

Houghton County Five Year Master Plan 2024-2028



A Vision for Houghton County

Houghton County is a special place where outstanding natural resources, scenic beauty, outdoor recreation, a four-season climate, a low density of development, extensive open space and public access, and unique historical landscapes combine to create a high quality of life for residents. The purpose of the Houghton County Master Plan is to provide a guide for Houghton County and its cities, townships and villages, to use in decision-making and coordination related to future land use, so that the qualities that make Houghton County special are not lost nor compromised for future generations.

The following statements are guiding principles for the Plan.

A comprehensive Houghton County Master Plan...

- Will be based upon the philosophy that land use regulations should be kept to a minimum except when the health, safety, and welfare of County residents are at stake.
- Will promote economic well-being while simultaneously protecting the quality of life.
- Will sustain natural resources and protect key cultural assets.
- Will consider the goals and values of our citizens.

Introduction

Houghton County established a County Planning Commission in 2001 to draft a general land use and County development plan, in accordance with the Michigan County Planning Act, M.C.L. 125.101 et. seq. The Michigan Planning Enabling Act, (P.A 33 of 2008, as amended, M.C.L.125.3801 et seq) changed the title of the primary planning document for a county from the Land Use Plan to the Master Plan. This Master Plan replaces the Master Plan that was last adopted in 2018.

This Master Plan is general in tone, and forms the broadest of templates upon which zoning ordinances of local governments in Houghton County may rest. Houghton County's Board of Commissioners and the Planning Commission have repeatedly stated that Houghton County has no intention of establishing county-wide zoning; and the decision to zone is best left to the residents of individual cities, villages and townships.

This master plan addresses county-wide concerns about growth, economics, historic preservation, health, and community services. These and other land use concerns resulted in eight overall themes.

1. Protection of resources
2. Setting growth priorities
3. Economic development
4. Enhancing historic characters and identity
5. Landmarks and public art
6. Residential development patterns
7. Commercial development patterns
8. Recreational activities and woodland access – paths, trails, lake access, etc.

Note: These eight themes are best implemented at the township level of government.

A master plan is intended to be formed with community involvement, to best represent the community’s present nature and its future aspirations. This plan was shared in Draft status to all of our local municipalities on December 6, 2023.

The 2024 Master was approved by the Houghton Board of Commissioners on December 12, 2023.

Overview of Houghton County

Houghton County is located in the northwestern portion of Michigan’s Upper Peninsula, on the southern shore of Lake Superior. The county lies on the Keweenaw Peninsula, a stretch of land that extends 75 miles into the lake. There are varied perceptions of the boundaries of the Keweenaw Peninsula. Some view “The Keweenaw” as Keweenaw County; while to others it includes both Keweenaw County and Houghton County, or the landmass that lies beyond the Keweenaw Waterway. Most geologists and geographers describe the Keweenaw Peninsula as a land form jutting into Lake Superior, whose eastern base is at the head of Keweenaw Bay and whose western base is in the Porcupine Mountains region, and that stretches all the way to the tip and the very top of the Upper Peninsula and Keweenaw Point. The Keweenaw is also synonymous with the “Copper Country” in local perspectives, of which Houghton County is the epicenter.

The County was organized in 1848, and named after Douglass Houghton, Michigan’s first State Geologist, who confirmed the existence of copper on the Keweenaw Peninsula. The City of Houghton serves as the County seat, and the nerve center for the surrounding municipalities. Houghton County's history is tied to the copper mining industry, which flourished in the area from 1843 to 1968, when the Calumet & Hecla Mining Company ceased the last local copper mining operations. Due to the success of copper mining, Houghton County was once the fourth most populous county in Michigan, attracting thousands of Finnish, Scandinavian, Cornish, French Canadian, German, Slovak, Italian, and other immigrant groups. However, low copper prices and the high cost of operating deep underground mines forced the decline and eventual closure of the local mining industry. The region and area suffered economically, with population decreasing by over 50% between 1920 and 1970 (See Table 1-1).

Historic Houghton County Population

	1920	1950	1970	1980	1990	2000	2010	2020
Houghton County	71,930	39,771	34,652	37,872	35,446	36,016	36,628	37,035

Today government at all levels; healthcare services, construction, tourism, high-tech professional services, and retail trade have replaced mining as the major sources of employment for the County. Houghton County is the home to two institutions of Higher Education in Michigan Technological University and Gogebic Community College, and both draw students from the State, the Region, and around the world. High-tech transfer from the universities holds promise as a growing new employment sector. Major corporations and numerous other companies have either established satellite offices in the county, or employ workers remotely from Houghton County. This uses the talents of Michigan Tech engineering students and graduates, paying competitive starting salaries and helping to establish more young families in the community. The County is home to F.J. McLain State Park and Twin Lakes State Park, Keweenaw National Historical Park, and the Visitor’s Center and main dock for Keweenaw County’s Isle Royale National Park to the North. Many other local parks and outdoor recreational facilities are operated by townships or other local entities throughout the County.

The county is a popular place for a growing remote workforce, and business owners, many retirees, and those with second homes and summer cottages. The tourism industry is built around the area's historical resources, geology, and

boundless recreational opportunities. Lake Superior, the numerous inland lakes and streams, abundant forests, the various trail systems, and an annual average of 200 inches of snow make the county a destination for four-season outdoor recreation enthusiasts. These attributes attract increasing numbers of permanent residents, visitors, and seasonal home owners.

Population and Demographics

Houghton County has 14 townships, two incorporated cities, and five incorporated villages. It has numerous unincorporated small former mining communities (“locations”), and remnants of larger settlements. The County’s total population is about 37,000 and it is concentrated in the northern half of the county. Population distribution is influenced by Michigan Technological University and Gogebic Community College, whose students are over 20% of the population.

Despite the county’s slight overall gain in population (2 percent) between 2000 and 2020, the population centers in the cities of Houghton and Hancock showed modest growth, while most outlying areas showed a modest decline in population. This reverses the general 1990 to 2000 trend, when population growth took place outside of cities and villages in the rural areas.

Houghton County’s age demographics tend to be younger than both the region and the state. While the median age increased substantially from 2000 to 2020 regionally and for the state overall, Houghton County’s median age decreased by about 2%. A growing number of remote workers and business owners are impacting our community as well.

Nearly 20% of the population is under 18 years of age, and 62% of the population is in the 18-65 range. The recent closing of Finlandia University in Hancock during 2023 saw some of the younger population move to other areas to continue their studies, while many remained here and continued studies at MTU or GCC. Those over 65 account for 18% of the population in Houghton County. Ninety three percent of county residents age 25 and older have a high school diploma or higher education. More than 33% have acquired a college degree. Ninety four percent of the population is white, and the remaining census groups being made up of American Indian and Alaska Natives, Asian, Hispanic or Latino, and those who come from Two or More races.

Geography and the Environment

Houghton County’s 1,044 square miles (667,904 acres) are mostly highlands, upland plains, and lake border plains. Over 80 percent of this land is covered by forest, consisting mainly of upland hardwoods. Commercial timberlands cover thousands of acres in the County. Farming occurs on 7% of the county’s land. The county contains 923 miles of rivers and streams, over 20,000 acres of lakes and ponds, and 50 miles of Lake Superior shoreline. Elevation varies between about 600 and 1,600 feet above sea level. The County is divided by the Keweenaw Waterway (also known as the Portage Lake Ship Canal) which cuts through the area from northwest to southeast and connects Lake Superior on both ends.

Major Rivers

Houghton County’s major rivers, are the Sturgeon, Otter, Trap Rock, Salmon-Trout, Pilgrim, Graveraet, Elm, Misery, Silver, Jumbo, Ontonagon Rivers and numerous smaller tributaries and seasonal runoff streams. There are five

watershed sub-basins within the county including: Ontonagon, Keweenaw Peninsula, Sturgeon, Dead-Kelsey and Lake Superior.

Climate

Houghton County lies within the Lake Superior Basin, which has a typical continental climate characterized by cold dry winters and warm humid summers. Lake Superior can exert a strong microclimate influence on the area, which can result in cooler summers and milder winters than what is experienced several miles inland. This is due to the moderating effect of the Lake on the air temperatures and the prevailing westerly winds.

The moderating effect of the lake is experienced in spring and summer months when the cool water tends to level out temperature extremes and reduces the likelihood of frost. The areas adjacent to Lake Superior with good air drainage patterns are resistant to frost, and provide the area's longest growing season and a good potential for crops.

Lake Superior creates persistent snow fall when cold air passes over the relatively warm lake in late fall and early winter. This can cause early and heavy snow, referred to as "lake effect" snow. Trends of the last decade have seen years of both warmer and colder temps and snowfalls. These snowfall totals have kept the Lake Superior levels in constant flux.

The growing season in Houghton County is dependent on the weather; and frosts have been recorded in every summer month throughout the years. Average temperatures in January show a low of 8 degrees Fahrenheit and a high of 21 degrees Fahrenheit. In July averages temps show a low of 56 degrees and a high of 75. Annual summer precipitation averages 34.1 inches, while average snowfalls can be 200+ inches depending on elevation and the year, with records showing well over 300 inches. The ground is generally snow covered from mid-November to mid-April, and this means that the ground is rarely frozen to any depth. With that said, water pipes passing under plowed roads and in homes can and often do freeze in cold winters. The large amount of winter snowfall often results in heavy spring runoffs, fast and slow snowmelts, and even flooding and washing out of infrastructure and landmasses in extreme years. Weather conditions can vary greatly from the northern (near the lake) to the southern (away from the lake) portions of the County.

Geology

A combination of geological and glacial forces have determined the area's topographic features, ranging from steep, rocky ridges and dissected glacial deposits, to gently sloping lake plains and nearly level outwash plains.

The surface geology of Houghton County is a complex collection of ground moraines, end moraines, outwash deposits, glacial lake shorelines, and outlet channels, all with related deposits. These relatively recent glacial features are superimposed on a copper-rich "spine", marking one edge of a syncline of the mid-continental rift associated with igneous rocks. The bedrock geology and glacial activity have played key roles in shaping the present topography and resulting land use patterns. Much of the landscape is dissected by drainage ways. Soils vary greatly throughout the County, with dune areas near Traverse Bay and F.J. McLain State Park, to extensive deposits of stratified alluvium and organic deposits in the Sturgeon River valley south of Chassell. Because of this diverse geology and glaciations, there are 152 soil mapping units found in the published Houghton County Soil Survey.

Present Land Use and Development

Residential development is concentrated in established communities in the northern part of the county, with the largest numbers in Houghton/Hancock and Calumet/Laurium. Low-density homes, cabins, cottages, and camps are found in

rural areas throughout the county. The waterfronts are dominated by residential development, except for more rural areas of the County where road access is unavailable.

Business development tends to be centered in Houghton/Hancock and Calumet/Laurium with commercial development radiating outward from these business cores. Downtown areas continue to play a significant role in local commerce, but chain store and franchise restaurant developments outside of the downtowns have also had an increasing impact on the area.

The Commercial Forest Act (Public Act 94, 1925) offers a specific tax incentive for private forest landowners interested in long term forest management for a future timber harvest or just long-term investment. The program is voluntary and applies to forest land used for growing commercial forest crops on 40 contiguous acres or more. The land must be managed for the continuous production of timber crops and not be used or obligated for commercial purposes other than for the production of timber.

Land under this Act is removed from the general property tax roll. The landowner pays an annual reduced specific tax per acre to the township where the land is enrolled. The State of Michigan pays Houghton County a specific amount per CFA acre enrolled. In 2011 there were 185,787 acres of CFA land enrolled in Houghton County, whose total surface area is 667,904 acres. This is approximately 28% of the total area in Houghton County. Land listed under the Act must be left open to the public for hunting, fishing, and trapping. This provides a sizeable, accessible area for sportsmen and women. Other recreational activities on CFA lands are only allowed with land-owner permission.

The Ottawa National Forest in southern Houghton County occupies the majority of the land in Laird and Duncan Townships, and 23 percent of the entire county. Copper Country State Forest is made up of three large parcels in Elm River, Laird, Portage, and Chassell Townships. Two small portions of Baraga State Forest are located in Chassell and Torch Lake Townships. There are 44,200 acres of land in the state forests. In addition, F.J. McLain State Park and Twin Lakes State Park occupy nearly 600 acres. Altogether, 202,912 acres, or 30 percent of Houghton County is part of a state or national forest, park, or recreational area.

Land use and development is directed by planning and/or zoning regulations in the following municipalities: City of Hancock, City of Houghton, Village of Calumet, Village of South Range, Calumet Township, Chassell Township, Duncan Township, and Portage Township. There are no zoning ordinances for the Village of Laurium, Village of Lake Linden, Adams Township, Elm River Township, Franklin Township, Hancock Township, Laird Township, Osceola Township, Stanton Township, Schoolcraft Township, Torch Lake Township or Quincy Township.

Housing and Community Development

Houghton County Housing Units as of the 2020 Census numbered 18,807. Median housing values were \$115,300, and building permits issued were 336. At the time of this plan's writing, the current year shows building permits in excess of 380, so the desire to build here is reaching all-time highs and more building permit applications are happening every day. The "lower" local housing cost leads to a higher homeownership rates for our citizens, and relative to other areas of the Country and the State living in Houghton County still is a "good" and attainable goal. A growing number of Air BnB and VRBO homes are being built or have been designated from existing stock, and this has had an impact on housing availability as well for the County and its residents. Several of the local homes are seasonal, with owners who call other areas Home while spending the summer or several seasons here in Houghton County at a second home.

Schools

There are ten school districts in Houghton County, which are served by the Copper Country Intermediate School District. High School graduating classes range in size from 30 to 120 in these districts. Except for K-8 Schools in

Copper Harbor and the newly established Copper Island Academy, students in Keweenaw County mostly attend the Public Schools of Calumet-Laurium-Keweenaw. Formal arrangements are in place for students in far southern Houghton County in the school districts of Baraga, L'Anse, Ewen-Trout Creek and Ontonagon.

Higher Education

Michigan Technological University and Gogebic Community College are the two post-secondary education institutions in Houghton County. Both institutions contribute significantly to the educational as well as economic and cultural climates of the area.

Michigan Technological University is a Michigan public university, founded as the Michigan College of Mines in 1885. The University's main campus is located on the south shore of Portage Lake starting near Houghton's eastern city limit and extending to College Avenue. Michigan Tech also stewards many important land resources including Portage Lake Golf Course, Mont Ripley Ski Area, the Michigan Tech Recreational Trails and various smaller properties in the area. Notable facilities include the Student Development Complex and MacInnes Ice Arena, Sherman Field and the Amjoch astronomical observatory property in Atlantic Mine. The University has also developed the Great Lakes Research Institute along the campus waterfront, and is constructing the new HSTEM building and a dormitory at the current time, and is partnering with a local developer for an additional apartment complex. Michigan Tech has an active School of Forest Resources and Environmental Science and Social Sciences Departments, and a number of MTU faculty are active in the field of Land Use policy.

Gogebic Community College is a two year community college located in Ironwood, with a satellite location at the Copper Country Mall in Houghton. There is a growing number of students who are attending this satellite location in Houghton.

Finlandia University was a private liberal arts educational institution founded in Hancock, Michigan. The recent closing of the school has had an unfortunate impact on the City of Hancock and the area. At the time of this writing, several of the buildings are in receivership status, and have pending liens and other financial delays to redevelopment and new ownership.

Historic Features

At one time Houghton County was dotted with mine shafts, rock houses, stamp mills, smelters, and communities that were all dedicated to the processing and mining of copper. Many remnants of these activities remain and are visible on the landscapes around the County. These historical ruins and sites are rich with history; and any development should be sensitive to the historic character of the area and site.

Keweenaw National Historical Park (NHP) located in Calumet, Michigan, was established in 1992 to preserve and interpret the copper mining heritage on the Keweenaw Peninsula, the only place in the world during the mid-1800s where commercially abundant quantities of native elemental copper occurred. The copper mines were critical to the industrial development of the United States, and were America's first large scale hard-rock industrial mining operations and boom. Several mine shafts in the area reached deep in the earth, with several over 9,000 feet in depth. The park consists of 1,870 acres within the Calumet and Quincy units. Most of the park is and will remain in private ownership; while the National Park Service (NPS) currently owns six buildings and 142 acres in the two units.

The NPS maintains formal partnership agreements with the 21 Keweenaw Heritage Sites, spanning more than 100 miles from Copper Harbor in Keweenaw County to the Porcupine Mountains in Ontonagon County. Within Houghton County, these sites include: the A.E. Seaman Mineral Museum on the Michigan Tech campus in Houghton, the Calumet Theatre in downtown Calumet, the Chassell Heritage

Center, the Copper Range Historical Museum in South Range, the Coppertown Mining Museum in Calumet, the Finnish American Heritage Center in Hancock, the Houghton County Historical Museum complex in Lake Linden, the Keweenaw Heritage Center at St. Anne's in downtown Calumet, Laurium Manor Mansion in Laurium, the Quincy Mine Tours on US-41 just north of Hancock, the U.P. Firefighters Memorial Museum in downtown Calumet, Carnegie Museum in Houghton, and the Michigan Technological University Archives.

The NPS also partners with dozens of other government, nonprofit, and commercial entities in Houghton County and throughout the four-county area of the 'greater' park, as described above. The Keweenaw NHP Advisory Commission, a seven-member volunteer citizen-based panel appointed by the Secretary of the Interior, is authorized to conduct programs for preservation and interpretation of the copper mining story across the four-county area. The Commission implements the intent of Congress for Keweenaw NHP to operate as a functional partnership, unique among America's national parks. The Advisory Commission owns the Quincy Smelting Works (or Quincy Smelter) in Ripley, The Quincy Smelter is the only facility of its type left in the world, and it plays an important role in telling the copper story.

Employment and Industry

Income and Poverty

In 2021 the median household income in the County was \$48,623, and 14% of our population is deemed to be in poverty. The County is home to 873 employer establishments (as measured also in 2021), with a total annual reported payroll of \$3,524,560. Reported total retail sales for the County in 2021 was \$3,901,230

Based on measures of both employment and total earnings, the public sector plays the leading role in the economy, and provides economic stability, allowing Houghton County to be less subject to business cycle changes than other counties. In addition to traditional city and county government units, local government employment is found in universities, K-12 schools, road commissions, airports and other transportation services, medical care and other human services.

Over 50% of the county's private sector employment is in three classifications: food/drink service, healthcare and social assistance, and retail. Over the past decade, ambulatory healthcare and hospital services have made up an increasing share of employment. Although hospital and healthcare services are mostly structured in private, non-profit enterprises, those entities are heavily dependent on government fees and transfer payments. Manufacturing accounts for 9.6% of total county jobs, with professional and technical services (5.7%), and construction (4.4%) rounding out top industry categories.

Business Size

Aside from public and non-profit employers, almost all of the employers in the county are mid-sized to smaller businesses. Just two employers in the county held more than 500 employees in 2015: Michigan Technological University and UP Health System – Portage.

Roads

Houghton County is crossed by several State and US highways. Michigan Department of Transportation (MDOT) maintains approximately 110 miles of trunk line roads in Houghton County. Thirty-four miles of US-41, which starts in the northernmost part of the Keweenaw Peninsula and runs 1,990 miles to Miami, Florida, are in Houghton County. M-26 starts in Copper Harbor in Keweenaw County and runs southwest until it intersects US-45, about five miles beyond Mass City in Ontonagon County. Forty-six miles of M-26 are in Houghton County, including a four-mile stretch shared with US-41. Twelve miles of M-38 traverse central Houghton County, passing through Nisula en route from Baraga to Ontonagon. M-28, which spans virtually the entire Upper Peninsula, runs from I-75 in the east to US-2 at the City of Wakefield in the west. Fifteen miles of M-28 cross southern Houghton County passing through Kenton and Sidnaw. To reach the southern portion of Houghton County via State or National Highway, it is necessary to drive through other counties. In addition to these major routes, there are 847 miles of roads owned and maintained by the Houghton County Road Commission.

The Houghton County Road Commission operates from 5 locations, with their headquarters in Ripley and garages in Calumet, Elo, Alston, and Kenton. The county has many miles of seasonal roads with a number in southern Houghton County built and maintained by the U.S. Forest Service. The Houghton County Road Commission primarily uses Michigan Transportation Funds (MTF) (gas tax) to fund the maintenance of the roadways under its jurisdiction. The County also has a road millage of 1.3 mils that is distributed between the Houghton County Road Commission and the 7 incorporated cities and villages. The incorporated cities and villages maintain streets within their city/village limits.

Townships do not have jurisdiction over public roads in Michigan; there are no “township roads” recognized by state law. Furthermore, townships are not legally required to contribute to the construction, reconstruction, or maintenance of county roads. However, Section 14 (6) of Act 51 does permit townships to contribute to the cost of maintenance or improvement of the local county road system, and many of the 14 townships in the county do provide such funding to supplement county road commission funds.

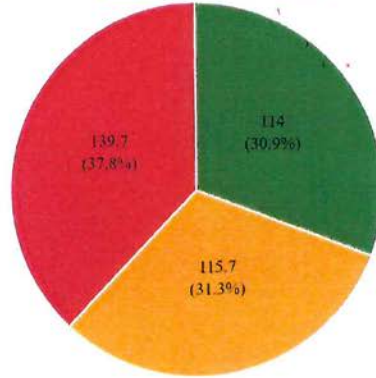
Furthermore, Section 12 (15) of Act 51 limits how much MTF revenue a county road commission can spend on local county road construction (50% of the project cost), and local county road bridge construction (75% of project cost). Costs not covered by MTF revenue must be provided by other sources often from township contributions but occasionally by private citizens. Townships contributed over \$800,000 in road improvements in 2023.

US-41 has been listed as the Copper Country Trail National Byway from Hancock to Copper Harbor, including the Brockway Mountain Drive.

The condition of Federal Aid Paved Roads in Houghton County in 2021-22 (Michigan Transportation Asset Council) is shown below, followed by the 2023 Houghton County Road Projects and the Houghton County 5-yr Transportation Improvement Plan. After the 2018 Father’s Day Flood, approximately \$46 million of road repairs were completed to Road Commission roadways and drainage structures.

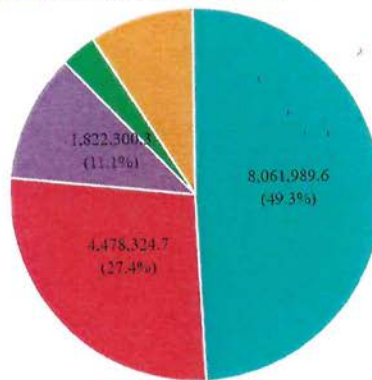
Federal Aid Rated Pavement Conditions
County - Houghton, All Roads, 2021 - 2022

Centerline Miles Good Centerline Miles Fair Centerline Miles Poor



Expenditures
County - Houghton, 2021

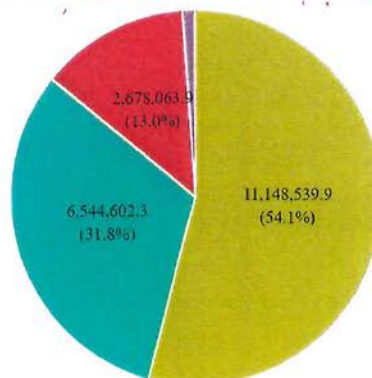
CCI PSI Routine Maintenance Winter Maintenance (Routine) Trunkline Maintenance (Trunkline) Administrative Other



Total Expenditures: \$16,363,832.19

Revenue
County - Houghton, 2021

State Sources Federal Sources Contributions from local units Other Charges for services



Total Revenue And Other Revenue Financing: \$20,589,281.45

HOUGHTON COUTY 2023 to 2027 Transportation Improvement Plan (Approved at 13A Task Force Meeting January 24, 2023)

PROPOSED PROJECTS			TEDF - CATEGORY "D" FUNDING			RURAL "STBGP" FUNDING		
PROJECT LOCATION	DESCRIPTION OF WORK	Length (miles)	TEDF "D"	MATCH	TOTAL AMOUNT	RURAL STBGP	OTHER	TOTAL AMOUNT
			80%			80%*		
	END 2022 FUNDS AVAILABLE		\$ 104,782			\$ -		
	2023 ALLOCATION		\$ 104,782			\$ 796,740		
2023	BEGINNING 2023 FUNDS AVAILABLE		\$ 209,564			\$ 796,740		
Lakeshore Drive (M-203 to Calumet Water Works Road)	Pulverize, reshape, drainage & surfacing Included in approved Federal 2023 Budget	3.31				\$ -	\$ 1,150,000	\$ 1,437,500
Calumet Water Works Road (Lake Shore Drive south)	Pulverize, reshape, drainage & surfacing	0.29				\$ 76,240	\$ 19,060	\$ 95,300
Valley Road (Bootjack Rd to Gay Rd)	Overlay and pavement marking	1.40	\$ 168,000	\$ 42,000	\$ 210,000			
Tires for Transit						\$ 2,000		\$ 2,000
Computers for Transit						\$ 6,500		\$ 6,500
North Cloverland Road (Anderson Rd south)	Reconstruction, drainage & surfacing	1.31				\$ 712,000	\$ 178,000	\$ 890,000
Obenhoff Road (Erickson Drive to Allouez St)	Small Urban Project	0.76						\$ 488,750
	2023 END BALANCE		\$ 41,564			\$ -		
	2024 ALLOCATION		\$ 104,782			\$ 785,000		
2024	BEGINNING 2024 FUNDS AVAILABLE		\$ 146,346			\$ 785,000		
Tapiola Road (Chassell Painesdale Rd to Valley Road)	Reconstruction, drainage & surfacing Federal Fund Exchange (MDOT @ 90%)	3.30				\$ 785,000	\$ 196,250	\$ 981,250
Gay Road (Valley Rd east)	Overlay and pavement marking	1.00	\$ 100,738	\$ 25,185	\$ 125,923			
Countywide	Pavement Marking					\$ -	\$ -	\$ -
Bootjack Road (M-26 to Valley Road)	Small Urban Project	0.60						\$ 481,250
	2024 END BALANCE		\$ 45,608			\$ -		
	2025 ALLOCATION		\$ 104,782			\$ 801,000		
2025	BEGINNING 2025 FUNDS AVAILABLE		\$ 150,390			\$ 801,000		
Superior Road (Boundary Road to Main Street)	Pulverize, reshape, drainage & surfacing	2.50				\$ 801,000	\$ 200,250	\$ 1,001,250
Transfer TEDF "D" back to Baraga CRC			\$ 150,390					
	2025 END BALANCE		\$ -			\$ -		
	2026 ALLOCATION		\$ 104,782			\$ 817,000		
2026	BEGINNING 2026 FUNDS AVAILABLE		\$ 104,782			\$ 817,000		
Superior Road (Chassell Painesdale Rd to Boundary Rd)	Pulverize, reshape, drainage & surfacing	2.40				\$ 768,000	\$ 192,000	\$ 960,000
Elm Street (4th Street to Mine Street)	Small Urban Project	0.32						\$ 481,250
Pavement Marking - County Wide						\$ 49,000		
	2026 END BALANCE		\$ 104,782			\$ -		
	2027 ALLOCATION		\$ 104,782			\$ 817,000		
2027	BEGINNING 2027 FUNDS AVAILABLE		\$ 209,564			\$ 817,000		
North Laird Road (N. Laird Heights Rd east)	Pulverize, reshape, drainage & surfacing	1.50				\$ 426,392	\$ 106,598	\$ 532,990
Tapiola Road (Moscow Road to Valley Road)	Reconstruction	2.20	\$ 209,564	\$ 52,391	\$ 261,955	\$ 390,608	\$ 97,852	\$ 488,260
	END OF (2027) 5 YEAR PROGRAM		\$ -			\$ -		

January 24, 2023

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TIP Approved at 13A Task Force meeting 01-24-2023

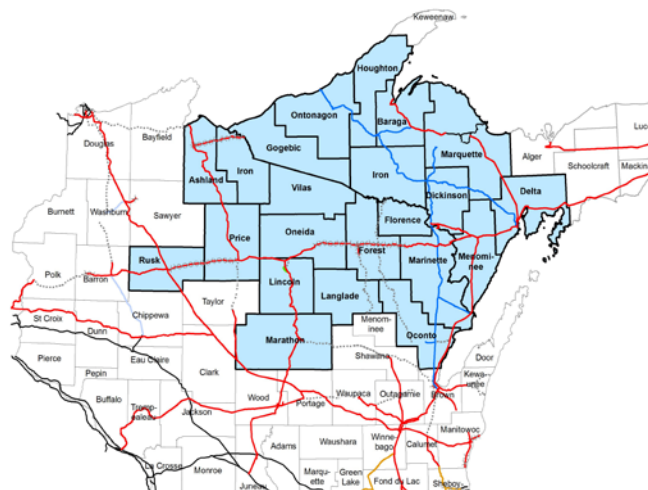
This section was developed by Kevin Harju, Highway Engineer, Houghton County Road Commission.

Rail

Although rail service played a critical role in the development and economic growth of the Keweenaw Peninsula, tracks that connected the Keweenaw's population centers, mines, and ports have been removed. Today the rail banked corridors between the Village of Baraga and City of Houghton and from Hancock to north of Calumet as well as many other former rail lines now serve as snowmobile, off-road vehicle, hiking and biking trails.

Houghton County is still served by one short line operator, the Escanaba & Lake Superior Railroad (E&LS). The E&LS has track and log landings in the southern portion of the County and it is part of its line that ends at Mass City. The E&LS also maintains tracks from Sidnaw east to Nestoria that connect to the Canadian National Railway (CN) and are currently used for car storage. The E&LS also maintains trackage rights over the CN line from Nestoria to Baraga. While the amount of rail in Houghton County is limited to the E&LS line in the south, the UP forest products industry still relies on moving Houghton County's logs by rail from the E&LS yards and CN yards located in L'Anse.

The Northwoods Rail Transit Commission (NRTC) has been formed by 13 counties in northeastern Wisconsin and seven counties in the U.P., including Houghton County (see map below). The Mission of the Northwoods Rail Transit Commission is to sustain and enhance safe, reliable and efficient rail service critical to the businesses, communities and economies in northern Wisconsin and the Upper Peninsula of Michigan. The Commission has been meeting regularly to see if freight rail service can continue in the region. CN is the main freight rail server in the region. There have been rumblings from the rail company about service cutbacks.



The harvesting and transporting of logs throughout the Great Lakes Forest Region has long suffered from an inability to effectively compete for sufficient private sector investment to provide an adequate fleet of railcars dedicated to transportation of logs forest-to-mill in the Region. Establishment of a Great Lakes Forest Log Car Fleet will contribute to improving the health of the Region's forests, to a more effective

and efficient use of the Region's highways, to highway safety and to the welfare of communities; generally, by reducing highway miles, fuel consumption and emissions necessary for transporting logs from forest-to-mill.

Ports

Domestic port facilities are available in Houghton and Hancock. The Keweenaw Waterway provides refuge to ships/boats seeking an alternate route when waves on Lake Superior discourage passage around the Keweenaw tip. Ships up to 600 feet in length navigate the Waterway, with the limit being the 104 foot vertical clearance of the Lift Bridge. The National Park Service's *M/V Ranger III*, providing service to and from Isle Royale National Park, operates from a dock in Houghton. Seaplane service is also offered by the Isle Royale Seaplanes in Ripley. The Houghton County Marina is just to the east of the Lift Bridge, on the Hancock side. The City of Houghton is now prepared to welcome and receive Passenger Cruise Ships with the new dock along the Portage Canal waterway in downtown Houghton.

Airports

Houghton County Memorial Airport (CMX) is located four miles northeast of Hancock at an elevation of 1095 feet. The airport is owned by Houghton County and operates year-round. The airport maintains two paved runways; the primary runway, 13/31 is 6,501 feet long and the secondary runway, 7/25 extends 5,196 feet. The county has an Airport Zoning Ordinance in the immediate vicinity of the airport (10 mile radius), restricting the height of structures and objects of natural growth. FAA regulations prohibit wildlife attractants i.e. garbage facilities, recycling center, manmade ponds, etc. from being constructed within a 5 miles radius of the airport.

Commercial air service is provided by United Airlines via SkyWest Airlines with two daily nonstop flights to Chicago's O'Hare Airport serving approximately 50,000 passengers annually. Approximately 15,000-20,000 corporate, charter, and general aviation aircraft use the airport annually. Air Cargo service is provided daily by UPS and FedEx. Combined, UPS and FedEx move approximately 800,000 pounds of freight annually through the airport. A critical care air ambulance is stationed on the airport serving the community to provide emergency life flights when needed.

The airport is served by a single story terminal building totaling approximately 12,550 square feet. The Terminal building provides air service passenger facilities, rental car facilities, and administrative offices for the Transportation Security Administration (TSA), Federal Aviation Administration (FAA Navigational maintenance), Veterans Affairs, and Airport Operations/Administration office and conference room. Transient pilot facilities and heated hangars are available for use. The Airport owns three seven unit T-Hangars (10,200 square feet each) leased to owners of smaller aircraft, one large Aircraft Storage Hangar (14,400 square feet) and a smaller Fixed Base Operations (FBO) maintenance hangar (6,000 square feet). In addition two privately owned hangars, 8,300 and 4,700 square feet, respectively, are located on the airfield and are primarily used for aircraft storage, maintenance, and office space. Aircraft fueling, parking, and maintenance are also provided.

Currently the Airport is one of 9 airports in the state of Michigan receiving funding under the Essential Air Service (EAS) program. The EAS Program was established in response to passage of the Airline Deregulation Act of 1978 (ADA). This federal program provides operating subsidy to airlines in order to maintain, at a minimum, a basic level of commercial air service. EAS is all about connecting smaller

communities to the national transportation system. By facilitating economic development, educational opportunity, health care, emergency transportation, recreation, and tourism; the program provides an enhanced quality of life for our residents. The program also works by providing a return on investment for the County and the State of Michigan by creating airport revenue for airport operations, jobs, and capital improvements. The necessity for EAS is justified by providing worldwide accessibility and promoting economic growth within the community. Elimination of the program would eventually restrict economic growth, cut jobs and erode airport infrastructure.

The Airport Capital Improvement Plan (ACIP) serves as the primary planning tool for identifying and prioritizing critical airport development and associated capital needs while enhancing safety and reliability. Funding for ACIP projects is provided by Federal, State and local grant funds through the FAA Airport Improvement Program.

Projects scheduled for the next 10 years are as follows:

2024	Design	Passenger Terminal Building CBR and Design
2025	Construction	Terminal site preparation, removal and relocation of buildings
2026	Construction	Terminal Building, Wildlife Hazard Assessment
2027	Acquire	Passenger Loading Ramp, Construct Hangars
2028	Construction	Remove old terminal building, Design ARFF/SRE Building
2029	Construction	ARFF/SRE Building Site Work
2030	Construction	ARFF/SRE Building
2031	Design	Taxiway B Rehabilitation, Acquire SRE – High Speed Rotary Plow

The Houghton County Memorial Airport is approximately 2,400 acres and hosts a 204 acre Industrial Park with the necessary infrastructure and utilities ready for hookup. The industrial park is easily accessible from Highway 41 providing tremendous location and exposure for developing or established businesses. The Industrial Park can be used for manufacturing, warehousing, industrial, distribution and research and development. Currently 15 businesses and a school are located in the Airpark, employing approximately 300 seasonal, part-time and full time employees. Land is also available for lease adjacent to the airport entrance road, aprons and taxiways. The airport also owns large parcels of land to the north which could be developed for qualified businesses. Over 400 acres are currently leased for testing and research and development of ground vehicles.

Pricket-Grooms Field Airport (6Y9) is located one mile northeast of Sidnaw at 1372 feet. It is privately owned and operated. There are several private airstrips in Houghton County that may create possible conflicts regarding communication and wind-generation towers.

This section was developed by Dennis Hext, Manager, Houghton County Memorial Airport.

Internet Access

Affordable access to the internet is vital for economic development, education, and emergencies. It is important that there be cooperation between government and the private sector to provide affordable cellular and broadband access to all parts of Houghton County.

The Regional Educational Media Center (REMC) of the Copper Country Intermediate School District provides access to high-speed internet to all of the Houghton County K-12 schools, plus

Stanton Township schools (K-8), and the Western UP Health Department. The Northern Michigan University Educational Access Network (EAN) provides K-12 students, college students, and lifelong learners with affordable access at home. Currently, EAN has only one tower in Houghton County near Evangel Community Church in Houghton with a 4-6 mile radius. EAN provides learning modules for building various skills to degree seeking students, community members, and educational partners.

Various parts of Houghton County can obtain high speed internet access from Charter (Spectrum), Baraga Telephone Company, Pasty.net, and ShoreWaves, Star Link and others. There are some parts of the rural, low-population density areas of Houghton County that have limited or no access to an affordable high-speed internet.

The Peninsular Fiber Network (PFN) is a joint effort between Baraga Telephone and Hiawatha Telephone to provide high-speed internet access to the Upper Peninsula, Northern Lower Michigan, and Northern Wisconsin. The goal is to bring a fiber backbone within close proximity of rural users.

Cellular communication in the county, including mobile data at 5G LTE speeds, is provided by Verizon and AT&T. While cell service is improving, there remain gaps in service due to terrain, lack of tower coverage, and sparse areas of population.

Public Review and Participation

The Michigan Planning Enabling Act, (P.A 33 of 2008, as amended, M.C.L.125.3801 et seq) requires that members of the Planning Commission be appointed as representatives of the community. Public participation is an on-going part of planning in Houghton County.

The people of Houghton County will have an Open Forum and the chance to make comments and offer suggestions for this plan through December 31, 2023. This plan will be posted on the Houghton County Planning Commission's page, and we have solicited feedback from all who would like to have their thoughts, ideas, and commentary heard and considered as the plan was written.

During the fall and winter of 2023 this Plan was written and reviewed. The Draft of the plan was placed on the Houghton County website and hard copies were sent to each township on December 5th. A Public Hearing will be scheduled for January 2024 where the Public will be encouraged to offer feedback. A hard copy will be sent to each Township, City and Village within the County to ask for their review and feedback.

On January 9th, 2024 the Planning Commission will offer the Master Plan to the Houghton County Board of Commissioners for approval of the draft plan. Copies of the draft plan were placed in the County Controller's office and the Portage Lake District Library, and electronic copies were made available on the county's web site.

The Planning Commission is seeking feedback and participation from any County citizen and municipality. All comments received by the commission will be evaluated and utilized if appropriate, and considered prior to adoption.

Planning in Harmony with Winter

Winter affects Houghton County in many ways and snow cover may last from mid-November until late April or early May. Taking advantage of the positive aspects of winter encourages the use of a unique natural asset, and improves the area's appeal for new businesses and residents.

- Outdoor recreational opportunities, including downhill and cross-country skiing, snowmobiling, ice fishing, snow shoeing, ice skating and hockey.
- Indoor arts, culture and social activities.
- Winter tourism, special events, and festivals including MTU's Winter Carnival, including using ice and snow for civic art and a celebration of Winter
- Hancock City's Heikkinpaiva Finnish Celebration.
- The CopperDog 150 sled dog race in Calumet
- The Great Bear Chase in Calumet Township

Specific considerations:

- Cost of snow management for public and private sectors.
- Mobility issues, especially for seniors and the disabled, on foot or in automobiles.
- Increased heating costs and energy consumption.
- Support for ice fishing

Recommendations for planning:

- Generate local pride in our winter culture and promote winter tourism
- Foster innovative efforts in the community to design facilities and buildings suited to the winter season.
- Consider lighting treatments for winter conditions, lighting of trailways and walking paths to improve access and increased opportunities for recreation and tourism.
- Support winter recreation opportunities such as ski trails and snowmobile/multi-use trail corridors, and support multi-seasonal recreational use of existing public land and parks.
- Support for Snowmobile Trail Grooming is now a main concern. With the most extensive and largest collection of snowmobile trails in the Midwest, caring for them and the snow grooming machines will continue to be a huge need. The Keweenaw Trails Service group is working hard to construct a Maintenance Building in Calumet Township, and are heading to completion of their new facility. Retiring the unheated and limited current facility in Mohawk in Keweenaw County is the goal, and if the new facility gets completed it will be important for Winter Tourism and all of the trails throughout the Keweenaw Peninsula.

Land Use Planning Trends and Development Issues Facing Houghton County

Changes in the Houghton/Hancock area

In the early part of the Twentieth Century, much of the economic activity of the Keweenaw Peninsula was centered in the Calumet area. The Houghton and Hancock area was the major transportation hub for the region, providing facilities for rail and maritime services. There were modest commercial districts in both Houghton and Hancock, and the population was about half of what it is today. The Calumet area had a population more than double that of the present time and was a much more significant focus for commerce in the Keweenaw.

The close of the Twentieth Century found the economic roles of the Calumet area and the Houghton-Hancock area reversed. The major economic engine for the Keweenaw is now centered in the Houghton-Hancock area. The university and community college, one of the two hospitals, most governmental offices, the major shopping centers, many cultural and arts venues, most of the newly constructed residential and commercial property, the convergence of the two major access highways – are now found in the Houghton and Hancock area.

The resulting growth pressures have been handled reasonably well within the cities of Houghton and Hancock. New commercial and residential development in these cities has generally been in accordance with current community development principles. Much of the area within the two cities has now been either developed or planned for development.

Decreasing Government Funding and Consolidation of Services

Decreasing state and federal spending for public services, and an increase in state-owned properties, properties owned by conservation groups and land conservancies are decreasing the amount of tax revenue and population in the area and increasing the property tax for private land owners. Businesses and non-homestead landowners are then left with fulfilling the property tax shortfalls caused by the decreased tax revenue the state and conservation group-owned properties have caused. This, combined with an emphasis by state leaders on improving local government efficiency has significant implications for the county. Local government and public services at all levels (municipalities, townships, county offices, school districts, state and federal branches located in the county etc.) will increasingly respond to financial incentives or legislative dictate to consolidate services, expand across boundaries and reduce programs. Demographic shifts, such as falling numbers of school age children, will amplify the pressure created by diminishing support for local services.

Waterfront Development

Houghton County has miles of Lake Superior shoreline, numerous inland lakes, and the Keweenaw Waterway system including Torch and Portage Lakes. Significant amounts of new residential development have occurred along waterfront areas since the early 1990s. This has included frontage on Lake Superior and Keweenaw Waterway, as well as inland lakes and streams. In the last 20 years, waterfront property values have increased five-fold in some areas. Seasonal cottages are being converted to year round residences. Vacant lots are being developed with homes, many of them large. In some areas, remediated stamp sands will increase the supply of available lots.

Trails and recreational access

Tourism and recreation play an important role in the Houghton County economy. Recreational trails are important for residents as well as visitors. Trails, over land and over water, date back to the earliest human use of the Keweenaw.

Today, Houghton County has both land and water trail systems. The North Country National Scenic Trail traverses the southern reaches of Houghton County, primarily on lands of the Ottawa National Forest. This wild route contrasts with the paved trail on the old Soo Line grade along Houghton's waterfront, running nearly four and half miles. Some years ago community members installed a short, wheelchair-accessible trail through the Houghton School Forest. There are numerous short trails, such as at the Nara Nature Trails, the Michigan Tech University Recreational Trail System, the Maasto Hiihto and Churning Rapids Trails in Hancock, the Swedetown Trails in Calumet Township, the Paavola Wetlands trail, the Sturgeon River Sloughs and Chassell Trails, and the Silver Mountain Tail in the southern part of the county.

There is an extensive formal trail system, primarily using old railroad grades or logging roads, that is professionally groomed for snowmobiling in the winter. Houghton County and the snowmobile trails that traverse the county is part of the largest collection of snowmobiling trails in the whole Midwest. Many of these routes are used by ATVs or mountain bicycles in the warmer months. There is an extensive network of well-groomed cross-country ski trails in Houghton County. Many of these also provide summer mountain biking and hiking opportunities. Many of the primary and secondary roads in the county are suitable for road biking and see significant use in this way.

The county has numerous abandoned rail grades and old road traces that are informally used for snowmobiling, ATV riding, mountain biking, walking, running, cross-country skiing, snow shoeing and sled dog mushing. However, few of these trails have permanent easements or fee ownership. The impact of this is that a trail long used may suddenly become unavailable for public use. Changes in land use, ownership and attitudes have the potential to close down important and irreplaceable trail segments. In addition, there is potential for placing motorized trails in locations unsuitable because of adjacent land use, such as residential neighborhoods.

The Keweenaw Waterway, in addition to its use by motorized vessels up to 600 feet long, is part of the Keweenaw Water Trail, which permits small craft such as canoes and kayaks to explore the natural and cultural heritage of the Keweenaw from the water. Since the tip of the Keweenaw Peninsula, from Hancock northeasterly, is an island, the Water Trail is a loop trail. The Hancock City Campground provides a convenient starting and ending point for Water Trail users. Numerous inland lakes and several area rivers also provide water trail opportunities.

Portage Lake Lift Bridge

The Keweenaw Waterway connects both ends of Portage Lake with Lake Superior. One third of Houghton County and all of Keweenaw County lies north of the waterway.

A single bridge has connected this man-made island with southern Houghton County since 1875. The current structure was built in 1959 and is maintained and owned by the Michigan Department of Transportation. The Portage Lake Lift Bridge is the heaviest dual deck aerial lift bridge in the world. Although it has never been out of operation for more than several hours, the possibility of a mechanical failure or of an impact by a wayward vessel exists. At best a bridge outage of any duration is disruptive, and if the outage is prolonged it can become a threat to public health, public safety, and the region's economy.

The effect of an extended bridge outage on the population both north and south of the existing bridge has been studied extensively. There are various conveyances that can be placed to alleviate problems caused by a failure of the Lift Bridge, and plans to mitigate a bridge failure are reviewed and revised on an ongoing basis by emergency responders and other stakeholders. Given the importance of its function, the Portage Lake Lift Bridge has been identified as a critical piece of infrastructure for both Houghton and Keweenaw counties.

Past development in the area has placed both acute care hospitals, the sole EMS provider, most of the physician clinics, the Michigan State Police post, many of the county's fire units, the U.S. Coast Guard, the area's only rescue hovercraft, the airport, the health department, and all home health agencies on the island portion of north Houghton County.

The only emergency service providers located south of the bridge are Michigan Tech Public Safety, Houghton County Sheriff, Houghton City Police, and many of the fire departments. In addition to inhibiting emergency services from traveling from the island to the south, an extended bridge malfunction would also prevent necessities like food, medicine and fuel from reaching the population on the north of the Keweenaw Waterway. MDOT has completed updates and some needed maintenance on the lifting motors recently, and also some deck and connecting teeth work on the roadway.

As of the end of September 2023, a permanent CFR was written and adopted by the 9th District Commander for the Coast Guard for the bridge. This new CFR restricts lifts to the half hour, meaning that for pleasure craft lifts will only be executed on the top and bottom of the hour, and not in between. Large commercial and governmental vessels will continue to get lifts on demand and as needed. Local leaders and the Upper Michigan MDOT had asked for longer restrictions and closing the bridge to lifts for the busiest parts of the day and several hours, but that request was denied. Getting it restricted to scheduled lift times does allow for vehicle traffic to plan for crossings, and for boats to do the same.

It is the consensus of this Commission that future county decision makers will have to continue work with state and federal partners to develop alternative solutions and that local agencies, businesses, and members of the community should have their own plans in place in the event of a prolonged outage. A second crossing has been talked about many times, and development of a second crossing or alternate route is recommended.

Scenic, Historic, Cultural Resource Preservation and Management

Houghton County has an unusually rich concentration of nationally significant scenic, historic and cultural resources: Douglass Houghton Falls, Queen Anne Falls, Hungarian Falls, Redridge Falls, the Sturgeon Gorge Wilderness on the Ottawa National Forest, the Quincy and Calumet Units of the Keweenaw National Historical Park, and the headquarters complex for Isle Royale National Park, and many others

that you can find around the county. Two units of the Michigan State Park System (F.J. McLain and Twin Lakes), along with significant lands protected by the state forest system, are located within the county.

In 2005, the U.S. 41 corridor north and east from the Portage Lake Lift Bridge was designated by the federal government as the Copper Country Trail National Scenic Byway, one of the few in the nation.

The Quincy and Calumet Units of the Keweenaw NHP are designated National Historic Landmarks, and there are numerous properties and districts within the county listed on, or eligible for listing on, the National Register of Historic Places.

The Keweenaw Ridge, the spine of small mountains and hills running northeasterly through the County from Ontonagon all the way to Keweenaw Point, forms part of the unique viewshed and landscape of our County that gives it its inherent natural beauty and intrinsic value. The Keweenaw Ridge highlands extend through the communities along the Copper Range and is under threat by proposals for wind farm development.

The people of Houghton County are asked to be the resident caretakers of these important resources by the people of Michigan, and all the citizens of the United States. This is both a privilege and an obligation.

There are not many counties in the United States with such a rich mix of significant resources. These enhance the quality of life and help attract and retain businesses that recognize the strategic value of an excellent quality of life for their employees.

Forestry and Timber Products

Forests in Houghton County have made a remarkable resurgence in the decades since the decline of mining and the subsequent loss of population. Indeed, the major landowners in the county are predominantly forest product businesses and government agencies. Most timber harvesting is done by multiple small companies under contract to timberlands management companies. Log transport is often done by individuals and small companies. Mills which accept pulp wood have declined in recent years with the overall contraction of the economy, and today there are no pulp mills in Houghton County. Local value-added forest product processing, such as arena flooring at Horner Flooring continues to exist, despite the long journey to market for the finished products. There is a highly selective market for maple veneer logs with the “bird’s eye” structure. A prime, single eight foot log can bring \$10,000 or more for export. The lack of value-added processing of forest products is a major concern in the region, therefore it is recommended that any such value-added timber related industries would be advocated for and encouraged.

Brownfield Sites, Land Bank, Blighted Properties

Houghton County has a Brownfield Redevelopment Authority, and through their efforts and working with developers they consider multiple sites within Houghton County can be reclaimed and put back on the tax rolls. A growing interest in Brownfield Developments has seen an uptick recently, and several sites are being considered at this time. The County helps to lead a Houghton County Land Bank Authority, and this group considers blighted properties, foreclosed properties those that fall into states of need, and

redevelopments that help to revitalize communities in our County. In 2023 the Houghton County Land Bank received recognition and honor from the Governor for their leading work in this area.

The Potential for Growth and Rural Lifestyles

A concept which has received some interest among urban planners and demographers is the observation that some in higher socio-economic groups now have the ability to make a life-style choice to locate outside the confines of developed urban areas. The reputation of a lower cost of living, the perception of simpler and healthier lifestyles, improved winter driving as a result of better vehicles, and especially the ability to work in remote areas served by high speed internet, has given a boost to population growth in some rural areas. The growing opportunities for remote work arrangements where people enjoy high paying professional jobs and the quality of life in Houghton County is a growing trend. These remote workers have families who attend our schools, live here and invest in our communities, fly to and from our County Airport, and link us to other areas of our state, country, and the world. This will have an impact on the County Airport, so plans to modernize the terminal and to keep a focus on having a good facility at CMX remains an important focus if we are to continue to serve this new segment of the population that are choosing to take their jobs with them and make Houghton County their home.

These rural areas (which are attractive to such groups) tend to have open space, uncongested roads, clean air and water, and rather than core cities, a network of farms, open space, tiny villages and larger towns diffused throughout a county. Rather than being connected to cities, they are typically three to four hours from metro hubs and are economically independent from them. Attractive rural areas flourish in communities with colleges, good infrastructure, available capital and human resources, strong public services, and an emphasis on environment, recreation and life style, and artist communities.

In Houghton County, rural residential growth typically occurred on small lot splits and land divisions along existing road systems. Very few new roads were constructed for this development, and most lots are not platted, but are land divisions with few restrictions or requirements. Most rural residential is constructed with short driveways because of snow issues. The result is a strip of residential land use visible along many roads in the county.

New residents, whether locating in cities or outside of incorporated municipalities, will bring important consequences for public services, community infrastructure, and the tax base that comes with them when they choose to locate in Houghton County.

Solid Waste Reduction and Recycling Programs

In 2014, the Planning Commission identified goals for solid waste reduction and improved recycling programs and formed a working group to explore the issues, Houghton County owns a solid waste transfer station located in Atlantic Mine, and in addition to trash processing the facility that has also collected scrap metal and waste oil for many years. The transfer station has fee schedules to charge for waste collection by the bag or by the ton. County-owned tractor trailers haul compacted waste to a landfill in Greenland, MI that is owned and managed by Waste Management Corporation. The Copper Country Recycling Initiative (CCRI) was formed as an outcome of the Planning Commission's working group to more actively pursue waste reduction and recycling success in the region. The CCRI is a collaborative, citizen-based group that intends to serve as an information clearinghouse and catalyst for recycling and waste reduction efforts in the Copper Country. The CCRI working group maintains a website and a Facebook page to provide

information, and share announcements relevant to waste reduction and recycling events, trainings, and other opportunities.

As of 2020, the County worked with the CCRI to bring Single Stream Recycling to the County. This effort is a partnership with Waste Management who hauls the recycled goods to the Marquette Recycling Facility (MRF), and now several tons each month are taken out of the trash streams and into the recycling streams as a result. The CCRI remains in close communication and partnership with the County, and new ideas for increased recycling in Houghton County are continuously being considered.

Future Economic Development

Houghton County's economic development activities aim to improve the economic well-being of the county through job creation and retention, tax base enhancements and quality of life. These values are driven by strategies, policies, and programs led by various public and private organizations. Among the County's priorities for individual prosperity are available employment, decent housing, good health and access to human services and recreation. The business climate in Houghton County supports all types of businesses.

Frequently mentioned factors that provide Houghton County with a favorable business climate include business and income tax levels, low crime, cost of living, quality of life, and real estate costs relative to other areas. Challenges include workforce availability, energy costs, housing shortages, and local market size.

Houghton County has factors of its business climate that may be viewed as strengths or weaknesses, depending on the need of the particular business such as:

- Infrastructure (e.g., available deep water port; lack of interstate highways)
- Environmental regulation
- Permitting, licensing, and various reporting regulations
- Access to financing and capital (e.g., venture capital)
- Incentives (e.g., tax credits)
- Quality of services and transportation (e.g., dependability of air service)

Considering the complexity of economic development, the Houghton County Master Plan serves to highlight certain aspects of the community as they relate to the above areas, but does not intend to direct or emphasize any particular efforts over another.

Economic Development Entities

Houghton County draws from an array of traditional and emerging economic development tools. A few of them include:

- **Downtown Development Authority (DDA)** – The Village of Calumet, the City of Houghton and the City of Hancock each have a designated DDA provided by Michigan Law.
- **Local Development Finance Authority (LDFA)** – Established in 2002, the Cities of Houghton and Hancock formed a joint LDFA for the provision of tax funds for economic development.
- **Michigan Core Communities** – In June of 2000 the State of Michigan initiated an effort to spur private development in its urban communities and traditional centers of commerce. The incentives, unique to

Core Communities, target critical needs of older communities through new housing development, redevelopment of obsolete facilities and development of contaminated properties. The city of Houghton is designated as a core community, enabling access to brownfield redevelopment incentives, neighborhood enterprise zones, and obsolete property rehabilitation exemption.

- **Business Incubation** – Business incubation is a business support process that accelerates the successful development of start-up and fledgling companies by providing entrepreneurs with an array of targeted resources and services. These services are usually developed or orchestrated by incubator management and offered both in the business incubator and through its network of contacts. A business incubator’s main goal is to produce successful firms that will leave the program financially viable and freestanding. These incubator graduates have the potential to create jobs, revitalize neighborhoods, commercialize new technologies, and strengthen local and national economies. Houghton County has two business incubation organizations that include:
 - **MTEC SmartZone (SZ)** — MTEC SmartZone is one of 15 SmartZones in Michigan. MTEC SmartZone helped create over 250 direct jobs in eight years through programs and support to entrepreneurs and small businesses in the technology sector. In addition, MTEC SmartZone has created a new business model for Fortune 500 Companies, allowing them to access Michigan Tech’s student engineering talent. This model has brought jobs back from overseas and benefited companies like Ford Motor Company and GE Aviation in many ways.
 - **Entrepreneur Support Center (ESC)** — Operated by MTEC SmartZone, the ESC is a resource center that provides entrepreneurs with a place to work, with direct guidance from business counselors to foster ideas, and start and develop businesses into companies that create jobs for the local community. ESC has helped launch about two companies a month since it opened in April 2011.
- **Keweenaw Economic Development Alliance (KEDA)**— Keweenaw Economic Development Alliance takes a leadership role in Houghton, Keweenaw and Baraga Counties, helping expand and diversify the area’s economic base. KEDA designs and implements proactive, sustainable programs focused on retaining and expanding existing firms, starting up new businesses, attracting entrepreneurs and companies to the Keweenaw and initiating projects that create conditions for future economic growth.
- **Michigan Small Business and Technology Development Center (SBTDC)** — SBTDC provides a broad range of support services to local companies through local business counselors housed at KEDA and Michigan Tech, regional business counselors based in the Escanaba SBTDC office, and technology company specialists located throughout the state.
- **Superior Innovations at Michigan Technological University (SI)** — SI is a private, for-profit company established by Michigan Tech under the non-profit Michigan Tech Entrepreneurial Support Corporation (MTEC). Both MTEC and SI serve as tools to help transition early stage discoveries from University labs into successful commercial enterprises.
- **Western Upper Peninsula Planning & Development Region (WUPPDR)** — WUPPDR provides a wide range of services including technical assistance to local units of government, grant writing and administration. Fostering stable and diversified economies in the Western Upper Peninsula, WUPPDR also serves as the regional clearinghouse for federal and state funded programs. Through this

role, WUPPDR enhances intergovernmental coordination and encourages opportunities for public comment on projects of regional significance.

- **USDA Regional Development** – Assists regions in creating self-sustaining, long term economic development in rural areas through visioning and strategic planning. Provides communities seeking information on USDA Rural Development and other federal community and economic development programs. Promotes partnerships at the local and state levels to assist communities in advancing their strategic or economic development plans. Promotes coordinated planning among Rural Development programs to address specific projects in a community or regional strategic plan.
- **Western Upper Peninsula Michigan Works** – The Houghton One Stop Center provides a complete array of employment and training services to the residents of the Copper Country area. Computers are available for use by job seekers to work on their resumes or to search for jobs through various internet resources. Free career resource materials are available as well as a display of job application forms from over 50 Copper Country employers.
- **Keweenaw Chamber of Commerce** – The Keweenaw Chamber of Commerce strives to enrich the overall business and economic climate of Houghton and Keweenaw counties through a variety of programs and services.

Other Economic Development Features

- **Houghton County Renaissance Zone** – Over 400 acres of Houghton County has been reserved in two different locations to serve as Renaissance Zones. By 2007, 18 companies have been taking advantage of the tax-free incentives that these areas offer.
- **HUBZone Certification** – Available throughout Houghton County, the **Historically Underutilized Business Zones** (HUBZone) program helps small businesses in urban and rural communities gain preferential access to federal procurement opportunities. These preferences go to small businesses that obtain HUBZone certification in part by employing staff who live in a HUBZone. The company must also maintain a "principal office" in one of these specially designated areas.

Credits: Information in this section was contributed by International Economic Development Council, Keweenaw Chamber of Commerce and Western Upper Peninsula Planning & Development Region, Michigan Economic Development Corporation, National Business Incubator Association, U.S. Small Business Administration, USDA Rural Development, and Western Upper Peninsula Michigan Works.

Living the Plan

Houghton County recognizes that decisions about zoning are best made at the city, village or township level. This master plan may serve as one base for an individual township to develop a zoning ordinance. Houghton County has no intention of attempting to implement county-wide zoning.

Projected Land Use Descriptions by Township

The attached maps are based on existing land uses in Houghton County, and demonstrate future use possibilities. They are not intended to be restrictive or proscriptive; rather they will help orient future planning by political sub-units within the county. No line or color on the map is absolute. These maps show the major categories of future land use which allow for growth while protecting values identified by members of the public.

The following land uses are shown on the maps:

- Forest (private, public)
- Commercial/Industrial
- Agricultural
- Recreation (non-forest)
- Rural Residential (includes year around, second home, lake shore, camps – not dense. Year around access limited by local residents.)
- Stream Preservation
- Residential (more dense, communities, villages, small towns) • Urban (areas inside cities)

Several Townships requested that their existing zoning and planning maps be used. Note that many of the cities, townships and villages have, or are establishing, web sites with much more specific information about their jurisdiction. Please refer to these township's websites for the most current map.

Discussion for Houghton County Townships, starting in the southern part of the County. Level of detail generally goes to the Section level only; finer detail when appropriate.

Duncan Township Duncan Township is impacted by the Ottawa National Forest. A small industrial area west of Sidnaw is identified with a good confluence of highways, railroad, and an airport. Wise management of forest land is best done with large tracts of non-fragmented land. Hwy M28 passes through E-W; FH16 N-S. Rural Residential exists, but is not encouraged for significant future growth along Goldenglow Road and Lake 13 Road, coming down from the Silver Mountain tracts in Laird Township. Maintaining land in large tracts is most conducive to maintaining and developing trail systems. Duncan Township has a zoning ordinance.

Laird Township Laird Township is dominated by the Ottawa National Forest and the Copper Country State Forest; an agricultural strip roughly along M-38; and rural residential areas along the Pike Lake Rd and in the Silver River/Silver Mountain Area. Two population concentrations are at Nisula and Alston with small commercial/industrial areas around them. Wise management of forest land and agricultural land is best done with large tracts of non-fragmented land; these encourage multiple recreational uses such as trails. Prickett Lake area is a key recreational area whose future land use should be maintained (primary mission of the impoundment remains power production).

Elm River Township Elm River Township preserves land which is a mix of public and private forest but has rural residential around the lakes and along the M-26 corridor and the major county roads. A commercial section is shown along M-26 in the Twin Lakes area, and recreational use on Lake Roland with Twin Lakes State Park, the golf course and Emily Lake.

Adams Township Adams Township shows rural residential continuing from Elm River Township to Toivola, a forest corridor along M-26 north of Toivola and south of Painesdale, and between the established communities of Painesdale and Trimountain and the Village of South Range to maintain a

“northwoods feeling” approaching the Houghton/Hancock area. New residential development is encouraged within the existing communities, which have appropriate infrastructure. This helps preserve the “northwoods feeling” and a sense of the area’s mining heritage. The Cole’s Creek drainage as it approaches the Keweenaw Waterway at the north edge of the township has a stream preservation emphasis.

Stanton Township Stanton Township shows a mix of agricultural, rural residential, and forest in the inland portions. A mix of rural residential, recreational, and some agriculture uses exists along the Keweenaw Waterway and Lake Superior shoreline, as well as the Salmon-Trout River and Coles Creek. Coles Creek serves as an important DNR benchmark for cold-water trout fisheries. There are three areas of agricultural land in the township that have unique micro climates conducive to fruit crops. These areas, even if forested, should be considered appropriate for agricultural use. Stanton Township plays a very important role in Houghton County’s recreational access to Lake Superior, with significant public park development at North Entry and Agate Beach. Recreational Use is identified for the township’s widely known Covered Road. Rural residential runs along the Lake Superior shoreline from the edge of the Township Park at the north entry to the Southwest, as far as Graveraet River. Beyond that point the lake shore will be preserved primarily for public recreation.

Chassell Township Chassell Township is rural residential along the Canal and Portage Lake, and recreational land just inside the rural residential land along Portage Lake. Agricultural land is west of US 41 and south of Snake River Hill; these are traditionally good berry lands. Rural residential is shown along most county roads and a stream buffer is along the Sturgeon River where flooding may occur during snow melt. Chassell Township has an existing Land Use Plan and zoning ordinance in effect. Several culverts under US41 in Chassell are blocked or partially blocked. A future flood has the potential to wash out portions of US41. The township is working with MDOT, the Houghton County Road Commission, and the Houghton County Drain Commissioner to try to resolve the problems before a major flood occurs. There are four private airstrips in Chassell Township; protecting their safe approaches has implications for the development of wind energy and the construction of communication towers.

Charter Township of Portage The Charter Township of Portage has a land area of 112.6 sq. miles and a water surface area of approximately 3.9 sq. miles with a population of 3,156 comprised of 33% urban and 67% rural residents. The Township sits immediately adjacent to the City of Houghton, which is the largest population center in Houghton County and home of Michigan Technological University, well known nationally for its engineering programs. The Township has a great mix of outdoor recreational opportunities. For instance, the vast majority of the Pilgrim River Watershed is largely located in Portage Township. The watershed is 15,546 acres in size with a total stream length of 31.8 miles. The Pilgrim River Watershed Project (PRWP) is solely located in Charter Portage Township and it comprises 1,600 acres of that watershed total. It was recently completed with the efforts of silent sports enthusiasts, wildlife lovers, natural resource managers, and watershed neighbors collaborating with the Copper Country Chapter of Trout Unlimited, Northwood Alliance, Partners in Forestry, Copper Country Audubon, Houghton-Keweenaw Conservation District, Keweenaw Land Trust, Keweenaw Trails Alliance, and the Michigan Department of Natural Resources. The abundant outdoor recreational activities found in Charter Portage Township which is located immediately adjacent to the City of Houghton and Michigan Technological University enhance the "quality of life" experience for our residents and make the Township a very attractive place to live and do business.

Franklin Township Franklin became a township on October 19, 1863. Its roots can be found amongst the mining heritage that is the Copper Country. Its quaint communities erected to house masses of immigrants who were looking for a better life for themselves and their children. Franklin Township is home to some of the most iconic images making up our region. The Quincy mine hoist majestically sits atop Quincy Hill, beckoning to visitors and locals alike to come and explore her tunnels, experiencing the depths and darkness that was everyday life for our founders, and the SISU that kept them going.

Quincy Township Quincy Township is relatively small, undergoing significant annexation pressures from Hancock. It has a significant portion of the Quincy Unit of Keweenaw National Historical Park. The snowmobile trail corridor is an important community asset. The recent designation of U.S. 41 as a National Scenic Byway through this township is an economic stimulus to the County. Controlling adverse development is a key strategy. Rural residential development along several county roads allows for continuing growth supporting the Houghton/Hancock area.

Hancock Township Hancock Township is one of the fastest growing townships in the county. F. J. McLain State Park is located in Hancock Township and has considerable canal and Lake Superior frontage, while the DNR maintains a boating access to the Portage Ship Canal at Lily Pond. Hancock Township also provides recreational trails for adjoining populations, as private trails in Hancock Township connect to the Maasto Hiito trails in the City of Hancock. While there will be continuing pressure for rural residential development along the road corridors in this Township, the water resources in this area are spotty, some wells have run dry, and there are concerns that additional growth will adversely affect the available water resources. There is also a large gravel excavation site and blacktop plant located in the township. Further excavation of large gravel resources should be carefully studied before implementation since expansion could impact both recreation and water resources. Although Hancock Township does not have zoning, it has several ordinances affecting development and all property owners or prospective property owners are encouraged to discuss potential purchases and projects with township officials.

Osceola Township Osceola Township is a long, narrow township that ranges from Torch Lake on the south almost to the Houghton County line on the north. The snowmobile trail corridor is a community asset. The recent designation of U.S. 41 as a National Scenic Byway through this township is an important economic stimulus. Controlling adverse development within this corridor is a key strategy to be undertaken by this Township. Osceola snakes around and through intensive residential development in the Calumet area, requiring extensive cooperation among units of government. Rural residential characterizes the Torch Lake waterfront, a part of the Torch Lake Remediation project. Inland areas of the Township support agricultural uses. The airport sits partly in Osceola Township.

Torch Lake Township Torch Lake Township is divided by Torch Lake. Most of the county roads support Rural Residential use; the exception being along seasonal roads. Torch Lake Township has extensive Lake Superior frontage with sections that should be preserved for public recreational access. Most of the interior of the Township is either forest or agricultural. The Rice Lake shoreline supports Rural Residential. The area of Point Louis should be preserved for public recreational use.

Charter Township of Calumet Calumet Township has an extensive Land Use Planning and zoning process in place. The Douglass Houghton Falls Scenic Site is recreational and is in the process of development at this time. The State of Michigan and the MDNR have invested \$600,000 to consider site plans, better parking, a restroom facility, an informational kiosk, a pedestrian path and bridge, observation decks, and a Veteran's Memorial. Rural Residential is shown along some county roads, with agricultural

areas along other roads preserving scenic values and agricultural potential. Industrial uses are shown to support the existing Renaissance Zone and also the existing industrial sites at Osceola #13, Centennial #3 and #6, Calumet Electronics, Royale Machine, and gravel operations at various sites. Calumet Township is an important component of the Keweenaw National Historical Park.

Schoolcraft Township Extensive areas of Schoolcraft Township are agricultural. Forested land is along the eastern edge of the Township. Rural residential is shown along the entire Trap Rock Valley area, as well as along Torch Lake and the Rice Lake/Grand Traverse area, reflecting long standing patterns. Recreational use is in the Superfund remediation area.

Preparation of this plan:

This plan was prepared by the Houghton County Planning Commission and the County Administration.

The members of the 2023 planning commission are:

Allan T. Aho, Chassell Township-Agriculture & Forestry, Land Use
John Larson, Hancock Township-Education
Ron Kilpela, Franklin Township-Local Governmental Planning and Zoning
Timothy Sears, Franklin Township-Sanitation, Environmental Health, Housing & Human Services
Benjamin Larson, County Administrator
Joel Keranen, District 2, Houghton County Board of Commission
Steve Aho, Hancock Township-Economic Development & Tourism
Michael Erickson, Osceola Township-Environment
Horst Schmidt, Torch Lake Township-Recreation & Culture

Much of the statistical information and historical data was derived from the 2018 Master Plan document.

Summary of Public Review and Comment: Feedback is encouraged and will be included as received from our County partners and municipalities. A Draft of this document was sent to Community and Municipal partners to seek input, as well as being posted on the Planning Commission's Webpage on the County Website, and shared as the top News Story on the Main Page.

Written comments

District 4 Board of Commissioner Gretchen Janssen had several minor edits and corrections to both the Master Plan and Recreation Plan. Those edits were all incorporated into the Plans.

Summary of Public review and Comment, September, October and December Planning Commission Monthly Meetings, 2023: There was no public participation or comments offered at the time of these public meetings.