

TURNER TOWNSHIP MASTER PLAN for Land Use



Goals and Objectives for Growth

Management

2021

TURNER TOWNSHIP BOARD

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Tina Schumacher	Clerk
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James Rittenberg	Trustee

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Joyce Huber	Secretary
Albert Bender	Member
Tina Schumacher	Member
Rodney Daniels	Zoning Administrator

CONSULTANTS

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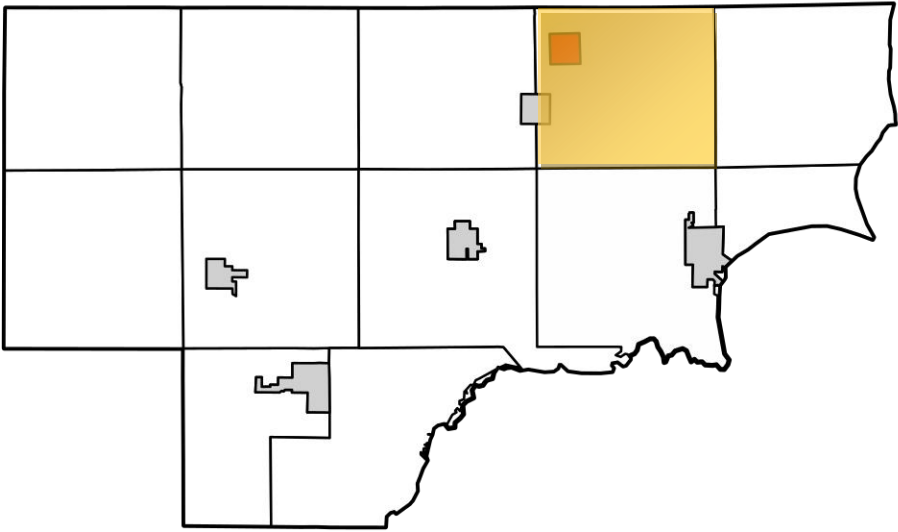
Scott Bell, A.I.C.P. & GIS Specialist

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Clare – West Branch

TURNER TOWNSHIP LOCATION MAP



Turner Township
Arenac County, Michigan

Turner Township Master Plan

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SECTION ONE

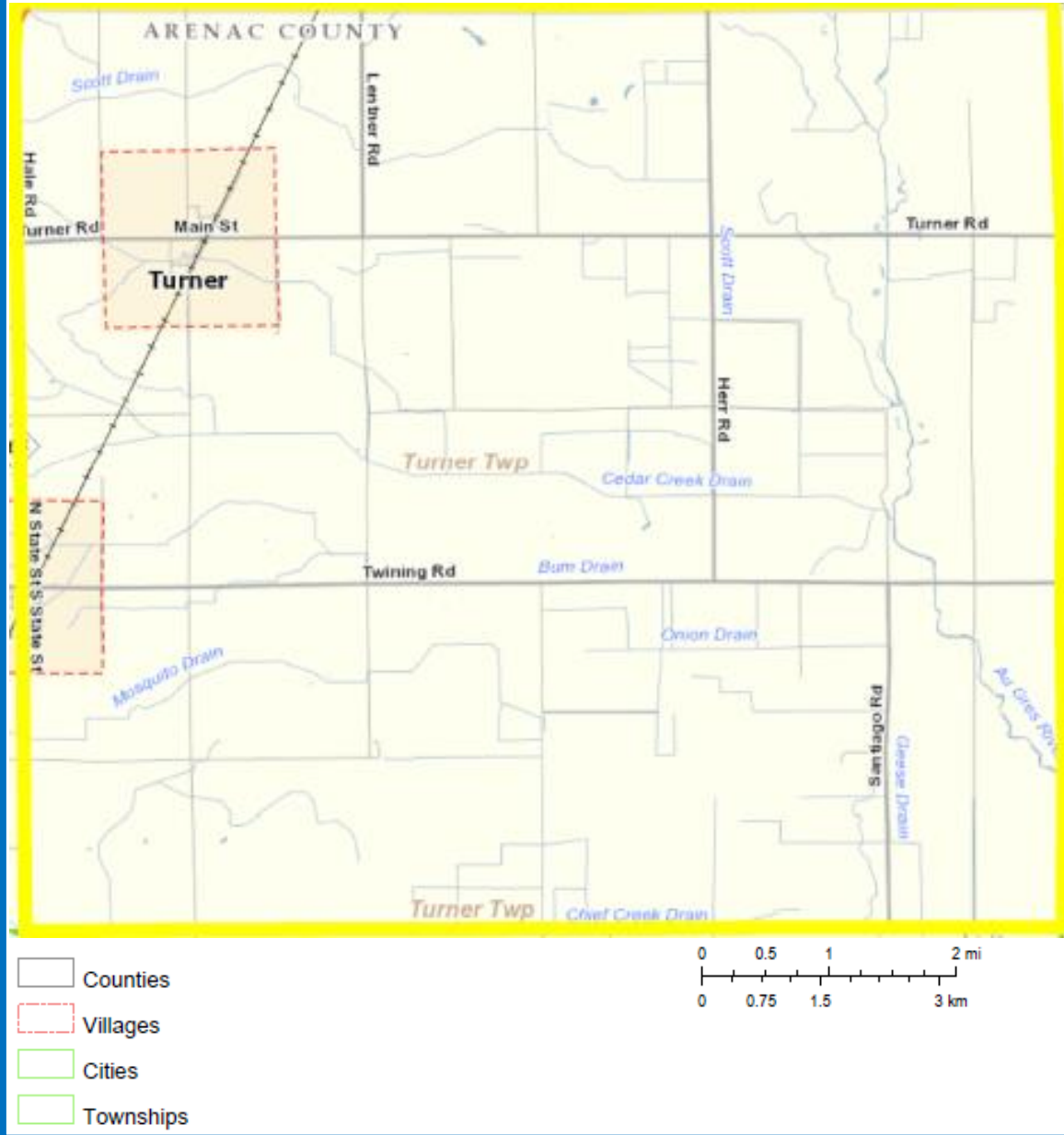
Introduction

Turner Township is a small rural township with an agricultural and logging heritage. It is crossed by drains running east toward the AuGres River, which runs north to south through the former town of Santiago on the east side of the township. Much of the township is rich farmland. There are two villages in the township – Turner and Twining.

The residents of Turner Township wish to retain their heritage as a rural, agricultural community. Commercial and institutional needs will be found in nearby towns and cities; but the township will continue to allow entrepreneurial activities and home-based enterprises to serve other commercial needs. The township will encourage land uses that would promote good-paying jobs in the area. They will also address the need for affordable housing.

In the near-term little change may be apparent, but this Turner Township Master Plan for Land Use sets out guidance to continue the community as its residents wish it to be and begins to address the changes that are starting to occur that may be substantial within 15-20 years. Circumstances affecting the future of the township include the lack of heirs able or wishing to continue the existing farming operations, new types of agricultural operations that are being proposed, including marijuana operations, and younger generations moving away from the area while newcomers, including retirees, take their places.

Michigan Municipalities & Unincorporated Places



SECTION TWO

BACKGROUND

A. Regional History

The history of Turner Township is tied to the uses the land has granted. The bounty of wildlife in the region provided a living to Native Americans before the arrival of Europeans and was what attracted the French in the 17th century, then the British in the 18th century. The area was made part of the United States of America, the Northwest Territory, after the American Revolutionary War in 1787. The British retook control of the area and little settlement of Europeans took place until the 1800's.

The earliest Europeans were traders, clergymen, and soldiers. After 150 years these Europeans, by benefit of guns, germs, whiskey, a culture of invention and development, and sheer numbers, came to dominate Mid-Michigan. The heavy influx of settlers began after the Erie Canal opened in 1825 making migration by the Great Lakes as easy, or easier than, the Ohio River route which had led to the settlement of the lower Midwest much sooner than Michigan. This new immigration from the northeast is evident by the numbers of New Englanders and New Yorkers who were the early settlers of the area.

Arenac County (originally a part of Saginaw, Midland and Bay Counties) was organized in 1883 during the timber boom, which lasted through the last half of the 19th century. The Saginaw Bay watershed includes approximately 865 miles of rivers which were used to float "white gold" (white pine logs) to sawmills in Saginaw, there converted to lumber and shipped on to the burgeoning East and Midwest. From 1851 to 1897, the last big year, the Saginaw River floated 25 billion board feet of lumber in pine logs, enough to build one million medium-sized homes or pave a road ninety feet wide all the way to the moon. Michigan's "green rush" was worth a billion dollars more than California's "gold rush".

During this time, the Rifle River Boom Company and many other timber cutting companies employed over 4,000 men and had as many as 130 miles of floating logs. In Arenac County logs were floated down the Rifle and Au Gres Rivers to the Saginaw Bay. Logs that floated down the Rifle River were collected at the mouth of the river and milled by the Rifle River Boom Company. Logs flowing down the Au Gres River were boomed together and floated to Bay City to be milled. Waste wood was used to vaporize water from brine wells into salt as Michigan supplied half the nation's salt during the lumbering era. As the timber was cut, agriculture and other enterprises began in earnest. It is claimed as much timberland was

burned by settlers as was cleared by lumbermen. As forests were being cleared out, federal actions began to entice farmers and their families to the area.

The Graduation Act of 1854, the Homestead Act of 1862, and the new railroads, which usually received six miles either side of their tracks as an incentive to construct the railroad systems, conjoined to bring waves of would-be farmers into the region. Railroad promoters even maintained an agent in Germany to promote land sales. Unfarmable cut over lands went ultimately into tree farms, Christmas trees, hunting and fishing businesses, or back to the State for non-payment of taxes. Dozens of once thriving timber towns became ghost towns throughout the region.

The first road was constructed in 1863 by a lumber company and a bridge was built in 1882 over the Rifle River by Bay County (whereof Turner Township was a part). The Tawas and Bay City Railway and later the Detroit & Mackinac Railway brought people and supplies to the area and helped ship timber out. These first works of infrastructure opened the township to a larger and continued influx of settlers.

In the past there were three villages within Turner Township: Turnerville, Twining and Santiago. Turner and Twining

are exiting general law villages in the township today.

Turner Township was divided from AuGres Township as a result of a petition presented by John McFarlin and eleven other residents of Turnerville to the Arenac County Board of Supervisors in January 1886.

Turnerville, Joe Turner's headquarters since the 1870's, was in the northwestern part of AuGres Township and consisted of a roundhouse; for repair of the locomotives essential to hauling most of the pine in Mason and western Turner Townships to the Rifle River above Omer. The village was non-existent until the Detroit & Mackinac Railway was built. Turnerville had a saw and hoop mill, and Williams of Prescott also operated a sawmill. All the lumber and supplies that were shipped out, as well as all the supplies that were brought in, were hauled by teams over bad roads to Prescott, where the narrow-gauge Tawas and Bay City Railway ran from Tawas City to the Michigan Central Railroad at Alger. Joe Turner dismantled the narrow-gauge railroads and hauled them away in 1886 to lumber elsewhere.

As Turner Township grew during the last years of the nineteenth century, people wanted better roads through the "Awful AuGres Swamp" to the AuGres River. "Billy the Bum" underbid all other contractors and got the job of cutting out

the road east from Twining to the AuGres River. He and his men cut and logged off that road, then dug out what is known today as the “Bum Drain” on the north side of the road and cut through “Vinegar Hill” to take the first step in draining the swamp and providing access to Turner’s rich AuGres Valley.

The settlement of Santiago was at the AuGres River. It was founded during the Spanish-American War, where the Bum Drain entered the AuGres River at the Old Indian Sugar Bush. Santiago was named after San Diego de Cuba, a prominent name during the Spanish-American War. At that time only six families lived there. All the country around the site of Santiago is low and flat. The banks of the AuGres were higher than the surrounding country. The swamp was so deep that trees were afloat. One could run a pole down several feet through the ooze. When “Billy the Bum” dug the ditch from Twining east through Vinegar Hill to the river, that lowered the swamp somewhat, after which the road was corduroyed. When the road became passable, millions of staves and other forest products were toted over the corduroy from Santiago to Twining. Settlers moved in, and according to the census of 1900, 250 people resided there. At that time there were several stores, a post office, a brick yard, several mills, two saloons, a blacksmith shop, and a school.

The banks of the AuGres River were densely covered with hard maple and

basswood trees, some of which were five feet in diameter. All the area back from the river was heavily timbered with black ash, elm, soft maple, and cedar; and still further back in the deep swamp only tamarack, cedar and tag alders grew.

The first years of Turner Village were filled with the excitement of lumbering days, hoop-making and single weaving. People rushed in from all parts of America to share in the wealth and excitement of building a new town. In 1895 the Detroit and Mackinac Railway was built, thus making a nucleus for the town. The town had many businesses from lumber mills to hardware stores, a bank, a livery, a general store, two hotels and a saloon. There were no farms yet; and all food and supplies, including hay, came by rail. In 1900 three carloads of ice a day were shipped from Tawas City to keep meat cold. The lumber companies moved out about 1907, and Turner became a trading center for the new farming community.

After the lumbermen left, the new settlers burned existing woodlands, used giant tripods and pulleys with horse teams to pull the huge white pine stumps and sent hogs into the remaining woodlots to clear the rattlesnakes. With the steel plow (1830), the reaper (1834) and the tractor (1920), agriculture became the dominant land use in Arenac County, but just barely. Logging still continued and mining of salt and gypsum began in the 1940's.

Various agricultural crops have predominated in Arenac County over the years from wild cranberries harvested by the Chippewas to huckleberries through the mid-1800's, to chicory in the 1910's. Dry beans were introduced after the Civil War, sugar beets in the 1890's, and soybeans and corn, as their productivity increased, became major crops in the 20th century.

Recent Past & Present

After the lumber boom peaked in the 1880's, fortunes declined. Although the introduction of electricity in the early 1900's brought many new businesses to the area, farming remains the dominant land use in the township.

Turner Township currently lacks many employment opportunities within the Township and many residents commute or have relocated to areas that have a higher employment demand. Recently, the township promulgated ordinances based upon the State of Michigan Marijuana Laws to allow marijuana growing and selling within the township. The township board expects that operations will begin soon and believe that employment for residents will follow.

B. Geography

General Geography

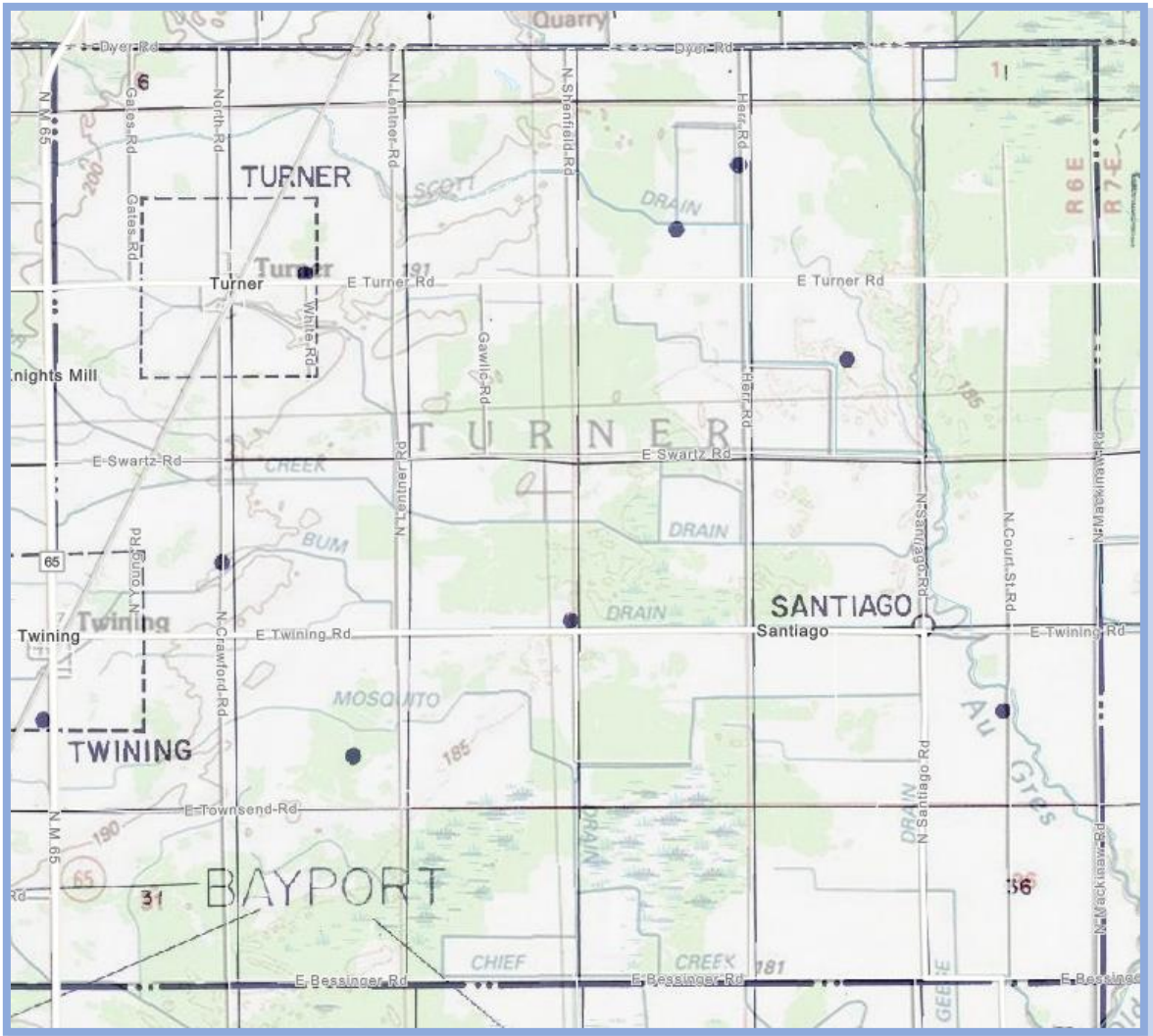
Turner Township (T20N, R6E) is one of twelve townships located in Arenac County. It is located between Mason Township to the west, Whitney Township to the east, Deep River Township to the South with Ogemaw County located to the north. The township comprises approximately 32.3 square miles of land. Turner and the east half of Twining are villages within the township.

The township is generally flat, declining from about 675 feet above sea level at the northwest corner of the township toward the southeast and the AuGres River to about 592 feet above sea level along the south boundary of the township.

The West Branch of the AuGres River flows north to south along the east side of the township. The Cedar Creek Drain, originating in Mason Township flows eastward across the middle of Turner Township and joins the West Branch of the AuGres River just north of the old village of Santiago.

The Township is partially forested which are utilized as woodlands. Some areas of forested and scrub-shrub wetlands exist throughout the township. The remainder of the township is mainly farmland.

Turner Township's climate results from its location near the Saginaw Bay and Lake Huron. Being close to the moderating influences of the Saginaw Bay and Lake Huron, temperatures are moderated, and precipitation and snowfall are very dependent upon the wind direction. The average growing season for the area is approximately 127 days. The average annual rainfall is approximately 29 inches. The mean daily maximum and minimum temperatures in January are 30°F and 14°F and in July 83°F and 57°F. Snowfall is usually less than 43 inches per year.



Turner Township Topographic Map

Geology

The processes that gave rise to the land within the Township provided the elevations, shaped the contours, deposited the underground formations of various minerals including deep oil and gas deposits, and much shallower limestone and gypsum. They carved the river valleys and laid down the parent materials for the soils.

Bedrock Geology

The bedrock geology of Turner Township is that of the Michigan Basin: sedimentary rock of limestone, dolomite, shale, and sandstone laid down in ancient seas of the Paleozoic Age up to 500 million years ago. Above these sedimentary rock formations is a layer of glacial drift material in varying thickness deposited during the late Pleistocene period.

Surface Geology

The surface geology of Turner Township is glacial in origin. As the last glacier receded, the melting ice flowed toward what is now the Saginaw Bay. As the melt waters ran downhill, valleys were cut forming the now present streams and their tributaries. The variability of the streams and tributaries in the lengths and direction of flow can be contributed to the randomly located and irregularly piled glacial deposits. The deposited materials formed the end moraines of fine textured till located in the west part of the Township to areas of more clay and

poorly drained soils through the central and east portions of the Township.

Soils Overview

The most prevalent soil association is the Kawkawlin-Twining-Sims association, which is in the western third of the township. This association consists of mainly level to sloping terrain. Consisting of somewhat poorly drained soils to very poorly drained soils from clay loam and sandy clay loam glacial till. These soils are typically well suited to farming but may require some artificial drainage. The soils use for building sites or recreational areas is limited because of high water table and slow permeability.

The second most prevalent soil association is the Roscommon-AuGres association, which runs through the center of the township, with mainly level to gently undulating somewhat poorly drained to very poorly drained deep sands. Agriculture is difficult on these soils and tile drains are not always practical. Building is difficult because of high water table.

The balance of the soils, along the AuGres River and in the south-central area, is poorly drained to very poorly drained making them difficult to farm and the high water table limits residential uses.



LEGEND	
	Lacustrine Clay & Silt
	Lacustrine Sand & Gravel
	End Moraines of Fine Textured Till

Turner Township Quaternary Geological Map

Hydrology

The groundwater table is relatively high and easily accessible in Turner Township. The Township has no municipal water supply; therefore, residents and businesses use individual wells to supply water. Almost the entire township falls within the Au Gres Watershed. A small portion of the southwest corner of the Township falls within the Big Creek Watershed.

Groundwater

Important factors in the evaluation of groundwater are quantity and quality of the water. The geologic and hydrologic features of the township provide residents with sufficient water quantities. Water availability will likely not limit growth. According to the Arenac County Health Department, in general, the deep sandy and sandy loam soils produce sufficient quantities of potable water.

The high water table ranges from 0"-6", so finding water and drilling for a well is usually relatively easy. But there are high levels of gypsum and other elements in the water that make it unpalatable and often unusable even for landscaping. Many people haul or buy water and have cisterns or other ways to store water at their homes and businesses. Because of the high water table, septic systems also must be engineered mound or other systems.

The vulnerability of drinking water aquifers to surface contamination is moderate to high in the township. A review of the Aquifer Vulnerability to Surface Contamination in Michigan Map prepared by the Center for Remote Sensing and Department of Geography at Michigan State University shows a range vulnerability of highly permeable soils over highly sensitive drift lithology. These areas consist of deep, sandy textured soils that offer little protection of groundwater from surface contaminants.

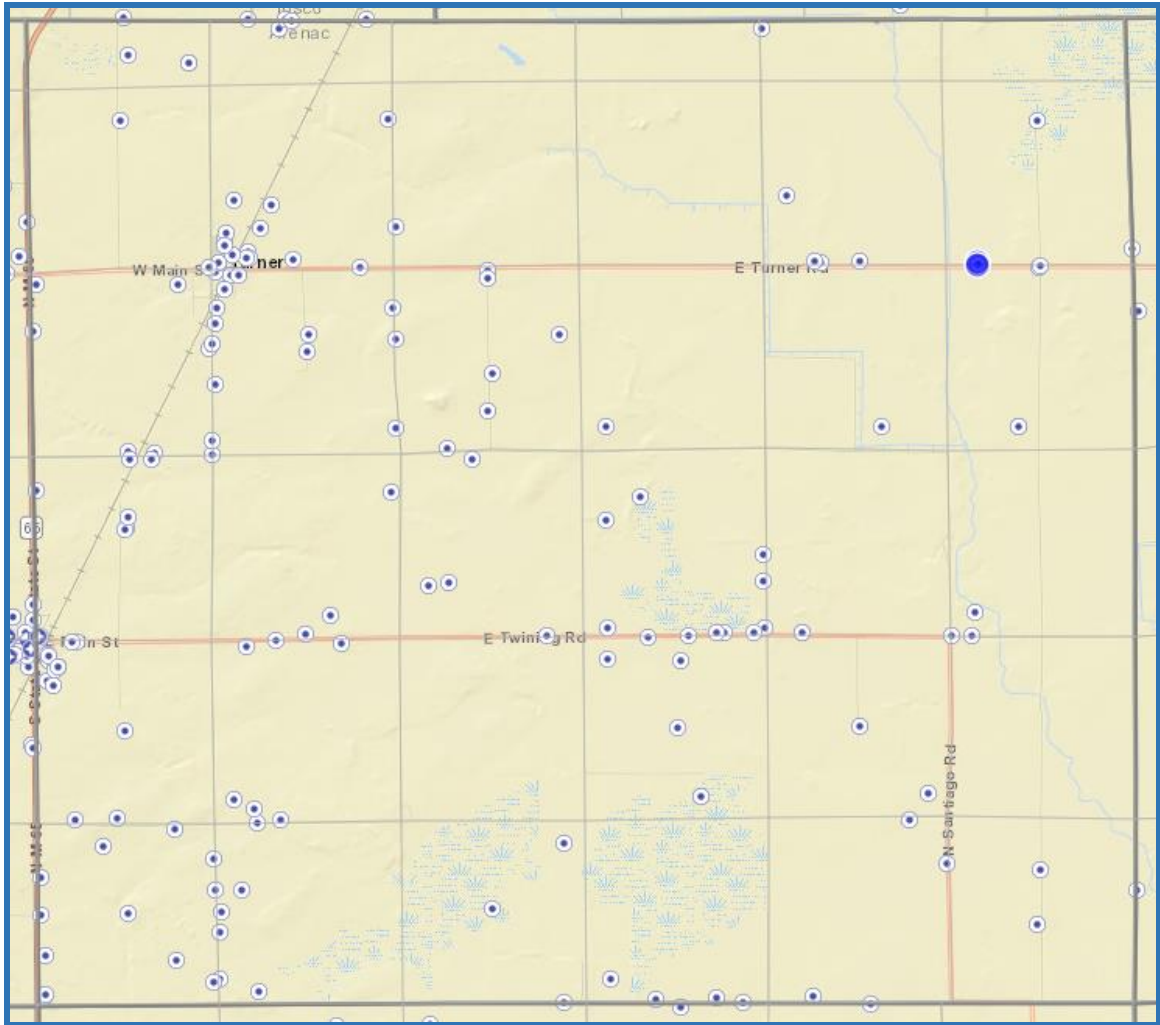
Most of the township has moderately permeable soils over highly sensitive drift lithology to highly permeable soils over least sensitive drift lithology. Groundwater and potential contaminants do not move as quickly through these finer soils, sandy loam and sandy clay loam as they do through coarse sandy soils. There also tends to be bands of clay and loamy materials in the subsurface that may offer some protection to the deeper groundwater aquifer. Since these subsurface bands of clay and loam can be very localized in extent, there is no assurance the groundwater aquifers are protected from surface contamination.

Water quality is potentially more of a limiting factor than water supply. The combination of highly permeable soils, shallow wells, on-site septic systems, and dense residential development can result in high nitrate levels in drinking water.

There are approximately 166 water wells within the township and from the records available they appear to have an average depth of 100 feet. The shallowest of the well logs available online is only 25 feet deep and the deepest, as indicated by the solid blue marker on the EGLE Water Well Map below, has a depth of 470 feet. This well is in the East ½ of the Southwest ¼ of Section 12 of Turner Township.

Location	
County	Arenac County
Townships	Turner Township
Town, Range	T20N,R06E
Section	12
Latitude	44.14274
Longitude	-83.70325
Elevation	607 feet (185 meters)

Welllogic Wells - Record 1		
County:	Arenac	Welllogic ID:
Township:	Turner	0600002002
Township/Range:	T20N, R06E	Link to Scanned Well Logs
Section:	12	
Owner:	George & Linda Schlagel	
Well Address:	2655 Turner Rd. Turner 48765	
Well Depth (feet):	470	
Completion Date:	2005-09-22	



Turner Township Water Well Map

Source: Michigan Department of Environment, Great Lakes & Energy

Surface Water

Most of the township is located in the Au Gres River Watershed. A small portion of the southwest corner of the township is in the Big Creek Watershed. Both watersheds are within the Lake Huron Watershed and drain to the Saginaw Bay. Tributary creeks and drains arise in the area and flow in a general easterly direction, eventually emptying into the Au Gres River. The waterways include the Cedar Creek, the Scott Drain, Turner A & B

Drains, the Bum Drain, Rush Drain, Onion Drain and Hardy Drain. The Skip and Strong Drains empty into the Big Creek Drain system. There is an intercounty drain along Dyer Road that drains water coming from Iosco County and mining operations there.

The drains have been created by dredging and straightening existing creeks and digging drainage ditches through natural drainage ways or low areas. The purpose for creating county drains and private

farm drains is to improve drainage by increasing the flow of water from the lands desired to be cultivated. Drainage tile systems have been buried in a few farm fields and connected to the drainage ditches to further improve soil and growing conditions.

There are no lakes in Turner Township. There are private ponds and floodings, both natural and man-made, located in the township. Wetlands found throughout the Township are another source of natural bodies of water (see National Wetland Inventory map). National Wetland Inventory Maps are general maps used to provide information on the potential location of wetlands based on soils, topography, and other available data. The United States Fish and Wildlife Service prepared these maps through interpretation of topographic data and aerial photographs. This inventory map may indicate wetlands that are not actually present, or it may not show wetlands that are present. According to the National Wetlands Inventory maps, wetlands in the Township range in size from very small, isolated pockets smaller than an automobile to larger areas of several acres.

A variety of wetland types are scattered throughout the entire township. A large portion of the township has soils that include wetland soils. The majority of the lands from Twining past Turner to the county line are lands mainly without wetlands. Almost all the rest of the

township to the east have soil areas which include wetland soils.

Some of the wetlands are forested, especially along the AuGres River and along the creeks and drains. Scrub-shrub wetlands are the next most prevalent wetland type in the township, and those features are primarily found associated with the AuGres River and through the central portion of the township. Small emergent wetland features are located within the township again primarily in the northerly one-half of the township. These wetland features exist in low lying areas where runoff from surface water, and shallow ground water deposits remain present during portions of the growing season.

Almost all the farmland in the township is tilled and drained. As indicated earlier, the water table is high in most areas of the township. Flooding of areas in Iosco County for mining and other purposes has caused changes in the water table as the flow of water has been restricted, and then not, and has caused problems and concerns for farmers and others in these areas of northern Turner Township.

Wetlands can provide a variety of functions including sedimentation and pollution control, surface water filtration, storm-water storage and flood control, wildlife habitat, and aesthetics. The habitat within these wetlands varies from emergent vegetation such as cattail, sedges, and various wildflowers to scrub

shrub to forested wetlands containing species including, but not limited to, dogwood, tag alder, cedar, silver maple, and cottonwood and green ash.

The following wetland inventory map was drafted pursuant to Part 303, Wetland Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. The wetland inventory maps show potential and approximate locations of wetlands and wetland conditions.



LEGEND

- Wetlands as identified on NWI and MIRIS maps
- Soil areas which include wetland soils
- Wetlands as identified on NWI and MIRIS maps and soil areas which include wetland soils

Turner Township Wetland Map

Fauna and Flora

Turner Township contains a rich variety of natural resources and habitat types. The habitats include Mesic Northern Forest and Dry Mesic Northern Forests that are pine or pine-hardwood dominated communities often found on glacial lake plains and inland dune ridges. Additionally, forested and scrub shrub uplands, riverine valleys, floodplain forests, swamps, emergent and scrub shrub wetlands, open agricultural fields currently in production and some which have been left fallow, and small wood lots can be found interspersed within the township. Numerous small creeks and streams course through the township before reaching their final destination as they converge with Big Creek and the Au Gres River. Some of these watercourses contain cold-water fish including Brook, Rainbow and Brown Trout, along with other species such as panfish and walleye, giving anglers a chance to try their skills. A few small, private inland ponds are found in the township.

The abundant wildlife, which relies on these varied habitats, provides recreational opportunities not only for the residents of the Township, but also for the visitors to the area. Large and small game hunting for species including white-tail deer, rabbits, squirrels, ruffed grouse, waterfowl and wild turkey, is an activity enjoyed by many. Bird watching and wildlife observation, which have become another preferred recreational activity

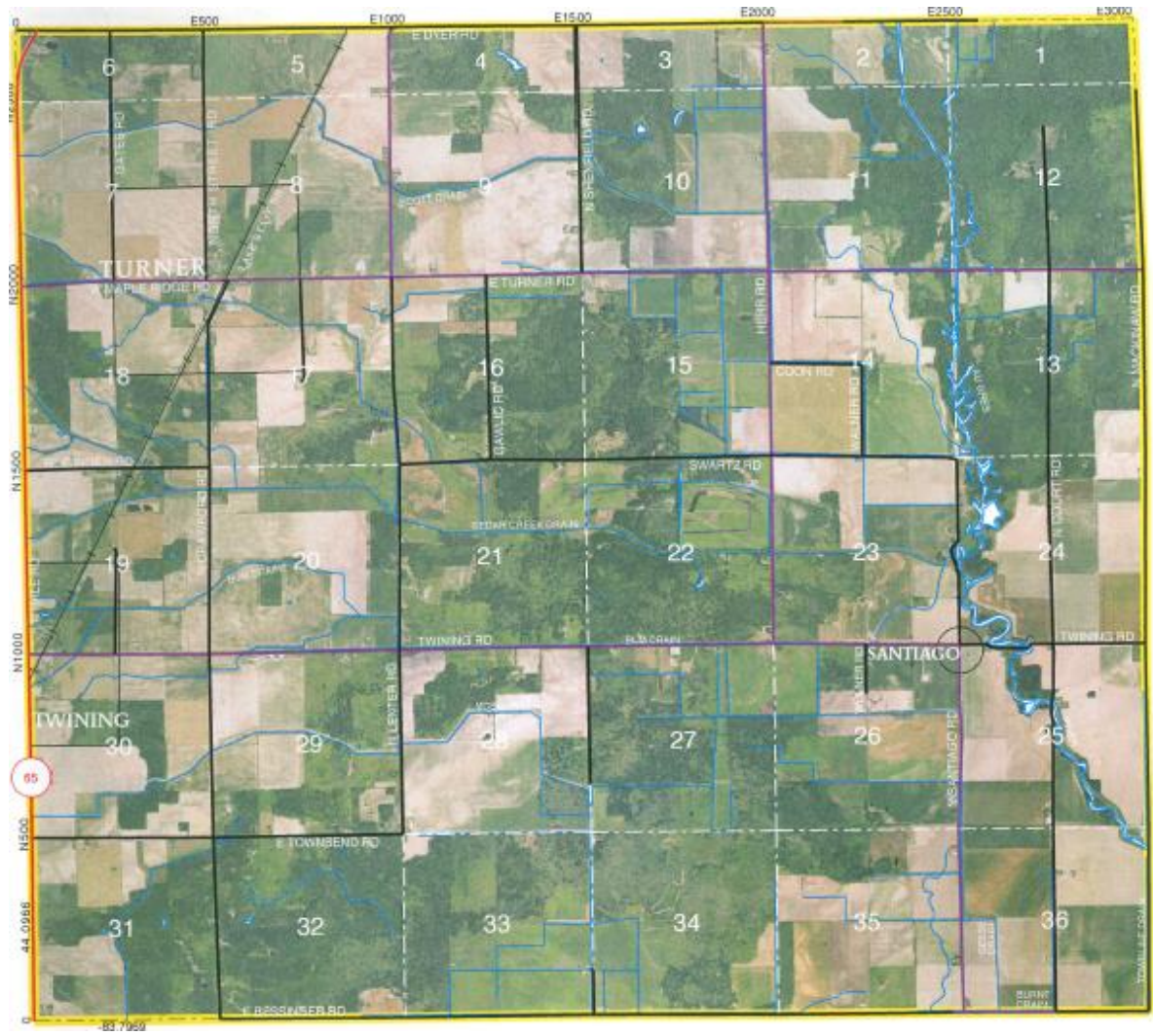
not only in Michigan but in most other parts of the country as well, afford the participants great viewing opportunities in the Turner Township area due to the variety of available habitats and accessible lands. Wildlife including deer, fox, coyote, muskrat, and occasionally beaver, utilize the varied habitats during their life cycles including breeding, nesting, and raising young. A variety of smaller animals, reptiles, amphibians, bird species including neotropical migrants, waterfowl, and birds of prey also live and thrive in the area.

The tracts of pine-forested canopies can be seen from the roadways while traveling throughout the area. The blaze of yellow and red hardwood leaves in the fall, seen throughout the township adds a welcome splendor prior to the drab browns and grays of winter. The colorful profusion of spring, summer, and fall flowers in the open fields, along the roadways, and in the forests is a delight to gardeners, botanists and the general public. Numerous species of wildflowers, grasses, ferns, trees and shrubs abound throughout Turner Township and the surrounding area. In addition to the many forms of wildlife including mammals, reptiles, amphibians, birds, insects, aquatic species, trees and flowers normally observed, there are some species which are not as readily visible. This is due in part to the rarity of the species, the preference for isolation and solitude, or requirements for areas of undisturbed habitat. A few species of

wildlife listed as threatened, endangered, or special concern under federal and or state law have been identified as having occurred within portions of Turner Township. The federally enacted Endangered Species Act of 1973, and/or Part 365, Endangered Species Protection of the Michigan Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended, provides protection for these special resources. A recent response from the Michigan Department of Natural Resources, Wildlife Division indicates that occurrences of two known protected species have been recorded within the Township. *Haliaeetus leucocephalus* – Bald eagle, a large bird of prey and our national symbol, and *Dentaria maxima* – Large toothwort, a small, woodland

wildflower, both of which are currently listed as state threatened, have been observed in Turner Township. The presence of threatened or endangered species does not preclude activities or development, but may require alterations to project plans. Other state statutes are in place to help protect and preserve the natural resources of the local communities, a few of which include wetlands, and inland lakes and streams protection.

The vast diversity of the natural resources found within the township provides enjoyment and a quality of life for those who reside in, and those who visit, Turner Township.



Aerial Photo of Turner Township
Source: Farm & Home Publisher, Ltd.

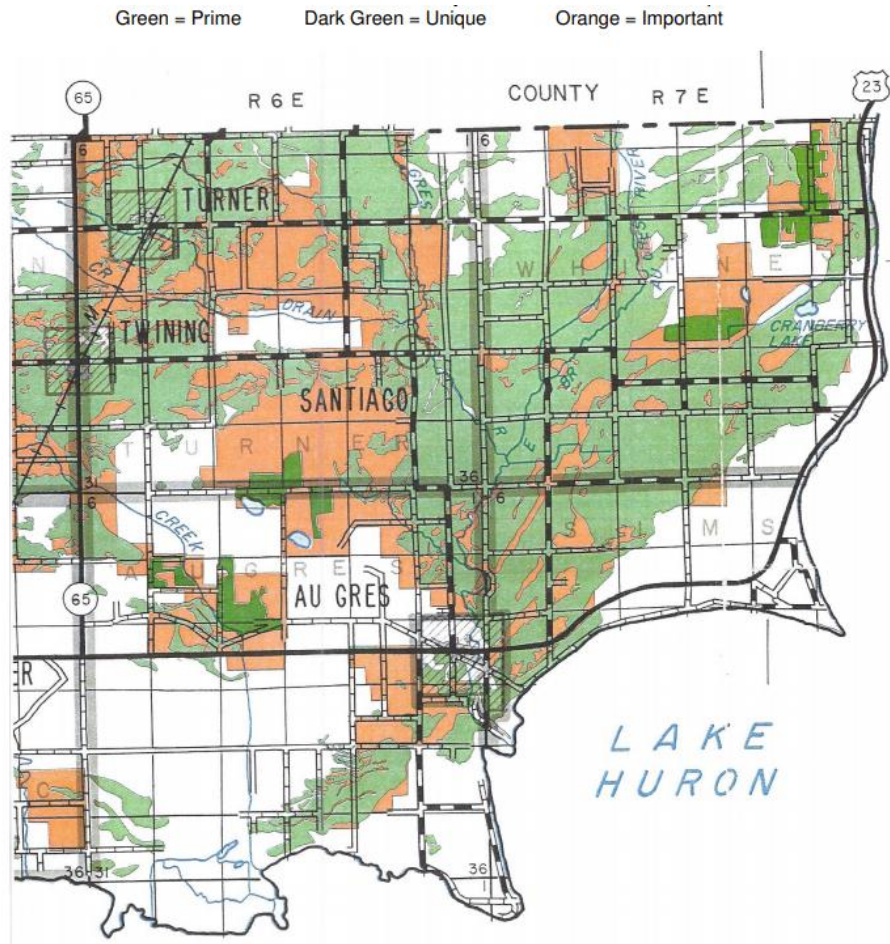
C. Existing Land Use Cover and Uses

Turner Township has over of 32 square miles of land. Forests and agricultural land are almost equal in land cover.

The area along the West Branch of the AuGres River in the northeast of the township are lowlands with mixed forests of deciduous and coniferous trees. Wetlands and low areas are also found throughout the center of the township, fewer in the north but expanding going south towards AuGres Township.

Agricultural uses are the predominant land use throughout the township. Small farms have been consolidated into larger ones over the last 20-30 years until now only a handful of large active farms exist. Row crops from sugar beets to corn and soybeans are the dominant agricultural products.

The following map depicts the distribution of prime farmland in the eastern section of Arenac County according to the 2011 Arenac County Master Plan.



Northeast Arenac County – USDA Prime Farmland Map

Source: 2011 Arenac County Master Plan

Other land coverage consists of scattered woody wetlands and mixed forests. Some small areas of grasslands and pasture also exist.

Residences constitute only a small percent of township lands. These are scattered throughout the Township and in the villages of Twining and Turner. There are numerous hunting properties, with and without cabins or lodges, throughout the township. These are found in the wooded areas often associated with wetlands and creeks.

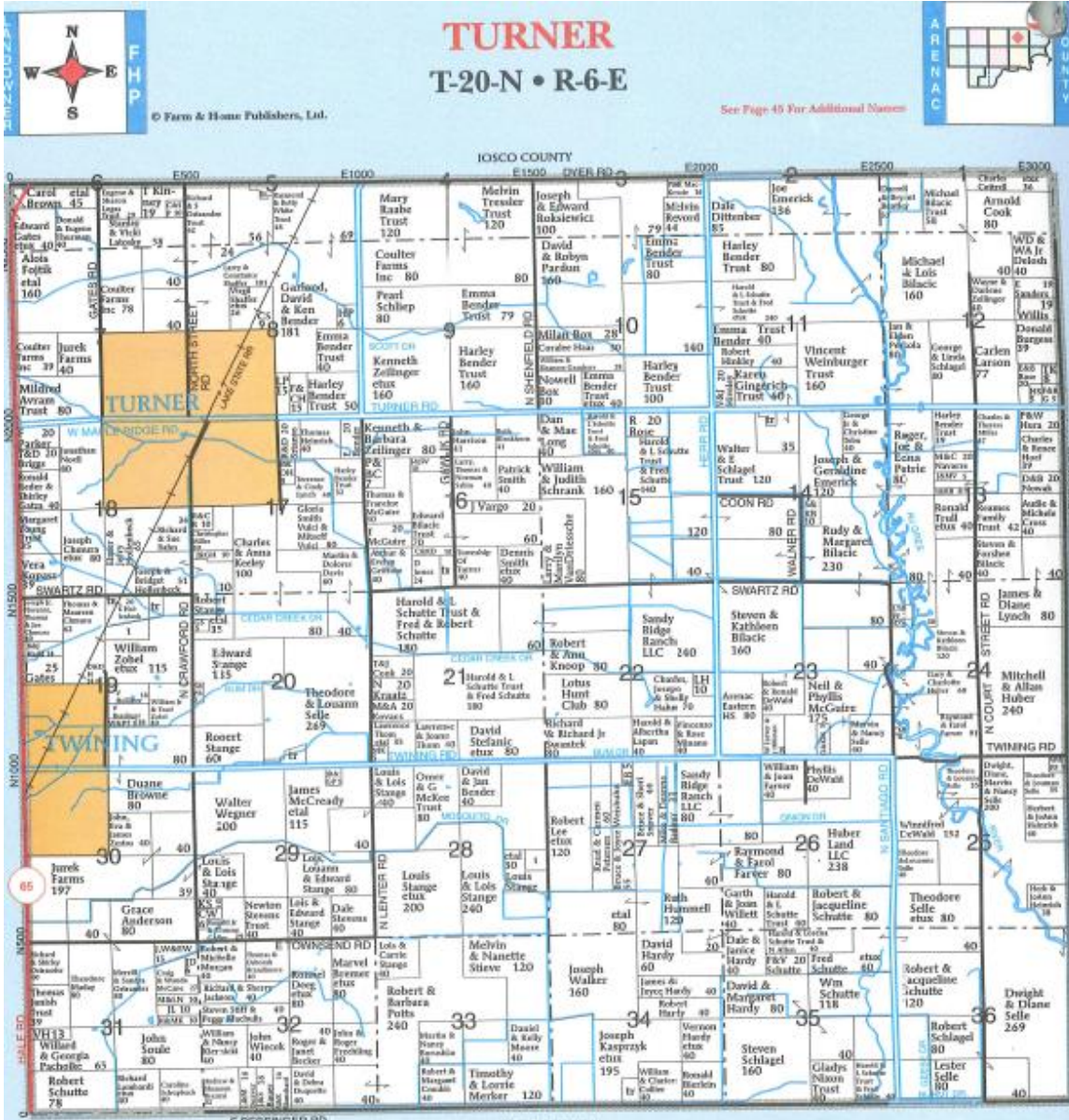
Most commercial establishments in the township, like the residential ones, are centered in or around the villages of Turner and Twining.

The enactment of laws legalizing the use of marijuana for medicinal and

recreational use by the State of Michigan prompted Turner Township to promulgate its own ordinances to regulate the propagation and sale of marijuana in the township. Permits for operations have been applied for and these enterprises will soon be a part of the township landscape.

There is only one active oil & gas well and a gas storage facility in Turner Township, all located along Twining Road east of the village of Twining.

The plat maps (2004, 2018), which follow, illustrate the trends of ownership patterns in the township. Most of the parcels shown are larger parcels of 10 acres or more. Many parcels are over 100 acres.

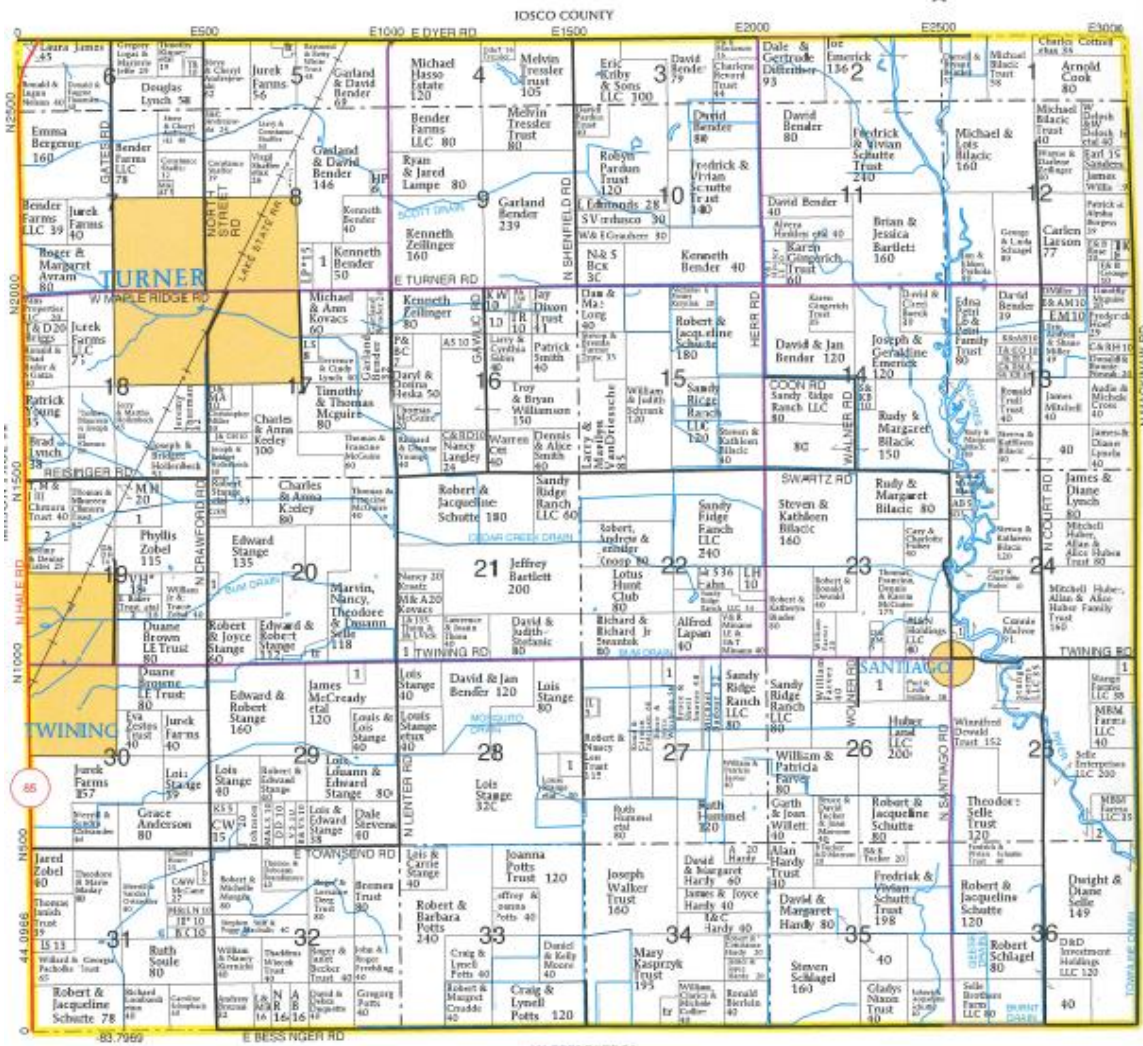
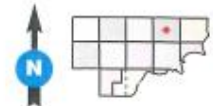


Turner Township 2004 Plat Map
 Source: Farm & Home Publisher, Ltd.

TURNER

T-20-N • R-6-E

See Pages 58-59 For Additional Names.

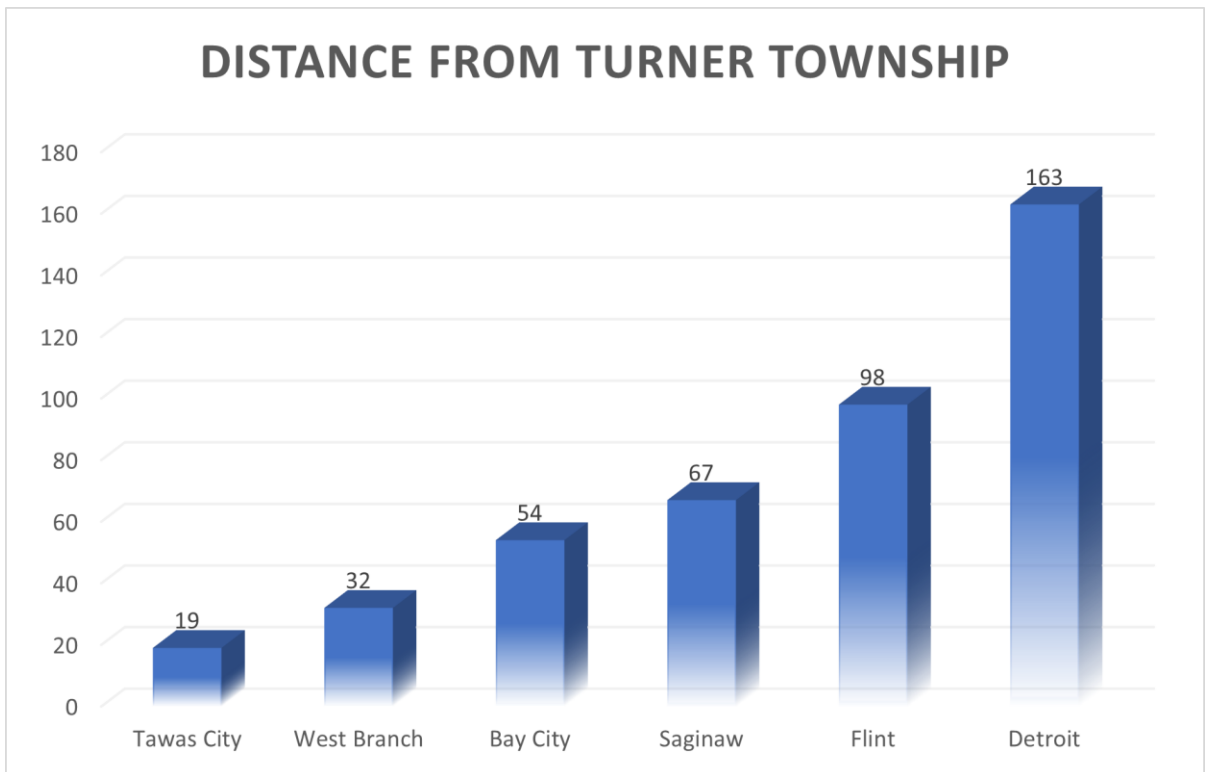


Turner Township 2018 Plat Map
 Source: Farm & Home Publisher, Ltd.

D. Transportation, Public Facilities, and Services

Turner Township is served by M65, a major state trunk line. County local roads and private roads also serve the township. The Township lies within a half-hour drive of several small communities including Oscoda and Au Sable, Tawas City and East

Tawas, AuGres, Omer, Hale and Standish. Since interstate highway I-75 and US-23 are just a short drive to the west and east, township residents can drive to Saginaw, Midland, Bay City and even Flint allowing them to be within the modern commuter's range for employment, commerce, entertainment, and education.

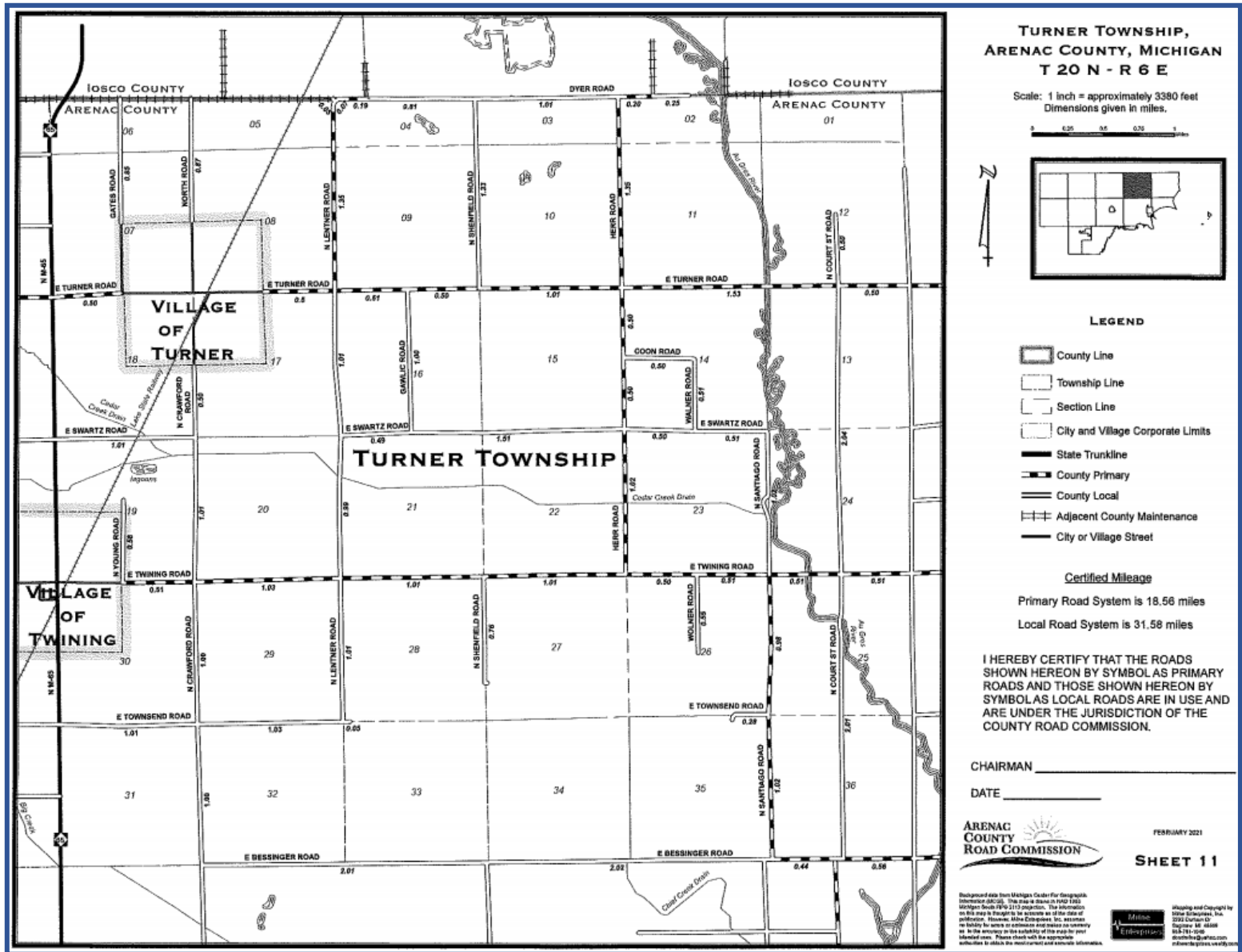


COMMUTING DISTANCE
Source: Google Maps

Nearby access to Interstate I-75 and US-23 provides Turner Township residents with access to the recreational and vacation opportunities throughout northern Michigan and elsewhere in the United States and Canada and provides easy access to the township by tourists and other visitors. The state and federal road system provides roadways for farmers and commercial and industrial

producers to market their products efficiently throughout the region.

The Arenac County Road Commission is responsible for maintaining roads with funds provided by state gasoline taxes and currently a one mill property tax millage. The commission provides \$25,000 per year on a fifty-fifty match basis for township local roads and \$20,000 per year in discretionary funds



Turner Township Act 51 Map
Source: Arenac County Road Commission

with no match required. Turner Township has a voter approved one mill (approximately \$26,000 per year) to maintain roads in the township. The road commission is encouraging the township to create a three-to-five-year plan for township road improvements so improvements and funding can be coordinated and efficiently accomplished.

ARENAC COUNTY ROADS	
Primary Roads	185 miles
Local Roads	451 miles
TURNER TOWNSHIP ROADS	
Primary Roads	18 miles
Local Roads	31 miles
Source: Arenac County Road Commission	

Rail transportation for freight in Arenac County is provided through the Lake State Railway, formerly the Detroit & Mackinaw Railway. The Arenac Transit Corporation provides inter-county bus services for the county residents. Indian Trails Motorcoach provides long distance bus service to the area.

The Midland-Bay City-Saginaw International Airport (MBS) is about an hour away from Turner Township. The MBS International Airport is the closest commercial airport capable of handling large jets, while the Alpena Regional Airport offers daily flights to Detroit and is a Northwest Airlines airlinck.

Utility services in the county are provided by Consumers Energy (electric service), and Pigeon Telephone Company (phone service). Internet services are provided by Century Link, Verizon, Charter and others.

Turner Township provides general services to the citizens in their community such as assessing, zoning and planning, and elections. Turner Township provides these several services to the citizens in their community by means of local taxes. Fire protection is provided by the Twining Mason Turner Fire Department, which is located in the Village of Twining and is operated by volunteer firefighters. Turner Township has a one mill voted millage to contribute to the fire department (approximately \$23,000 per year).

There is a small playground in the village of Turner. In Twining there is a playground on the former Middle School grounds and one at the Twining Baptist Church, both in Mason Township, not Turner. There are no other public or private recreational facilities in the township.

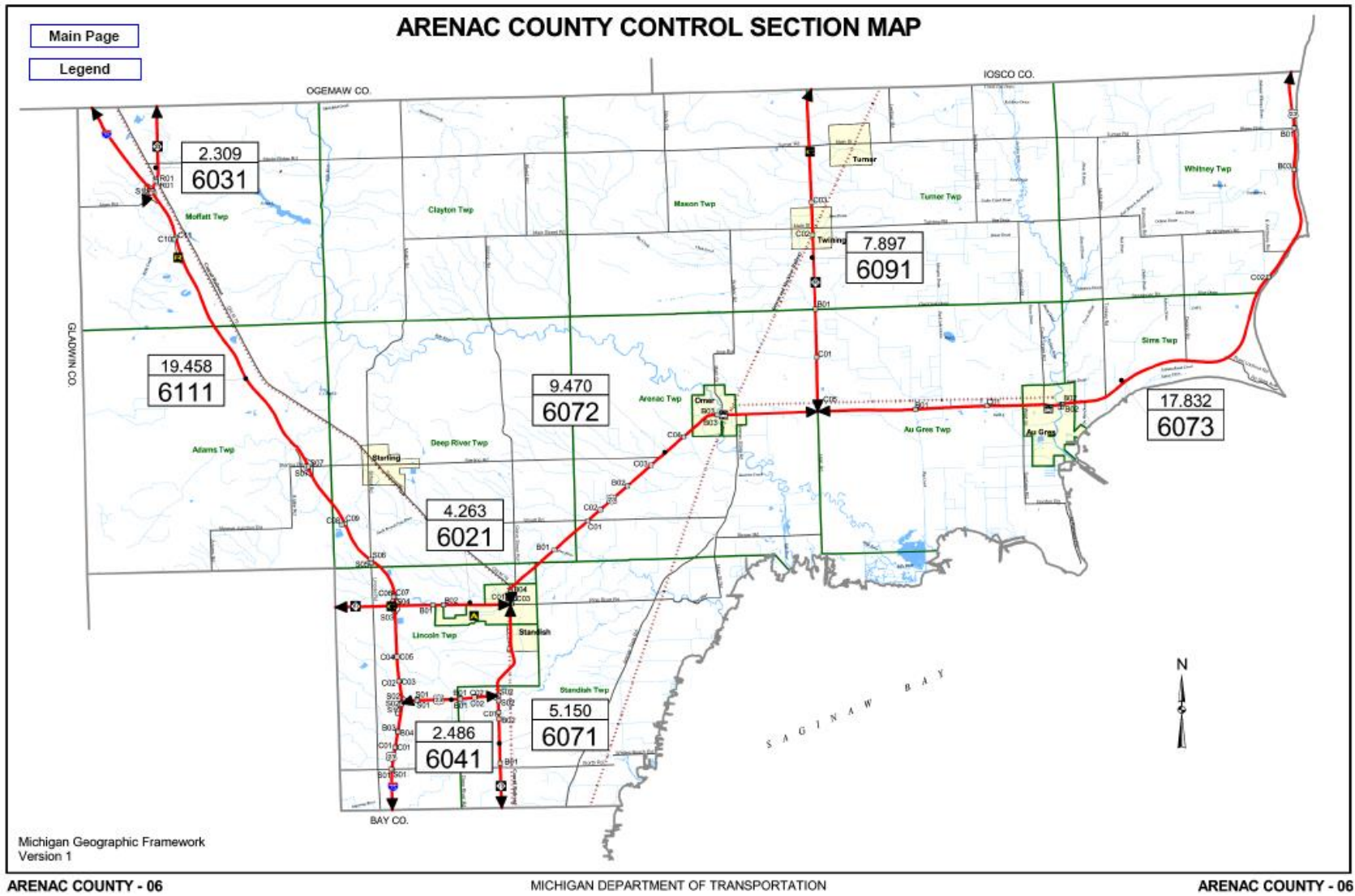
In addition to the Fire Department, medical services are also provided through county funding. Mobile Medical Response (MMR) is responsible for medical emergencies within Turner Township. Several hospitals are within 30-60 minutes of Turner Township. Ascension Standish Community Hospital, located in the City of Standish and the

West Branch Regional Medical Center, located in West Branch, both offer full medical services.

Police protection is provided by the Arenac County Sheriff's Department and the Michigan State Police.

Primary and secondary education is provided by the Bay-Arenac Intermediate School District (ISD) and the Iosco Regional Education Service Agency. Almost all children in Turner Township go to the AuGres-Sims school district. A few parcels are served by Whittemore-Prescott school district. The public schools in Turner Township have been closed and the buildings have been sold.

Higher education is available to the township through Kirtland Community College in Roscommon, Delta College in Bay City, Saginaw Valley State University in Saginaw and Mid-Michigan Community College in Harrison as well as other state universities such as Michigan State University, University of Michigan and Central Michigan University. Alternative education is provided through the Bay City ISD Skills Center and through the Standish Alternative Education Program.



Arenac County Control Section Map
 Source: Michigan Department of Transportation

E. Economic Profile of Arenac County

Arenac County is predominately a rural, farming and forested area. It is about 30 - 40 minutes north of the industrial tri-city region of Midland, Bay City and Saginaw. It borders on Lake Huron and the Saginaw Bay and is considered part of the northern recreational area of Michigan.

Turner Township has a population of approximately 527 souls with the largest cohort in the age range of 55-64 compared to Arenac County's 15,070 with the majority of people in the 50-69 year age bracket, according to the US Census, 2019 American Community Survey.

<i>TURNER TOWNSHIP LABOR MARKET</i>		
	2010	2019
Population over 16	518	452
In Labor Force	320	236
Employed	276	213
Not Employed	44	23
Armed Forces	0	1

Source: 2010 American Community Survey
2019 American Community Survey

Approximately eighty-nine percent of Turner Township residents over age 25 have high school diplomas or higher which is in line with the County's eighty-eight percent. Only four percent have bachelor's degrees compared to the county's nearly thirteen percent. The median income in Turner Township is \$49,583.00 versus \$42,290.00 in Arenac County and \$59,584.00 in the State of Michigan.

TURNER TOWNSHIP MASTER PLAN

Farming is among Arenac County's most important economic segments. It accounts for 48% of the County's land use. According to the 2011 Arenac County Master Plan, 70,165 acres are in prime farmland, 8,710 total acres are in additional farmland of local importance, and 1,468 total acres are in unique farmland, other than prime. Agriculture generates approximately \$35,000 versus \$32,000 for manufacturing (2019).

The economic base of the county includes recreation, agriculture, manufacturing and government employment. The largest economic sectors in the county are transportation and utilities; producing annually \$42,250 and \$78,553 respectively (2019). Manufacturing, and health care are the two largest industries in the county, employing approximately twenty-two percent and sixteen percent of the workforce respectively. The largest employers in the county are the Standish–Sterling Community Schools, the Ascension Standish Community Hospital, and First American Healthcare, Inc.

There are four banks in the county with combined assets of over \$128 million. There is only one certified industrial park, the Standish Industrial Park, located west of downtown Standish on M-61.

The county has three colleges within close proximity: Saginaw Valley State University in Saginaw County; Delta Community College in Bay County; and Kirtland Community College in Roscommon

County. There is one hospital in Arenac County. The Ascension Standish Community Hospital serves the residents of Arenac County and has a total capacity of 69 beds.

Major transportation routes cross Arenac County. Interstate I-75 transects the western portion with US-23 splitting off south of Standish and running north along the Lake Huron coast of Michigan. M-65 tees off of US-23 just east of Omer and provides another northerly route. Michigan trunk line M-61 runs east and west to Standish and M-33 joins I-75 in Alger in the northwest corner of the county. There are three truck companies that deal in the county. Bus passenger service is provided by Greyhound in Bay City.

The Arenac County Public Transit Authority is a non-profit organization that provides a demand response service for any Arenac County resident.

The Lake State Railway hauls freight in the county. The nearest port is Alabaster, just north of the county line. Air travel and

freight can go through the MBS International Airport. (The Standish Industrial Airport has closed.) The largest airlines serving MBS are Northwest, Simmons and United Airlines.

Real estate sales and values in the township and region have remained steady historically but dipped in the late 2010's. Now, there is a boom in real estate prices where some home and property prices have increased by 50% or more from 2018-2019 prices.

<i>ARENAC COUNTY</i>
<i>SIGNIFICANT EMPLOYERS</i>
Ascension Standish Hospital
Auburn Bean and Grain Company
Bay City Shovels
Bessinger Pickle Company
Bopp-Busch Manufacturing
Crew Products Company
Globe Fire Sprinkler Corporation
Hayes Lemmerz International
Magline, Inc
Maple Ridge Hardwoods
Saganing Eagles Landing Casino
Vantage Plastics

Source: Eastern Michigan Council of Governments

<i>PROPERTY VALUES</i>			
	2010	2019	% Change
Turner Township	\$88,300.00*	\$77,600.00*	-12.1%
Arenac County	\$99,000.00*	\$99,400.00*	+0.4%

*Median Value of Owner-Occupied Units
 Source: 2010 American Community Survey
 2019 American Community Survey

F. Demographic Trends

The Turner Township population is 527 people. This is the equivalent of about 15 persons per square mile. The township population has varied little over the years. But in the last decade, it has begun to drop significantly. Turner Township residents, similar to most of the region, are almost all white (93.3%) and are almost equally divided between the sexes, (279 male, 248 female). The median age in the township is 53.3 years, with 18.7% of the population aged over 65 years of age. Over 70% of people have a high school education and 213 people aged 16 years and over are employed.

The per capita income in the township is \$22,778 with 21 persons living below the poverty level.

The average commuting time for township residents is about 35 minutes compared to 25 minutes for the average commuter time for all U.S. residents. This

supports the earlier indication that Turner Township residents travel to local cities such as West Branch, Standish, Tawas City and as far away as Saginaw and Alpena for work.

<i>POPULATION TRENDS</i>			
	2010	2019	% Change
Turner Township	630	527	-16.3%
Arenac County	16,487	15,070	-8.6%
Gladwin County	26,076	25,279	-3.1%
Ogemaw County	21,862	20,898	-4.4%
Iosco County	26,422	25,197	-4.6%
Michigan	9,952,687	9,965,265	+0.1%
Source: 2010 American Community Survey 2019 American Community Survey			

There are 208 occupied housing units in the township, 186 of which are owner-occupied and 22 of which are renter-occupied. This translates to approximately 89% of the population of the township being homeowners. The average household size in the township is 2.41 persons. The median owner-occupied house value is \$77,600. The median rent for units being rented is \$940/month. The preponderance of the vacant housing units are non-homestead cabins or cottages.

There is currently a new residence under construction in the township. There have been a few home additions, barns and garages constructed in the past few years, but this is the first new home built in 13 years in Turner Township.

G. Township Finances

Turner Township collects about \$30,000 per year in property taxes and collects approximately \$30,000 per year in state shared revenues with total revenues of \$80,000-\$100,000. A fairly regular source of funding is received from applications for the 2% grant funds of the Saginaw Chippewa Indian Tribe. The township receives funds for general operations and improvements every year from the Tribe. Special contributions in the past have included payments for drain improvement debts, road improvements, township hall improvements and, through the county, a large monitor and computer setup for the county GIS system.

As indicated earlier, Turner Township has a one-mill voted tax for township road improvements and a one-mill voted tax for its contribution to the Twining-Turner-Mason Fire Department. The township has no debt.

PLAN OF ACTION

A. Analysis & Discussion of Findings

Turner Township is a northern Michigan general law township that has exceptional natural resources including rich farmlands and woodlands and the upper reaches of the West Branch of the AuGres River. The small villages of Twining and Turner provide residential sites and local goods and services for the community and there are good transportation routes to nearby towns and cities.

Agriculture is the prominent activity and land use in Turner Township. In addition to the villages, there are single-family homes throughout the township with residents, most who commute to nearby towns for work or who have home-based businesses. The people of Turner Township rely on these other communities for most of their staples.

The township has recently promulgated ordinances allowing marijuana growing and selling in the township. There is already one permit holder beginning operations north of the village of Turner. Turner Township expects more interest in this activity and hopes it will provide employment opportunities for township residents and will draw visitors, other entrepreneurs, and future new residents to the community.

Turner Township is a neighborly rural community that hopes to stay so. This Master Plan for land use sets out the township's design to retain the current character of the township, the farms, family homesteads, home-based businesses, and local commercial establishments. It projects well-maintained roads for commuting, shopping, and farm-to-market needs, combined with good communication services for an environment of both peaceful living and where local enterprises can prosper in this rural setting. The township will continue to depend upon Arenac County for police, social, and other services, and upon the Arenac County Road Commission for assistance in maintaining and repairing the township's roads.

B. Goals and Determinations

Given the state of Turner Township and the effects of both local and outside forces, the Planning Commission puts forth the following goals for its future:

- Retain the Township's rural character;
- Retain the quality of the Township's natural resources;
- Protect and encourage farming in the township;
- Continue to provide needed services, and facilities for township residents and visitors;
- Develop and maintain a good Township road system;

- Promote and support activities for youth;
- Promote new small scale commercial enterprises;
- Promote a high-quality communication system for the township, county, and region;
- Plan and develop affordable housing.

C. Policies, Strategies, and Actions

The Turner Township Planning Commission proposes the following policies, strategies, and actions.

Retain the Township’s rural character.

- Prepare a zoning ordinance that sets out the types of land uses and development, e.g. forested and farm areas, that will foster the maintenance of these Township characteristics;
- Ensure that high-intensity uses are located properly;
- Allow and encourage businesses compatible with the rural community.

Retain the quality of the Township’s natural resources.

- Ensure that proper setbacks, buffers, and restorations are a part of project site plan reviews;
- Provide for greenways and links between natural areas;

- Keep high-density and intensity uses away from valuable natural resource areas;
- Provide for native plant species landscaping as project performance and development standards.

Protect and encourage farming in the township.

- Use the zoning ordinance to set out agricultural districts which limit uses that would interfere with farming operations;
- Follow the GAMPS rules when approving uses requiring special use permits;
- Work with the Arenac County Drain Commissioner to maintain drains and ditches.

Continue to provide needed services and facilities for Township residents and visitors.

- The Planning Commission and Township Board shall continue to monitor the needs of the Township and to plan to meet future expectations;
- Work with the villages of Twining & Turner on projects of mutual benefit;
- Work with Arenac County and Regional Planning Agencies to promote township needs, e.g. job creation in regional cities and towns, modern communication systems, good roads, and other services.

Develop and maintain good township road system.

- The Turner Township Planning Commission and Township Board should continue to examine the needs for road improvements and to prepare a plan to cooperate with the Arenac County Road Commission and surrounding Townships where appropriate, to maintain and improve its Township road system;
- Continue the township road millage to this end.

Promote and support activities for youth.

- Examine possibilities for recreation activities;
- Install park facilities where and when appropriate.

Promote new small scale commercial enterprises.

- With the creation of new ordinances allowing marijuana growing and selling, the township should encourage applicants for these operations and be open to corollary businesses that may be interested in operating in the township.

Promote a high-quality communication system for the Township, county, and region.

- In order to foster small local businesses and to create conditions that may help to establish job opportunities, the services and

infrastructure to support a good system of information technology should be available within the Township and region. Therefore, the Township should work with the county, other regional and state agencies, and private providers to develop and maintain such services.

Plan and develop affordable housing.

- There is a dearth of inexpensive housing, both for rent and purchase in Turner Township. The township should work with county and regional agencies to investigate possible funding and to find interested developers;
- Suitable land may be identified, keeping in mind the need for adequate water and sewage disposal for higher density housing.

D. Future Land Use

Based upon the goals of this plan, the lands of Turner Township are divided into future land use districts. Each district has a primary intent and purpose, as the names suggest, yet the uses and landscape of the districts may overlap and vary regardless of the boundaries set forth. The districts are:

Agriculture/Rural Residential

Commercial.

The **Agriculture/Rural Residential District** has the agricultural lands within the Township. The intent of the district is to protect and foster farming where it is feasible and to allow other uses

compatible with this objective. These other uses include agricultural rural businesses and residential dwellings on one acre or larger parcels.

Future commercial uses are provided for in the **Commercial District**, located along M-65. Other commercial activities may be allowed as special uses in the Agriculture/Rural Residential District as regulated by the zoning

ordinance. Lot sizes will be determined by health and sanitary requirements, parking, and the other specific requirements of an intended use.

Limited **“industrial”** uses may be allowed as special uses within the districts above upon thorough review of their potential effects and the site design of a proposed use.



Turner Township Future Land Use Map