Torch Lake Township also includes 10.1 miles of shoreline along the 29.3-square mile Torch Lake to the east. These shorelines serve as significant recreational amenities to many residents and visitors. Development can come into conflict with the dynamic forces of the Grand Traverse Bay and its ever-changing shoreline. As such, Torch Lake Township’s residents and leaders bear the responsibility of balancing the protection of the shoreline/shorelands and land use rights and needs. This section will focus on Great Lakes coastal resiliency, highlighting the challenges and risks associated with shoreline development and the adaptation strategies the Township can take to preserve its shoreline.

CHANGING WATER LEVELS

The Great Lakes are dynamic bodies of water, with water levels that fluctuate over short and long timeframes. The gravitational pull of the moon and wind cause minute changes daily and cyclical changes in precipitation and runoff cause the Great Lakes to rise and fall feet over decades. As shown in the figure “Lake Michigan Water Levels”, Lake Michigan follows a routine pattern of rise and fall for over 100 years. Lake Michigan’s historic

Shoreline: The intersection of the ordinary high-water mark and land.

Shoreland: Commonly used to describe the shoreline ecosystem. Legally refers to the land 500 feet inward from the shoreline.

low was recorded at 576.02 feet in January 2013 and peaked at 582.35 feet in 1986. However, in June of 2020 Lake Michigan was recorded at 582.19 feet, coming within approximately two inches of the historic high. In other words, Lake Michigan water levels shifted from a historic low to a near-historic high in a period of seven years. This has not happened since the data started being recorded. This trend of rapid lake fluctuations will likely continue and accelerate with changes in the climate.¹

The late 2010s saw a period of high-water, causing shoreline erosion and the submergence of many shorelands. In extreme cases, shoreline homes had to be abandoned and were consumed by the waters of the Great Lakes. In addition to high water levels, extreme waves due to storm events and the pace of changing water levels also contributed to the inward-shifting shoreline.

Shifting Dynamics

Changing water levels coincide with other observed regional climate trends. Increased temperatures are beginning to impact northwest Lower Michigan,

Figure XX: Lake Michigan Water Levels



Source: U.S. Army Corp of Engineers

with the region experiencing a rise in temperatures of two to three degrees Fahrenheit over the past century.² With changes in temperature, precipitation events are typically observed to increase in frequency and intensity. The 2010–2014 and 2015–2020 periods recorded the highest multiyear averages of 2-inch rainfall events on record.³ As the climate warms and precipitation events become more severe and frequent, the historic dynamics of the Great Lakes will change.⁴ Warmer air, fewer days of ice cover, more severe and frequent storms, and faster evaporation will cause an acceleration of water level that will become less predictable. These shifting dynamics will speed the erosion of the shoreline at a pace where it cannot be replenished by natural systems, posing a threat to structures, infrastructure, and critical facilities located near the shoreline.

Critical Coastal Facilities

It is vitally important to consider the presence of critical facilities on the shore as risk from erosion or flooding may compromise these facilities. Generally, schools, hospitals, public safety buildings, and utility and water/sewer infrastructures are considered critical infrastructures. There are currently no such critical facilities located on the coast in Torch Lake Township. However, there are 357 homes currently along the shore of the Grand Traverse Bay that will be impacted by coastal erosion, changing water levels, and wave action from severe storms, in addition to 384 dwellings with lake frontage on Torch Lake.

Flood History

In addition to the impacts of the changing coastline and wave action from severe storms, inland flooding risks should also be explored and planned for. The National Flood Insurance Program (NFIP) is a federal insurance policy that provides protection to those who may be at risk of flooding. Torch Lake Township does not currently participate in the NFIP.⁵ However, mortgage lenders may require property owners to secure flood insurance in order to grant a mortgage. Based on a listing of redacted Federal Insurance and Mitigation Administration (FIMA) NFIP insurance policies updated in April 2025, there are six (6) properties in Torch Lake Township with active FIMA NFIP policies. These policies include total building insurance coverage of \$1.5 million. Countywide, there are 21 policies with total building insurance coverage of \$4.64 million.⁶



Home at the edge of a bluff, Berrien County, Michigan.

Source: Department of Environment, Great Lakes, and Energy (EGLE).

Within a dataset of FIMA NFIP claims spanning from 1980 to 2025, only five claims in Antrim County were made to the NFIP, including two (2) such claims in Torch Lake Township, one being from a loss event in November 1986 and one being in April 2014.⁷ It is therefore rare for those who have coverage to experience an event that would require claiming the protection.

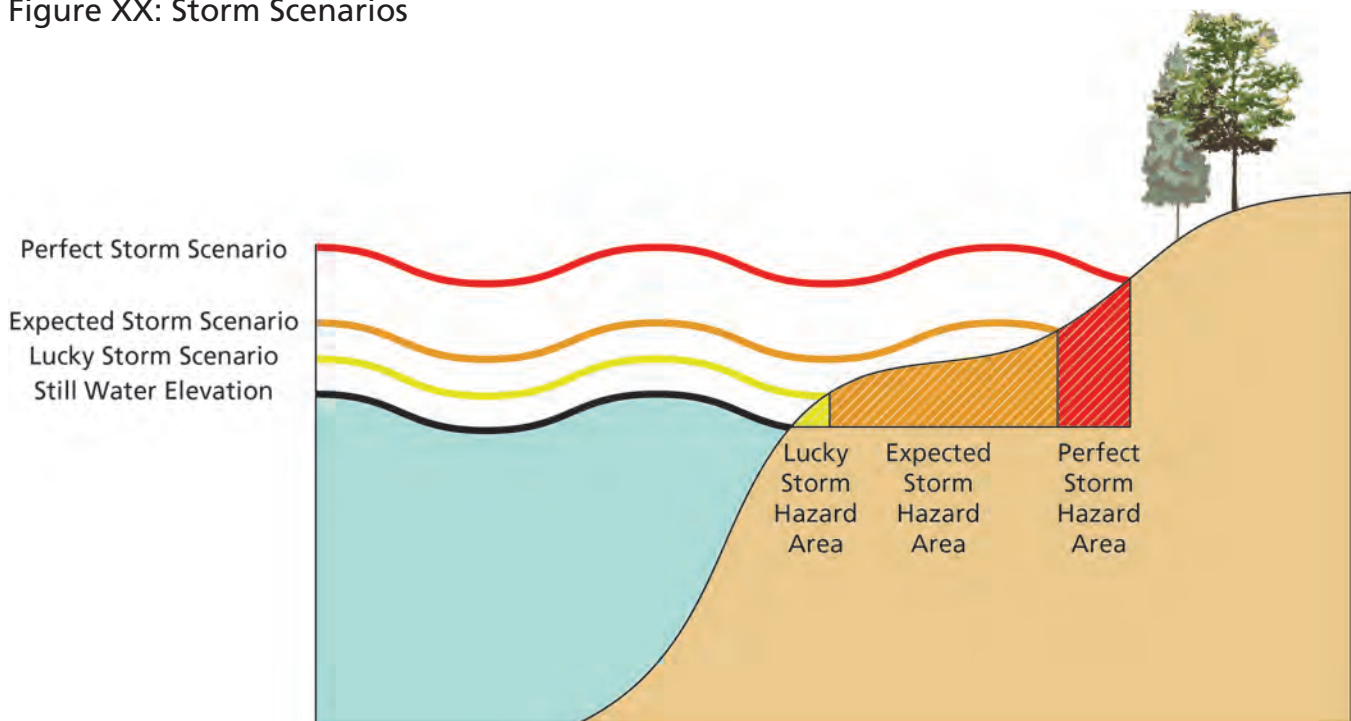
COASTAL AND FLOODPLAIN RISK ANALYSIS

Key to planning for the future is understanding the current level of shoreland risk. Identifying what areas of the shore are likely to flood during a storm provides insight into locations of greatest risk for people, structures, and the natural environment. While this analysis of coastal flooding from storms does not provide a direct correlation to shoreland erosion, it does highlight what areas of the shore are likely to experience the most severe interactions with the water.

Method

The analysis used a combination of elevation, water levels, storm surges, data from Federal Emergency Management Agency (FEMA), and Geographic Information Systems (GIS) to determine what areas are likely to flood in a storm scenario.⁸ The analysis uses three different storm scenarios, a “lucky”, “expected”, and “perfect” storm to accurately project the full range of risk:

Figure XX: Storm Scenarios



“Lucky” scenario.

Under FEMA’s National Flood Insurance Program (NFIP), zones are delineated to outline flooding risks based on different types of storm events. The NFIP’s Flood Insurance Rate Map (FIRM) Zone A areas are those with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage.⁹ Zone AE areas are those within the base floodplain, where base flood elevations representing a 1-percent annual chance flood are provided. The “Lucky” storm scenario is measured as a best-case scenario and assumes that only the A and AE zones connected to the shore as well as those elsewhere in the Township are inundated during a storm event.

In Antrim County, combined national flood hazard layer (NFHL) data is not currently available. In its absence, 100-year flood elevations for both the Grand Traverse Bay (584.6) and Torch Lake (590.56) are provided in a FIRM dated January 1997. These are elevations under which there is anticipated to be a 1% annual chance of flooding adjacent to the Grand Traverse Bay and Torch Lake. These elevations were produced as contours from a digital elevation model (DEM) image provided taken in February 2024. Areas under these elevations near their respective water bodies provide the basis for the “Lucky” storm scenario. The “Lucky” scenario does not anticipate coastal high velocity wave action.

While this map predicts flooding according to the delineated 100-year floodplains of Torch Lake and Lake Michigan, additional localized flooding can occur outside these floodplain areas based on obstructions within natural and constructed drainage pathways, such as obstructions in storm sewer pipes and catch basins or grading property in a manner that obstructs drainage from an upland location. Localized flooding can be accentuated in times of increased precipitation.

“Expected” scenario.

The expected storm represents a more typical storm event and is the combination of the average still water elevation of the Grand Traverse Bay, storm surge, and the 100-year floodplain zones to determine what areas are at risk. Along the Township’s shoreline on Grand Traverse Bay, expected storm hazard area also includes the lucky storm hazard area

“Perfect” scenario.

The perfect storm represents the worse-case scenario when the lake is at its highest elevation. The perfect storm is modeled using the historic lake high, a storm surge, and the 100-year floodplain zone. The perfect storm hazard area includes all three hazard areas.

Results

Under the lucky storm scenario, an estimated 598 parcels would be impacted by coastal storm flooding (27.29% of all parcels in the Township). These lots encompass roughly \$191.29 million in state equalized (SEV) property value, about 56.06% of the total value in the Township. Therefore, a majority of the Township's tax base is at risk from coastal and lake flooding, even under a "base case scenario". Even only accounting for parcels on the Grand Traverse Bay, 340 parcels are impacted in the lucky storm scenario, representing \$91.06 million in SEV (26.69% of the Township's total SEV). The perfect storm scenario models an increase to 670 parcels (30.58% of the total) being impacted, totaling \$199.58 million in SEV property value, or about 58.49% of the Township's total SEV. The maps illustrating each of the hazard zones are included at the conclusion of this section.

All scenarios show the significant impact that a single storm can have on the Township's fiscal health and its inventory of bayside or lakeside properties.

This analysis describes the overlap between storm hazard zones and property boundaries, and not the overlap between those zones and buildings. In many cases, buildings and other structures may be elevated above other portions of property or set back from the shoreline. Buildings and structures may therefore be shielded from the direct and immediate impacts of storm hazard events. Some lakeside properties have received letters of map amendment (LOMA) from FEMA, indicating that their structures are elevated above the listed 100-year floodplain elevation.¹⁰

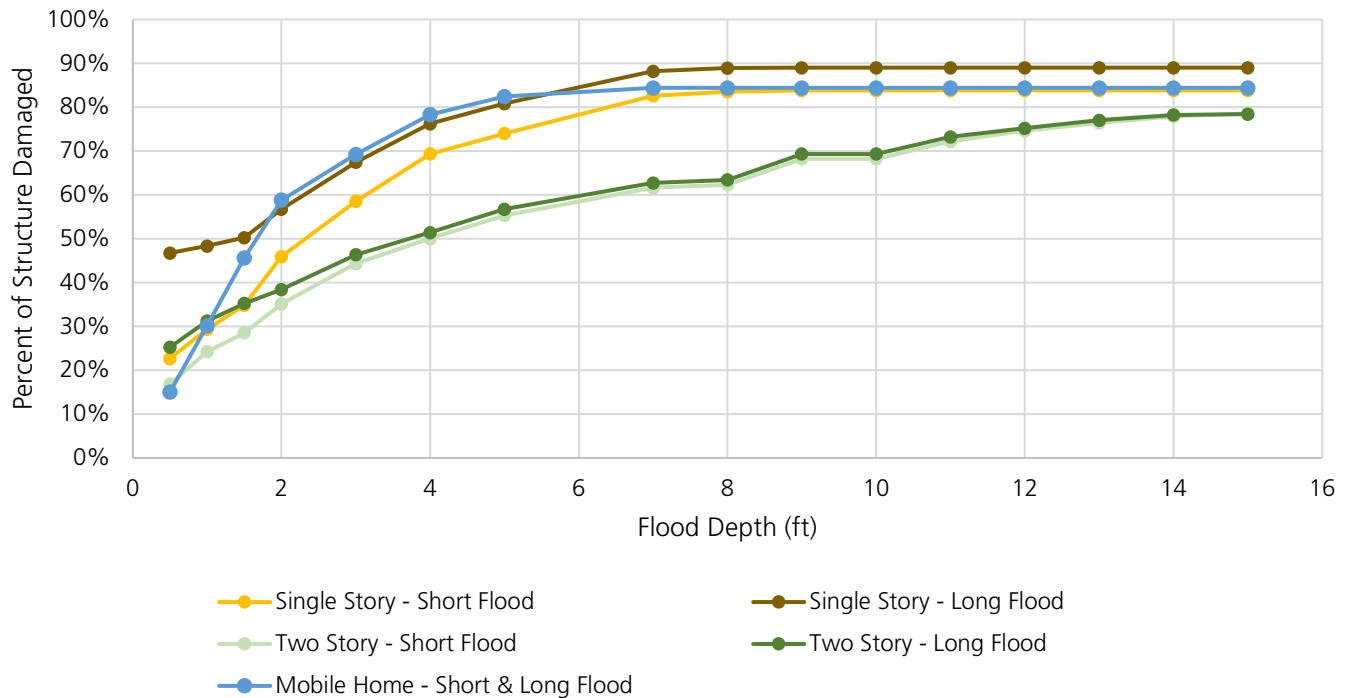
While buildings and structures may be safe from many of the impacts of flooding, flooding on lower portions of property can be detrimental over time. While there is little change in the landscape impacted under each storm scenario, impacts vary between properties. The more intense the storm scenario, the more water moves over the land. If the terrain does not change, the flood waters in the affected areas will be deeper and more impactful. Additionally, the water is likely to stay inland for longer, prolonging the damage to structures. The United States Army Corps of

Table XX: Flooding and Wave Action Risk in Torch Lake Township

		Lucky Storm Scenario		Expected Storm Scenario		Perfect Storm Scenario	
		Count	Percent	Count	Percent	Count	Percent
Total Parcels	Including Torch Lake Floodplain	598	27.29%	627	28.62%	670	30.58%
	Grand Traverse Bay Coast Only	340	15.52%	369	16.84%	412	18.80%
SEV (millions)	Including Torch Lake Floodplain	\$191.29	56.06%	\$199.58	58.49%	\$199.58	58.49%
	Grand Traverse Bay Coast Only	\$91.06	26.69%	\$99.35	29.11%	\$99.35	29.11%
Improved Residential Lots Affected	Including Torch Lake Floodplain	515	41.94%	539	43.89%	539	43.89%
	Grand Traverse Bay Coast Only	290	23.62%	314	25.57%	314	25.57%
Improved Residential SEV (millions)	Including Torch Lake Floodplain	\$178.92	58.47%	\$186.77	61.04%	186.77	61.04%
	Grand Traverse Bay Coast Only	\$86.41	28.24%	\$94.26	30.80%	94.26	30.80%
Second Homes Affected	Including Torch Lake Floodplain	285	43.45%	298	45.43%	298	45.43%
	Grand Traverse Bay Coast Only	157	23.93%	170	25.91%	170	25.91%

Sources: Michigan Open Data Portal, Torch Lake Township, including 2021 parcel and Assessor information, Emmet County, NOAA, and EGLE.

Figure XX: Depth to Damage



Source: U.S. Army Corp of Engineers

Engineers publishes depth to damage curves based on historical data and information from flood-affected property owners to calculate the relationship between flood depth and structure damage. As evident in the figure titled “Depth to Damage,” there is a substantial increase in damage between 0 feet and 2 feet for one-story structures, while the percent of a two-story structure damaged by flood waters remains consistent as flood waters increase in depth. The damage done by a lucky storm versus a perfect storm will likely follow these property damage trends. Given that the homes on the lakeshore are high-valued properties, even little damage could cost property owners a significant amount of money for repairs.

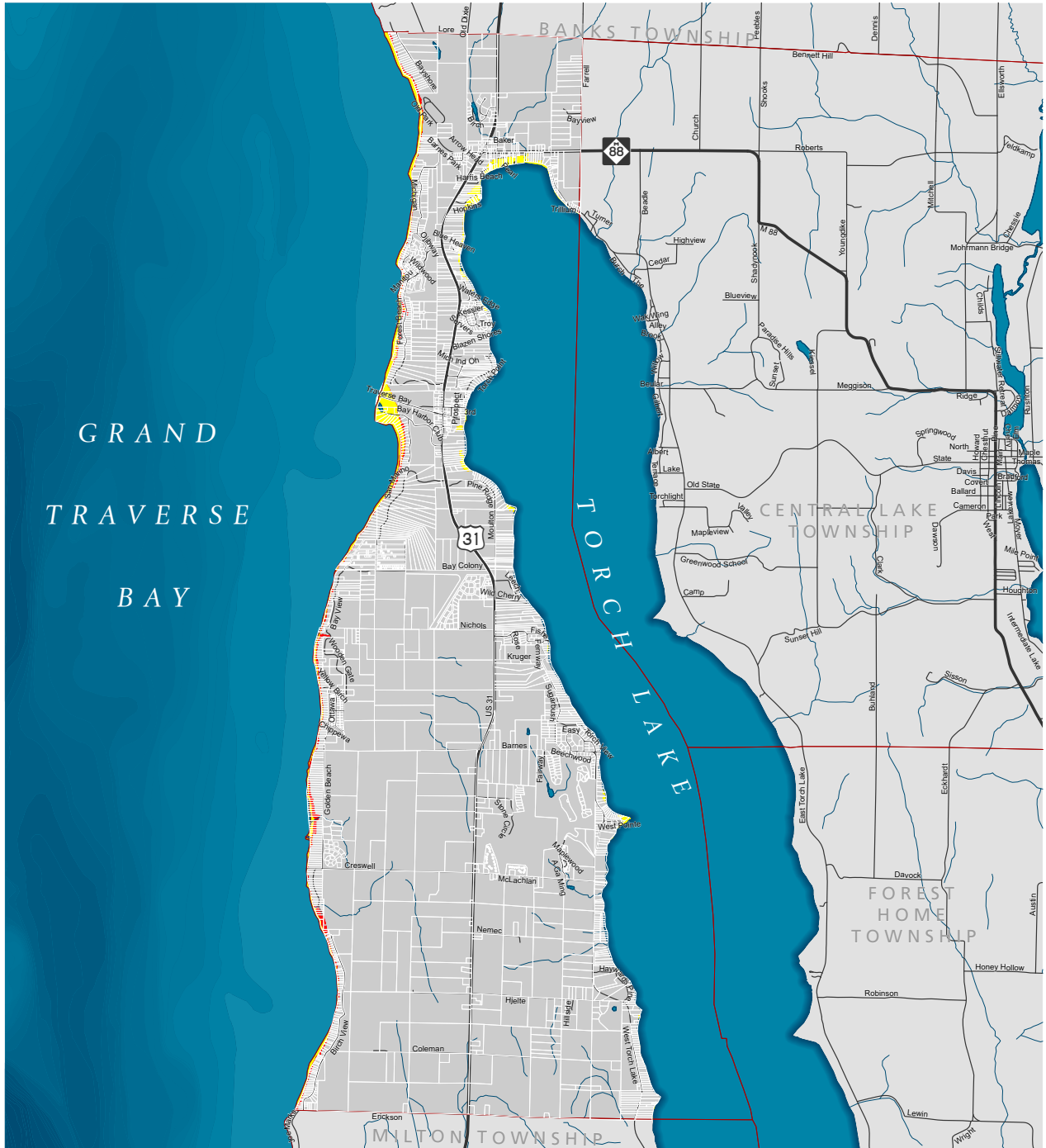
SENSITIVE LANDFORMS: HIGH RISK EROSION AREAS AND CRITICAL DUNES

Another threat to shoreland is erosion, and the continued loss of beaches and buildable coastland. While erosion was not included in the future flood modeling, the Michigan Department of Environment, Great Lakes, and Energy (EGLE) maintains a database of high-risk erosion areas. High-risk erosion areas (HREAs) are shorelines of

the Great Lakes where the land is receding at a rate of one foot or more per year for a minimum of 15 years.¹¹ High risk erosion zones encompass 85.4 acres in Torch Lake Township, and 152 parcels (6.94% of all parcels in the Township) fall partially or completely within high risk erosion zones. Based on global building footprint data completed by Bing Maps, as of 2020, 75 buildings in Torch Lake Township (4.7% of all buildings in the Township) are within high risk erosion zones.

Critical dune areas represent a diverse cross-section of dune shapes, height, and vegetation along Lake Michigan’s shoreline in the lower and upper peninsulas, and the shore of Lake Superior. The Critical Dune Areas (CDAs) include public lands and private properties where developmental, silvicultural, and recreational activities are regulated and a permit is required under Part 353, Sand Dunes Protection and Management, of the NREPA.¹² Critical dune areas encompass 653.6 acres in Torch Lake Township (approximately 6.76% of the Township’s total land area), and 327 parcels (14.92% of all parcels in the Township) fall partially or completely within high risk erosion zones. 140 buildings in Torch Lake Township (8.8% of all buildings in the Township) are within critical dune areas.

Map XX: Coastal and Lake Flood Hazard Zones



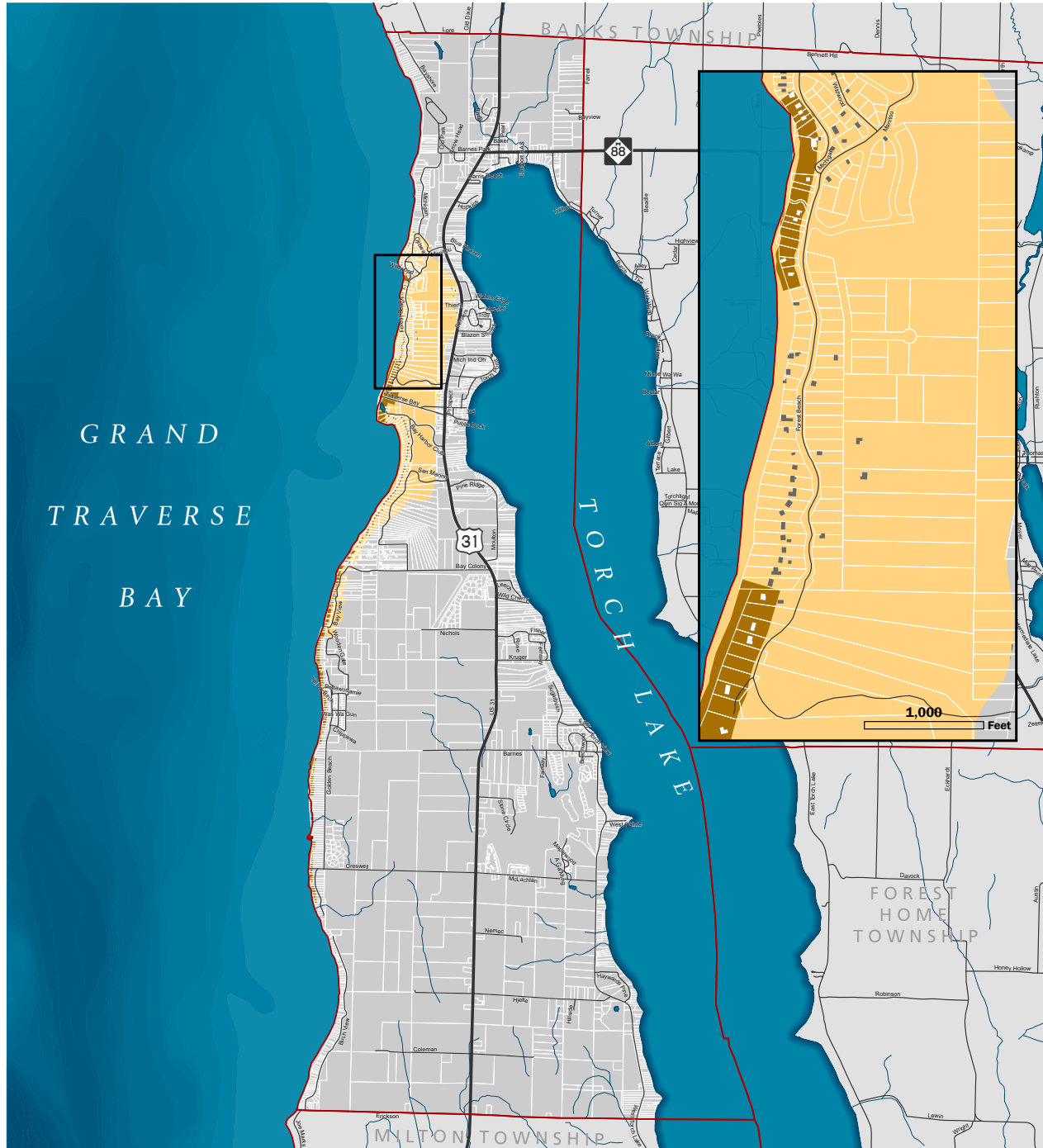
Coastal and Lake Flood Hazard Zones

Sources: Michigan Open Data Portal, Torch Lake Township, Antrim County, NOAA, EGLE

- Torch Lake Township
- Lucky Storm
- Expected Storm
- Perfect Storm

1 Miles
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Map XX: High Risk Erosion Zones & Critical Dunes



High Risk Erosion Zones & Critical Dunes

Sources: Michigan Open Data Portal, Antrim County, Torch Lake Township, Bing Maps

- Township
- High Risk Erosion Zones (HREZ)
- Critical Dunes
- Building within HREZ
- Building within Critical Dune Area

1 Miles
Beckett & Raeder, Inc.



ADAPTATION STRATEGIES

To preserve the health of the shoreland and protect private property and structures it is necessary to implement adaptation strategies.

Zoning - Setbacks

Zoning is the main regulatory tool that local communities use to control development. Adopting zoning regulations specifically to prevent shoreline flooding and preserve shore features is one adaptation strategy. Within the Zoning Ordinance, setbacks are the most effective tool to mitigate coastal risk. Setbacks are the minimum distance a structure can be from a lot line, other structure, or natural feature.

Within the Torch Lake Township Zoning Ordinance, adopted in September 2024, a Waterfront Overlay Zoning District (Section 4.2) has been implemented with a purpose that includes preserving and protecting waterways and lakes in and adjacent to Torch Lake Township. The Waterfront Overlay District applies to all private development and/or use of a portion of a lot or parcel within 50 feet of the Ordinary High Water Mark (OHWM) of Lake Michigan, the water's edge of Torch Lake, or the normal stream bank of streams, rivers, established wetlands and other natural and built watercourses. Under section 4.2.4 of the Zoning Ordinance (Structure Regulations), within this District, no new structures are permitted other than one stairway for each 100' of water frontage with landings up to 48 inches in width, and ground level walkways with a maximum width of 48 inches. The relocation of structures away from the Lake Michigan OHWM or water's edge of Torch Lake for lots with a depth of 80 feet or greater should be encouraged. Additionally, lots in the Waterfront Overlay District which are split by a roadway should be encouraged to remove structures in the waterfront portion of the lot or relocate them to the portion on the outside of the roadway.

Natural Vegetation

While not as effective as wetlands at mitigating the impacts of coastal flooding, natural vegetated shoreline areas (including dune grass, lichens, and woody plants) provide a natural barrier to flowing water, slowing it down and infiltrating a small portion of it into the ground. Vegetative buffers along the shore would reduce the distance flood

water travels inland and would lessen the force floodwater would have on the built environment. Torch Lake Township's Zoning Ordinance section 4.2.6 includes provisions for a required 30-foot shoreland protection strip perpendicular to the OHWM, water's edge of a water body, or banks of a waterway. Upholding these greenbelt requirements around coastal flood zones will provide enhanced protection during flood events.

Cluster Development

Clustering shoreline development has less negative impact on the shoreline and preserves greater amounts of natural space, reducing the amount of built out land at coastal risk. Cluster developments allow for some flexibility in design to ensure efficient use of the land and the protection of environmentally sensitive areas. Clustering private development, leaving the remaining open space that would have been consumed by traditional development, allows for more public access to the natural features and the shore. Additionally, clustering private development in areas encompassed by both inland and coastal wetlands allows wetlands to remain intact. In turn, these wetlands can more adequately provide the benefits discussed in the previous section. These wetland benefits are particularly relevant in Torch Lake Township, which has a total wetland area of 5,944 acres, or about 44% of its total land area.

Clustering development can be promoted through the use of a Planned Unit Development (PUD) or Open Space and Preservation District (OSPD) development option, the zoning map, or the Master Plan's Future Land Use map. These development options and their specific applicability to wetland, critical dune, and high risk erosion areas are described in the sections below.

Critical Dune and Erosion Risk Zone Protection

Critical dune areas and high risk erosion areas are subject to regulation and specific permitting requirements from EGLE. Many of these areas also fall within Waterfront Overlay Districts that include limits on new structures and vegetation requirements as described in the section above. Torch Lake Township should build on these coastal protections to encourage the protection of steep slopes adjacent to the Lake Michigan Shore, as well as of coastal dune areas. Use of the OSPD

development option can be an effective way to protect sensitive or high slope portions of HREZ and critical dune sites. Section 9.3 of the Torch Lake Township Zoning Ordinance describes that the OSPD development option allows property zoned for residential uses to be developed with the same number of dwelling units but on smaller parcels than would otherwise be required by the Zoning Ordinance, in return for the preservation of part of the property in an undeveloped state. At least half of the subject property in an OSPD, as designated by the landowner, shall remain perpetually in an undeveloped state. Prospective developers of large, contiguous property in critical dune and erosion risk protection areas should be encouraged to pursue only OSPD projects that cluster homes and preserve steep slope areas in an undeveloped state. Educational materials should be developed in consultation with EGLE and the Township's Building Official to educate prospective builders on the most advanced and code-compliant low impact construction methods for construction within critical dune and high risk erosion areas.

Wetland Preservation

Coastal wetlands act as natural water retention areas. Preserving and enhancing these features along the shore offers a barrier of protection during coastal floods. During flooding events, wetlands retain more water than their normal state, allowing the flowing water to be captured during the flood event before slowly returning into the soil or a water body. Inland wetlands also act as a natural filter for rainwater, helping to mitigate watershed-scale inland flooding. Wetland cohesiveness also aids in the preservation of vital native wetland plant and animal species. The Waterfront Overlay District contains strict limits on new construction within 50 feet of established wetlands. Additional permitting and mitigation procedures are administered by the State of Michigan. The Waterfront Overlay District contains a requirement for a 30-foot wide shoreland protection strip in shoreland areas abutting waterbodies. Where properties have existing development within inland wetland portions of the Waterfront Overlay District, a similar vegetative buffer strip adjacent to wetland boundaries should be encouraged.

Section 9.2 of the Torch Lake Township Zoning Ordinance describes and regulates the PUD development option. The use of the PUD option can incentivize wetland and other open space preservation by offering flexibility in the dimensional requirements of the project. PUDs are therefore the most viable means of achieving cluster development in the interest of wetland and shoreline preservation.

PUD should be encouraged as a development option for parcels greater than 10 acres in area along the coasts of Lake Michigan or Torch Lake, or which are partly or wholly encompassed by wetlands. See the map titled, "Wetlands and Favorable Parcels for Cluster Development," which demonstrates parcels that may be viable for cluster development tailored to wetland preservation.

Negative Impacts of Armoring

One common strategy to mitigate rising lake levels and coastal flooding is hard structures, or armors. These structures are often built of rock and placed near or at the ordinary high-water mark to prevent further coastal erosion. Other types of armoring structures include sheet pile break walls. While intended to prevent coastal erosion, shoreline armoring structures have the opposite impact. Wave action that runs into the hard structure is directed to either side of the structure eroding the neighboring beach and shoreland. In response to a neighboring armor structure, adjacent property owners may establish armoring structures on their own property to prevent the erosion of their property, leading to the rapid armoring of entire shores. Over time, water will reach behind the armor and start to erode the shoreland that the structure was intended to preserve, leading to additional armoring or overall degradation of the shore.¹³

Shoreline armoring has substantial negative impacts on shoreline health. If an entire beach was to become armored, over time the beach would disappear completely. The armoring structures also impede sand from naturally being deposited, preventing beach replenishment. Therefore, to restore these beaches, artificial beach nourishment would be required, an expensive and environmentally taxing process. The loss of the shore

Map XX: Wetlands and Favorable Parcels for Cluster Development



Wetlands and Favorable Parcels for Cluster Development

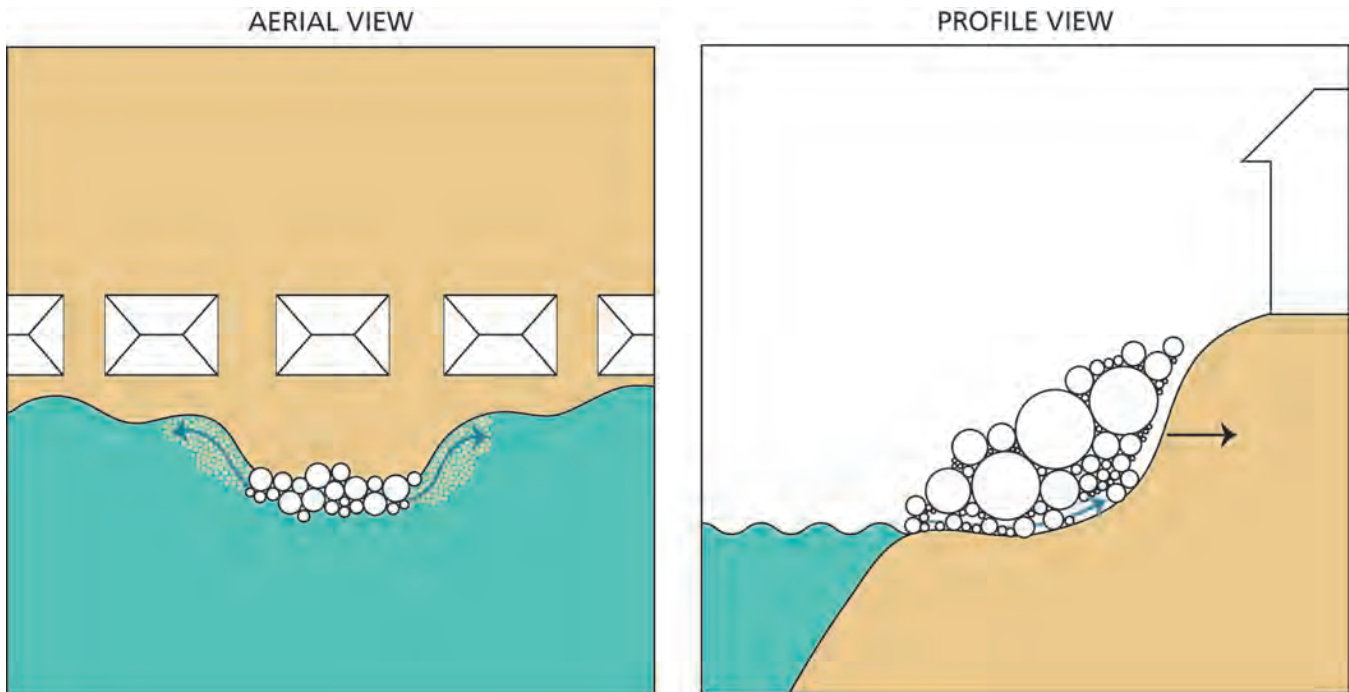
Sources: Michigan Department of Environment Great Lakes and Energy (EGLE) Open Data, Michigan Open Data Portal, Antrim County, Torch Lake Township

- Torch Lake Township
 - Cluster Development-Viable Parcel*
- * Vacant residential or agricultural parcels zoned to allow housing greater than 10 acres in area which are partly or wholly encompassed by wetlands.

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond Wetland
- Lake Wetland
- Riverine Wetland

1 Miles
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Figure XX: Failure of Armoring Structures



Erosion expanding around shoreline armoring, Geneva Camp & Retreat Center, Park Township.

Source: Cory Morse / MLive, 2019

and the beach would have profound impacts on the whole community, including a loss of recreational assets and the main tourist attraction.

RECOMMENDATIONS FOR COASTAL AND FLOOD PLANNING AND RESILIENCY

- » The relocation of structures away from the Lake Michigan OHWM or water's edge of Torch Lake for lots with a depth of 80 feet or greater should be encouraged.
- » Lots in the Waterfront Overlay District which are split by a roadway should be encouraged to remove structures in the waterfront portion of the lot or relocate them to the portion on the outside of the roadway.
- » Prospective developers of large, contiguous property in critical dune and erosion risk protection areas should be encouraged to pursue only Open Space and Preservation District (OSPD) projects that cluster homes and preserve steep slope areas in an undeveloped state.
- » Educational materials should be developed in consultation with EGLE and the Township's Building Official to educate prospective builders on the most advanced and code-compliant low impact construction methods for construction within critical dune and high risk erosion areas.
- » Where properties have existing development within inland wetland portions of the Waterfront Overlay District, a similar vegetative buffer strip adjacent to wetland boundaries should be encouraged.
- » PUD should be encouraged as a development option for parcels greater than 10 acres in area along the coasts of Lake Michigan or Torch Lake, or which are partly or wholly encompassed by wetlands.

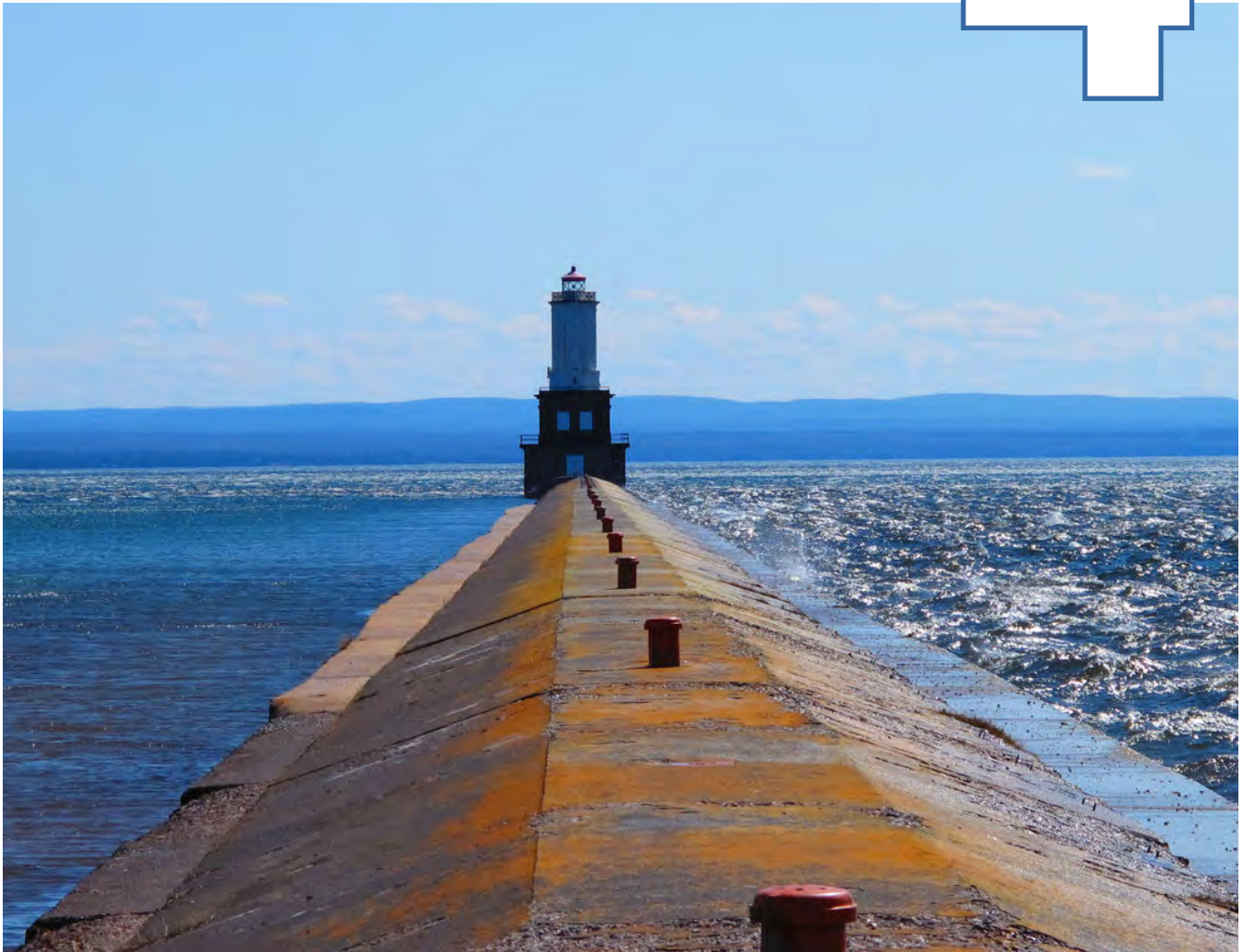
Sources

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- 13 Meadows, G., Norton, R., "Long-Term Effects of Armoring Structures on Great Lakes Shorelines", The University of Michigan, Michigan Technological University, https://www.house.mi.gov/MHRPublic/CommitteeDoc.aspx?uri=2019_2020_session/committee/house/standing/natural_resources_and_outdoor_recreation/meetings/2020-12-03-1/documents/testimony/guymeadowsrichardnorton.pdf

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Economic Development

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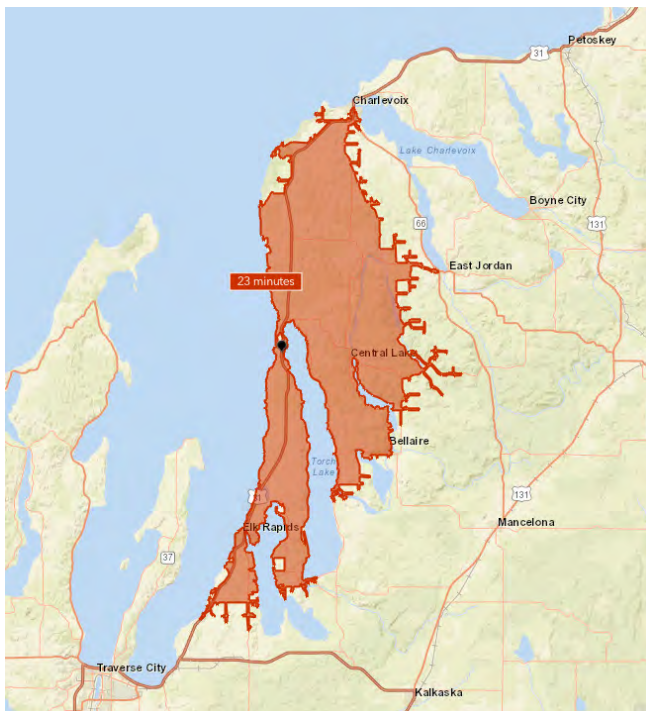


Economies function as a complex network of relationships that extend across local, national, and global scales. While municipalities can influence economic development, they are also subject to external laws, policies, and market trends that can significantly shape local outcomes. Because of this interdependence, effective economic development strategies are most successful when developed in partnership with others, enhancing the broader network in which they operate. At the local level, economic development often aligns with using land to its “highest and best use”. When land is developed based on the analysis in this Master Plan, it can help meet regional needs for housing, commerce, recreation, or industry to support job growth, workforce housing, and tourism. This section outlines the area’s key employment sectors, collaborative efforts, and opportunities for placemaking and redevelopment.

ECONOMIC REGION

Torch Lake Township residents often commute to another community or even a different county. According to the American Community Survey, the average commute for a resident of the Township is 23 minutes.¹ Using ESRI Business Analyst to create a map with a 23-minute drive time range, the map “23 Minute Drive Time” shows where residents

Figure XX: 23-Minute Drive Time



Source: ESRI Business Analyst

drive time to potential jobs in Central Lake, Bellaire, Rapid City, and Elk Rapids. This commute time is crucial to an economic analysis because residents often shop, eat, and spend recreation time in this range as well.

DEMOGRAPHIC MAKEUP AND ECONOMIC IMPACTS

Demographics play a major role in shaping a community's economy. The size, age, education, and skills of the population influence the strength of the workforce and the types of businesses that can succeed. Consumer demand is driven by factors like age, income, and household size, affecting what goods, services, and housing types are needed. A growing and diverse population can also strengthen the tax base, support entrepreneurship, and fuel economic growth, while an aging or shrinking population can strain public resources. Understanding demographic trends is critical for planning sustainable economic development.

In Torch Lake Township, the population size has remained relatively stable in recent years with less than a 5% growth rate since the turn of the century.² Almost 43% of residents are 65 years or older, though residents in the aged 35-44 cohort are increasing in the community to about 13.1% of the population, an increase from 6.3% in 2018.³ In 2023, the median household income in the Township was \$85,972, over 20% higher than both Antrim County and the State of Michigan.⁴ Almost 95% of all housing units are single-family detached units, and owner-occupied units comprise 94.2% of all households.⁵ The median value of an owner-occupied home was \$460,500 in 2023.⁶ In short, the average household in Torch Lake Township is white, earns 20% higher than the median earner in Michigan, and owns their home that is significantly more valuable than the average home statewide.

Tapestry Segmentation

Esri Tapestry Segmentation is a demographic analysis tool that groups neighborhoods across the United States based on shared demographic, socioeconomic, and lifestyle characteristics. Drawing from sources like the U.S. Census, American Community Survey, and other sources, Tapestry Segmentation organizes residential areas into detailed segments. This system uses clustering and data modeling techniques to provide a

nuanced understanding of community complexity, capturing patterns in household makeup, income, education, housing, and consumer behavior. This tool is designed for analysis at the neighborhood or ZIP Code scales, making it a valuable resource for understanding the diverse dynamics that shape local economies.⁷ Using this information, populations are categorized into one of 67 markets, which are then placed into one of 14 differing “Lifemode” groups.

In Torch Lake, there is only one tapestry segment represented – Rural Resort Dwellers. Generally, a community will be represented by multiple tapestry segments, and it is very rare that only one segment is represented. It is telling that the local population is very homogeneous, but considering the high home values and high median income in Torch Lake Township, it has become difficult for a wide variety of residents to move into the area. Characteristics of this segment include:

Neighborhood

- » Housing is largely owner occupied and has a large presence of second homes. These homes are valued higher than the national median, something not typical for a rural area.
- » Many of the households are older, empty nesters; also, a large portion are single inhabitants.
- » Vehicles are required for residents to get around because of the rural aspect.

Socioeconomic

- » Many residents are either already retired or are near retirement. Their wealth has largely accumulated already, and they have pivoted their portfolios to lower-risk assets.
- » Those who are employed are oftentimes working in highly skilled positions.

This segment of the population is a common group across Northern Michigan.

COST OF TRANSPORTATION AND HOUSING

As a rural community where many residents need to commute for work and to access goods and services, there is a significant reliance of automotive transportation for those who reside in Torch Lake Township. The Center for Neighborhood Technology (CNT) measures these costs associated with transportation as they can comprise of a large portion of a household’s budget.

The CNT considers the cost of transportation affordable to a household if it is 15% or less of the total household income.⁸ Estimates of transportation costs for a household are based off of a variety of factors including fuel costs, vehicle payments, insurance, and maintenance; in Torch Lake Township annual transportation costs are estimated to be \$17,673 for a household that has two vehicles.⁹ This is about 20.6% of the of the median household income of \$85,972, showing that households are possibly spending more money than they should on their transportation to work, shopping, recreation, and other activities.

The CNT also considers the cost of housing within communities to create a combined transportation and housing cost measure to indicate level of cost burden and the amount of capital residents must possess to live there. Estimates show that on average a household spends 26% of its income on housing costs, which are below the cost-burdened threshold of 30%.¹⁰ This information shows that a household in Torch Lake Township can be expected to spend 46.7% of its annual income on transportation and housing, a figure below both the State (48%) and National (50%) averages.¹¹

IMPLAN

Even as a substantial portion of the workforce leaves the County for work, it is important to see what employment sectors are contributing most to Torch Lake Township. One of the ways to do this is to evaluate industry’s economic output, such as goods and services, and what percentage of the workforce is employed by local industry. This illustrates what industries are thriving in the area.

Products typically pass through various stages of manufacturing, processing, distribution, and sales before reaching consumers. These stages establish critical economic connections that contribute to the broader economy. To analyze these interconnections in the Township, IMPLAN, an input-output economic modeling tool, was utilized. IMPLAN draws data from multiple government sources, such as the Bureau of Economic Analysis, the Census Bureau, and the Internal Revenue Service.¹² IMPLAN data helps to show what industries are within a zip code to understand what they generate within an area. In this case the 49627 and 49648 zip codes were used; these areas will be referred to as Torch Lake Township during this analysis. This analysis will show what industries are the largest employers and who provides the most significant economic impact with the study area, providing the Township with an idea of what can be supported in the Township.

Largest Economic Output

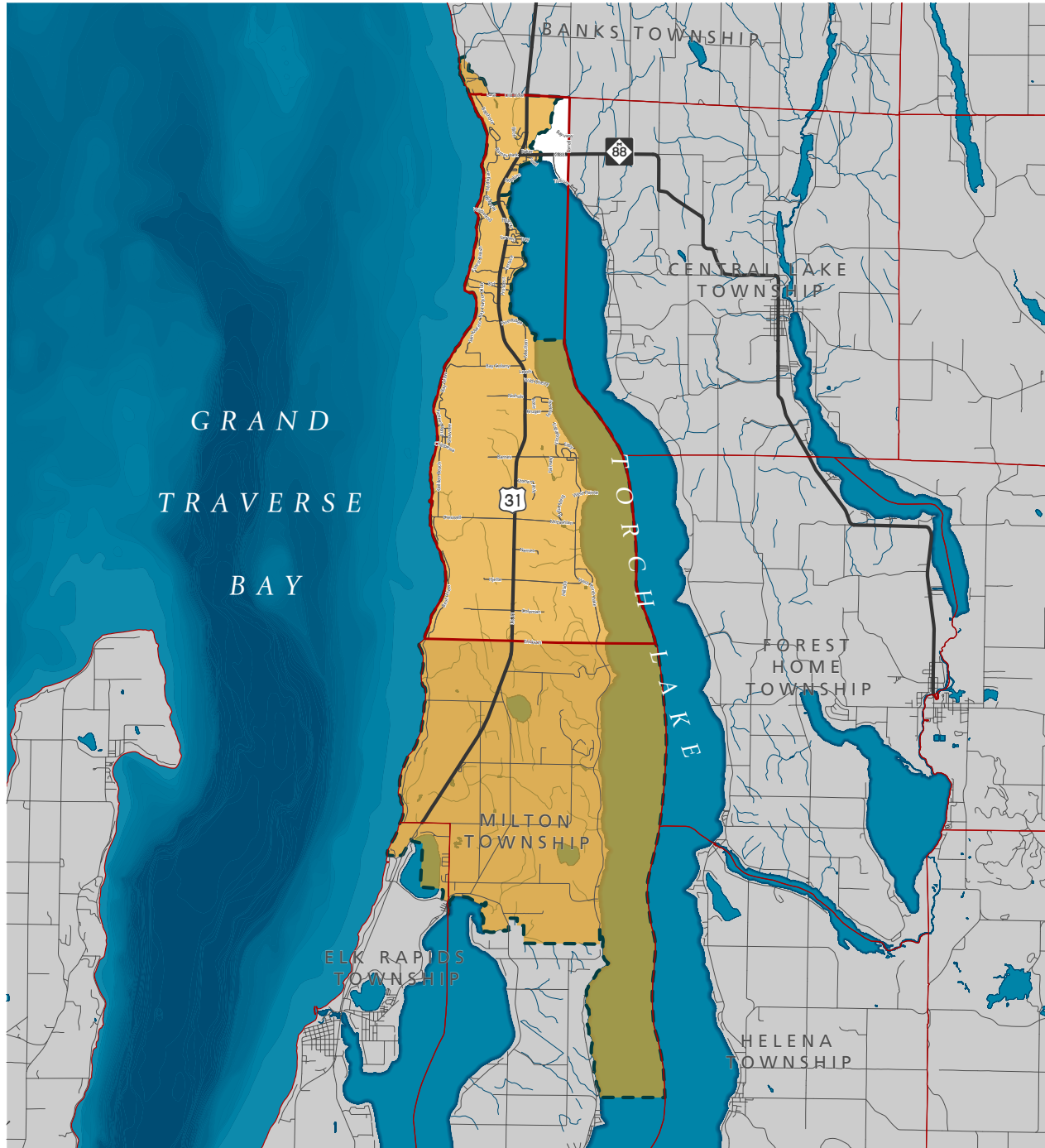
The total economic output metric reflects the combined value of a business, offering a comprehensive view of the economic contributions within a region.¹³ The table “Largest Industries by Economic Output in Torch Lake Township” shows the top ten industries in the Township. The largest output industry is “Frozen fruits, juices and vegetables manufacturing” with a total output of higher than \$18 million in 2022. Other large output industries include construction, retail, and some government support services. The total employment in the top ten industries is 203, producing a total output of \$37,706,540.¹⁴ It should be noted that many of the average employment compensations are less than the median income for a Torch Lake Township

Table XX: Largest Industries by Economic Output in Torch Lake Township

Industry	Employment	Output	Average Employee Compensation
Frozen fruits, juices and vegetables manufacturing	35	\$18,236,066	\$46,656
Construction of new single-family residential structures	21	\$2,664,798	\$50,667
Construction of other new residential structures	10	\$2,279,284	\$50,864
Employment and payroll of local govt, education	28	\$2,267,963	\$64,833
Retail - Gasoline stores	14	\$2,248,911	\$27,950
Landscape and horticultural services	27	\$2,231,460	\$57,467
Employment and payroll of local govt, other services	30	\$1,991,042	\$52,966
Breweries	6	\$1,983,549	\$55,986
Employment and payroll of state govt, other services	17	\$1,917,193	\$92,365
Retail - Building material and garden equipment and supplies stores	15	\$1,886,274	\$38,416
TOTAL	203	\$37,706,540	--

Source: IMPLAN

Map XX: Economic Impact Study Area (IMPLAN)



Economic Impact Study Area (IMPLAN)

Sources: Michigan Open Data Portal, Torch Lake Township

1 Miles
Beckett & Raeder, Inc.



- Torch Lake Township Boundary
- 49627 and 49648 ZIP Code Boundaries / Study Area

Table XX: Largest Industries by Employment in Torch Lake Township

Industry	Employment	Output	Average Employee Compensation
Frozen fruits, juices and vegetables manufacturing	35	\$18,236,066	\$46,656
Employment and payroll of local govt, other services	30	\$1,991,042	\$52,966
Employment and payroll of local govt, education	28	\$2,267,963	\$64,833
Landscape and horticultural services	27	\$2,231,460	\$57,467
Religious organizations	22	\$1,637,249	\$31,148
Construction of new single-family residential structures	21	\$2,664,798	\$50,667
Employment and payroll of state govt, other services	17	\$1,917,193	\$92,365
Retail - Building material and garden equipment and supplies stores	15	\$1,886,274	\$38,416
Fruit farming	14	\$1,013,058	\$21,972
Retail - Gasoline stores	14	\$2,248,911	\$27,950

Source: IMPLAN

household.

Largest Employment Industries

The table “Largest Industries by Employment in Torch Lake Township” shows the top ten industries in Torch Lake Township by total employment. The top economic output industry “Frozen fruits, juices and vegetables manufacturing” is also the largest in total employment, with local government support industries rounding out the top three. The top ten industries employ a total of 223, producing a total output of \$36,094,014.¹⁵ These industries have potential to expand, as they are already relied on and showing some level of success. The Township should partner with Antrim County, and other organizations, as well as private businesses to see how their growth can be supported.

ECONOMIC DEVELOPMENT PARTNERSHIPS

Torch Lake Township as a rural community cannot be solely responsible for its economic development. As a part of a network, it will have to cooperate with agencies that have a larger scope and connection to resources such as funding, expertise, talent, and program management. Below are potential and existing economic development

partners.

Antrim County Economic Development Corporation (EDC)

With the mission to “retain, expand, and promote County-wide economic growth and stability,” the EDC is a good partner to understand what businesses need to be successful in the region.

Networks Northwest

This non-profit has a 10-county regional scope. Its primary services include workforce development; business and economic development; and community development. They encourage regional coordination and as such disseminate data and information across its municipalities to facilitate collaboration. They are a good resource for technical assistance.

Northern Lakes Economic Alliance (NLEA)

The Northern Lakes Economic Alliance (NLEA) is non-profit organization that helps to support business development and growth in Antrim, Charlevoix, Cheboygan, and Emmet Counties. It does this work by collaborating with local government units, as well as companies to help retain existing and creating new jobs.¹⁶

BROADBAND CONNECTION

Broadband is a critical technology that increasingly drives economic growth across the country. Businesses looking to open or expand now consider not only the availability of reliable broadband in a community, but also whether the local workforce has the digital skills and tools needed to succeed. The economic future of Michigan communities depends both on having strong broadband infrastructure and on the ability of businesses and residents to effectively use it to support local growth and development.¹⁷ The NLEA is working to increase the coverage of reliable and cost-effective high-speed internet across the region to advance economic growth in both the public and private sectors.¹⁸

KEY TAKEAWAYS

- » While there is a growth occurring population of adults in the 35-44 age range, 43% of the population is 65 and over. With such a large population of elderly residents it is going to be very unlikely for new jobs to locate in the general area because of a lack of potential employees. Torch Lake Township is largely a retirement heavy, and seasonal population community.
- » Torch Lake Township, along with much of the wider region, is observing an increasing trend of residents who live in the area seasonally. The upside is higher tax revenues without the year-round commitment to services. Since most seasonal dwellers come to Northwest in mid-June and tend to leave by mid-September, they do not require the year-round services, while paying higher taxes on property and spending their money in the area while they reside there.
- » Overall, residents of Torch Lake Township are more educated than the State, with 54.8% having a bachelor's degree and 23.4% having a graduate degree or higher, compared to the State of Michigan, which observes 31.8% and 12.5% for the same figures, respectively. While residents are seasonal, and many have exceeded retirement age, there may be a market for higher level niche positions in the area to take advantage of this higher education attainment.
- » The "Frozen fruits, juices and vegetables manufacturing" industry is both the largest by economic output, and by total employment. This industry should be supported by the Township, as agricultural related jobs are integral to the local economy.
- » Due to the rural nature of the Township, many residents who are in the workforce must commute away for their place of work. Housing prices are generally higher in Torch Lake Township than they are in nearby communities, which means that residents are choosing to commit more of their income to transportation costs, to travel elsewhere for their work.
- » Broadband, or lack thereof, can be an issue. Recent government investment in rural areas with support from the NLEA to provide fiber optics to attract younger professionals desiring access to outdoors, this is likely a part of why there is an observed increase of working age adults in Torch Lake Township. The more amenities that can be provided, the more likely it is that Torch Lake Township can continue to attract younger residents.

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Transportation & Non-Motorized Access

5



Transportation networks are essential for maintaining connectivity in all aspects of daily life, allowing residents to access their homes, workplaces, and community destinations. Roads, sidewalks, trails, and other infrastructure form the foundation of local mobility, while connections to broader systems—such as highways, rail lines, and airports—support the movement of people and goods, impacting the community's economic vitality.

This chapter provides an in-depth look at Torch Lake Township's transportation infrastructure, including roadways and other mobility systems, and incorporates community input on current conditions and future needs. Building on this feedback, it identifies opportunities to improve transportation and mobility, with an emphasis on expanding multimodal and non-motorized options to enhance access within the Township and its surrounding region.

ROAD NETWORK

Internally, the Township is comprised of a system of public and private roads providing connections to nearby communities and directly serving commercial operations and residential areas. Public road maintenance and plowing is provided by the Antrim County Road Commission, while private roads are maintained by property owners. Torch Lake Township's largest and only major highway through the Township is US-31, which is the dominant north/south route through the Township. It is a state trunkline under the jurisdiction of the Michigan Department of Transportation (MDOT). The total length of US-31 passing through Torch Lake Township is approximately 9.5 miles. M-88 runs just under 1 mile in the northeastern part of Torch Lake Township, running a total of 26 miles to US-131 in Mancelona.¹

AADT Formula

$$\text{AADT} = \frac{\text{Total \# of vehicle traffic in a year}}{365}$$

Average Annual Daily Traffic

Average Annual Daily Traffic (AADT) is a key metric used in transportation planning, engineering, and even retail site selection. It measures the total volume of vehicle traffic on a roadway over the span of a year, averaged across 365 days. The formula for calculating AADT is provided in the accompanying callout box. This metric offers valuable insight into traffic patterns and is instrumental in making informed decisions about infrastructure investment and development.²



In the United States, AADT data is a critical component of the Highway Performance Monitoring System (HPMS), which informs federal funding allocations for highway maintenance and improvements. Each state's Department of Transportation submits annual reports that include AADT figures. In Michigan, the Michigan Department of Transportation (MDOT) collects and manages AADT data through its Traffic Monitoring Program (TMP), which tracks traffic volumes on over 36,000 miles of federally funded roads. While traffic counts were once done manually, modern data collection typically involves placing pneumatic tubes across roadways. As vehicles pass over the tubes, air is pushed to a sensor that registers each crossing. These sensors are generally left in place for 2 to 14 days, and the data collected is averaged to produce an accurate estimate of daily traffic volumes.³

Map XX: Road Classification & Traffic Counts



Road Classification & Traffic Counts

Sources: Michigan Open Data Portal, Antrim County, Torch Lake Township, Michigan Department of Transportation (MDOT)

 Torch Lake Township
 2025 Average Annual Daily Traffic (AADT) Count

Road National Functional Classification (NFC)

-  Major Arterial
-  Minor Arterial
-  Major Collector
-  Minor Collector
-  Local Road

 1 Miles
 Beckett & Raeder, Inc. 

In Torch Lake Township, AADT data is collected for US-31 and M-88. US-31 observes the highest traffic counts with an AADT of approximately 7,100 vehicles daily in the southern portion of the Township and just over 5,800 in the northern portion of the Township through Eastport. The small section of M-88 in the northeastern section of the Township hosts approximately 2,500 vehicles daily.⁴

Road Condition

The Transportation Asset Management Council (TAMC) plays a vital role in overseeing the condition and performance of Michigan's transportation infrastructure. Focused primarily on state-owned roads and bridges, TAMC utilizes the Pavement Surface Evaluation and Rating (PASER) system to assess pavement conditions. It reports to both the Michigan Infrastructure Council and the State Transportation Commission, promoting best practices in asset management and supporting tools that enhance the efficiency of road agency operations.⁵

TAMC also partners with other infrastructure owners to ensure a coordinated, statewide

approach to transportation asset management. Using the PASER system, road segments are rated on a scale from 1 to 10 based on surface condition and maintenance needs. These ratings are then grouped into three overall categories: "poor," "fair," and "good," providing a clear framework for prioritizing infrastructure investments.⁶

The map "PASER Ratings" depicts what quality roads in the Township were measured at in recent years. Roads in Torch Lake Township that are monitored by the State are shown to be in "good" condition. If these roads are maintained as isolated issues arise, they should continue to function as needed. Additionally, some local roads are evaluated by the Township. Torch Lake Drive in the southeast of the Township is shown to be in "fair" condition, as well as some roads within neighborhoods. Farrel Road, on the border of Central Lake Township in the northeast was evaluated as being in "poor" condition, as well as the most eastern portion of Barnes Road. These roads should be repaired as soon as possible as they will continue to degrade at a faster rate than other roads as they are already severely damaged.

Table XX: Largest Industries by Employment in Torch Lake Township

PASER Rating	PASER Description	TAMC Description	Recommended Treatment	
			Asphalt Pavement	Concrete Pavement
10	Excellent	Good	No Maintenance	No Maintenance
9	Excellent			
8	Very Good		Little or no maintenance	Routine maintenance, crack sealing
7	Good	Fair	Crack-sealing, minor patching	
6	Good		Preservative treatments, sealcoat	Surface repairs, partial depth patching
5	Fair			
4	Fair	Poor	Structural improvement - overlay	Extensive slab or joint rehab
3	Poor			
2	Very Poor		Reconstruction	Reconstruction
1	Failed			

Source: TAMC

Map XX: PASER Ratings



PASER Ratings

Sources: Michigan Open Data Portal, Antrim County, Torch Lake Township



Torch Lake Township

— State Road, Good, Evaluated in 2023

— Local Road, Good, Evaluated in 2024

— Local Road, Good, Evaluated in 2023

— Local Road, Good, Evaluated in 2022

— Local Road, Fair, Evaluated in 2022

— Local Road, Poor, Evaluated in 2022



NON-MOTORIZED

Non-motorized transportation is an integral element of transportation systems which advance the ethos of shared roadways and multi-modal commute. As a predominantly rural community, 79% of township residents rely on motorized vehicles (car, truck, or van) to commute to work and also likely require a vehicle to run errand, as well as other activities.⁷ Additionally, about 15% work from home, these residents also likely need a vehicle to access these other services, similar to those with workplace commutes.⁸

The Nakwema Trailway is a 45-mile paved trailway that runs between the City of Charlevoix and Acme Township. It has connections to approximately 25 different natural areas, as well as multiple communities in its stretch of pathway.⁹ The Nakwema Trailway is connected to the Little Traverse Wheelway in Charlevoix which runs another 27 miles to Harbor Springs in West Traverse Township, and has connections to the North Western State Trail which extends to Mackinaw City.¹⁰ In the southern extent of the Nakwema Trailway, the Acme Connector links the trailway to the TART trail, which runs through Traverse City and then north along the western shore of the Grand Traverse Bay into Leelanau County.¹¹

These connections lead to more than 400 miles of additional trails through northern lower Michigan connecting Torch Lake Township to the whole region.¹²

PUBLIC TRANSPORTATION

Antrim County Transportation (ACT) provides an on-call dial-a-ride bus service within Antrim County. For transportation needs beyond the County boundaries, ACT coordinates with the similar transportation services in adjacent counties. Additionally, a six-county regional transit system coordinates two systems, the “Regional Ride” and the “Health Ride” which serve Antrim County. The Regional Ride is a fixed route system that was implemented in early 1998. One of the routes passes through Banks Township on US-31.¹³

Ride Sharing

Ridesharing services are where riders are connected with drivers through a mobile app or through a website where riders pay a fee to ride in a private vehicle by the owner. In the Antrim County region there are local ridesharing services like Up North Rides, as well as the major national services (Lyft, Uber). While these services are present, they are also not always reliable as they depend on private people who are not always available.

INSERT IMAGE



Map of Nakwema Trailway.

Source: nakwematrailway.org

AIR TRAVEL

Three airports are within an hour's drive of Torch Lake Township. These airports allow wider access to the region and offer flights to a list of places.

Torchport Airport

Torchport Airport, also known as Torchport Airpark in Eastport, Michigan is a small, privately-owned, but available for public-use airport envisioned as a residential aviation community often referred to as a "fly-in community." The residential component of the airpark was designed to offer one-acre lots where homes could be built either attached to or separate from aircraft hangars, catering to aviation enthusiasts looking to live with direct runway access.¹⁴

In 2017, the property was sold to new owners who have since begun taking steps to realize the original vision of a fully developed airpark. Today, Torchport Airport continues to market itself as "A Northern Michigan Fly-In Community," and is gradually transitioning into the type of aviation-oriented neighborhood that was first imagined decades ago.¹⁵ Currently, the airport features two runways,

one that is paved, measuring 3,000 feet in length and one turf runway that measures 2,400 feet in length.¹⁶

Cherry Capital Airport

Cherry Capital Airport (TVC) in Traverse City, is operated by the Northwest Regional Airport Authority. In 2022, the airport served more than 582,000 passengers, including residents, tourists, and business travelers. Currently, the airport is served by six airlines offering 17 nonstop flights to destinations across the United States.¹⁷

Antrim County Airport

Antrim County Airport (KACB), located in Bellaire is a public airport with one runway that measures 5,003 feet in length.¹⁸ The airport averages approximately 20 flights per day.¹⁹

Pellston Regional Airport

Pellston Regional Airport (KPLN) is a public airport located north of the Village of Pellston. The airport has two runways, one measuring 6,513 feet and the other 5,401 feet.²⁰

INSERT IMAGE

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Existing & Future Land Use

6



Action Plan

7

