



COHOCTAH PLANNING COMMISSION
MEETING
May 02, 2024 at 7:00 PM
Township Hall | Fowlerville, Michigan

The Township will provide necessary reasonable auxiliary aids and services to individuals with disabilities at the meeting upon 72 hour advance notice by contacting Barb Fear, Township Clerk, by email: bfearclerk@gmail.com, phone: (517) 546-0655, or mail: 10518 N Antcliff Rd Fowlerville MI 48836.

AGENDA

CALL TO ORDER

PLEDGE OF ALLEGIANCE – *Moment of Silence*

ROLL CALL

APPROVAL OF AGENDA

APPROVAL OF MINUTES

1. 04/04/2024 PC Minutes

CALL TO THE PUBLIC

MATTERS PERTAINING TO THE GENERAL PUBLIC

UNFINISHED BUSINESS

2. Recreation Plan
3. Master Plan Review

NEW BUSINESS

CALL TO THE PUBLIC

ADJOURNMENT



COHOCTAH PLANNING COMMISSION MEETING

April 04, 2024 at 7:00 PM
Township Hall | Fowlerville, Michigan

The Township will provide necessary reasonable auxiliary aids and services to individuals with disabilities at the meeting upon 72 hour advance notice by contacting Barb Fear, Township Clerk, by email: bfearclerk@gmail.com, phone: (517) 546-0655, or mail: 10518 N Antcliff Rd Fowlerville MI 48836.

MINUTES

CALL TO ORDER

Meeting was called to order at 7pm

ROLL CALL

PRESENT

Jessica Buttermore
Chrissy DeFrancisco
Phil Charette
Mark Cican
Kyle Engel
Sarah Newton
Clint Beach

APPROVAL OF AGENDA

Motion made by Newton, Seconded by Cican to approve agenda as presented.
Voting Yea: Buttermore, DeFrancisco, Charette, Cican, Engel, Newton, Beach

APPROVAL OF MINUTES

Motion made by Engel, Seconded by Newton to approve the minutes of 03-14-2024 as presented.
Voting Yea: Buttermore, DeFrancisco, Charette, Cican, Engel, Newton, Beach

1. 03/14/2024 PC Minutes

CALL TO THE PUBLIC

There were no comments from the Public

UNFINISHED BUSINESS

There was no unfinished business

NEW BUSINESS

2. Utility-Scale Wind Energy Systems

Utility-Scale Wind Energy System ordinances were discussed

3. Utility-Scale Battery Energy Storage Systems

Utility-Scale Battery Energy Storage Systems ordinances were discussed

4. Recreation Plan

the Recreation Plan for the township was discussed

CALL TO THE PUBLIC

There were no Public comments

ADJOURNMENT

Motion made by Charette, Seconded by Newton to adjourn the meeting at 9:10pm.

Voting Yea: Buttermore, DeFrancisco, Charette, Cican, Engel, Newton, Beach

Cohoctah Township Recreation Plan 2009

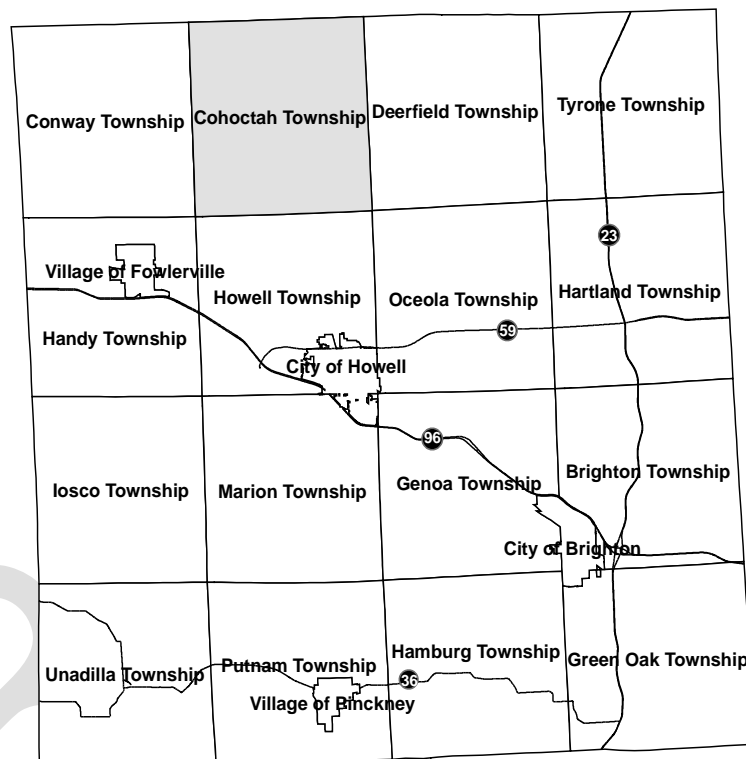
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Community Description

Cohoctah Township is located in the Northwest quadrant of Livingston County, Michigan. It is a township that remains primarily rural, but growth is coming to its borders. The demographic profile, taken from the Township's master plan, is included in the appendix.

The Cohoctah Township Recreation Plan was developed solely for the township. The plan's focus is to address township wide recreation services, including activities for youth, adults, and senior adults.



Administrative Structure and Budget

The Cohoctah Township Board of Trustees, elected by the voters in the township, carry out all the administrative functions for the recreation plan. The Township is primarily rural, with agricultural, farming, and single family homes as the main land use within the township.

The enabling legislation is 1905 Public Act 156, and 1917 Public Act 157.

The recreation staff consists of a part-time park ranger that does park scheduling at the township's horse riding arena that was acquired with a state grant. The park ranger also makes sure groups that have used its horse park have cleaned up after the event, and may perform other duties that may be assigned to this individual by the township clerk or township board.

The current year and projected Recreation Budgets are \$16,200, which breaks down as follows: Wages, \$1,000; Park Improvements, \$1,000; Park Maintenance, \$4,000; Park Mowing, \$2,800; Fowlerville Recreation Department, \$4,400; Parade Funds, \$2,400; Utilities, \$600. The Township parks are funded from the general operating fund. The budget for 2010 has not been completed, but the amounts will in all likelihood be increased as more planning will be needed. The resources of funding the parks and recreation budget is from the Township's general fund. User fees will not be charged except for riders in the Cohoctah Park who use the horse riding arena. This cost is minimal, \$5 per rider per year and was instituted at the request of the Livingston County 4-H Horse Leaders.

The volunteers involved in the park and recreation programs are used on an as needed basis.

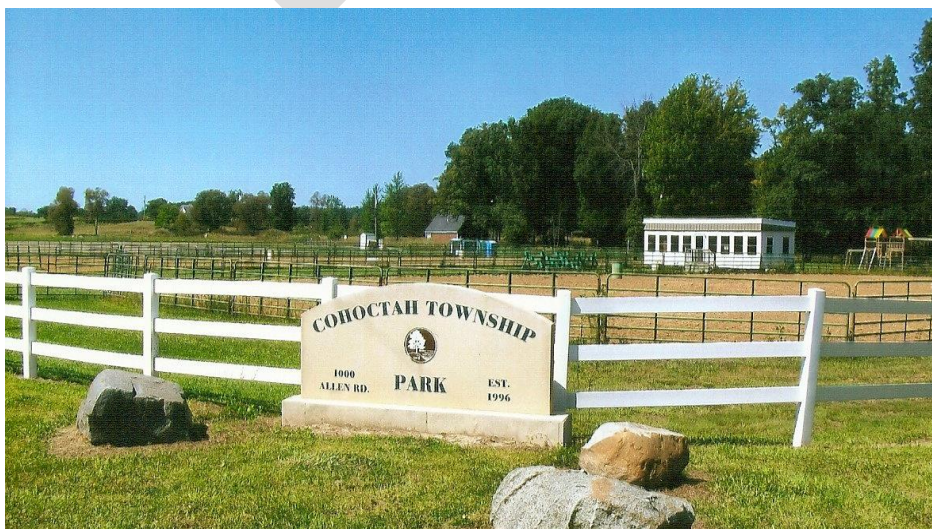
Cohoctah Township is a member of the Fowlerville Schools Recreation Program through a contractual arrangement with the Fowlerville Community School, Conway Township, Handy Township, and Iosco Township. This recreation program provides recreation services to youth in the area. A citizen of the township serves as a representative of the Fowlerville Recreation and is paid \$28 per meeting.

The township has partnered with the Livingston County 4-H Horse Leaders over the past 10 years to develop and maintain the Cohoctah Township Park.

Recreation Inventory

Cohoctah Township Park

Cohoctah Township, through a grant received from the State of Michigan in the Mid 1990's acquired 40 acres of land that was farmland and recreation land. This property contains water that could be used for fishing. This property that is located on the corner of Allen and Preston Roads in the Southeast quadrant of the township and was acquired with a grant from the Michigan Natural Resources Trust Fund. This property is being used in conjunction with the Livingston County 4-H Horse Leaders Council for horse shows. The township and 4-H has developed two horse riding arenas.



This property has land to expand the horse riding area to the West.



The Cohoctah Township Park on its 40 acres also contains woods, wetland areas, and water.



Antcliff Road Property (41 + Acres)

In December 2005, the township purchased nearly 42 acres of land across the street from the current township hall located at 10518 Antcliff Road, Fowlerville, Michigan 48836, for a future township hall, second fire station (when needed), and park land. This property is located in the Northwest quadrant of the township. The township board has developed a map to aid in future development of this land. A copy of this map is attached as an exhibit. The vision for this property are baseball or softball fields, soccer fields, and a walking trail. This land is flat and currently continues to be used for farming.



Cohoctah Road and Oak Grove Road Property (Two Acres)

The township also owns two acres of land on the corner of Cohoctah Road and Oakgrove (heading toward the village of Byron). This land could be used for a mini-park.



Fire Hall Property (Five Acres)

In addition, the township currently owns five acres of land where the Cohoctah Fire Station is located on the corner of Oakgrove and Chase Land Road. The township has the option to purchase an additional 2.5 acres when and if it were to be offered for sale. This land could also be used for a mini-park.



Oak Grove Recreation Area

The State of Michigan owns land that is used primarily for hunting along the Southeast township line with Deerfield Township. In the Appendix, Appendix 1 Public Resource Map 1 is a map entitled "Cohoctah Township Community Resources" that shows the location of the Oak Grove Recreation Area, and the location of other public property owned by the Township.

Accessibility Assessment

Currently, the location for the parks are not easily accessible for persons with disabilities, and thus do not meet accessibility guidelines. Thus, the ranking would be a 1. The township is aware of this deficiency and will make efforts to improve accessibility as it continues to develop its parks.

DNR Recreation Grant Inventory

As mentioned above, The Cohoctah Township Park was acquired with a grant from the Michigan Natural Resources Trust Fund under a land acquisition project agreement dated October 12, 1995. The project number is TF94-164. Project Title is Cohoctah Township Park. This land, as described above, is being used in partnership with the Livingston County 4-H Horse Leader Council for horse riding arenas.

Public Input Process

Cohoctah Township gathered public input regarding parks and recreational plans on ____ different occasions during the preparation of the recreation plan. The first was ____, The second was _____. The third was _____. All the meetings were at the township hall. Flyers were placed around the township and a notice was published in the Press and Argus. A copy of the notice posted in the township and in the newspaper is attached in the Appendix. In addition, the township conducted a township survey that asked questions on recreation. A copy of the survey results are attached in the appendix.

Community Meetings

All attendees at the community meetings were given an opportunity to provide input and ideas regarding parks and recreation in Cohoctah Township. Those ideas are listed below.

Goals and Objectives

Developing goals and objectives is an important part of the recreation planning process. The goals developed are based on the demographic characteristics of the population and the

physical and environmental characteristics of the area. The goals developed are broad and general. The objectives carry out the purpose of the goal. The Action Plan is the most specific.

The Cohoctah Township Board, with input from citizens at the meetings, formulated the following goals and objectives.

Goal 1

Provide broad community-based recreation opportunities that improve the overall quality of life for all residents of Cohoctah Township.

Parks serve as a natural gathering place for community residents and provide free or inexpensive recreation opportunities. To enrich the quality of life for Cohoctah Township, it is important to strive to provide recreational opportunities and work to improve land the township owns for recreational activities.

Objectives:

Continue to develop the Cohoctah Township Park by working with 4-H to improve and expand the horse riding area and offer the opportunity to fish on the property.

Create a township recreation committee comprised of citizens of the township.

Work with the state, county or other recreational organizations to expand recreation in the township.

Seek local, state, and federal grant monies to develop the township's park land.

Goal 2

Continue to keep options open to purchase additional land to maintain open space and recreational uses within the township.

Objective:

Continue to look for property in the Southwest quadrant of the township. Ideally this property should have access to a lake or other water body.

Action Program

Over the next five-year period, the Cohoctah Township Recreation Plan will be used by the leaders of the township to accomplish the goals set forth through this planning process. Through the planning process, it became apparent that the township is strongly dedicated to providing recreational opportunities to its community residents and capitalizing on the township's abundant natural resources while maintaining the community's rural character. Township

officials also recognize that this will not be an easy task, but are committed to the goals established through the creation of the recreation plan.

Action Item 1 - Develop a Recreation Committee

Priority- High

As one of the first steps toward accomplishing the goals, the township would like to establish a Cohoctah Township recreation committee to assist in recreation planning within the township. The committee will work closely with the township board to bring the goals and objectives to fruition. The township will seek community participation in the process by asking for volunteers to serve on the recreation committee with a small stipend. The committee members will be appointed by the township board. The committee will prepare and make recommendations to the township board.

Action Item 2 - Develop the Cohoctah Township Park to offer other recreational opportunities such as fishing and picnic areas.

Priority - High

The township should continue to work with 4-H to develop and expand the horse riding arena on the Southern portion of the park. Work toward a covered riding area should be pursued.

Through grants or other funding sources, a board walk along the water in the park should be pursued with locations available to offer fishing opportunities. A study needs to be done to determine what fish are in the water and whether the water could be stocked with fish.

Action Item - Consider collaborating with the Fowlerville Community School Recreation Group to develop the land across from the township hall for baseball and soccer fields.

Priority - Medium

There continues to be a shortage of baseball and soccer areas in the communities surrounding the township. Discussions have occurred with the Fowlerville Community School Group on using the land across from the township hall for soccer fields. This use should continue to be considered.

Action Item 3 - Obtain additional open space and recreation land for future parks

Priority - Medium

Additional park land is needed in the Southwest quadrant of the township. Ideally this land should be on water or have access to water.

Adoption

After the public input and notification process described above, the Cohoctah Township Recreation Plan was adopted by the Township Board on _____. Copies of the plan were

transmitted to the Livingston County Planning Commission, and the Michigan Department of Natural Resources in _____.

Copies of the notification advertisements, the public hearing minutes, the resolutions, and the transmittal letters the planning agencies are included in the appendix.

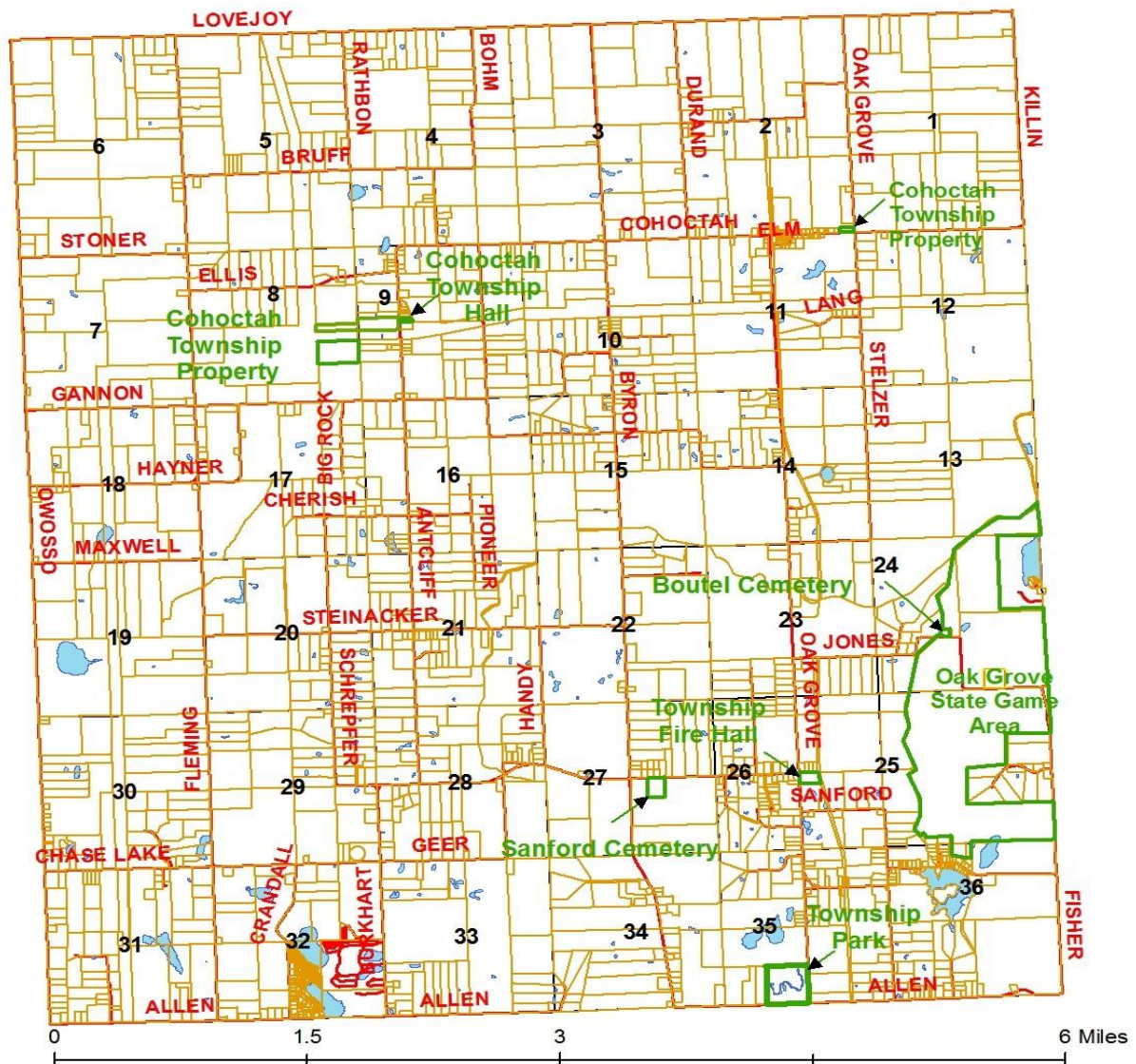
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Appendix 1
Public Resource Map

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Map 1

Cohoctah Township Community Resources



Legend

- | | |
|------------------|-------------------|
| Cohoctah_parcels | Public Land |
| Cohoctah_lakes | Township Sections |
| Cohoctah_roads | |

Prepared by: Livingston County
Department of Planning, July 2009
Source: Livingston County
Geographic Information System

Cohoctah Township
Comprehensive Plan



Appendix 2-
Township Demographics

DRAFT - 1



Chapter 3: Demographic Profile

Cohoctah Township Demographic Profile

In preparation for the development and amendment of the Cohoctah Township Comprehensive Plan, several demographic characteristics were compiled and analyzed to add understanding to the unique community needs of Cohoctah Township as compared to surrounding communities and Livingston County as a whole.

Population

The Township's population remained relatively stable for decades until more rapid population growth occurred after 1960. For nearly 100 years between 1870 and 1960, the decennial census recorded a Township population that fluctuated by no more than 188 persons per decade.

HISTORICAL POPULATION PROFILE

1870	1880	1890	1900	1910	1920	1930	1940	1950	1960
1,177	1,276	1,286	1,340	1,152	1,113	1,057	976	1,015	1,160

Source: U.S. Bureau of the Census

Between the 1970 and 1980 censuses, the Township population finally exceeded 2,000 persons. This decade was also the period of time in which the percent population growth was most dramatic, mirroring the most dramatic period of growth for the county as a whole. The population has since risen to a 2000 Census population of 3,394.

Cohoctah Township's percent population change was most dramatic between 1970 and 1980

PERCENT POPULATION CHANGE

1960 Census	% change 1960 - 1970	1970 Census	% change 1970 - 1980	1980 Census	% change 1980 - 1990	1990 Census	% change 1990 - 2000	2000 Census
1,160	25.3%	1,454	67.5%	2,436	10.6%	2,693	26.0%	3,394

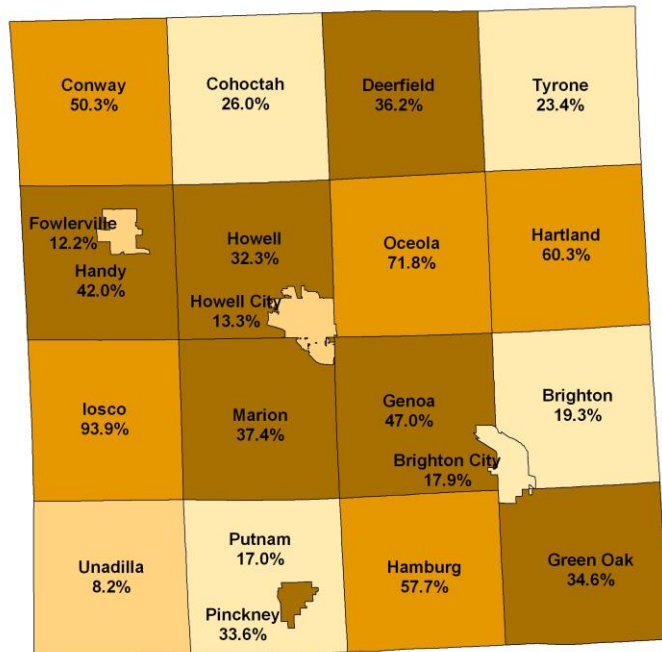
Source: U.S. Bureau of the Census

Compared with the surrounding communities of Conway, Deerfield, and Howell Townships in Livingston County, and Burns Township In Shiawassee County, Cohoctah Township only surpassed Burns Township in population gain between the 1990 and 2000 Censuses. Cohoctah Township gained 701 new residents during this time period. Although Cohoctah Township's 26% population increase was significant, it was lower than that of most surrounding communities and lower than Livingston County's growth rate of 35.7% during this decade.

1990 - 2000 POPULATION COMPARISON

Community	1990 Population	2000 Population	Numerical Change 1990 - 2000	% Change 1990 - 2000
Cohoctah Township	2,693	3,394	701	26.0%

LIVINGSTON COUNTY
Percent Change in Population, 1990-2000



Legend
By Municipality
Percent Change in Population
 Small Increase: 0.0% to 15.0%
 Moderate Increase: 15.1% to 30.0%
 Large Increase: 30.1% to 50.0%
 Very Large Increase: over 50.0% gain

Conway Township	1,818	2,732	914	50.3%
Deerfield Township	3,000	4,087	1,087	36.2%
Howell Township	4,294	5,679	1,385	32.3%
Burns Township	3,019	3,500	481	15.9%
LIVINGSTON COUNTY	115,645	156,951	41,306	35.7%

Source: U.S. Bureau of the Census, 1990 and 2000 Census

The Southeast Michigan Council of Governments (SEMCOG) estimates that Cohoctah Township's February 1, 2009, population is 3,603. A numerical change of 209 persons in approximately a nine year time period. This estimate reflects a 6.2% population growth for this decade thus far, which is considerably less than the 26% growth rate of the 1990 – 2000 decade.

In the long term, SEMCOG forecasts that Cohoctah Township's population will grow to 3,742 by 2010, 3,960 by 2020 and 4,449 by 2035. This reflects a 2000 to 2035 population gain of 1,055 persons for a percent change of 31.1%. Growth is

expected to be very incremental between the years 2005 and 2035, with the largest gains in population expected between 2005 and 2010 (232) and 2030 and 2035 (234). For each five year period in between, SEMCOG forecasts that the Township will gain less population, ranging from a 7 person gain to a 211 person gain.

Between 2005 and 2035, Cohoctah Township's largest periods of growth are forecast to be between the years 2005 and 2010 and the years 2030 and 2035

COHOCTAH TOWNSHIP POPULATION FORECAST

2005	Pop. Gain 2005 - 2010	2010	Pop. Gain 2010 - 2015	2015	Pop. Gain 2015 - 2020	2020	Pop. Gain 2020 - 2025	2025	Pop. Gain 2025 - 2030	2030	Pop. Gain 2030 - 2035	2035
3,510	232	3,742	7	3,749	211	3,960	112	4,072	143	4,215	234	4,449

Source: Southeast Michigan Council of Governments 2035 Regional Development Forecast

Compared to the three surrounding Livingston County communities, Cohoctah Township is expected to gain slightly less population than Conway and Deerfield Townships between 2000 and 2035. A total gain of 1,055 persons is expected in Cohoctah Township, while Conway Township is expected to gain 1,131 new residents, and Deerfield Township is expected to gain 1,314 new residents. Howell Township is expected to gain significantly more new residents in this 2000 to 2035 time frame (4,373).

Dependent Population

The dependent population consists of persons under the age of 18, and persons that are age 65 and older. When the total number of persons in these age categories is divided by the total number of persons considered to be the non-dependent ages of 18 through 64, a dependency ratio results. This ratio can help a community plan for housing and services that primarily serve the dependent population.

In Cohoctah Township the dependency ratio derived from the 2000 Census is 56%, which means that there are approximately 56 dependent persons for every 100 non-dependent persons in the Township.

DEPENDENT POPULATION COMPARISON

Community	Under 18 Population	% of Total Population	65 and Older Population	% of Total Population	Dependency Ratio
Cohoctah Township	985	29.0%	233	6.9%	56%
Conway Township	855	31.3%	202	7.4%	63%
Deerfield Township	1,220	29.9%	266	6.5%	57%
Howell Township	1,558	28.0%	582	10.2%	60%
Burns Township	1,022	29.2%	321	9.2%	62%
LIVINGSTON COUNTY	45,125	28.8%	13,037	8.3%	59%

Source: U.S. Bureau of the Census, 2000 Census

In comparison with the surrounding four municipalities, Cohoctah Township has a low

There are approximately 56 dependent persons for every 100 non-dependent persons in Cohoctah Township

percentage of population that is under eighteen and a low percentage of population that is age 65 and older. As a result, Cohoctah Township's dependency ratio is lower than all neighboring communities and Livingston County as a whole.

Housing

Housing Units

Although population is an important factor to consider when contemplating the potential future impacts upon a community, it is the built environment or housing units that will accommodate this future population growth and have the most impact on future land use.

HOUSING UNIT COMPARISON				
Community	Total Housing Units			
	1990	2000	Change	
			#	%
Cohoctah Township	900	1,206	306	34%
Conway Township	581	919	338	58.2%
Deerfield Township	1,057	1,495	438	41.4%
Howell Township	1,358	1,993	635	46.8%
Burns Township	1,044	1,230	186	17.8%
LIVINGSTON COUNTY	41,863	58,919	17,056	40.7%

Source: U.S. Bureau of the Census, 1990 and 2000 Census

The number of housing units in Cohoctah Township grew steadily between 1990 when the Census recorded 900 housing units and 2000 when the Census recorded 1,206 housing units. These figures reflect a growth of 306 new housing units (a 34% increase). Cohoctah Township's growth in housing units is somewhat lower than that of surrounding Livingston County communities, although significantly higher than the growth in housing units experienced by Burns Township in Shiawassee County. In terms of total housing units, the surrounding communities of Deerfield, Howell and Burns Townships surpass Cohoctah Township; however, Cohoctah Township has a larger stock of housing units than neighboring Conway Township.

Households

HOUSEHOLD COMPARISON								
Community	Total Households		2000 Census Family Households		2000 Census Non Family Households		Average Household Size	Average Family Size
	1990	2000	#	%	#	%		
Cohoctah Township	841	1,124	939	83.5%	185	16.5%	3.02	3.30
Conway Township	561	887	749	84.4%	138	15.6%	3.08	3.38
Deerfield Township	961	1,386	1,119	80.7%	267	19.3%	2.95	3.30
Howell Township	1,338	1,902	1,566	82.3%	336	17.7%	2.91	3.20
Burns Township	1,010	1,191	993	83.4%	198	16.6%	2.94	3.20
LIVINGSTON COUNTY	38,887	55,384	43,506	78.6%	11,878	21.4%	2.80	3.18

Source: U.S. Bureau of the Census, 1990 and 2000 Census

Cohoctah Township has gained 283 households since 1990, which represents a 33.7% percent change. This 1990 – 2000 numerical change in households is less than all surrounding communities except for Burns Township. The Township's 1,124 households contain a larger average household size (3.02 persons) and a larger average family size (3.30 persons) than the surrounding Livingston County communities except Conway Township; most of the surrounding communities have average household sizes under 3 persons whereas Cohoctah and Conway Townships have an average household size over 3 persons. Like all Livingston County townships, Cohoctah Township households are predominantly composed of families (83.5%) with a lesser number of households consisting of a non-family composition (16.5%). Most Cohoctah Township family households are headed by a married couple (73.3%), while a lesser number of family households are headed by a female (6.0%) or a male parent (4.2%). Non-family households in Cohoctah Township are primarily comprised of householders living alone.

COHOCTAH TOWNSHIP HOUSEHOLD FORECAST											
Household Type	2010	Change 2010 - 2015	2015	Change 2015 - 2020	2020	Change 2020 - 2025	2025	Change 2025 - 2030	2030	Change 2030 - 2035	2035
Households With Children	540	-49	491	0	491	26	517	41	558	15	573
Households Without Children	799	91	890	86	976	24	1,000	29	1,029	65	1,094
Total Households	1,339	42	1,381	86	1,467	50	1,517	70	1,587	80	1,667

Source: Southeast Michigan Council of Governments 2035 Regional Development Forecast

SEMCOG forecasts that Cohoctah Township will experience growth in households with children and even more substantially, in households without children. This is contrary to the region which is expected to experience a decline in the number of households with children. Between 2010 and 2035 Cohoctah Township is expected to gain 33 new households with children and a more dramatic 295 households without children. Growth in Cohoctah Township households with children is not anticipated under after 2025. Growth in households without children is expected during each five year period between 2010 and 2035. SEMCOG forecasts that Cohoctah Township will gain the most new households between 2015 and 2020 (86 households).

Housing Value

Census 2000 figures show that among all eighty-three counties in Michigan, Livingston County has the highest median housing value for owner-occupied housing units (\$187,500). Cohoctah

Township's median housing value of \$159,400 is significantly lower than the county's median value and lower than the median housing value of thirteen townships in Livingston County. The Village of Fowlerville, and Conway, Handy and Unadilla Townships, are the only Livingston County communities that have lower median housing values. The value of most Cohoctah Township homes range from

\$50,000 to \$299,999, with the largest number of homes valued in the \$100,000 to \$149,999 category. The change in these values over the last 10 years has been dramatic. Between the 1990 and 2000 censuses, Cohoctah Township's median housing value doubled (from \$70,800 to \$159,400 for a percent change of 125%).

The value of most Cohoctah Township homes fall in the \$100,000 to \$149,999 category

Between the year 2010 and the year 2035 Cohoctah Township is expected to gain 328 households for a 24.5% change

In comparison, most surrounding communities had less of a change in numeric value, and only Burns Township surpassed Cohoctah Township in terms of percent change in median housing value over the 10 year period.

COMPARISON OF MEDIAN HOUSING VALUES				
Community	Median Value of Owner-Occupied Units			
	1990	2000	# Change	% Change
Cohoctah Township	\$70,800	\$159,400	\$88,600	125%
Conway Township	\$73,700	\$154,200	\$80,500	109%
Deerfield Township	\$83,100	\$172,300	\$89,200	107%
Howell Township	\$89,500	\$161,200	\$71,700	80%
Burns Township	\$52,600	\$119,300	\$66,700	127%
LIVINGSTON COUNTY	\$97,300	\$187,500	\$90,200	93%

Source: U.S. Bureau of the Census, 1990 and 2000 Census

According to the Livingston County Planning Department's housing sale price database, the southeast quadrant of Livingston County has long maintained the highest median housing sale price in the county, followed by the northeast quadrant, the central portion of the county, and then the western portion of the county which includes Cohoctah Township.

Income

Livingston County has the highest 1999 median household income in the state (\$67,400), and is second only to Oakland County for the highest 1999 median family income (\$75,284). Cohoctah Township's median values of \$57,500 (household) and \$63,182 (family) are in the lower half of Livingston County community values.

MEDIAN INCOME COMPARISON						
Community	Median Income 1989		Median Income 1999		Household Change	
	Household	Family	Household	Family	#	%
Cohoctah Township	\$43,944	\$46,098	\$57,500	\$63,182	\$13,556	30.8%
Conway Township	\$41,312	\$43,017	\$64,306	\$67,206	\$22,994	55.7%
Deerfield Township	\$42,805	\$44,394	\$65,756	\$69,750	\$22,951	53.6%
Howell Township	\$47,784	\$49,367	\$63,114	\$67,034	\$15,330	32.1%
Burns Township	\$33,577	\$36,861	\$49,671	\$52,888	\$16,094	47.9%
LIVINGSTON COUNTY	\$45,439	\$49,910	\$67,400	\$75,284	\$21,961	48.3%

Source: U.S. Bureau of the Census, 1990 and 2000 Census

Compared with surrounding communities, Cohoctah Township has the lowest 1999 household median income and 1999 family median income. The Township's income figures are most comparable to Howell and Conway Townships. Over the last ten years, Cohoctah Township's household median income has increased by \$13,556 or 30.8%. Most

***Most Cohoctah Township households
have an income range of
\$75,000 to \$99,999***

Cohoctah Township households have a household and family income in the \$75,000 and \$99,999 range.

Occupations

According to the 2000 Census, Cohoctah Township has an employed civilian population aged 16 and over, consisting of 1,670 workers. Most of these workers (87.5%) are private wage and salary workers with self-employed workers in their own unincorporated business comprising the second largest class of workers in the Township (7.1%) and government workers comprising the third largest class of workers in the Township (5%).

As recorded in the 2000 Census, the dominant occupation category in Cohoctah Township is *Sales and Office Occupations*. 565 or 33.8% of the 1,670 workers claim this as their occupation. *Management, Professional, and Related Occupations* is the second largest occupation category with 441 workers or 26.4% of the employed civilian population aged 16 and over. The third largest occupation category in the Township is *Production, Transportation, and Material Moving Occupations*. This occupational category has 275 workers or 16.5% of workers.

COHOCTAH TOWNSHIP OCCUPATIONS		
Occupation	Number	Percent
Sales and Office Occupations	565	33.8%
Management, Professional, and Related Occupations	441	26.4%
Production, Transportation, and Material Moving Occupations	275	16.5%

Source: U.S. Bureau of the Census

Education

Cohoctah Township is part of three public school districts, the largest being Howell Public Schools. A western segment of the township is in the Fowlerville Community Schools district, while a northern segment of the township is in the Byron Area Schools district. Cohoctah Township does not contain any of school facilities that are a part of these districts.

The 2000 Census recorded 1,012 Cohoctah Township residents age 3 years and older that are enrolled in school. The majority of these students (43.7%) are enrolled in elementary school grades 1 through 8. The second largest percent of students (27.2%) are enrolled in high school grades 9 through 12 and the third largest percent of students are enrolled in college or graduate school (21%).

Cohoctah Township consists of a well educated population age 25 years and older. 88.2% of this adult population group has graduated from high school or obtained a higher degree level. Cohoctah Township's educational attainment level is slightly lower than Livingston County's 91.4% high school graduate or higher attainment, and slightly lower than that achieved by most surrounding communities. However, Cohoctah Township's percentages of educational attainment are very comparable to that of Burns Township.

EDUCATIONAL ATTAINMENT COMPARISON						
Population 25 years and over						
Community	Population 25 years	Less than 9 th grade	9 th – 12 th grade, no	High School	% High School	% Bachelor's

	and over		diploma	graduate	graduate or higher	degree or higher
Cohoctah Township	2,167	60	196	674	88.2%	12.8%
Conway Township	1,683	20	192	692	87.4%	10.8%
Deerfield Township	2,594	41	192	877	91%	18.6%
Howell Township	3,685	52	417	1,293	87.3%	18.6%
Burns Township	2,197	30	212	894	89%	13.2%
LIVINGSTON COUNTY	101,381	1,701	7,030	28,702	91.4%	28.2%

Source: U.S. Bureau of the Census, 2000 Census

Cohoctah Township does not have as large a percent of population 25 years and over that have obtained a bachelor's degree or higher. 12.8% of this adult population group in Cohoctah Township has obtained a bachelor's degree or higher as compared to 28.2% in Livingston County as a whole.

Agriculture

Agricultural activities figure prominently in the Cohoctah Township way of life. U.S. Census of Agriculture figures are only compiled on a county-wide basis, therefore the best local indicator of agricultural activity is by tracking the number of farms enrolled in Public Act 116 Farmland and Open Space Preservation contracts.

Each of these agreements between the State and a landowner, represents a temporary restrictive covenant regarding the use of the land. A landowner voluntarily agrees to preserve their land for agriculture in exchange for certain tax benefits and exemptions for various special assessments. An agreement runs with the land and is for a jointly agreed upon length of time (at least 10 years).

The twenty-seven (27) current Farmland and Open Space Preservation contracts in Cohoctah Township far outnumber most other Livingston County communities with the exception of Conway, Handy and Unadilla Townships. The table below illustrates the location of the Farmland and Open Space Preservation contracts in Cohoctah Township.

COHOCTAH TOWNSHIP FARMLAND AND OPEN SPACE PRESERVATION CONTRACTS

Size in Acres	Section Number	Quadrant of Township
65	3	Northeast
69	3	Northeast
118	12	Northeast
10	12	Northeast
10	12	Northeast
44	3	Northeast

Size in Acres	Section Number	Quadrant of Township
40	8	Northwest
64	18	Northwest
190	6	Northwest
11	6	Northwest
20	35	Southeast
10	35	Southeast

100	3	Northeast
60	3	Northeast
85	17	Northwest
98	7	Northwest
Unk.	7	Northwest
91	7	Northwest
Unk.	17	Northwest
120	6	Northwest

130	35	Southeast
176	36	Southeast
91	36	Southeast
130	33	Southwest
160	33	Southwest
40	33	Southwest
75	32	Southwest

Summary Table of Farmland and Open Space Preservation Contracts		
Quadrant of the Township	Total Number of Contracts	Total Number of Acres Under Contract
Northeast	8	476
Northwest	10	699+
Southeast	5	427
Southwest	4	405
TOTALS	27	2,007

Source: Michigan Department of Agriculture, Farmland and Open Space Preservation Program, April 2009

Most of the Farmland and Open Space Preservation contracts in Cohoctah Township (37%) are in the northwest quadrant of the township; particularly sections 6,7 and 17. The second highest number of contracts are in northeast quadrant, followed by the southeast and southwest quadrants.

The largest amount of acreage held in these contracts was also in the northwest quadrant where over 699 acres (35% of the acreage preserved in all Cohoctah Township contracts) are preserved in 10 contracts. The largest amount of acreage held in a single contract is 190 acres in section 6 of the northwest quadrant. More than half of the contracts (17 out of 27) in Cohoctah Township are for less than 100 acres.

Like most communities in Livingston County, agriculture is not as prominent in Cohoctah Township as it was in years past. Each decade, agricultural land use has diminished due to various circumstances such as future generations choosing not to farm, low return on commodities making farming unprofitable, and increased residential growth and development.

Demographic Trends in Cohoctah Township

From the demographics analyzed in this section, we can identify some trends that should influence future planning and development in Cohoctah Township; for instance, these trends may influence the goal and objectives section of this comprehensive plan. Following are identified trends and how they may impact Township planning.

- **Trend:** In comparison with the surrounding four municipalities, Cohoctah Township has a low percentage of population that is age 65 and older. **Planning Implication:** A small portion of the Township needs to be master planned for senior living. Settlement areas in the Township are the logical location for senior uses because these areas offer more services (post office, stores, etc.) than more rural areas of the Township.
- **Trend:** Cohoctah Township has the third lowest number of rental housing units in Livingston

County. **Planning Implication:** A small portion of the township needs to be master planned for high density multiple family uses such as rental housing.

- **Trend:** Cohoctah Township has a larger average household size and a larger average family size than most surrounding Livingston County communities. **Planning Implication:** Larger dwelling units may prevail in the Township. Future residential land use should accommodate family-scale housing. Future recreation planning should consider the activity needs of families.
- **Trend:** Compared with surrounding communities, Cohoctah Township has the lowest 1999 household median income and family median income. **Planning Implication:** The comprehensive plan could allow for limited expansion of commercial and industrial development that may add employment opportunities in the community, thereby impacting income. Commercial and industrial future land use planning could concentrate on growth in agricultural-related commerce and industry.
- **Trend:** Agricultural activities figure prominently in the Cohoctah Township way of life. The twenty-seven (27) current Farmland and Open Space Preservation contracts in Cohoctah Township far outnumber most other Livingston County communities with the exception of Conway, Handy and Unadilla Townships. **Planning Implication:** A future land use classification in Cohoctah Township should encourage the continuation of agricultural activities.

Appendix 3

Survey (attach)

DRAFT - 1



Unadilla Township

Livingston County, Michigan

Parks & Recreation Master Plan



2024 - 2028

Adopted October 12, 2023

Assisted by:



www.cwaplan.com

Acknowledgments

Township Board

- Linda Walker, Supervisor
- Linda Topping, Clerk
- Julie Weiland, Treasurer
- Sue Cox, Trustee
- Lori Cowan, Trustee

Planning Commission

- Bryan Spadafore, Chair
- Richard Green, Co-chair
- Diane Constable, Secretary
- Mitch House, Officer
- Linda Topping, Township Board Representative

Recreation Plan Steering Committee

- Lori Cowan
- Diane Constable

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Chapter 1: Executive Summary

The Unadilla Township Parks and Recreation Master Plan articulates a vision for parks and recreation in the community. The purpose of this Plan is to guide recreation planning and development efforts of Unadilla Township over the next five years. Once adopted, the Plan is the official document to be used by the community to guide decisions regarding parks and recreation.

Unadilla's first recreation plan was adopted in 2004 and most recently updated in 2017. This iteration of the Recreation Plan was originally intended to be submitted to the DNR in 2021. Unfortunately, an administrative error delayed the process, and the plan was not submitted by the February deadline. The Township opted to complete the planning process in 2023, completing the necessary steps which would allow submittal in 2024. As a result, the plan is now valid through 2028.

The Township has become a key partner in developing and maintaining the Mike Levine Lakelands State Trail, and continues to seek opportunities to provide outstanding recreation options for her residents. This plan update highlights ongoing recreation efforts in the community. It meets state standards for community recreation planning that are necessary to gain eligibility for grant programs.

Key Plan Findings

Unadilla Township residents are invested and enthusiastic about their parks. Their recreation needs are well served by a combination of their local facilities and regional recreation resources. The Mike Levine Lakelands State Trail is of prime importance to residents, and is heavily utilized throughout the year. There is a desire to see additional development both in terms of upgrading existing amenities as well as development of new recreation opportunities.

Since 2021, several projects have been completed. At Township Hall Park, the swings have been replaced with new seats and an accessible child swing, and an accessible picnic table was added. At Unadilla Park, a bench seat for the playground area was installed, annual plants added under the park signs, and the portable toilet removed due to vandalism issues. Perhaps the most noticeable project involved adding a 5.5-foot wide asphalt lane on the Lakelands Trail between Main Street and Van Syckle Road, improving accessibility while retaining a gravel lane for equestrian use.

Top priorities for future projects include maintenance of existing properties, preservation of natural resources, and continued/improved access to trails and pathways.

What The Plan Contains

The Unadilla Township Parks & Recreation Master Plan follows the format suggested by the Michigan Department of Natural Resources (MDNR) in the Guidelines for the Development of Community Park, Recreation, Open Space, and Greenway Plans (2009, rev. 2018). While the order of the chapters in this plan are different than in previous years, the required elements are in place.

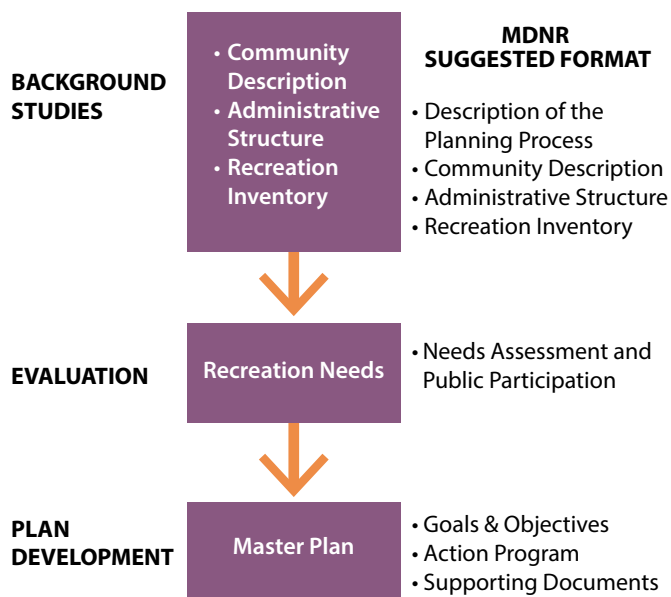
- This plan begins with Unadilla Township's **Goals and Objectives** which outline the overarching desires for Unadilla's parks, recreation facilities, and programs.
- The **Action Program** chapter outlines an action plan and strategies for implementation.
- The **Public Participation** portion of the plan presents the input received from local officials, staff, and residents. This information helped in formulating the Goals & Objectives and Action Plans.
- **Recreation Inventory** describes the existing parks and recreational facilities of the community as well as those of the state and the region located nearby.
- The **Administrative Structure** chapter includes a description of how parks and recreation services are administered in Unadilla Township, including budget and funding information.
- The **Community Description** chapter provides a summary of both the social and physical characteristics of the community.
- Finally, supporting documents including the resolutions and notices documenting the plan's adoption by Township Board, are included in the appendices to the plan.

Planning Process

The process used to draft the Plan consists of three phases: background studies, evaluation, and plan development. Each is described more fully below:

- **Background Studies.** This phase involved gathering and updating data from the U.S. Census, existing documents and plans, and from field observations. The data is organized into three main categories: *community description*, *administrative structure*, and *recreation inventory*.
- **Evaluation.** The second phase in the planning process evaluated and analyzed the data compiled to determine recreation facility deficiencies and needs. Public input to assess recreational needs was also sought at this level. A written survey and a public hearing were conducted to receive residents' opinions and ideas for the park and recreation system. Input from Township officials and members of the Trails and Recreation Committee were also used.
- **Plan Development.** The last phase in the process involves Plan development and adoption. Based on the deficiencies and needs, goals and objectives were formulated and a specific action plan developed. Strategies to implement the Plan were also discussed.

The following diagram illustrates the planning process and how it corresponds to the MDNR suggested format described earlier:



Unadilla Township recognizes the importance of public participation in the recreation planning process. This Master plan was developed with input from Township officials, staff, community stakeholders, and residents. The Township conducted an online survey from July 9 to August 27, 2021 as part of the original planning activities. The Plan was approved for public review by the Master Plan Steering Committee on September 27, 2021. Finally, the Plan was subject to a public hearing on November 11, 2021 following the 30-day public comment period, and prior to the Township Board adoption on December 9, 2021.

A clerical error prevented proper submittal of the plan to the DNR at that time, however, and the Township decided to re-open the process in 2023. Rather than re-run the survey, the Steering Committee held a public input session (see page 15). The plan was again released for a 30-day review period beginning on August 16, 2023, and a Public Hearing held on October 12, 2023, after which the plan was officially adopted.

Table 1. Input Participation

Participants	Rec. Inventory, Resource Inventory, & Community Description	Public Input	Goal Formulation	Action Program	Public Hearing	Plan Adoption
Township Board		√			√	√
Recreation Plan Steering Committee	√	√	√	√	√	
Township Residents		√	√		√	

Chapter 2: Goals & Objectives

The Unadilla Township Recreation Committee has formulated the following goals and objectives for the next five-year planning period. The goals and objectives are broad enough to encompass the needs expressed from the public and from Township officials and the observed deficiencies in the recreation resources of the area. They also consider demographics, current growth and forecasted development, the area's physical resources and recreation trends.

GOALS

Unadilla Township should provide outdoor recreational opportunities for persons of all ages and all abilities that are well-maintained and safe.

Unadilla Township should consider the future needs of the community and take actions to dedicate parkland in order to meet future recreational needs of the community.

OBJECTIVES

1. Improve the Lakelands Trail

The Lakelands Trail is a great asset to the community and its continued improvement is recognized as a priority for the community. Resurfacing of the trail with crushed limestone and smaller improvements such as the addition of benches near the trailhead and along the trail itself are projects the Township would like to pursue.

2. Improve Existing Park Facilities

In keeping with the goal of making park facilities accessible for persons of all ages and abilities, barrier-free paths to playground structures should be incorporated at Unadilla Township Community Park and the Unadilla Township Office Playground. Other amenities such as benches are also priorities.

3. Acquire and develop new recreation facilities

Potential land acquisition and parkland dedication should focus on preserving and protecting high quality natural areas, local rural, historic and educational opportunities as well as providing open space for active recreation use and community gathering. Of particular interest for the community is the potential acquisition of the old schoolhouse on Barnum Road for use as a community center.

Coordination with the Township Board and Planning Commission will be necessary to preserve open space and dedicate parkland in new developments.

4. Administration, finance and funding

Unadilla Township recreation resources are owned and operated by a variety of public and private entities such as the state, Stockbridge Community Schools, Unadilla Township, land conservancies and others. Coordination between and among the various entities maximizes the community's recreation potential. Recent park and trail improvements have been covered by a combination of disbursements from the Township's general fund and a variety of grant funding and other donations. The Township must continue efforts to generate revenues through grants and fundraising to provide necessary capital for improvement projects and parkland acquisition.

Chapter 3: Action Program

The action program details the manner in which the goals and objectives will be met. It includes a list of specific projects as well as a schedule with suggested capital improvement projects, time frame and strategies for implementation.

ACTION PLAN

The following outlines the list of specific projects and actions which are recommended for the next five years. A preliminary non-motorized pathway plan showing the proposed improvements is also included on Figure 13.

1. Maintain and Improve the Lakelands Trail

Maintaining and improving the Lakelands Trail is a high priority for the community. Improvements will best be accomplished through coordination with the MDNR and the Friends of the Lakelands Trail. Proposed improvements recommended include:

- Construction of a parking area at the intersection of Barton Road and M-36 including spaces for up to four cars, a simple identification sign, and brown “trail parking ahead” signs on M-36;
- Provision of safe crossings, installation of signs and maps, bollards, and pedestrian amenities such as additional benches and dog waste facilities where possible along the trail; and
- Development of a geographically linked discovery application, developed in coordination with existing heritage projects, which would highlight significant natural and historical features on the trails, at the Township’s parks, and at other important locations around the Township.

Justification: This action is a significant need identified at the public meeting and responds to national and regional trends.

2. Improve Unadilla Township Community Park

As the Township’s flagship park, Unadilla Community Park remains a priority for future park improvements. The proposed improvements include:

- Acquisition and restoration of the schoolhouse on Barnum Road;
- Construction of a small parking area at the schoolhouse site;
- Expansion of the walking path to meet the new play equipment and shorten the distance between the pavilion and the path;
- Add fire-resistant surfacing under grills; and
- Consider addition of additional facilities such as horseshoe pits or shuffleball courts, and gathering spaces including temporary stages for public events.

Justification: These items were identified at the public meeting and respond to observed deficiencies as well as environmental and social trends identified in the previous section.

3. Improve Unadilla Township Office Playground

The playground represents one of the few play opportunities for families within a short walking distance of downtown Gregory. As with the other Township properties, the playground should be developed in a manner which makes it as inclusive as possible. Possible improvements include:

- Provide barrier-free access to playground amenities; and
- Continue to update equipment with structures designed to be inclusive.
- Add shade trees
- Add small gazebo / picnic structure

Justification: These items were identified at the public meeting and respond to observed deficiencies.

4. Acquire and dedicate parkland

Future parkland acquisition and dedication is an important action the Township should consider as opportunities arise. Desired parkland should focus on providing active recreation use and preserving local rural, historic and educational opportunities. Desired properties would include enough room for a variety of active and passive recreation uses such as sports fields, specialized recreational uses, walking paths and picnic areas. Properties contiguous to existing parks and open spaces are also desirable.

Example of a specialized recreation use may include a working farm with cultivated fields and livestock which would protect Unadilla's agricultural heritage and provide educational opportunities. Properties with natural features providing habitat preservation and nature related activities would also be desirable. Land acquisition which would provide areas for active recreation uses is also desirable for Unadilla.

It will be important to work with the Township Board and the Planning Commission to ensure parkland needs are considered in the review of new developments and to encourage or develop regulations for developers to set aside land for park facilities. It will also be important to work with Livingston County, area land conservancies, and other organizations.

Justification: This action responds to trends related to the demographic and physical characteristics of the area.

5. Administration, finance and maintenance

Facilitate communication and partnerships to promote the shared use of the area's parks and recreation resources including the state, schools, land conservancies and private recreation providers as well as the Township facilities by community groups. A means of generating operational costs and revenues where possible should be pursued to support the improvement projects mentioned above and to maintain the existing park facilities to a high quality standard. Seeking grants and support must be done aggressively. The Unadilla Township Recreation Committee must continue to promote and advocate the social, economic and environmental value and benefits of parks and recreation by reaching out to the community and the region.

The Township Recreation Committee could develop and organize an after school program at the Township Hall and community events could take place at the Unadilla Community Park such as a movie night, concerts in the park, and a farmers market.

Justification: This action is recommended to implement the current master plan.

Project Schedule

Table 2 lists individual projects along with specific tasks to be accomplished, the objective the task refers to, a rough cost estimate, and potential funding sources. In addition, the projects are listed with a time frame for completion. Short-term (ST) projects are recommended for completion within one to two years while long-term (LT) projects may take longer to be completed, within five to six years. Mid term (MT) projects fall in between, from two to four years.

Table 2. Improvement Schedule

Description	Cost Estimate	Funding Source*	Time Frame
Lakelands Trail			
Apply for grants and conduct fundraising for trail improvements.	-	-	OG
Build a parking area near the intersection of Barton and M-36 including parking and signage.	\$15,000 - \$20,000	GF, G, D, V	LT
Install historical markers or interpretive signage to highlight significant natural features along the trail	\$200 - 500/ sign; total to be determined	GF, G, D, V	MT
Develop safe crossings, signs and maps, bollards, and other trail amenities	varies	GF, G, D	ST
Purchase ADA accessible picnic tables	\$900/table	GF, G, D	ST
Install dedication rock at Gregory trailhead	\$600	GF, V	ST
Unadilla Township Community Park			
Apply for grants and conduct fundraising for park improvements	-	-	OG
Develop parking area on schoolhouse site	To be determined	GF, G, D	LT
Expand walkway to meet with playground structure and connect pavilion to north path	\$3,000 - \$6,000	GF, G, D	ST
Add fire-resistant surfacing under grills	\$500	GF, G, D	ST
Develop mixed-use horseshoe pits or shuffleball court	\$1,000 - \$4,000	GF, G, D	LT
Unadilla Township Hall Playground			
Apply for grants and conduct fundraising for playground improvements	-	GF, D, V	OG
Develop a 5-foot wide barrier-free pathway with connection to playground structures - Phase 1 ~120 linear feet	\$9,000	GF, G, D, V	ST
Develop a 5-foot wide barrier-free pathway loop with connection to playground structures - Phase 2 ~320 linear feet	\$19,000	GF, G, D, V	LT
Purchase accessible swing units for inclusion on existing swingsets	\$600	GF, G, D	ST
Add shade trees	\$3,500	GF, G, D, V	MT
Add small gazebo / picnic area	\$20,000	GF, G, D, V	LT
Upgrade aging play structures with handicap accessible equipment as funds come available	To be determined	GF, G, D	LT

GF = General Fund, G = Grant, D = Donation, V = Volunteer

OG = Ongoing, ST = Short Term, MT = Medium Term, LT = Long Term

Table 2. (continued) Improvement Schedule

Description	Cost Estimate	Funding Source*	Time Frame
Parkland Acquisition			
Consider parkland acquisition to provide active recreation use and rural, historic, and educational opportunities	-	GF, G, D, V	OG
Work with the Township Board and Planning Commission to review development proposals and encourage developers to set aside open space, parkland, and trails	-	-	OG
Seek partnerships with the State of Michigan, Livingston County, area land conservancies, and others for parkland acquisition, development, and management	-	-	OG
Administration, Finance, and Maintenance			
Create a committee to meet with MDNR, Livingston County, Stockbridge Community Schools, land conservancies, and local groups to consider opportunities for shared services and facilities.	-	V	OG
Identify fund raising opportunities and potential grant seeking opportunities as an on-going task	-	V	OG
Maintain and develop volunteer opportunities	-	V	OG
Attract sponsors and donations for installing benches, trash receptacles, mile markers and signs in the park or along the Lakelands Trail	-	GF, G, D, V	OG
Develop a smartphone application that allows users to retrieve information on sites and amenities along Lakelands Trail or in Township parks	To be determined	GF, G, D, V	ST
Develop a walking club, an after school program at the Township Hall and community events such as a movie night, concerts in the park, and a farmers market at the Unadilla Community Park	To be determined	GF, D, V	ST
Continuously advocate and promote parks and recreation to the community	-	GF, V	OG

GF = General Fund, G = Grant, D = Donation, V = Volunteer

OG = Ongoing, ST = Short Term, MT = Medium Term, LT = Long Term

Implementation Strategies

In order to accomplish the recommended actions during the next five years, it will be necessary to secure adequate funding. The current budget provides only a limited amount of funds for park development and improvements. The amount is well short of the projected expenses involved in the project schedule. Therefore, the following strategies are recommended to proceed as planned.

Apply for Federal Funding

At the federal level, the Michigan Department of Transportation (MDOT) funds **Transportation Enhancements (TE)** activities for community-based projects that expand travel choices and enhance the transportation experience by improving the cultural, historic, aesthetic, and environmental aspects of the transportation infrastructure. To be eligible, a project must fall into one of the TE activities. Activities which may apply to the Township include:

- Provision of facilities for pedestrians and bicycles such as walkways, curb ramps, bike parking, off-road trails, bike and pedestrian bridges and underpasses;
- Educational programs for pedestrians and bicyclists designed to encourage walking and bicycling by providing potential users with education and safety instruction through classes, pamphlets, and signage; and
- Preservation, conversion, and use of abandoned railway corridors for acquisition, development, planning, design, and construction of multi-use trails, as well as purchasing unused railroad property for reuse.

A minimum 20 percent local match is required for proposed projects and applications are accepted online on an on-going basis.

Apply for State Funding

At the state level, the **Land and Water Conservation Fund (LWCF)** and the **Michigan Natural Resources Trust Fund (MNRTF)** continue to be the primary funding sources for parkland acquisition and development.

The MNRTF provides funding for the purchase and development of parkland for natural resource based preservation and recreation. Goals of the program are to:

- Protect natural resources and provide for their access, public use and enjoyment;
- Provide public access to Michigan's water bodies, particularly the Great Lakes and facilitate their recreation use;

- Meet regional, county and community needs for outdoor recreation opportunities;
- Improve the opportunities for outdoor recreation in urban areas; and
- Stimulate Michigan's economy through recreation related tourism and community revitalization.

Grant proposals must include a local match of at least 25 percent of the total project cost. There is no minimum or maximum for acquisition projects. For development projects, the minimum funding request is \$15,000 and the maximum is \$300,000. Applications are due in April and August for acquisition projects and April (only) for development projects.

The LWCF is a federal appropriation to the National Park Service, who distributes funds to the Michigan Department of Natural Resources and Environment for development of outdoor recreation facilities. The focus of the program has been on trailway systems and other community recreation needs such as playgrounds, picnic areas, skate parks, ball fields, soccer fields and walking paths. Minimum grant requests are \$30,000 and maximum grant requests are \$500,000. The match percentage must be 50 percent of the total project cost. Applications are accepted throughout the year, but must be in by April 1 to be considered for the following years grant funds.

The **Recreation Passport** grant program offers funding for the development of public recreation facilities for local units of government. Minimum grant requests are \$7,500 and maximum requests are \$150,000. The local match obligation is 25 percent of the total project cost. Application are due on April 1st.

Local units of government may use the Forest Stewardship program to develop a management plan for a municipal forest which would include a component targeting outreach to private landowners. A total of \$2,000 may be granted with a 50 percent local match. Applications are due in September. Non-game Wildlife Fund Grants have also been offered in the past to identify, protect, manage, and restore native plant and animal species, natural communities, and other natural features.

Apply for Other Grant Funding

While Detroit Edison only serves a portion of the Township, the ***Detroit Edison Tree Planting program*** may be a source of funding. The Program began as DTE joined the US Department of Energy's voluntary Climate Challenge Program to address greenhouse gas emissions. Cost-share funds are available to municipalities in the Detroit Edison's service area on a competitive basis for tree planting projects. A total of up to \$4,000 may be granted to eligible tree planting projects on public and school property with a 50 percent local match. Applications are typically due in February.

Similarly, the ***Consumers Energy Foundation Tree Planting funds*** are available to local units of government within the service territory of Consumers Energy for tree planting projects on lands open to the public. A total of up to \$2,500 may be awarded to a single municipality per calendar year.

Non-game Wildlife Fund Grants have also been offered in the past to identify, protect, manage and restore native plant and animal species, natural communities and other natural features.

There are also a variety of smaller grant programs available for the establishment of greenways/pathways or greenway-related facilities such as ***Bikes Belong Coalition***. The Bikes Belong Coalition is sponsored by members of the American Bicycle Industry. Their mission is to put more people on bikes more often. The program funds projects in three categories: Facility, Education and Capacity Building. Requests for funding can be up to \$10,000 for projects such as bike paths, trails, lanes, parking, and safe routes to school. Applications are reviewed on a quarterly basis.

Access to Recreation is a grant program available for universal access of people of all abilities to a wide variety of recreation opportunities, such as nature viewing and photography areas, hiking trails, scenic outlooks, waterfalls and water activities of all kinds, beaches, fishing and boating, playgrounds, picnic areas, campgrounds, and much more. There are two primary grant programs under this source of funding:

- ***Recreation Access Matching Grant*** provides up to 50 percent matching funds (up to \$10,000) for the purchase of universally accessible recreation equipment and materials such as all terrain hiking wheelchairs, pool lifts, accessible playground surface, transfer systems, beach access mats, trail surface enhancements, and accessible picnic tables that enhance recreation participation by people with disabilities; and
- ***Accessible by Design Awards*** is designed to stimulate the development of creative universally designed recreation experiences that invite, welcome, and support the inclusion of people of all abilities. Winning designs demonstrate how going above and beyond the minimum requirements of the Americans with Disabilities Act can create greater access and usability for people of all abilities in the community. Winning designs are awarded cash prizes to build the projects up to \$250,000 with 25 percent minimum match.

Increase Support for Parks

Public support for parks and recreation is crucial in determining the level of services Unadilla Township will be able to provide in the future. A specific project millage over a limited period could be considered in the future for specific capital expenditures such as a park acquisition or development project.

Seek Other Sources of Funding

Unadilla Township Board of Trustees should continue to investigate additional sources of funding. Seeking donations, attracting sponsors, holding fund-raising events and seeking out other revenue sources are methods that should be pursued aggressively to raise funding for park acquisition and development.

Chapter 4: Needs Analysis & Public Participation

An essential task in the recreation planning process is to determine the needs of the community as a basis for an action plan to improve the parks system. Needs provide the rationale for the formulation of goals and objectives as well as identify areas for capital improvements. To assess needs, consideration was given to current recreation trends an on-line survey was made available to Unadilla Township residents. The opinions focused on identifying priorities for park development in the future.

National Recreation Trends

Recreation trends on a national and regional level provide insights into activities that show the greatest growth in popularity and may affect the future direction of parks and recreation. The National Sporting Goods Association (NSGA) regularly conducts national surveys to measure participation in physical activities and track changes from previous years. Table 3 lists the top seven outdoor activities persons aged seven years and older participated in at least once in 2016.

The 2016 study shows a continued trend towards individual-based outdoor activities, with open water sports, outdoor activities, and snow sports all showing increases in participation. Team related sports, with the exception of soccer and lacrosse, have showed a steady decline in popularity in recent years, while trail related sports continue to grow in popularity. The top growing outdoor activities between 2006 and 2016 were exercise walking (87.5 to 106.3 million), running/jogging (28.8 to 44.5 million), hiking (31.0 to 42.2 million) and kayaking (5.9 to 9.2 million).

Table 3. Top Outdoor Activities - 2016

Activity	Participation (National)	Overall Rank	Participation (East North Central Region)	Overall Rank
Exercise walking	106.3 million	1	15.4 million	1
Swimming	46.3 million	3	6.3 million	7
Running / jogging	44.5 million	5	6.2 million	8
Hiking	42.0 million	6	5.3 million	12
Camping	40.1 million	7	6.4 million	5
Bicycle riding	36.0 million	9	5.8 million	9
Fishing	29.5 million	13	5.4 million	10

Source: NSGA Sports Participation in the United States 2016

These trends are consistent with trends observed in Michigan. According to a survey of Michigan residents conducted as part of the 2018-2022 Michigan Comprehensive Outdoor Recreation Plan, walking outdoors was identified as the most important outdoor activity by 26 percent of users statewide. A list of participation rates for the most popular activities is listed in Table 4 below. Participation rates for children under age 18 is provided in Table 5 on page 14.

Table 4. Top Outdoor Recreation Activities in Michigan

Activity	Participation Rate
Relaxing outdoors	75%
Walking outdoors, including dog walking	74%
Visit parks or playgrounds	67%
Sightseeing and/or driving for pleasure	64%
Visiting nature centers or historic sites	56%
Swimming outdoors	54%
Picnicking	53%
Fishing	41%
Biking of any kind (on or off road)	40%
Camping of any kind (modern, RV, tent, rustic)	39%
Team or individual sports outdoors	37%
Wildlife viewing and/or photography including birding	36%
Hiking/backpacking	34%
Jogging/running	34%
Canoeing, kayaking, stand-up paddle boarding, or wind surfing	32%
Road biking	31%
Motor boating	31%
Sledding/tubing	30%
Tent or rustic camping	30%
Shooting sports, including archery	30%
Modern or RV camping	25%
Hunting of any kind	20%

Source: Michigan Comprehensive Outdoor Recreation Plan

Table 5. Outdoor Recreation Activities - Children under 18

Activity	Participation Rate
Visit parks or playgrounds	85%
Swimming outdoors	76%
Sledding/tubing	54%
Fishing	52%
Non-league team or individual sports	46%
Team or individual sports in a league	44%
Road biking	41%

Source: Michigan Comprehensive Outdoor Recreation Plan

Some key findings include:

- Nearly 75 percent of residents feel that outdoor recreation is very important or moderately important to their household.
- Walking outdoors, including dog walking, was identified as the most important outdoor activity.
- 87 percent of participants went outside 52 or more days per year, with nearly 54 percent doing so for more than 100 days.

These national trends are consistent with trends in Michigan. According to a telephone survey of Michigan residents conducted as part of the 2013-2017 Michigan Statewide Comprehensive Outdoor Recreation Plan, the top 10 outdoor recreation activities are: biking (all types), camping, fishing, walking outdoors (including dog walking), hiking (all types), playing outdoor games/sports, hunting or trapping, swimming (all types), boating, and visiting playgrounds.



The National Recreation and Park Association (NRPA) and the American Academy for Park and Recreation Administration have published a list of future trends compiled from different sources that will influence the direction of recreation planning and programming. These trends include increases in:

- Environmentally sensitive lifestyles, natural area management, and water quality protection
- Concerns for personal and family security, in the importance for wellness activities, and a desire to preserve and maintain cultural heritage
- Public costs, in the provision of leisure services through the public and private sectors and partnerships, a greater recognition of the economic value of parks, open space, and green infrastructure
- Senior citizens and number of smaller households

Monitoring parks and recreation trends is important in determining how parks and recreation services should evolve. The implication of the trends noted above along with the demographic and physical characteristics of the area can be summarized as follows:

- As population increases, demand for recreation will likely increase;
- Recreation facilities and programs should respond to the expected increase of seniors;
- There is and will continue to be a demand for more linear parks, trails, and pathways for recreation and non-motorized transportation;
- With the increased popularity of exercise walking and fitness related activities, there will continue to be an increased importance on recreation contributing to walkable, livable, and sustainable communities; and
- The continued collaboration and partnerships between public, private, and non-profit agencies as well as with adjacent local municipalities for the provision of parks and recreation programs and facilities will be critical to help meet Unadilla's recreation requirements.

Public Input

This recreation plan is a continuation of efforts completed in 2021. Due to an administrative error, the plan was delayed and reworked in 2023. Full community outreach was completed for the 2021 plan, and the summary of those results is provided below and in the appendices.

A follow-up in-person meeting was scheduled for June 14, 2023. Despite advertising the plan on the Township website, on Facebook, and in the local newspaper (see Appendix A), no residents attended the meeting. The recommendations for this plan therefore are based on the 2021 outreach efforts, which we feel are comprehensive and representative of the community's desires.

An online survey was made available for public input beginning on July 9 and ran through August 27, 2021. A notice was published on the Township's website and Facebook (Appendix A, page 60). In addition, a public notice was posted at Township Office and flyers were posted at the trailhead in Gregory. Hard copies of the survey were made available at Township Hall to allow individuals without internet access to take the survey. A complete set of survey data is provided in Appendix F beginning on page 72.

Table 6. Survey Question 1: Relative importance of selected categories

Category	Very important	Important
Maintain existing park facilities	92%	5%
Protect natural resources	83%	14%
Access to paths and trails	80%	17%
Acquire/develop new rec. facilities	57%	29%
Access to active-use facilities	27%	38%
Access to passive-use facilities	21%	58%
Access to picnic facilities	17%	33%
Access to recreation programming	15%	32%

Ongoing maintenance of existing facilities, protection of natural resources, and access to paths and trails were clear priorities for the community. 97% of participants considered each of these topics to be "very important" or "important"; the very important rating was tagged at a 92% rate for maintenance, 83% for protection of natural resources, and 80% for access to paths and trails.

Acquisition and development of new park and recreation facilities also scored well (57% very important, 29% important), but not at the same level as the aforementioned categories. This was consistent with

the results for question 2, where 61% of participants indicated that the Township has too few parks ("far too few" 6%, "too few" 55%).

Residents were less enthusiastic in regards to the remaining categories, but even so, over 50% of participants gave each category high marks (see Table 6 above).

Questions 3 and 4 highlight the importance of the Mike Levine Lakelands State Trail to the community. 46% of respondents use the trail at least monthly, and 92% of users indicate that they are "very satisfied" or "satisfied" with the trail. 92% of respondents regularly participate in walking or trail sports, and nearly 70% indicated a desire to see additional multi-use trails in the community. Continued development of the trail in the form of upgraded surfacing, new trailheads, or additional amenities such as benches would be well received.

In contrast, Community Park and the Township Hall Playground are underutilized, with only 8% visiting Community Park and 3% visiting the Playground on a monthly basis. Satisfaction rates are decent for Community Park, with 54% of participants "very satisfied" or "satisfied" with the park.

Township Hall Playground, however, received poor marks. 27% stated they were "unsatisfied" or "very unsatisfied" with the facility. All of the suggestions for the park mentioned updating the play equipment and amenities.

Residents were also asked if the Township should acquire the historic schoolhouse adjacent to Community Park. 79% were in favor of purchasing the structure, and offered a number of different suggestions for uses of the property. A few of the suggestions appear to overestimate the size of the school building, but do offer intriguing possibilities for the property as a whole. At a minimum, the school property would provide space development of on-site parking, which would help improve accessibility on the site, and could help spur additional development and activities at the park.

- Resurfacing of the Lakelands Trail with crushed limestone to bring the trail up to ADA standards
- New trailheads at Dutton Road and at the intersection of Barton Road and M-36
- Benches close to the trailhead and further along the trail

Visions for Unadilla Township Community Park include:

- Purchase of the old schoolhouse due to its historical significance; could be utilized as a parking area and possible community center
- Extension of the walking paths to the new play structure and north of the existing pavilion

Public Review & Public Hearing

After the Steering Committee considered the input received through the survey and the public session, and reviewed recreation trends, deficiencies, and other background information, they established the Recreation Plan's goals, objectives, and an action program for implementation. A draft Plan was then prepared and made available for public review beginning on October 1, 2021. Copies were placed at the Township Hall, on the Township's website, the Stockbridge Library, the Unadilla Party Store and The Gregory Market. The plan's availability was posted in the Stockbridge Community News (Appendix A). Following public review, the Steering Committee approved the draft Plan and recommended its adoption by Township Board at a meeting held on November 11, 2021 (Appendix B). The public input into the plan culminated in an advertised public hearing held on December 9, 2017 (Appendix C). After the hearing, the Township Board adopted the plan (Appendix D).

The parks and recreation issues considered by the Parks and Recreation Committee are summarized into the following main themes:

1. Park improvement and development;
2. Parkland acquisition; and
3. Community parks and recreation services.

These issues served to formulate the goals and objectives of the Unadilla Township Parks and Recreation Master Plan.



Chapter 5: Recreation Inventory

The residents of Unadilla have a variety of available regional recreational resources. Local recreation facilities are somewhat limited, but facilities have been improved and expanded since the 2009 Recreation Plan. This section describes the local and regional recreational resources located in and around Unadilla. The information provided in this section was derived from a variety of sources including the 2009 Recreation Plan, information from Livingston County Planning Department, the Internet and a field survey conducted in the fall of 2016.

LOCAL RECREATION FACILITIES

TOWNSHIP HALL PLAYGROUND

Unadilla Township offices are housed in a former Stockbridge school building in Gregory. The property includes a half-acre fenced-in playground with a variety of play equipment.

The property sits adjacent to a 16-acre open area and sports fields owned by the Stockbridge School District. The fields available for public use, and includes a basketball court and ball field.

A new accessible play structure was added to the park in 2023.



TOWNSHIP HALL PLAYGROUND

Playground - 0.6 acres - passive use

- A. Swing sets
- B. Slide
- C. Rocking horse
- D. Climbing equipment - updated 2023

Stockbridge School District property - 16 acres - active use

- E. Ball field
- F. Basketball court

Map 1. Unadilla Township Hall Playground



Township Hall Playground

Unadilla Township, Livingston County

0 20 40 Feet



Source: Livingston County GIS
Carlisle/Wortman Associates
June 2021



UNADILLA COMMUNITY PARK

1.6 acres - passive use

- A. Picnic pavilion
- B. Climbing equipment
- C. Swing set
- D. Asphalt running/walking track (0.15 mile)
- E. Bike rack
- F. Grill



UNADILLA TOWNSHIP COMMUNITY PARK

Unadilla owns and maintains a 1.6-acre facility in the southeast corner of the Township. The park includes a picnic shelter with solar powered lighting, a paved walking/running path, a large open field, a handicapped accessible play structure and swing.

A 0.2 acre lot on the south side of Joslin Lake Road is home to a historic school house. The property offers potential both as a meeting space and for a small parking lot.



Map 2. Unadilla Township Community Park



Unadilla Township Community Park

Unadilla Township, Livingston County

0 30 60 Feet



Source: Livingston County GIS
Carlisle/Wortman Associates
June 2021





LAKELANDS TRAIL TRAILHEAD

1.6 acres - passive use

- A. Picnic pavilion
- B. Climbing equipment
- C. Swing set
- D. Asphalt running/walking track (0.15 mile)
- E. Bike rack
- F. Grill



LAKELANDS TRAIL TRAILHEAD

Unadilla provides a trailhead for the Mike Levine Lakelands State Trail in downtown Gregory. The trailhead features parking which can accommodate equestrian trailers, a horse hitch and water trough, and a handicapped accessible horse mount. A new picnic pavilion with solar powered lighting was funded by a Recreation Passport grant in 2016. Picnic tables and benches, bicycle parking, a wheelchair accessible portable toilet, and signage are also present. The improvements were funded through a combination of state grants, volunteer labor, and private donations.



A portion of the trail in Unadilla Township was converted in 2022 to a combination asphalt/crushed limestone surface. One mile of trail, running from Main Street to Van Syckle Road, now includes a 5.5 foot-wide paved lane to improve accessibility for mobility challenged users. The remaining surface remains crushed limestone to accommodate horse riders and bikers who prefer a softer surface.

The state park itself is a rails-to-trail which runs from Hamburg Township to Stockbridge for approximately 26 miles. The trail includes a 10-foot wide paved pathway in Hamburg Township and a crushed stone surface in the remaining portion. The trail segment located in Unadilla is leased from the MDNR by the Township as are the portions in Hamburg and Putnam Townships. Each section is maintained and operated by the respective townships and the Friends of the Lakelands Trail in cooperation with the MDNR.



The trail is also part of the Great Lake-to-Lake Trail, which runs from Port Huron to South Haven. A further description of the route is provided on page 31.

Map 3. Mike Levine Lakelands Trail - Gregory Trailhead



Downtown Gregory Trailhead

Unadilla Township, Livingston County

0 15 30 Feet



Source: Livingston County GIS
Carlisle/Wortman Associates
June 2021

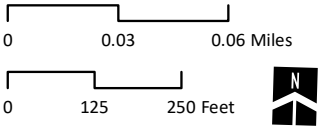


Map 4. Recreation Facilities - Downtown Gregory



Downtown Gregory Recreation Property Detail

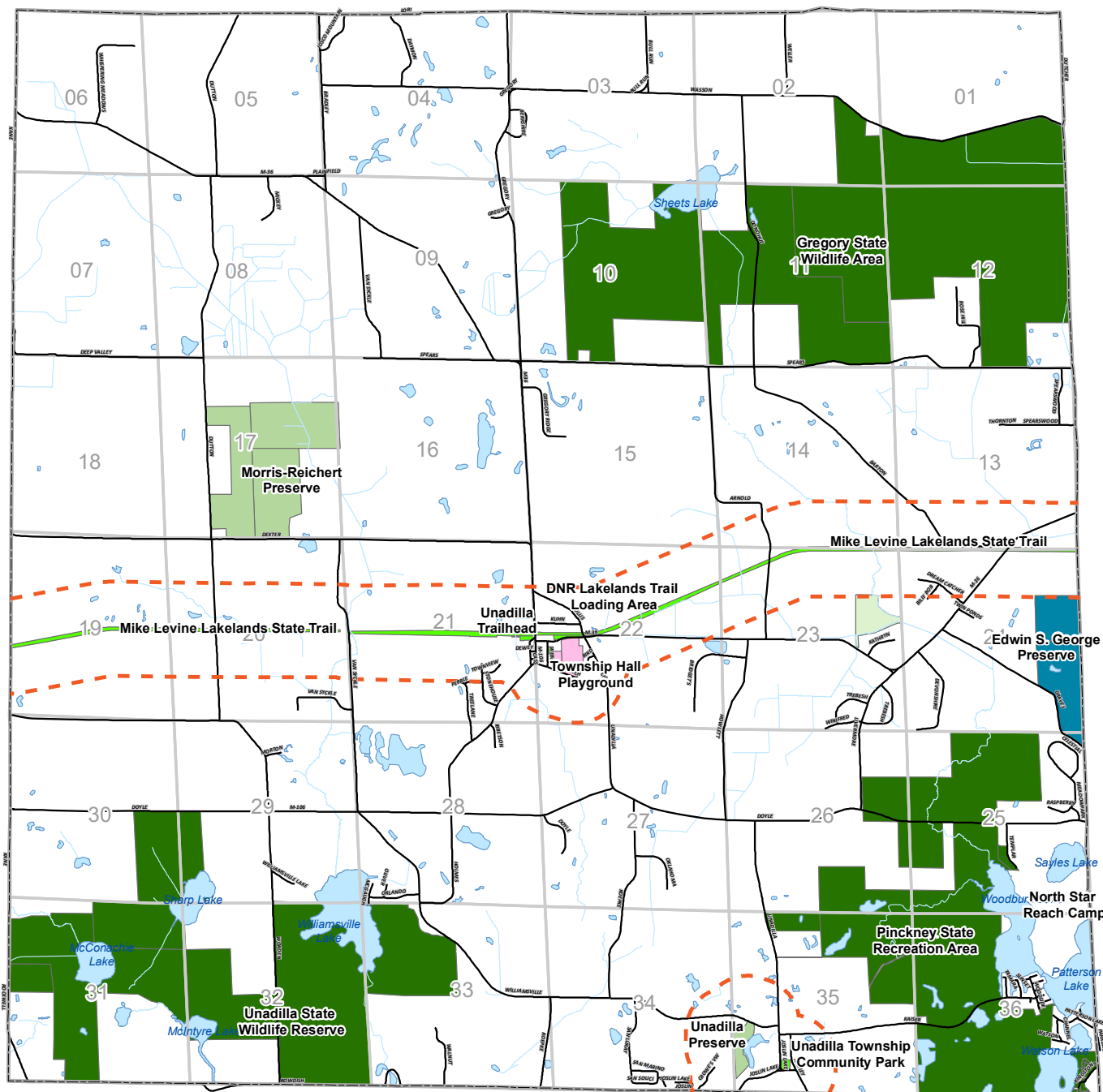
Unadilla Township, Livingston County



Source: Livingston County GIS
Carlisle/Wortman Associates
June 2021



Map 5. Recreation Facilities and Service Area



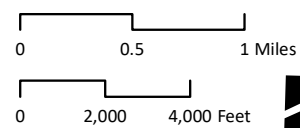
Unadilla Township Recreation Facilities

Unadilla Township, Livingston County

--- 1/4 mile (15 minute) walk zone for local parks & preserves



* Note: The Mike Levine Lakelands State Trail is owned by the Michigan Department of Natural Resources, but operated and maintained by Unadilla Township within the township boundaries



Source: Livingston County GIS
Carlisle/Wortman Associates
June 2021



Table 7. Unadilla Township Park Amenities

NAME	TYPE	ACCESS		PASSIVE USE				MISC.		TRAILS		
		PARKING AREA	HANDICAP ACCESS	PLAY EQUIPMENT	PICNIC TABLES / BENCHES	PAVILION	RESTROOMS	LITTLE LIBRARY	BIKE PARKING	PAVED WALK/HIKE TRAIL	UNPAVED TRAIL	EQUESTRIAN FACILITIES
Unadilla Township Community Park	C		•	•	•	•			•	•		
Township Office Playground	N	•		•					•			
Lakelands Trail Trailhead	T	•	•		•	•	•		•		•	•

*TYPE KEY: C = Community Park, N = Neighborhood Park, T = Trail

Preserves and Natural Areas

Unadilla Township also contains three preserves and natural areas which are owned by land conservancies and by the University of Michigan, and over 3,500 acres of state-owned land. The land conservancy sites are open to the public for hiking, nature viewing and guided tours.

The 13-acre **Unadilla Preserve** was donated by Fay and Almeda Roepcke. Located on Williamsville Road, the preserve contains rolling upland woods and includes a portion of the shoreline along Unadilla Mill Pond. It is located behind the Presbyterian Church on Williamsville Road west of Unadilla.

The **Morris-Reichert Nature Preserve** is owned by the Southeast Michigan Land conservancy and contains 242 acres of rolling hills and woodlands. It is located on Dexter Trail Road and Dutton Road in the northwest quadrant of the Township and is a refuge for bluebirds and foxes.

The **Unadilla State Wildlife Area** covers much of the southwest corner of the Township and continues into Washtenaw County. It is operated by the Michigan Department of Natural Resources (MDNR). The property, dedicated for wildlife conservation and management by the DNR Wildlife Division, consists of approximately 1,106 acres of rolling mixed forest.

Approximately 1,590 acres of the 1,747-acre west unit of the **Gregory State Game Area** is located in Unadilla Township. The remaining west unit area and another 959 acres of the east are located in Putnam Township. Both the Unadilla State Wildlife Area and Gregory State Game Area allow hunting, fishing, hiking, and limited rustic camping.

The 11,000-acre **Pinckney State Recreation Area** spans Washtenaw and Livingston counties with a small portion located in Unadilla Township (about 539 acres in sections 25, 26, 35, and 36). It is comprised of three major use areas: Silver Lake day use area, Bruin Lake campground and Halfmoon day use facility. The Bruin Lake campground is accessible from Kaiser Road in Unadilla. Activities and facilities include:

- Picnic areas/shelters with playground;
- Two swimming beaches with concession, volleyball courts, horseshoe pits at Halfmoon and Silver Lake day use areas;
- 62 miles of trails for hiking, 24 miles for mountain biking, 8 miles of equestrian trail and 59 miles of cross-country skiing trails;
- Several boat launches on many of the lakes and a boat rental on Silver Lake;
- Fishing pier on Silver Lake and shore fishing on all lakes;
- Snowmobiling in designated areas;
- 269 modern campsites, four 4-person cabins available for rent (one wheelchair accessible) and four 6-person cabins (two wheelchair accessible) with electricity; and
- Seasonal hunting.

Figure 1. Gregory State Game Area Map

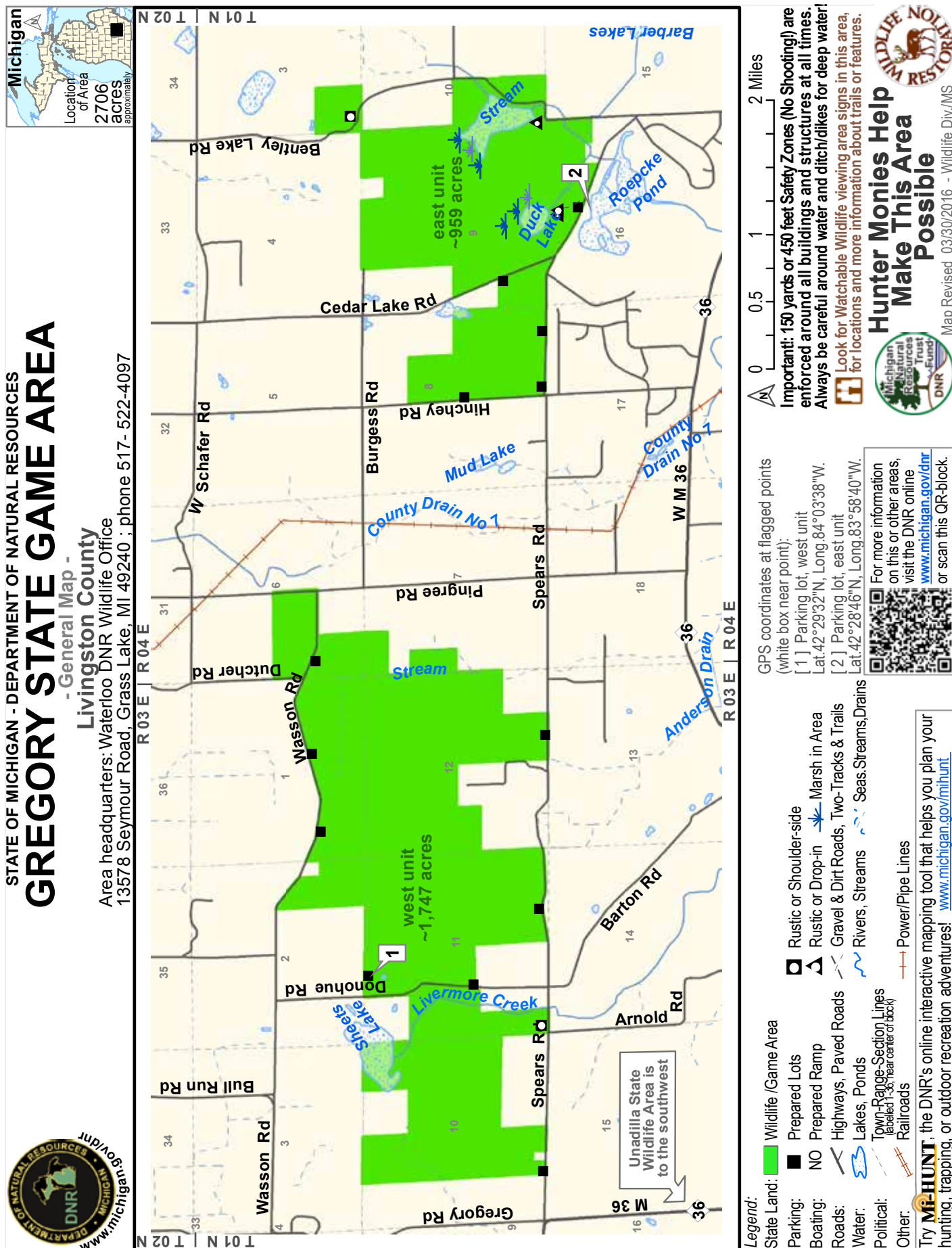


Figure 2. Unadilla State Wildlife Area Map

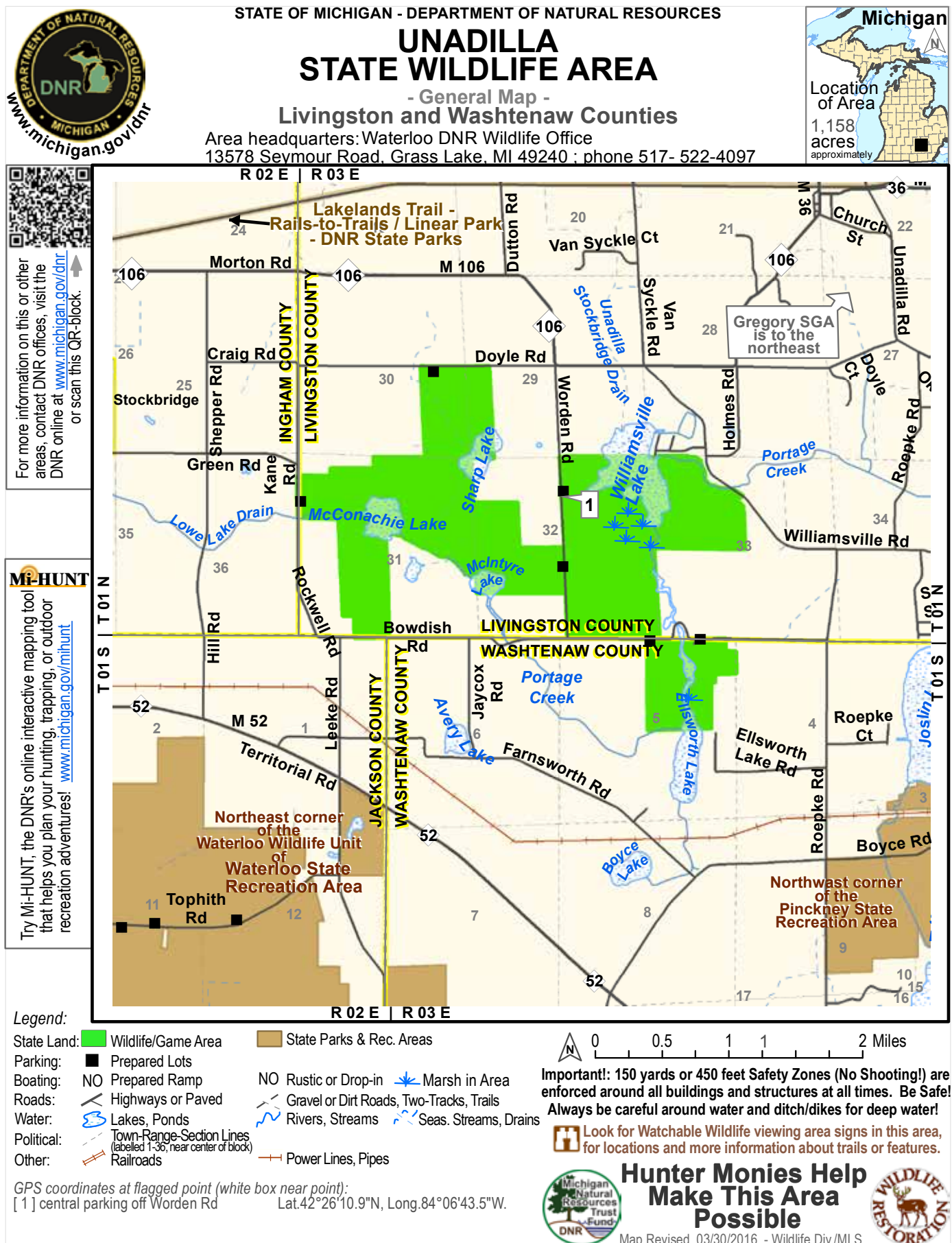
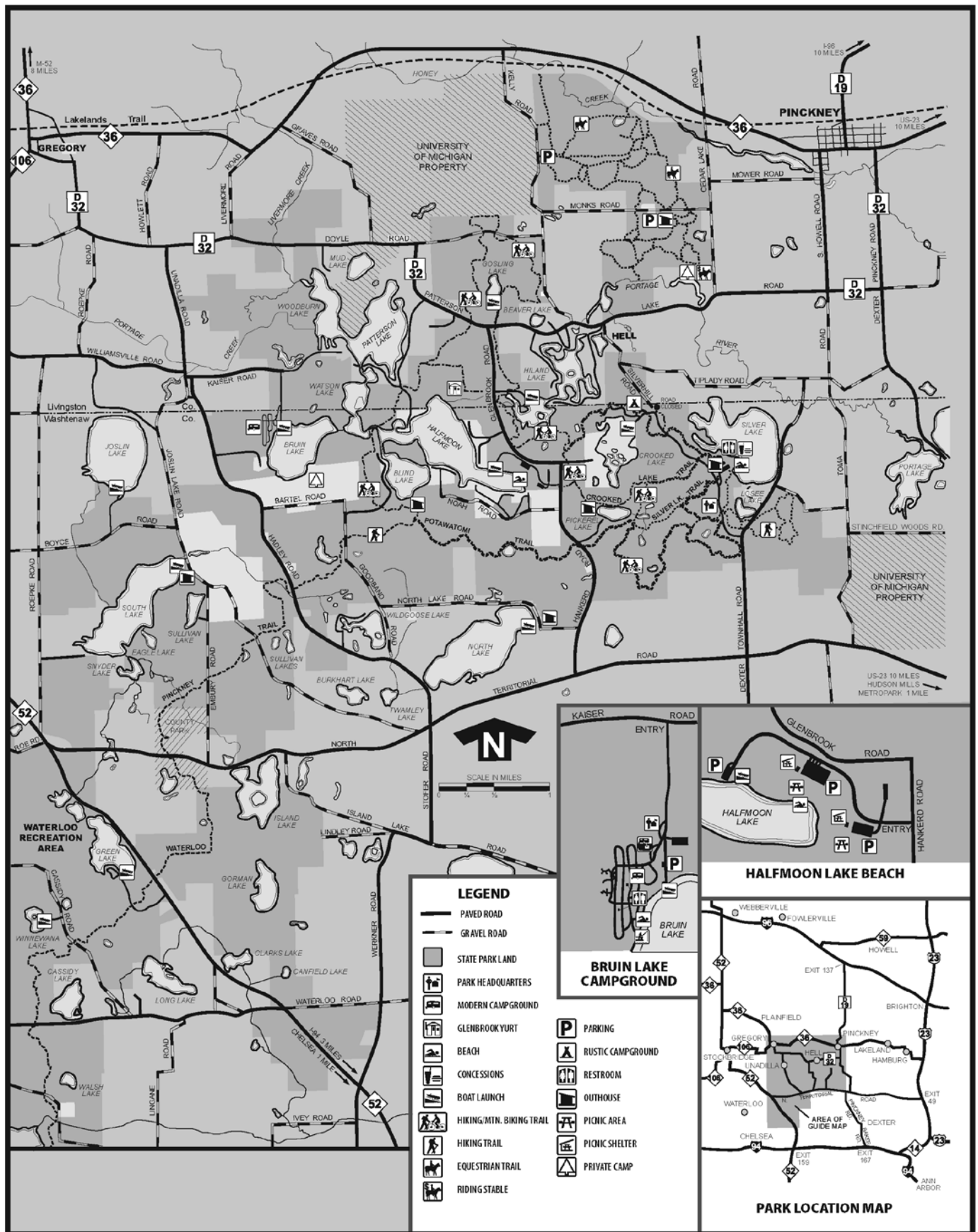


Figure 3. Pinckney State Recreation Area Map



Trails & Linear Parks

Unadilla Township sits in the heart of some of the most important trail developments in the state of Michigan. Of primary importance is the **Mike Levine Lakelands Trail State Park (MLLT)**. Renamed in 2018 to reflect the generous donations of Mike Levine, the MLLT is one of five linear state parks constructed along abandoned rail corridors in the Michigan state park system. The trail includes seven trailheads, including the Unadilla trailhead in downtown Gregory, and runs from the City of Jackson east to Hamburg Township.

Portions of the trail are paved, while other sections are constructed of compacted limestone. The stretch of path in Unadilla is currently constructed of compacted limestone, with asphalt added to a stretch between Gregory and Vansyckle Road. Totalling 22-miles in length, the trail is popular with walkers, hikers, bicyclists, horseback riders and cross-country skiers.



Figure 4. Mike Levine Lakelands Trail State Park

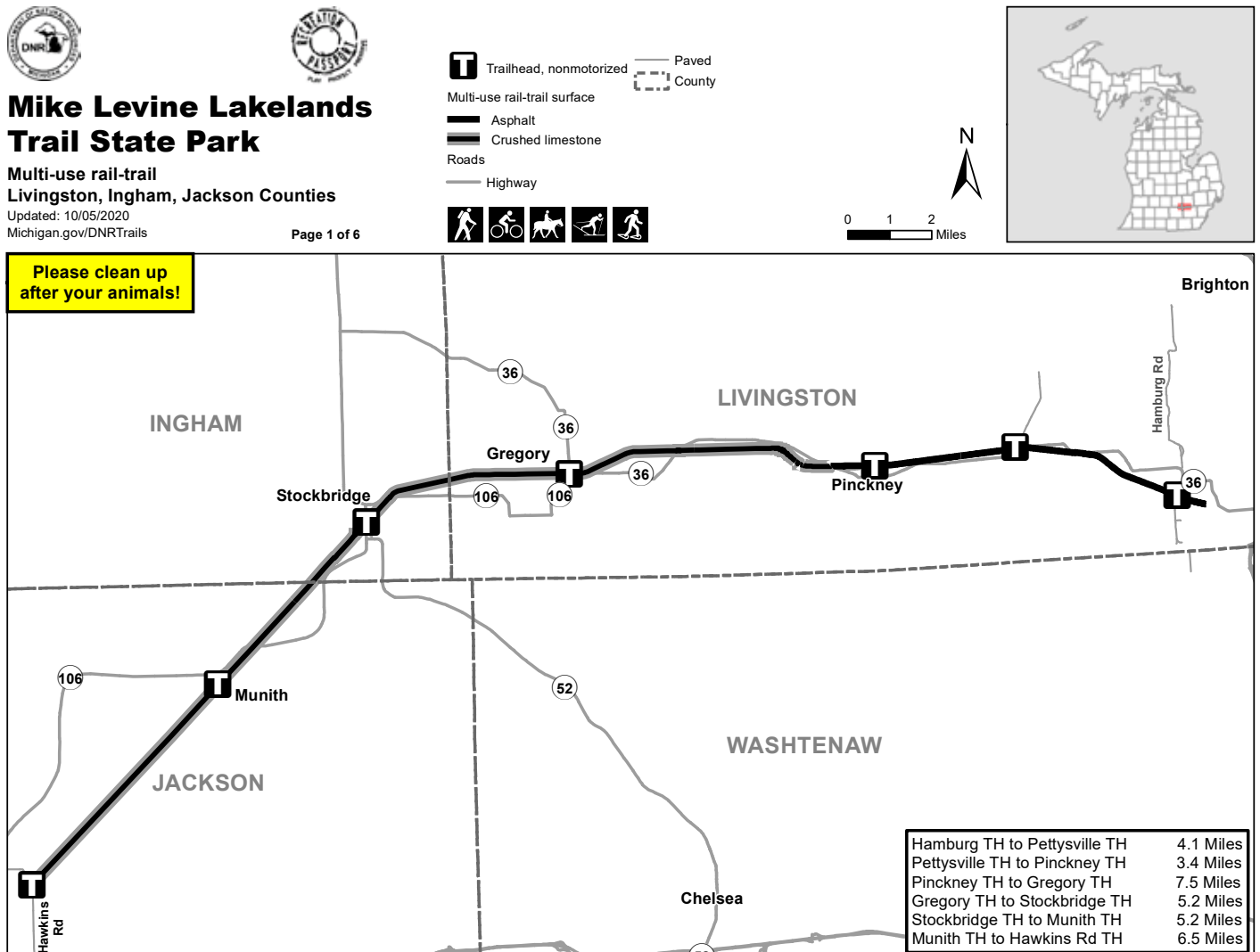
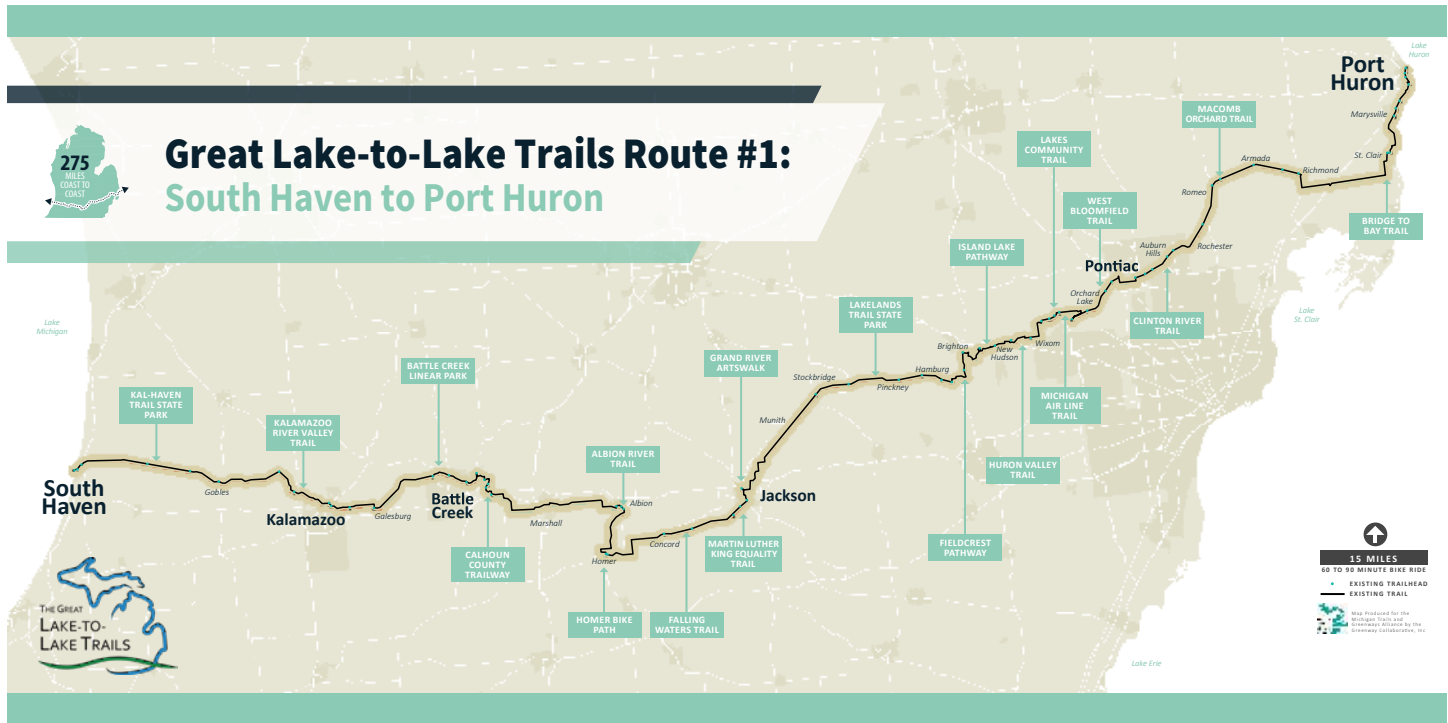


Figure 5. Great Lake-to-Lake Trail



The MLLT is key component in the **Great Lake-to-Lake Trail (GLLT)** that stretches from South Haven to Port Huron. Originally envisioned as a single trail, the GLLT concept has expanded to include four additional routes in both the Lower and Upper Peninsulas. Route 1 is the longest of the alignments, and incorporates nineteen regional systems spanning 315 miles. The trail is roughly 75% complete as of the fall of 2021.

The MLLT/GLLT merges with the **Iron Belle Trail (IBT)** in Stockbridge. The IBT is a 2,000+ mile route running from Belle Isle in Detroit to Ironwood in the far western Upper Peninsula. First announced in 2012, the Iron Belle Trail (IBT) system is the longest designated state trail in the United States. The IBT will provide a 1,273 mile biking and 791 mile hiking route winding from Belle Isle in Detroit to Ironwood in the far northwest corner of the Upper Peninsula. The trail takes advantage of existing multi-use trail systems, and fills gaps between communities where needed.

The IBT will become an important leg in the **North Country Trail**, the 4,600 mile trail system which spans from eastern New York to central North Dakota. Michigan's section of the trail will be the longest in the North Country system. The Michigan Department of Transportation (MDOT) maintains the bike trail along US-2 in the Upper Peninsula, while the Michigan Department of Natural Resources (MDNR) and local municipalities are responsible for the bike sections in the Lower Peninsula.

The IBT has spurred a flurry of activity across the state, with communities vying for the opportunity to connect with the system. The IBT will eventually travel just west of Unadilla Township, following Washtenaw County's **Border to Border Trail (B2B)** and connecting with the Lakelands Trail just north of the Township. Providing connections through the Pinckney and Waterloo State Recreation Areas could bring significant amounts of bikers, hikers, and equestrians to the Township.

Finally, Washtenaw County's **Border to Border (B2B) Trail** will connect the communities of Stockbridge, Dexter, Chelsea, and Pinckney. The original B2B configuration followed the Huron River north through Hudson Mills Metropark, ultimately connecting to the Lakelands Trail. The B2B's "Loop" configuration follows M-52 west to Stockbridge. This revised Loop alignment was developed in part due to easement issues with the original configuration and to ensure that gaps in the Iron Belle Trail network were filled as quickly as possible. While the original configuration has not been abandoned, its completion date has been postponed in favor of the new western route through Chelsea.

Figure 6. Iron Belle Trail

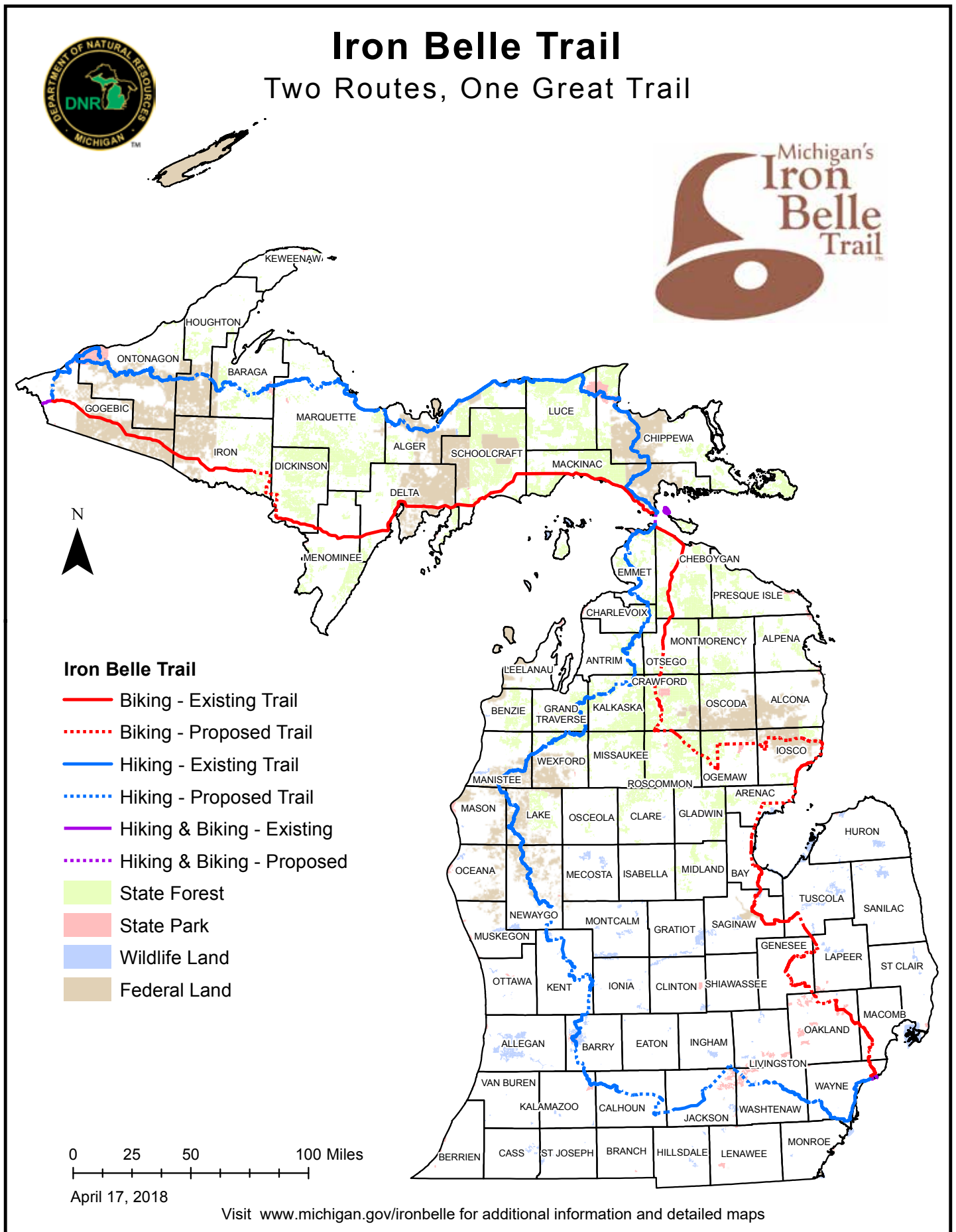
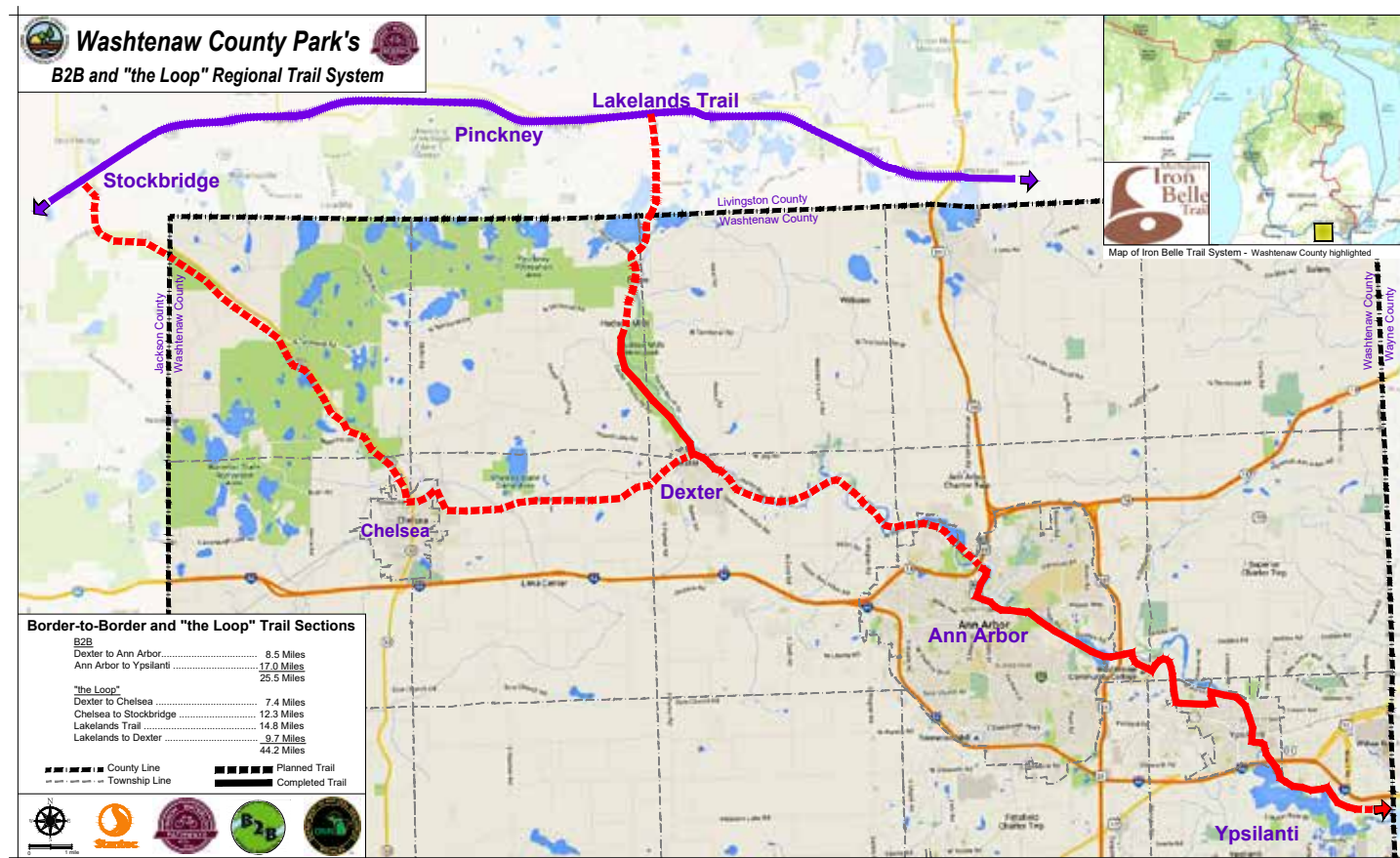


Figure 7. Border-to-Border Trail



School Facilities

While there are no public school buildings in Unadilla Township, the Stockbridge Community School District retains a sixteen acre property with a ball field and basketball court adjacent to the Township Hall Playground (see page 18).

Private Facilities

The **Edwin S. George Reserve** is a wildlife sanctuary and biological research area owned by the University of Michigan. It includes 268 acres in Unadilla Township and 1,300 acres of land in Putnam Township. The Reserve is used for research purposes by the University and is not open to the public.

Just south of the reserve is a former campground which has been redeveloped by the University as a camp for children with chronic and life-threatening health challenges. The 105-acre **North Star Reach**, located just north of Kaiserville on a peninsula between Patterson and Woodburn Lakes, serves over 1,500 area children and their families free-of-charge each year, including those with cancer, heart disease, ventilator dependency, organ transplants, sickle cell disease and other conditions.



Regional Recreation Facilities

In addition to the local recreation facilities, there are almost 3,000 acres of state-owned recreational facilities in Unadilla Township as well as an approximate additional 43,000 acres of parkland owned by the state and the Huron-Clinton Metropolitan Authority (HCMA) in adjoining townships. These facilities are considered regional recreational facilities. They are large facilities that provide opportunities such as camping, swimming, boating, hiking and golfing which are typically beyond the ability of a local municipality to provide. Descriptions of the regional parks located within the Township's borders are provided beginning on page 26. Table 8 lists the recreational activities they offer.

REGIONAL RECREATION FACILITY KEY

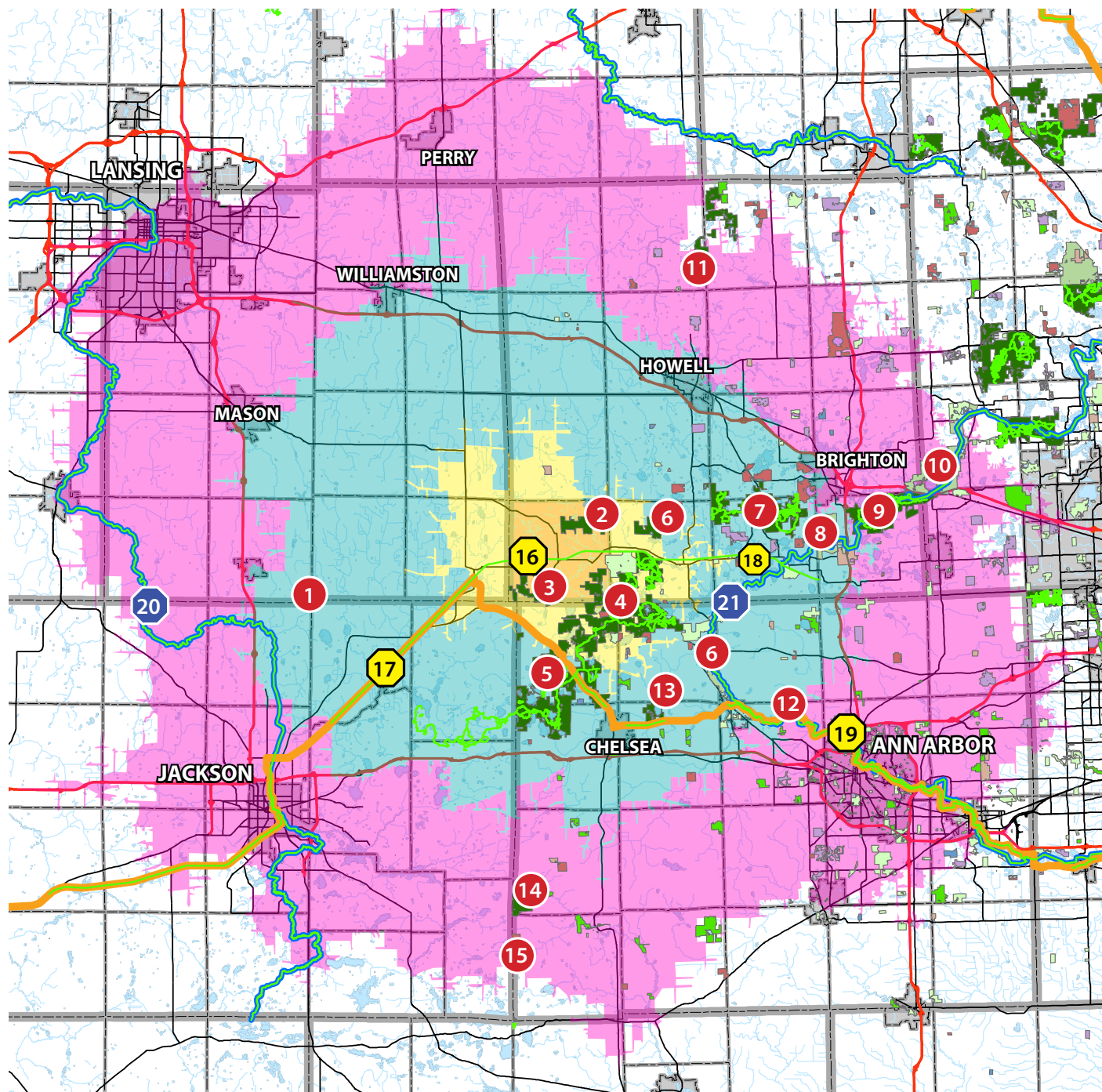
1. Meridian-Baseline State Park
2. Gregory State Game Area
3. Unadilla State Game Area
4. Pinckney State Recreation Area
5. Waterloo Recreation Area
6. Hudson Mills Metropark
7. Brighton State Recreation Area
8. Huron Meadows Metropark
9. Island Lake Recreation Area
10. Kensington Metropark
11. Oak Grove State Game Area
12. Delhi Metropark
13. Chelsea State Game Area
14. Sharonville State Game Area
15. Watkins Lake State Park & County Preserve
16. Mike Levine Lakelands State Trail
17. Iron Belle Trail*
18. Great Lake-to-Lake Trail*
19. Border-to-Border Trail
20. Upper Grand River Water Trail
21. Huron River National Water Trail

**Larger trail system composed of smaller components, e.g. the M. Levine Trail is part of the Great Lake-to-Lake Trail.*



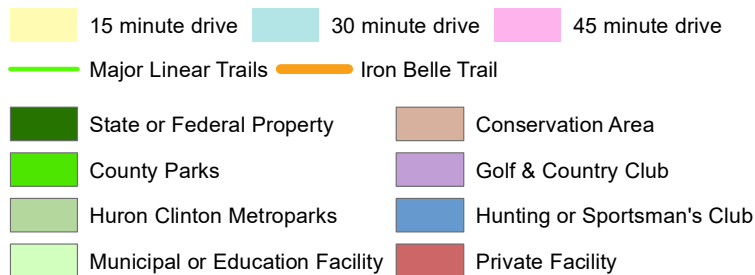
Waterloo Recreation Area

Map 6. Regional Recreation Facilities



Regional Recreation Facilities

Unadilla Township, Livingston County



0 5 10 Miles



Source: State of Michigan GIS
Carlisle/Wortman Associates
July 2021



Table 8. Regional Recreation Facilities

				ACTIVE-USE ACTIVITIES										PASSIVE-USE ACTIVITIES															
Category	Name	Acres / miles	Approximate distance from Township Hall in miles	Baseball / Softball Fields	Basketball	Disc Golf	Golf	Horseshoes / Shuffleboard	Sand Volleyball	Skate Park	Soccer / multi-purpose field	Tennis & Pickleball	Zip Line	Banquet Facilities / Spec Events	Visitors Center	Community Center/ Indoor Facility	Fitness Center / Equipment	Michigan State Park Explorer	Nature Programs	Geocaching	Metal Detecting	Dog Parks / Trial Course	Pet Friendly Area	Playground	Picnic Area	Picnic Shelter	Radio Control Flying	Watchable Wildlife / Birding	
STATE PARKS	Brighton Recreation Area	4,947	12			•												•		•	•		•	•	•	•		•	
	Chelsea State Game Area	803	15																									•	
	Gregory State Game Area	2,706	-																									•	
	Island Lake State Rec Area	4,000	26																				•			•		•	
	Maybury State Park	1,000	32																					•	•	•		•	
	Meridian-Baseline State Park	108	18																						•	•			
	Oak Grove State Game Area	2,453	30																									•	
	Pinckney Rec Area	11,000	-																•		•			•	•	•		•	
	Sharonville State Game Area	4,387	10																					•	•	•			•
	Unadilla Wildlife Area	1,158	-																									•	
	Waterloo Rec Area	20,000	13			•										•						•			•	•	•		•
	Watkins Lake State Park	1,839	32																									•	
METROPARKS	Delhi	81	21																•	•				•	•	•			
	Dexter-Huron	122	18	•															•	•				•	•	•			
	Hudson Mills	1,549	13	•	•	•	•	•	•		•	•				•	•				•	•			•	•	•		•
	Huron Meadows	1,576	20					•			•								•	•				•	•	•			
	Kensington	4,543	30			•	•	•	•			•			•	•			•	•				•	•	•			•
COUNTY	Fillmore County Park (Livingston County)	198	24																									•	
	Lutz County Park (Livingston County)	300	32																						•			•	
TRAILS	M. Levine Lakelands Trail	34 mi	-																										
	Great Lake-to-Lake Trail	275 ml	-																										
	Iron Belle Trail	2,000 mi	6																										
	Border-to-Border Trail	40 mi	9																										
WATER TRAILS	Huron River Water Trail	104 mi	9																										
	Upper Grand River Trail	91 mi	24																										



Island Lake Recreation Area

TRAILS				WATER / BOATING		WINTER SPORTS		CAMPING AMENITIES										HUNTING													
Hiking	Biking	Bike Rental	Mountain Biking / BMX Course	Equestrian	Swimming / Beach	Splash Pad / Pool / Water Slide	Paddlesports	Boat Rental	Boat Launch	Snowshoeing	Cross Country Skiing	Snowmobiling	Ice Skating / Hockey	Sledding	Equestrian Camping	Electrical Service	Winter Camping	Concession Store / Food	Cabins And Lodges	Rustic Site	Group Use Area	Walk-In / Paddle-In Sites	Yurt	Vault Toilet	Modern Restrooms	Sanitation Station	Shooting Range	Hunting	Fishing	Fishing Pier	
•			•	•	•		•	•	•		•				•			•	•	•	•		•	•		•		•	•	•	
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Comparison to Recreation Standards

The National Recreation and Park Association (NRPA) has classified parks and recommended an appropriate amount of parkland for a given population size. Although these guidelines are useful in pointing out deficiencies, a community's recreation system should be tailored to meet the needs of the community and not based on national guidelines.

According to the NRPA, parks and open spaces are categorized as mini-parks, neighborhood parks, community parks, and regional parks. The mini, neighborhood, and community parks are the close-to-home parks, designed to satisfy the recreational needs of local communities within a service radius of up to two miles. Unadilla Township Community Park, the Township Hall Playground, and downtown Gregory trailhead are all considered close-to-home parks. According to NRPA standards, the amount of close-to-home parkland recommended is 6.25 to 10.5 acres for every 1,000 residents.

Regional parks and preserves are parks that serve a broader area (a service radius of about 40 miles) than community parks and focus on meeting the recreation needs of the region as well as preserving unique landscapes and open spaces. This would include the state-owned, HCMA, and County parks and recreation areas described in the preceding pages. The NRPA suggested standard for regional parks is 15 to 20 acres of parkland per 1,000 people.

Other types of parks including school sites, greenways, and private recreation facilities, which can also contribute to the local park and recreation system:

- Schoolyards: areas that can fulfill the space requirements for other classes of parks such as neighborhood and community parks, which include the former school facility in Gregory;
- Greenways: areas that link park system components together to form a continuous park environment, which include the Lakelands Trail; and
- Natural Resource Areas: land set aside for the preservation of significant natural resources or open spaces, which include the land conservancy sites.

According to the NRPA standards, the Township recreation properties do not meet the minimum acreage for close-to-home parkland. Several recreation facilities provided by the land conservancies, however, are open to the public and located within the Township borders. In addition, the residents of the Unadilla are well served by regional recreation and game areas provided by the state that are located in Unadilla and in adjacent townships.

Table 9 compares the NRPA suggested standard with existing Township parks based on American Community Survey (ACS) 2020 population estimates and SEMCOG projected population for 2045. According to these suggested parkland acreage standards, Unadilla's parks fall short of the total recommended acreage for close-to-home parkland. Inclusion of the school property adjacent to the Township Hall playground helps to offset this deficiency, however. As new developments are planned in coming years, it will be important to work with developers to set aside space for local recreation opportunities. Tot lots and micro-parks owned and operated by homeowner associations or other housing authorities can help to address the deficiency in this area.

Conversely, the residents of the area are exceptionally well-served by the regional park facilities provided by the state and other entities. These regional facilities, with their well blended mix of active and passive recreation opportunities, effectively act as the Township's community parks. Adjacent township parks, private, and school recreational facilities also act as important recreational opportunities for Township residents.

Table 9. Suggested Parkland & Acreage

Type of Park	NRPA Minimum Standard Acres per 1,000 residents	Required Parkland Acres (Based on 2020 population of 3,425)	Required Parkland Acres (Based on 2045 population of 4,246)	Existing Acreage	2021 Parkland Surplus / Deficiency
Close to Home Parkland	6.25 - 10.5	21.4 - 26.5	26.5 - 44.6	3.8	17.6 - 22.7 acre deficiency
Regional Parks (within Unadilla Township)	15 - 20	51.4 - 68.5	63.7 - 84.9	~3,500	3,400 acre surplus
School Sites	n/a	n/a	n/a	16.5	n/a
Trails	n/a	n/a	n/a	6 miles	n/a

Accessibility Assessment

A critical component in planning for recreation facilities is providing barrier-free access to accommodate the needs of all people, including disabled individuals. The ranking system suggested by the Michigan Department of Natural Resources Guidelines (2006) to determine accessibility was used to evaluate Township parks. The ranking system ranges from 1 to 5:

1. None of the facilities meet accessibility guidelines
2. Some of the facilities/park areas meet accessibility guidelines
3. Most of the facilities/park areas meet accessibility guidelines
4. The entire park meets accessibility guidelines
5. The entire park was developed/renovated using the principles of universal design

Unadilla Township's three recreation properties were evaluated using the MDNR ranking system (Table 10). The specific elements that were evaluated include parking, paths of travel to activity areas, activity areas themselves, support facilities such as restrooms, and surfacing.

Future park projects will be designed to comply with or exceed accessibility guidelines of the American with Disabilities Act (ADA). It is the intent of the Township to develop all future projects to meet or exceed ADA requirements, and provide recreational amenities that meet the needs of all Unadilla Township residents.

Table 10. Accessibility Assessment

Facility Name	Rating	Comments
Unadilla Township Community Park	3	Lack of accessible parking primary reason for 2 rating. New playground structures are ADA compliant, but lack a barrier free path to the structures. The recent addition of accessible swings on the new swingset and accessible picnic tables have improved conditions. Parking and pathways would raise the score to a 4.
Unadilla Township Hall Playground	1	No accessible paths to play structures. Play structures themselves are not considered ADA compliant.
Mike Levine Lakelands Trail Trailhead	4	All of the new facilities including the portable toilets are designed to be accessible. The handicap accessible horse mount is specifically designed for universal accessibility. The trail itself was resurfaced in 2017 to crushed and compacted limestone, which is considered accessible, and plans to convert a portion to asphalt will further improve accessibility.

Status Of Grant Assisted Projects

Unadilla Township has received three MDNR grants for the development of parks facilities, and one additional grant from the Chelsea Wellness Foundation for the purchase of a playscape. The most recent grant was used in conjunction with a TAP grant and private donations to help fund improvements to the Mike Levine Lakelands State Trail.

Table 11. MDNR Grant Assisted Projects

Grant Source	Year	Amount	Grant #	Description / Status
Recreation Passport	2013	\$39,676	RP11-430	Unadilla Township Community Park: Walking trail around perimeter of park, pathway from Barnum Road to pavilion, solar lighting in pavilion. Improvements are in good condition.
Recreation Passport	2015	\$60,000	RP13-480	Lakelands Trail Trailhead: Handicap accessible horse mounting block, bike racks, park benches, picnic tables, pavilion with solar lighting, pathway from parking area to pavilion/beginning of trail, handicap parking space, decorative fencing. Improvements are in excellent condition.
Chelsea Wellness Foundation	2013	\$15,500	n/a	Unadilla Township Community Park: New handicap accessible play structure.
MNRTF	2017	\$300,000	TF17-0093	Improve six miles of trails to crushed limestone surface. Total project cost was \$1.25 million with \$700K from TAP funding, \$300K MNRTF, \$200K provided by private donations, and the remainder provided by the Township. The trail remains in excellent condition and is heavily used.



Chapter 6: Administrative Structure

The administration of parks and recreation services in Unadilla Township is the responsibility of the Township Board. A Recreation Committee was reconvened in 2016 to guide the preparation of the 2017 Recreation Plan, and continues in an advisory role to the Board.

Funding & Budget

Maintenance and improvements of the Township recreation facilities are funded through the Township General Fund. In 2021-2022, the Township allocated \$26,000 to recreation facilities and management.

Figure 8. Organizational Chart

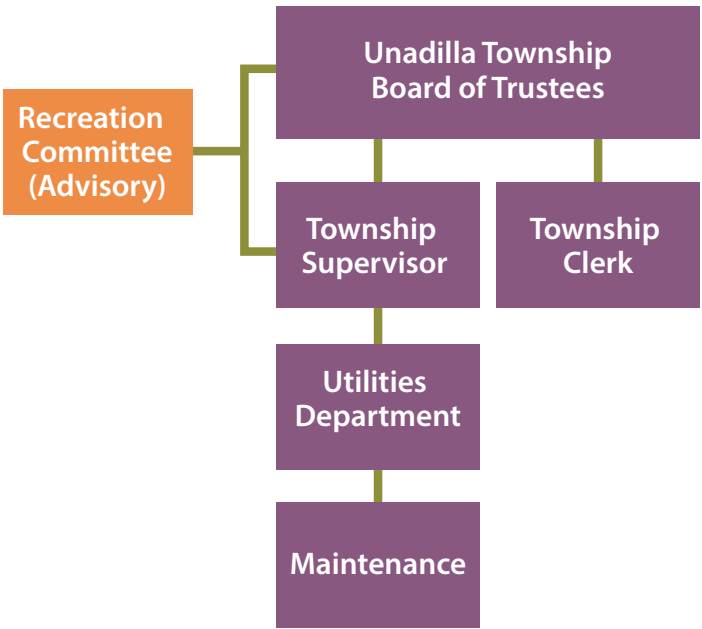


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Executive Summary
Goals & Objectives
Action Plan
Needs Assessment & Public Participation
Recreation Inventory
Administrative Structure
Community Description

Volunteers & Partnerships

Unadilla Township now owns the former Stockbridge school building in downtown Gregory, utilizing it as the Township Office. Along with the building itself, the associated playground is also owned and maintained by the Township and utilized as park space. The large open space and sports fields adjacent to the playground are still owned and operated by Stockbridge Schools. Unadilla has a close relationship with Stockbridge schools and residents regularly take advantage of recreation programs offered by Pinckney, Stockbridge and Fowlerville Community Schools.

Other organizations run various athletic recreation programs independently from the Township. For the most part, the sports programs that are available to Unadilla residents are part of the communities of Pinckney, Stockbridge and Fowlerville. These organizations oversee soccer, baseball and softball recreation leagues and programs. They are typically responsible for all expenses related to the sports programs. Some of these organizations include:

- The **Hamburg Community Soccer Club** which offers non-travel and travel soccer programs for boys and girls ages 14-18;
- The **Pinckney-Hamburg Baseball Softball Association**, which provides youth recreation baseball and softball for ages 4-12, travel baseball for ages 9-18, travel softball for ages 11-14 and adult co-ed softball.

Service clubs and community groups have also played a significant role in providing additional volunteer labor and financial support for park facilities and programs. Resident groups that are not necessarily affiliated with any specific organization have also made a large impact on Unadilla facilities, assisting with maintenance and upkeep as needed. Clubs and groups which have had an active role in the Township include:

Local service clubs:	<ul style="list-style-type: none">• Stockbridge Lions• Stockbridge Legions• Fowlerville Rotary• Fireman’s Association
Scouting Groups:	<ul style="list-style-type: none">• Boy Scouts of American• Girl Scouts
Recreation Use Groups:	<ul style="list-style-type: none">• Waterloo Horsemen’s Assoc.• Brighton Trail Riders• Michigan Mountain Biking Association• Pinckney Pedalers
Land Conservancies	<ul style="list-style-type: none">• Livingston Land Conservancy• Southeast Michigan Land Conservancy
Other Organizations:	<ul style="list-style-type: none">• Friends of the Lakelands Trail• Lakelands Trail Committee• Adopt-a-Trail Volunteers

Outside of organized groups, numerous individuals have donated time, effort, money, and materials towards Unadilla recreation facilities. Unadilla may want to consider connecting these individuals with the aforementioned organizations, or help existing “Friends of...” groups expand their charters to include the Township’s individual recreation facilities.

Chapter 7: Community Description

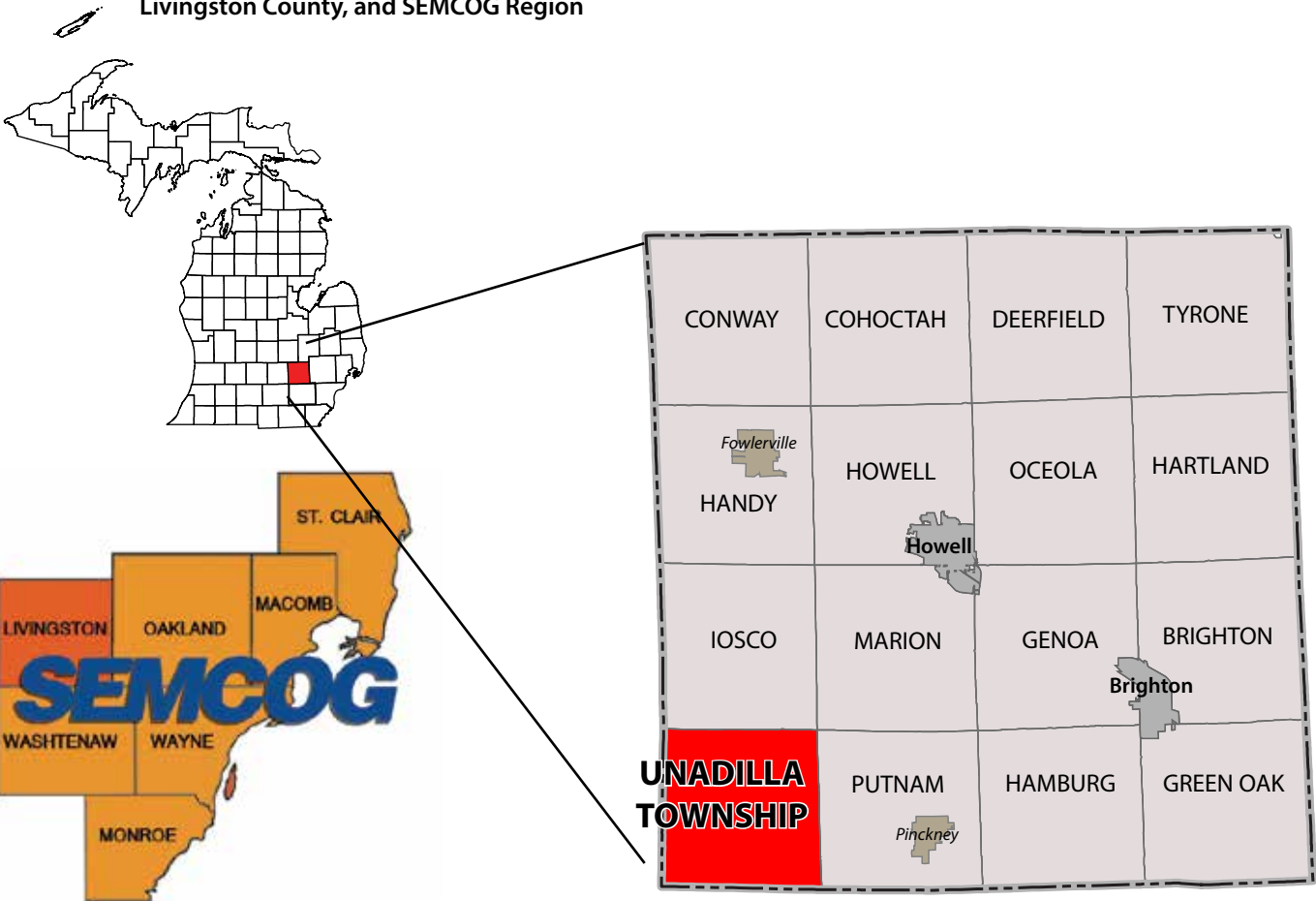
Regional Setting

The Township of Unadilla is located in southwestern Livingston County. It borders Washtenaw County to the south, Jackson County to the southwest and Ingham County to the west. Unadilla Township is approximately 13 miles south of I-96, 19 miles west of US-23 and nine miles north of I-94. As a result, it is not highly accessible from a regional perspective. Locally, two major roads bisect the community: M-36 and M-106. M-36 runs east-west from US-23 to US 127 and connects Pinckney to Gregory. From Gregory, it runs northwest through Plainfield. M-106 runs east-west from Gregory to Stockbridge in Ingham County. The Township contains the agricultural community of Plainfield, the business center of Gregory and the hamlet of Unadilla, which is nestled in a river valley. Unadilla Township enjoys a reputation as a highly desirable place to live because of its open spaces and natural areas.

Livingston County is located in the northwest area of the Southeast Michigan Council of Governments (SEMCOG) region. SEMCOG is the regional planning agency that conducts planning studies and maintains a comprehensive database of information about each community it serves. It is a source for some of the population and land use related data included in this report.

In planning for the future recreation needs of Unadilla Township, it is essential to understand both the community of people to be served and the recreation resources which the community offers. The first part of this document provides an overview of the population, physical, and recreation resources of the Township with the goal of understanding the unique features and opportunities the community offers.

Figure 9. Context Maps - State of Michigan, Livingston County, and SEMCOG Region



Population

Table 12 and Table 13 present the population, household, and housing characteristics of Unadilla Township according to the U.S. Census Bureau and SEMCOG Forecast information. Unadilla experienced a population decline of 1% between 2010 and 2020, and decreases were seen in two of the Township's immediate neighbors, with the Putnam Township experiencing the largest drop. SEMCOG forecasts steady growth for most of the region, however, with only Iosco Township projected to lose population. Unadilla's 27% projected growth is the highest percentage rate in the region. From population perspective, only Marion Township is expected to gain more residents by 2045 (1,826 new residents compared to Unadilla's 918).

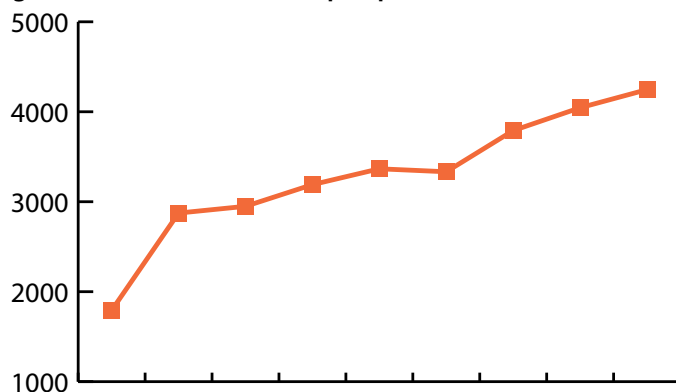
Table 12. Population Projections, Unadilla Township Area*

Community	2022	2045	% change 2022-2045
Unadilla Twp	3,365	4,246	27.4%
Iosco Twp	3,242	3,242	-16.2%
Marion Twp	11,769	13,071	16.2%
Putnam Twp	2,351	2,845	17.8%
Pinckney (City)	5,531	6,333	15.7%
Dexter (City)	4,605	4,641	3.1%
Dexter (Twp) (W)	6,608	7,326	9.4%
Lyndon Twp (W)	3,067	3,067	15.5%
Livingston Cty	196,820	241,566	21.7%
Southeast MI	4,792,437	5,104,922	7.1%

Table 13. Historical Population Data, Unadilla Township Area*

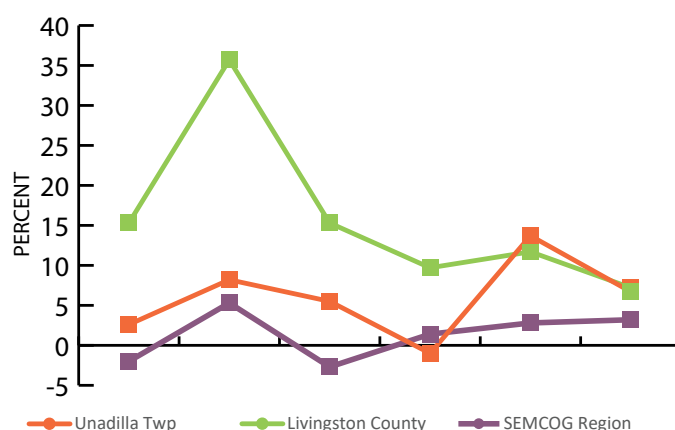
Community		1990	2000	2010	2020	Percent change 2010 - 2020
Livingston County	Unadilla Twp	2,949	3,190	3,366	3,333	-1.0%
	Iosco Twp	1,567	3,039	3,801	3,870	1.8%
	Marion Twp	4,918	6,757	9,996	11,245	12.5%
	Putnam Twp	4,580	5,359	5,821	2,415	-5.9%
	Pinckney	1,603	2,141	2,427	5,475	-0.5%
Washtenaw County	Dexter, City of	1,497	2,338	4,067	4,500	10.6%
	Dexter Twp	4,407	5,248	6,042	6,696	10.8%
	Lyndon Twp	2,228	2,728	2,720	2,656	-2.4%
Ingham / Jackson	Stockbridge Twp (Ingham)	2,971	3,435	3,896	3,912	0.4%
	White Oak Twp (Ingham)	1,074	1,177	1,173	1,199	2.2%
	Waterloo Twp (Jackson)	2,321	2,758	2,671	2,931	-2.0%
Livingston County		115,645	156,951	180,967	198,525	7.1%
Southeast MI		4,590,468	4,833,368	4,704,809	4,768,427	2.7%

Figure 10. Unadilla Township Population Trends



Source: US Census, ACS, SEMCOG

Figure 11. Population Trends by Percentage



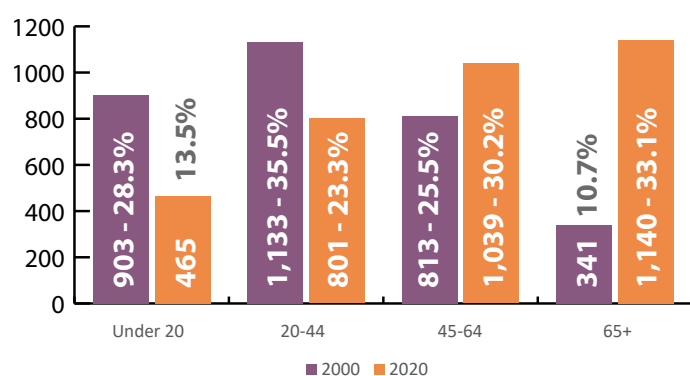
Source: US Census, ACS, SEMCOG

* Note: Stockbridge, Waterloo, and White Oak Townships fall outside of the SEMCOG region. 2020 counts are based on American Community Survey estimates. 2045 projections are not available.

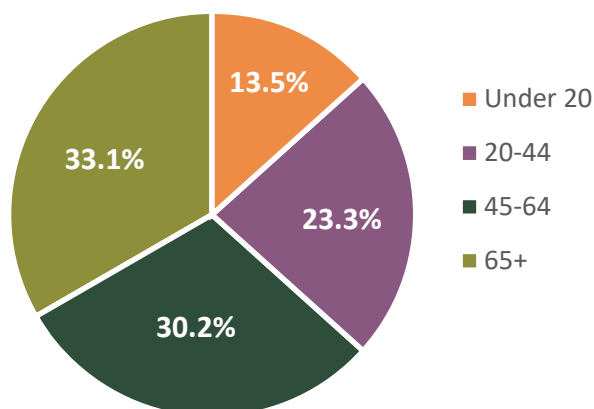
Table 14. Median Age, Unadilla Township & Region

Year	Unadilla Township	Livingston County	State of Michigan
2010	42	39.9	38.1
2011	41.7	40.5	38.5
2012	41.5	40.9	38.8
2013	40.1	41.4	39.1
2014	44.1	41.8	39.3
2015	41.5	42.1	39.5
2016	45.1	42.5	39.6
2017	47.1	42.9	39.6
2018	48.8	43.2	39.7
2019	47.8	43.5	39.0
2020	56.3	43.7	39.8
2021	56.1	43.6	40.2

Source: US Census, ACS, SEMCOG

Figure 12. Age Distribution Comparison 2000 - 2020

Source: US Census, ACS, SEMCOG

Figure 13. Unadilla Township Age Distribution 2019

Source: US Census, ACS

While the Township's population is increasing, its median age is also increasing. As shown in Table 14, Unadilla's median age rose from 42 in 2010 to 56.1 in 2021. The median age in Unadilla is significantly higher than the medians in Livingston County and the State of Michigan, and the rate of increase from 2010 to 2021 is higher in Unadilla as well (14.1 years for Unadilla, 13.7 in Livingston County, 2.1 years in Michigan, and 1.6 years across the United States).

A look at the Township's age breakdown helps explain the jump in median age. Table 15 and Figure 12 on this page and Table 16 on page 46 shows a clear shift in demographics even as population numbers are growing. Household sizes continue to decrease while the number of households with seniors 65 and older is increasing. The number of households with seniors living alone jumped 134% between 2010 and 2020, while the number of households without children increased almost 60%. These figures suggest that established Unadilla residents are more likely to "age in place", and that new residents tend to be older and living without children at home. This trend was noted in the previous recreation plan and looks as if it will continue, and emphasizes the need to meet the recreation needs of an older population.

Table 15. Unadilla Township Age Ranges 2000 - 2020

Age group	Census 2000	Census 2020	ACS 2020	% change 2000 - 2020
Under 5	187	180	135	-27.8%
5 - 9	224	222	162	-27.7%
10 - 14	253	210	103	-59.3%
15 - 19	239	231	65	-72.8%
20 - 24	139	138	89	-36.0%
25 - 29	155	157	170	9.7%
30 - 34	232	180	158	-31.9%
35 - 39	305	247	236	-22.6%
40 - 44	302	255	148	-51.0%
45 - 49	283	315	132	-53.4%
50 - 54	253	308	215	-15.0%
55 - 59	168	276	336	100.0%
60 - 64	109	220	356	226.6%
65 - 69	99	155	529	434.3%
70 - 74	92	99	196	113.0%
75 - 79	76	63	246	223.7%
80 - 84	45	65	100	122.2%
85 and up	29	45	69	137.9%

Source: US Census, ACS, SEMCOG

Table 16. Household Characteristics

Household Types	Census 2010	ACS 2020	% change	2045 SEMCOG
With seniors 65+	294	805	173.8%	832
Without seniors	992	799	-19.5%	823
Live alone 65+	85	199	134.1%	168
Live alone, under 65	180	144	-20%	166
2+ persons with children	413	294	-28.8%	432
2+ persons without children	608	967	59%	889
Total Households	1,286	1,604	24.7%	1,655

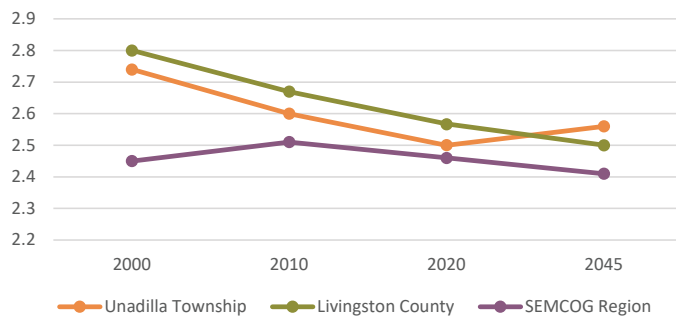
Source: US Census, ACS, SEMCOG

Table 17. Household Size, Unadilla Township & Region

	2000	2010	2020	2045
Unadilla	2.79	2.69	2.50	2.56
Livingston Cty	2.8	2.67	2.59	2.5
SEMCOG Region	2.45	2.51	2.46	2.41

Source: US Census, ACS, SEMCOG

Figure 14. Household Size Trends



Source: US Census, ACS, SEMCOG

Table 18. Components of Population Change

Component	2000 - 05 average	2006 - 10 average	2011 - 18 average
Natural increase (births/deaths)	16	6	-6
• Births	46	35	28
• Deaths	30	29	34
Net Migration (movement in - movement out)	6	7	22
Population Change (Natural Increase + Net Migration)	22	13	16

Source: Michigan Dept. of Community Health Vital Statistics, US Census, SEMCOG

Housing

According to the SEMCOG, there are 1,523 housing units in Unadilla Township, an increase of 2.6% from 2010. Unadilla's housing units consist almost exclusively of single-family detached units (89.1%) with the majority of the remaining housing being mobile homes (10.2%). 10 units are described as townhomes or attached condominiums. In comparison to surrounding communities, Unadilla lags behind half of its neighbors in overall housing stock.

Table 19. Housing Stock, Unadilla & Surrounding Region

Community	Census 2010	SEMCOG 2020	# Change	% Change
Unadilla Twp	1484	1523	39	2.6%
Iosco Township	1352	1395	43	3.2%
Marion Township	3676	4234	558	15.2%
Putnam Township	2452	2501	49	2.0%
Village of Pinckney	927	884	-43	-4.6%
City of Dexter	1704	1914	210	12.3%
Dexter Township	2612	2800	188	7.2%
Lyndon Township	1141	1192	51	4.5%
Stockbridge Twp	1409	1581	172	12.2%
Waterloo Twp	1289	1334	45	3.5%
White Oak Twp	433	486	53	12.2%
Livingston County	72809	77892	5083	7.0%

Source: US Census, ACS, SEMCOG

89% of Unadilla's housing units are occupied, with 82% owner-occupied and 7% renter-occupied. Vacant units fell from 13.3% in 2010 to 10% in 2019. Residential property values fell 12.5% between 2010 and 2019, with the median housing value dropping from \$234,031 to \$204,700. Gross rent increased slightly during that period, however, rising by 3.3%, with the median gross rent at \$1,316 in 2019.

New building permits started to recover from the Great Recession in 2018, but were hit hard by the onset of the COVID-19 pandemic in 2020. A net total of 48 new permits have been issued since 2016.

Land Use Patterns & Development Trends

Unadilla Township is primarily a rural and agricultural community consisting of significant amounts of farmland, open space and low density residential development. This development pattern is principally due to the following factors:

- Numerous lakes, wetlands and natural features;
- A limited road network, including many miles of unpaved roads; and
- Vast public land holdings including the Gregory State Game Area, Unadilla Wildlife Area and Pinckney Recreation Area.

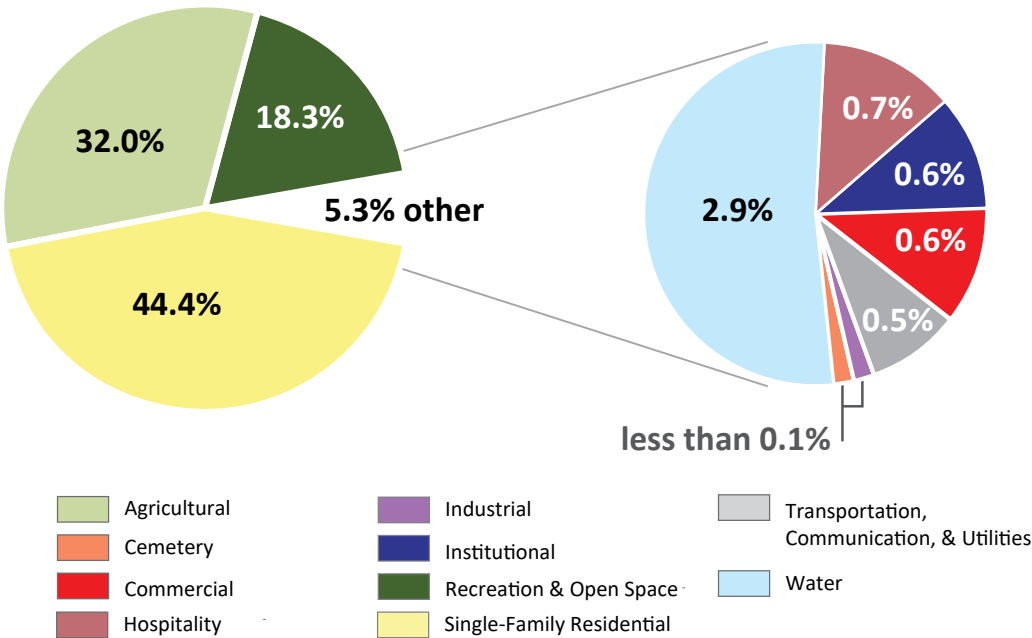
Unadilla continues to see increases in single-family residential development. Total land area dedicated to housing increased from 10,121.7 acres in 2017 to 10,184.2 acres by 2020. The changes comes primarily at the expense of agricultural land. While change is not dramatic, it does show a slow but steady move away from agriculture and highlights the importance of preserving open spaces. The state-owned recreation properties offer a certain level of open space protection, but the Township may wish to consider other acquiring sensitive properties while they remain available.

Table 20. Existing Land Use 2020

Land Use	Acres	Percent
Agricultural	7,341.9	32.0%
Single-family Residential	10,184.2	44.4%
Commercial	135.4	0.6%
Hospitality	167.06	0.7%
Industrial	4.2	0.0%
Governmental/Institutional	141.4	0.6%
Park, recreation, & open space	4,189.1	18.3%
Transportation, communication, & utility	104	0.5%
Water	676	2.9%
Total Acres	23693.6	

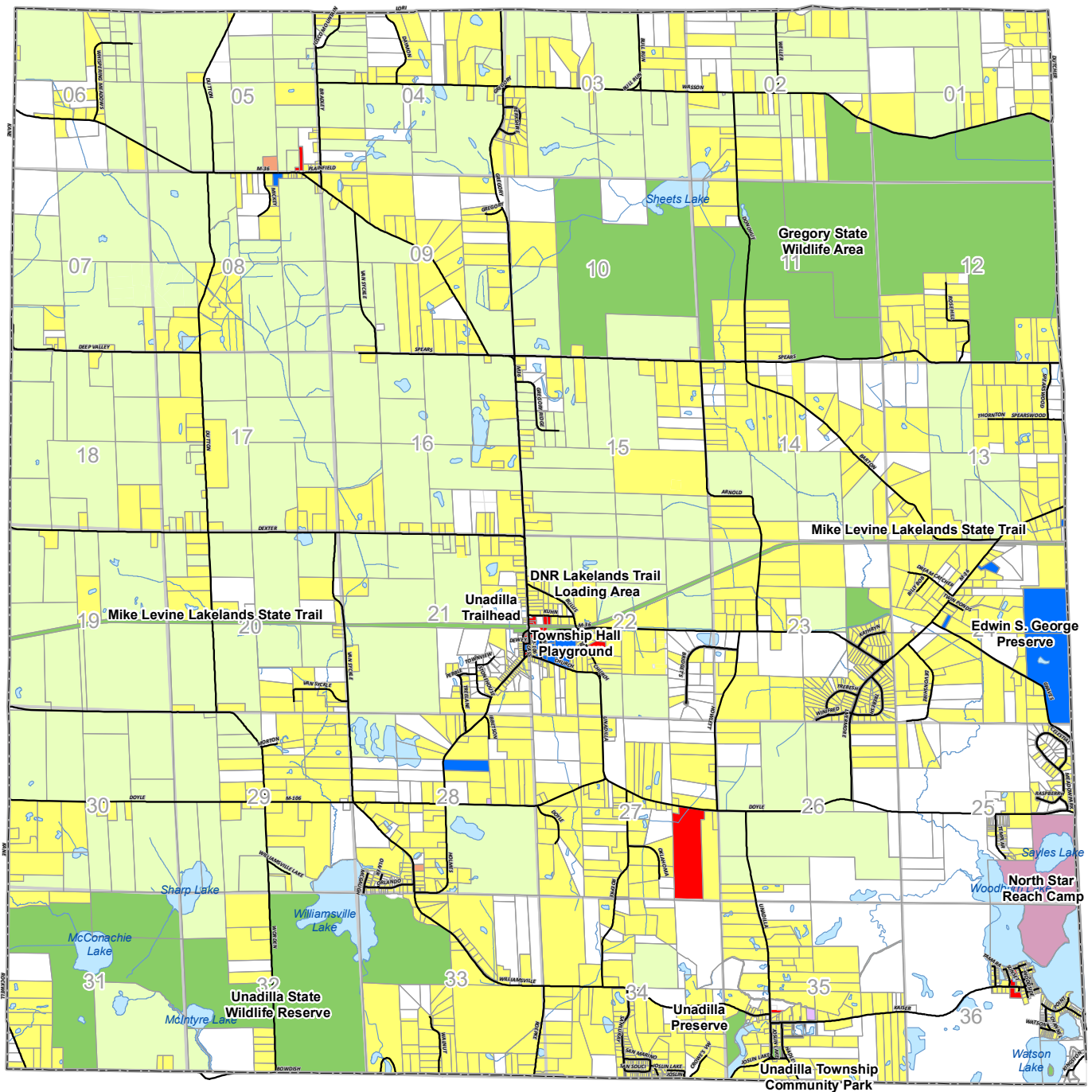
Source: Livingston County GIS

Figure 15. Existing Land Use 2020

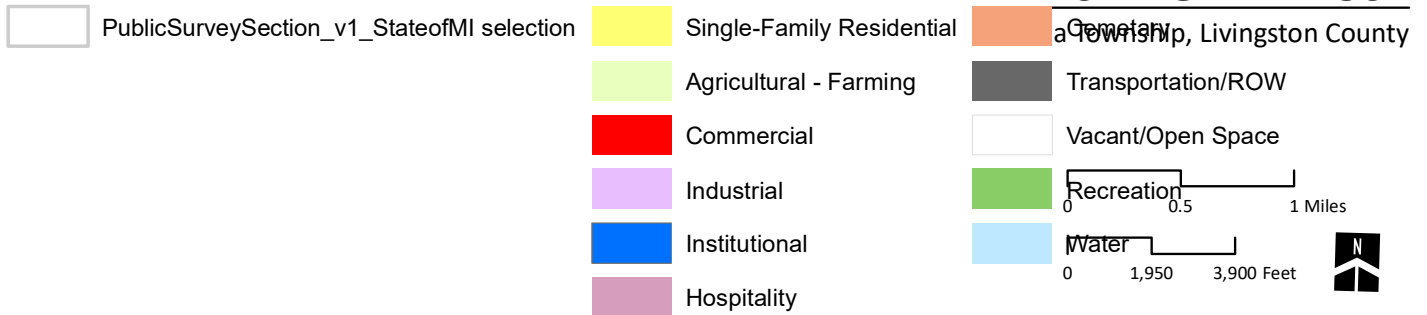


Source: Livingston County GIS

Map 7. Existing Land Use



EXISTING LAND USE



0 0.5 1 Miles

0 1,950 3,900 Feet



Source: Livingston County GIS
Carlisle/Wortman Associates
June 2021



Natural Features

Unadilla is known for its abundance of woodlands, lakes and wetlands. The natural features of the area have played a major role in influencing growth and development to the area. Like much of Michigan's southern lower peninsula, the area's landscape is characterized by gently rolling topography formed through glacial action. As the glaciers retreated, the outwash of sand, soil and debris created an irregular pattern of hills and depressions that collected water, creating the region's lakes and wetlands.

Geology and Topography

Unadilla Township sits on bedrock composed primarily of shale that was created during the Paleozoic Era. The elevation of the Township ranges from a low of 890 to a high of 1,015 feet above sea level. The topography throughout most of the Township varies between 900 and 960 feet with the elevation falling from the north to the south part of the Township. The highest spot is located in the southwest corner of Section 17 at an elevation of 1,015 feet above sea level. The lowest spots in the Township are at an elevation of 890 and located along both sides of D-19 in Sections 35 and 36, just east of Unadilla and extending to the west side of Woodburn and Watson Lakes.

Soils

According to the Soil Conservation Service, soils in Unadilla Township consist of five soil associations: Carlisle-Houghton-Gilford, Fox-Boyer-Octavo, Miami-Hillsdale, Fox-Boyer-Octavo-Houghton and Spinks-Oakville-Boyer-Octavo. The first two soil associations cover most of the Township. Carlisle-Houghton-Gilford soils are the predominant soil association and are characterized as very poorly drained, organic soils on outwash plains, in glacial drainage ways and on lake plains. This soil association is present in all four corners of the Township and in the middle of the Township including Gregory. The Fox-Boyer-Oshtemo association is found throughout the middle of the Township surrounding Gregory and Unadilla. This soil association is characterized as well-drained soils found on moraines.

The last three soil associations are present in small areas of the Township. Miami Hillsdale soils are well-drained soils found on moraines and till plains along the western boundary and in the northwest quadrant of the Township. The Fox-Boyer-Oshtemo-Houghton soils are only present in a small area north of M-36 in Section 13. This soil association is described as well-drained soils and very poorly drained organic soils on outwash plains. Most of the soils are underlain by gravelly sand and are a potential source for sand and gravel. A small area of the Spinks-Oakville-Boyer-Oshtemo association is found along the eastern boundary of the Township in Sections 24 and 25 and consists of well-drained soils on moraines.

Table of Contents	Executive Summary	Goals & Objectives	Action Plan	Needs Assessment & Public Participation	Recreation Inventory	Administrative Structure	Community Description
-------------------	-------------------	--------------------	-------------	---	----------------------	--------------------------	-----------------------

Water Resources

Unadilla Township includes two watersheds. The northern portion of the Township is part of the Red Cedar Watershed, which drains to Lake Michigan. The remaining portion which includes most of the Township is part of the Huron Watershed which drains to Lake Erie.

The Township includes ten major lakes of 10 acres or more which are located in the south portion of the Township. The three largest lakes include: Patterson Lake, which is split between Unadilla and Putnam townships, Williamsville Lake and Woodburn Lake. Sheets Lake is the fourth largest and only lake located in the northern portion of the Township. The five additional lakes range in size from 11 to 33 acres. They are located near the southern boundary of the Township and include: Mud, Watson, McConachie, Sharp and McIntyre lakes.

Unadilla Township does not contain any major rivers. However, there are two important creeks. Livermore Creek is located in the east half of the Township and travels in a north-south direction between Sheets Lake and Woodburn Lake. Portage Creek is located in the south portion of the Township and travels in a west-east direction between Williamsville and Woodburn Lakes.

In addition, the Unadilla-Stockbridge Drain travels in a north-south direction and is located in the west half of the Township. The drain extends from Section 7 near the northwest corner of the Township to connect with Williamsville Lake in Section 29.

Wetland areas are interspersed throughout the Township. The largest wetland systems are adjacent to lakes. A wetland system associated with Mud, Woodburn, Patterson and Watson lakes in the southeast corner of the Township forms the largest contiguous area of wetlands in the Township.

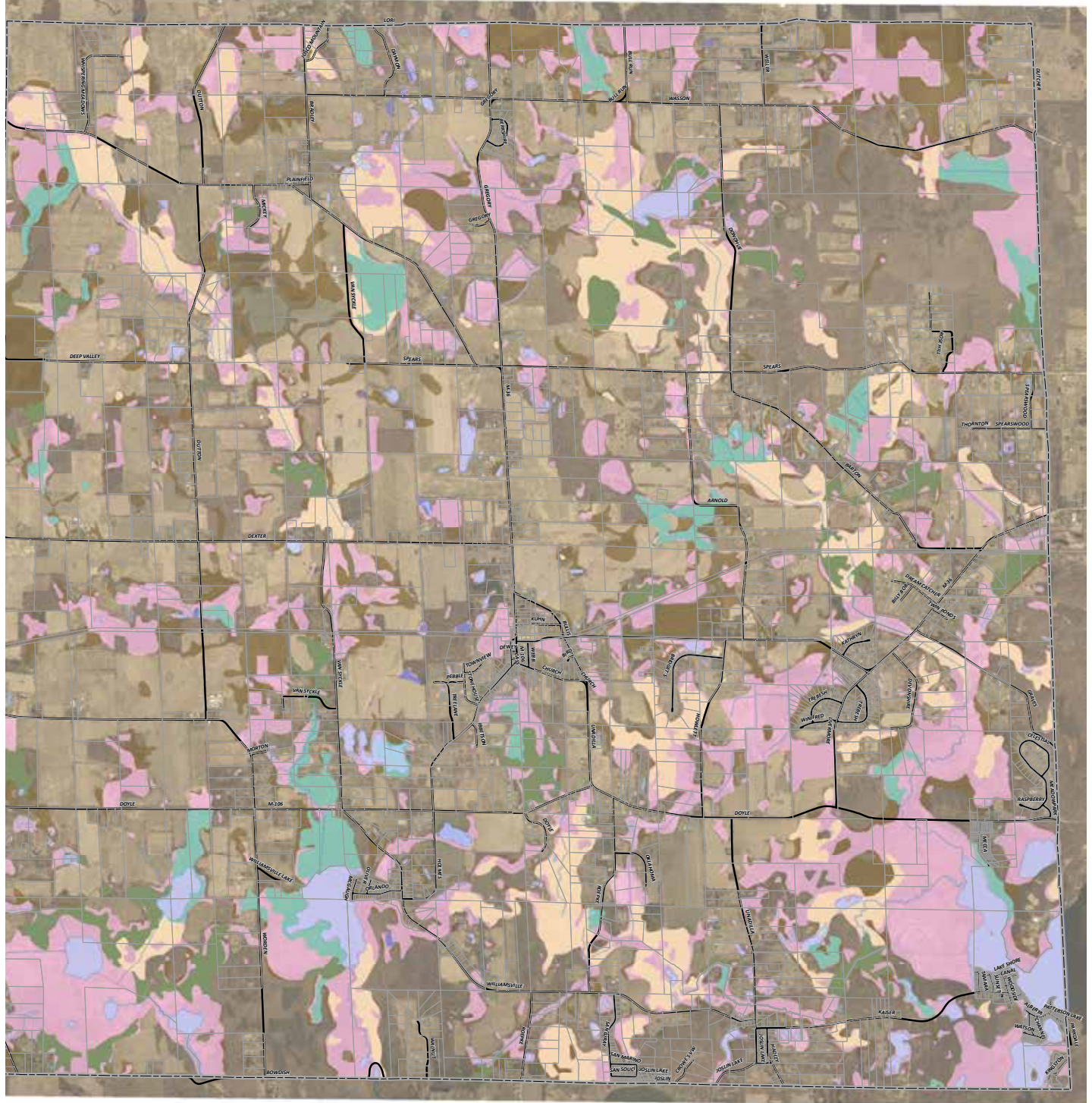
Table 21. Unadilla Township Lakes

Lake Name	Section	Acreage	Max Depth in Feet	Public Access
Patterson	36	170	60	Yes
Williamsville	28, 29, 32, 33	75.5	27	Yes
Woodburn	25, 36	67	26	No
Sheets	2, 3, 10, 11	61	20	Yes
Mud	25	33	Unknown	No
Watson	36	30	Unknown	No
McConachie	31	22	Unknown	No
Sharp	29, 30, 31, 32	20	Unknown	No
McIntyre	31, 32	10.5	23	No

Pinckney State Rec Area, Google/Shonda Adams



Map 8. Natural Features



NATURAL FEATURES

Unadilla Township, Livingston County

- Soil areas which include wetland soils
- Wetlands unclassified
- Lakes and Ponds
- Rivers and Streams

- Aquatic Bed
- Emergent
- Forested
- Scrub-Shrub



0 2,000 4,000 Feet

Source: Livingston County GIS
Carlisle/Wortman Associates
October 5, 2016



Woodlands

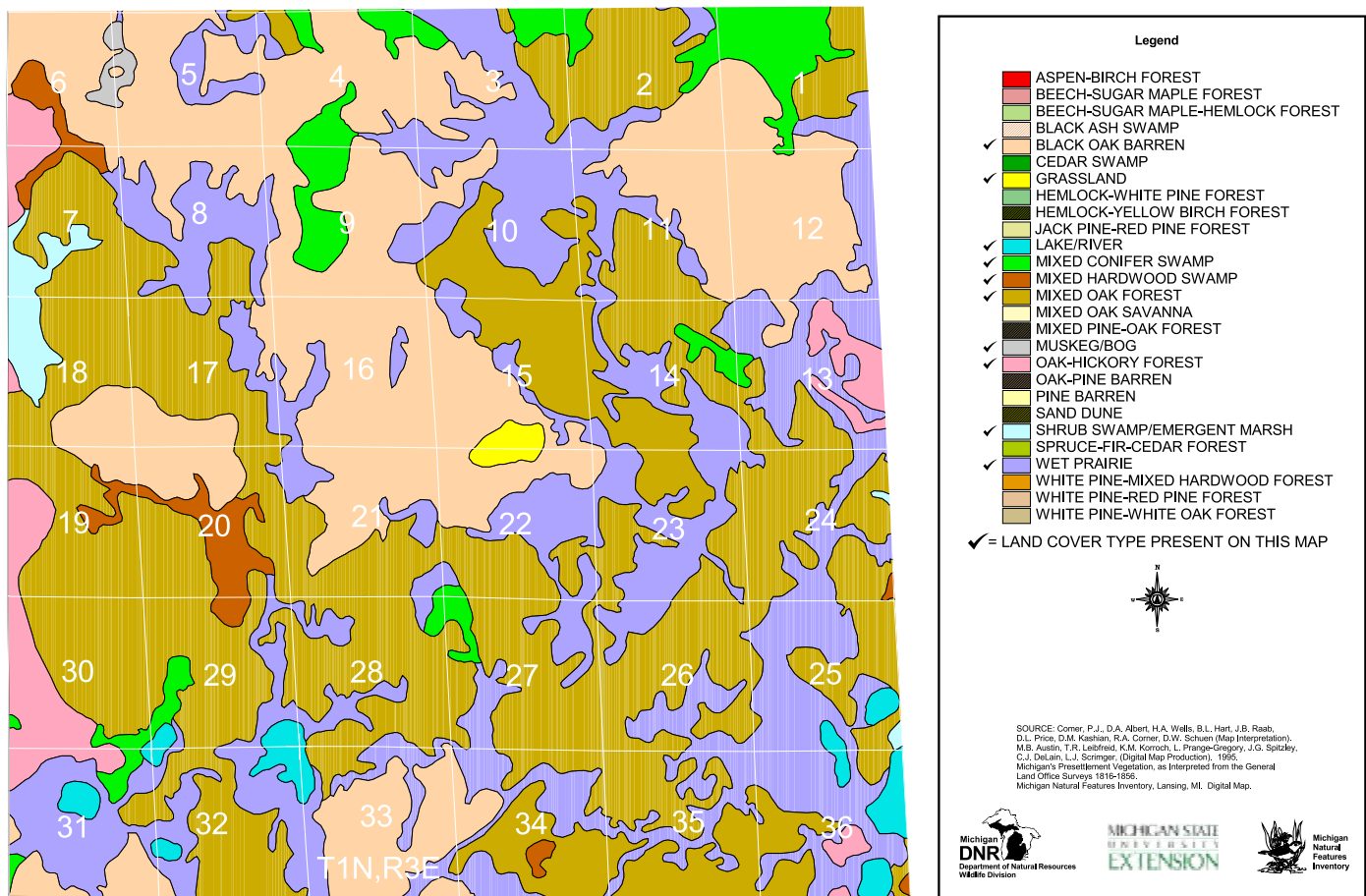
Existing woodlands are located primarily within the state parkland, along the waterways and wetlands. Moderately to well drained woodlands consist mostly of a mixture of hardwoods including oak, hickory, sugar maple, ash, cherry, beech, basswood and elm, while poorly drained woodlands consists mainly of elm, red maple, aspen, white cedar and tamarack.

Approximately 1,163 acres of woodlands are preserved in public ownership by MDNR which comprises Gregory State Game Area in the northeast portion of the Township. Other large woodland areas include approximately 150 acres in the northwest quadrant preserved by the Southeast Michigan Land Conservancy, 437 acres of woodland owned by the MDNR which includes Unadilla Wildlife Area in the southwest portion of the Township, 302 acres of woodland owned by the MDNR which contains Pinckney State Recreation Area in the southeast corner and 118 acres of woodlands owned by the University of Michigan in the southeast portion of the Township.



Pinckney State Rec Area, Google/Kenneth Nemchak

Figure 16. Unadilla Township Historical Vegetation Circa 1800



Source: Adapted from "Vegetation circa 1800 of Livingston County, Michigan", Michigan Department of Natural Resources, 1997

Planning Initiatives

While change is inevitable and growth in both population and housing will occur, Unadilla Township is committed to managing that growth to preserve its rural character and natural resources while enhancing recreational activities and overall quality of life for all its residents. The 2004 Livingston County Comprehensive Plan, the 2003 High-Quality Natural Areas study and the 2012 County Parks and Open Space Plan are recent local (Livingston County) initiatives that have relevance to the current plan. On a regional level, Michigan's trail initiatives, particularly those related to the Iron Belle Trail network and the Lake-to-Lake Trail system, as well as SEMCOG's 2014 Bicycle and Pedestrian Travel Plan for Southeast Michigan and Livingston County's Parks initiatives, have had significant bearing on Unadilla's recreation planning. Unadilla's most recent Master Land Use Plan was adopted in 2009.

2018 LIVINGSTON COUNTY COMPREHENSIVE PLAN

The 2018 Livingston County Comprehensive Plan contains a significant amount of information directly related to parks and recreation development. Public input on the plan showed a desire for additional recreation facilities on the west side of the county, with multi-use trails being the most desired green infrastructure element. Improved mapping of recreation amenities received high priority in the plan as well. Specific goals and objectives include:

- Improved coordination and collaboration between governmental entities on recreation mapping and inventory development;
- Mapping planned and proposed linkages between parks and recreation resources;
- Facilitate conservation, trail, and recreation development between public and private recreation providers;
- Encourage communities to include Complete Streets
- Encouraging the incorporation of green areas into the County's land use pattern.

SEMCOG PARKS AND RECREATION PLAN FOR SOUTHEAST MICHIGAN

The SEMCOG plan, adopted in 2019, was developed to highlight available recreation resources and ensure that the region's recreation system meets the needs of residents and visitors. The Plan notes that with over 2,300 parks covering 214,000 acres, over 400 miles of trails and greenways, and 450 miles of designated water trails, the region is well served by local, state, regional, and federal recreation authorities.

The plan provides several regional policy recommendations to address recreation development. Among the recommendations, prioritization of investment in land acquisition is viewed as necessary to address gaps in access to outdoor recreation facilities. Fostering collaboration among outdoor recreation stakeholders speaks to the need for ongoing cooperation between local and regional recreation authorities. Utilization of universal design principles ensures that facilities are accessible to residents of all abilities. Supporting conservation and stewardship of natural resources recognizes the value of open space and the desire of the region's residents to have access to natural areas in reasonable proximity to their homes.

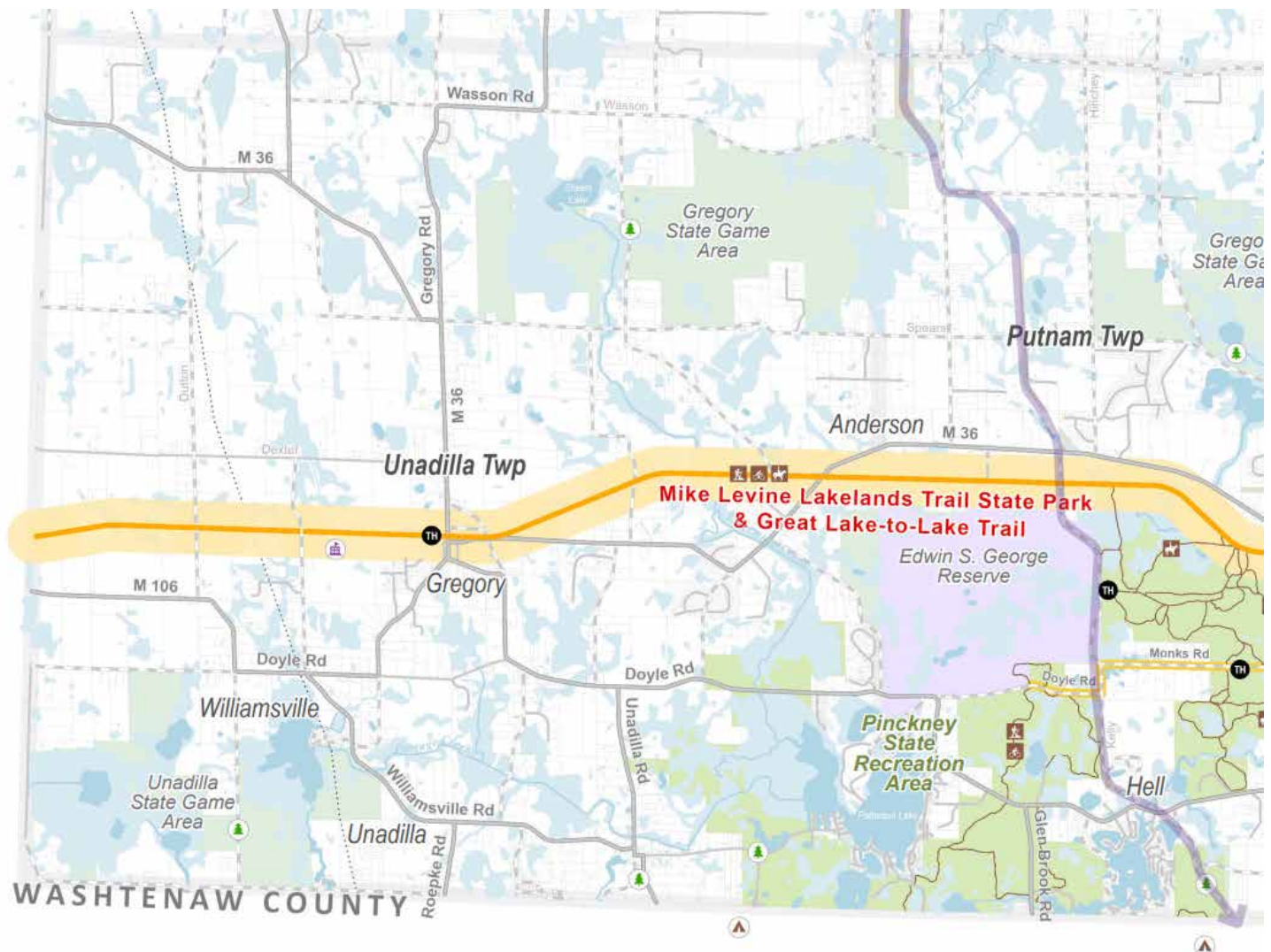
2009 UNADILLA TOWNSHIP MASTER PLAN

The Township adopted future land use goals and objectives in 2009 which spells out a plan for the future development of the Township. Preservation of the community rural character, open spaces, farmland and environmentally sensitive areas is extremely important to residents of Unadilla and is reflected in the Master Plan's goals and objectives.

LIVINGSTON COUNTY TRAILS PLAN

Adopted in 2020, the Livingston County Trails Plan gathered input from governmental representatives and community stakeholders to create an interconnected trail network. The plan identifies three named priority routes and four unnamed routes, some of which relate directly to Unadilla Township. Expansion of the Flex Route on US-23 offers improved crossing opportunities over the freeway, and direct connections between Island Lake State Recreation Area, Huron Meadows Metropark, and the Brighton State Recreation Area. Long term systems include a new route connecting south into Washtenaw County and north through Putnam, Marion, and Handy Townships.

Figure 17. Livingston County Trails Plan

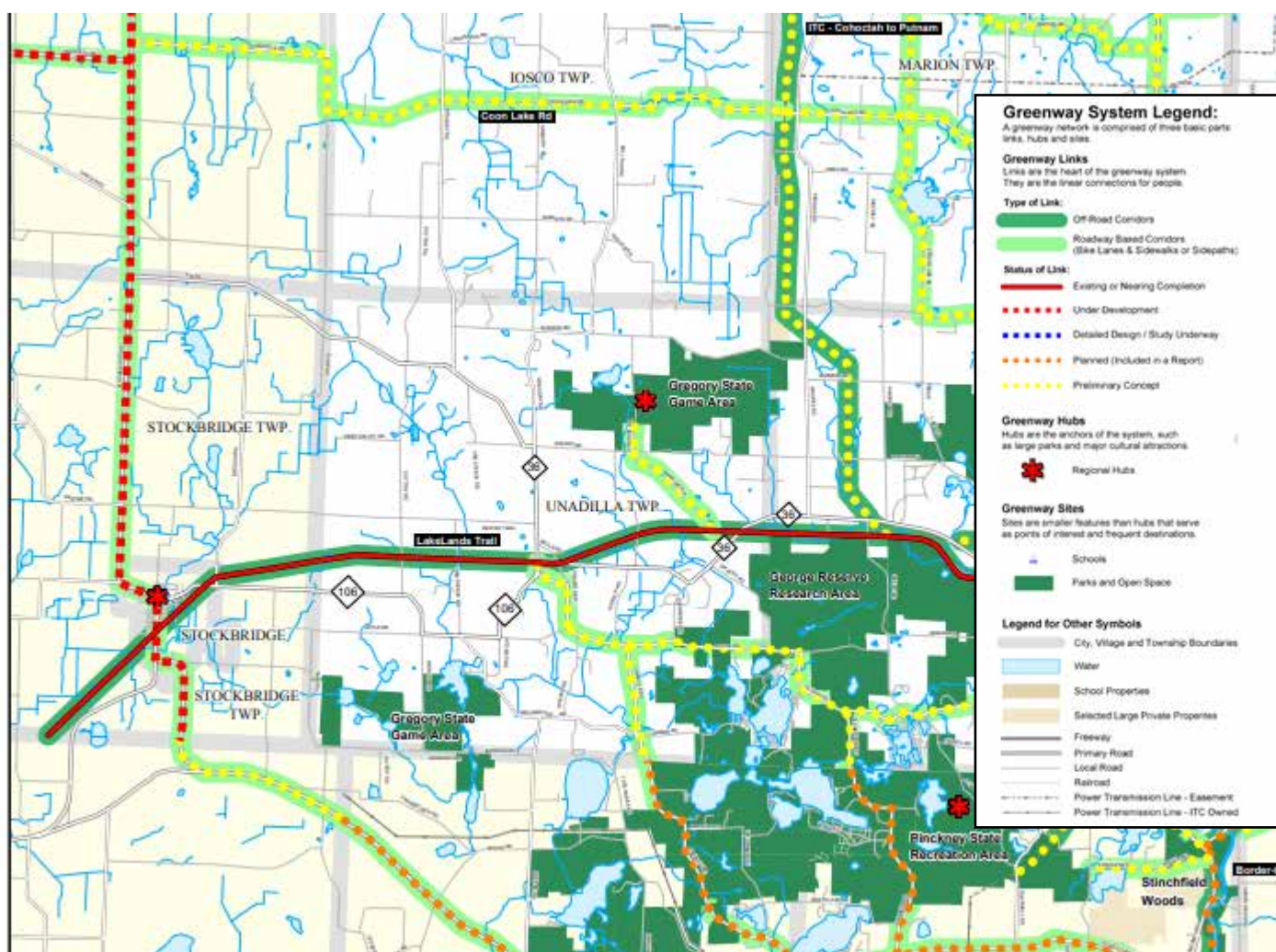


SOUTHEAST MICHIGAN GREENWAYS VISION

In 2006, the seven-county region of southeast Michigan updated the Southeast Michigan Greenways Vision to reflect the desired non-motorized connections in the region. This initiative was facilitated by the Community Foundation for Southeast Michigan. Counties worked together with local municipalities and community interest groups to develop a long-term vision for a connected system of greenways and trails.

Since the initial framework was developed, the initiative has expanded to include water trails as well as hiking and biking trails. Maps of existing and planned facilities show an ambitious trail network connecting facilities throughout the area. Among the proposed facilities, connections between the Lakelands State Trail and the Border-to-Border Trail are consistent with the vision laid out in this and other plans.

Figure 18. Southeast Michigan Greenways Vision

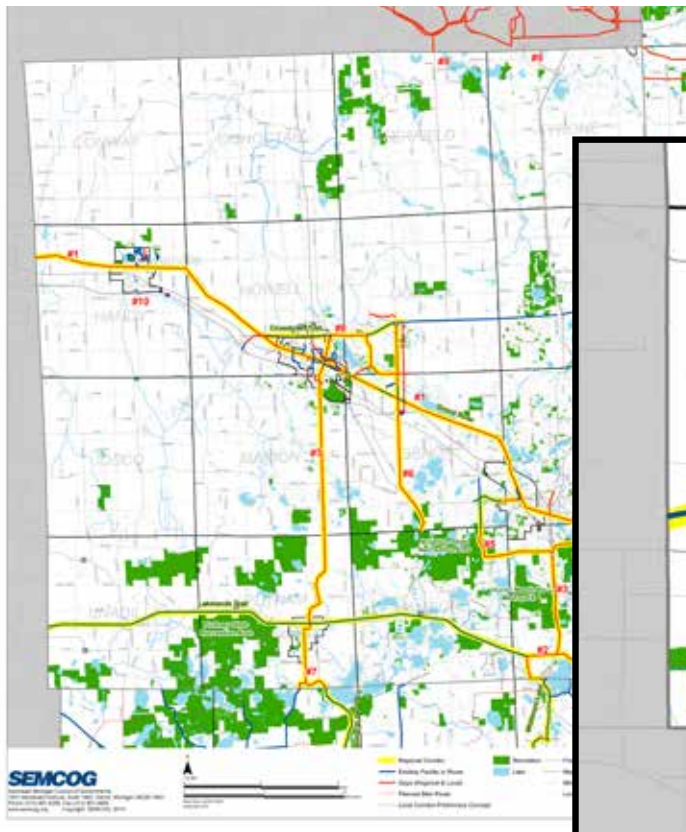


SEMOG 2045 REGIONAL TRANSPORTATION PLAN / 2014 BICYCLE AND PEDESTRIAN PLAN FOR SE MICHIGAN

The 2045 Regional Transportation Plan provides broad transportation recommendations for projects across the seven-county region, with a budget of over \$5 billion proposed for transportation infrastructure improvements. While this plan focuses on motorized infrastructure, it does provide a chance to look at upcoming projects and plan accordingly for other related infrastructure improvements. Generally speaking, road infrastructure improvements represent opportunities for adding to bicycle networks and implementing complete street programs.

The 2014 SEMCOG plan is a joint effort between Southeast Michigan Council of Governments (SEMCOG) and the Michigan Department of Transportation (MDOT). The plan provides recommendations for bicycle and pedestrian facilities across 10 regions and incorporating 60 different action items. SEMCOG's larger regional focus places more emphasis on existing non-motorized transportation options.

Figure 19. SEMCOG Bicycle & Pedestrian Plan



2003 LIVINGSTON COUNTY'S HIGH-QUALITY NATURAL AREAS

The study focused on identifying and evaluating potential natural areas of the County on which to target preservation efforts. Natural Areas are defined as areas of potential ecological significance which have been ranked based on the overall score of several criteria including: size, presence of riparian lands, wetlands and connectivity to assess each natural area's ecological value. The analysis revealed a large number of sizable, high-quality natural areas.

Unadilla includes fifteen "Priority 1" areas located in the northeast, southeast and southwest corners of the Township. The northeast corner contains about 1,780 acres of Priority 1 natural area including parts of the Gregory State Game Area. The southeast corner of the Township contains about 1,460 acres surrounding a cluster of lakes and contains the Pinckney Recreation Area and a University of Michigan reserve. 1,240 acres in the southwest corner of the Township surrounds Williamsville, Sharp, McConachie and McIntyre lakes in the Unadilla Wildlife Area.

Priority 2 areas are more abundant and are scattered throughout the township. Most are between 50 and 200 acres in size and are often located near other natural areas. Priority 3 areas have cumulative scores of 10 points or less and are typically less than 40 acres in size. These areas are also scattered throughout the Township.

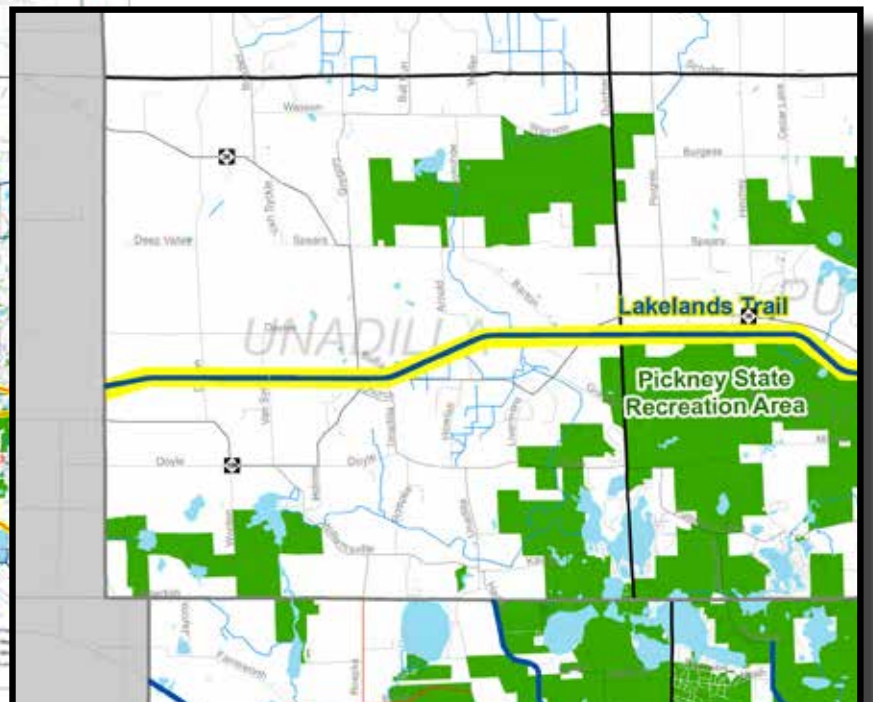
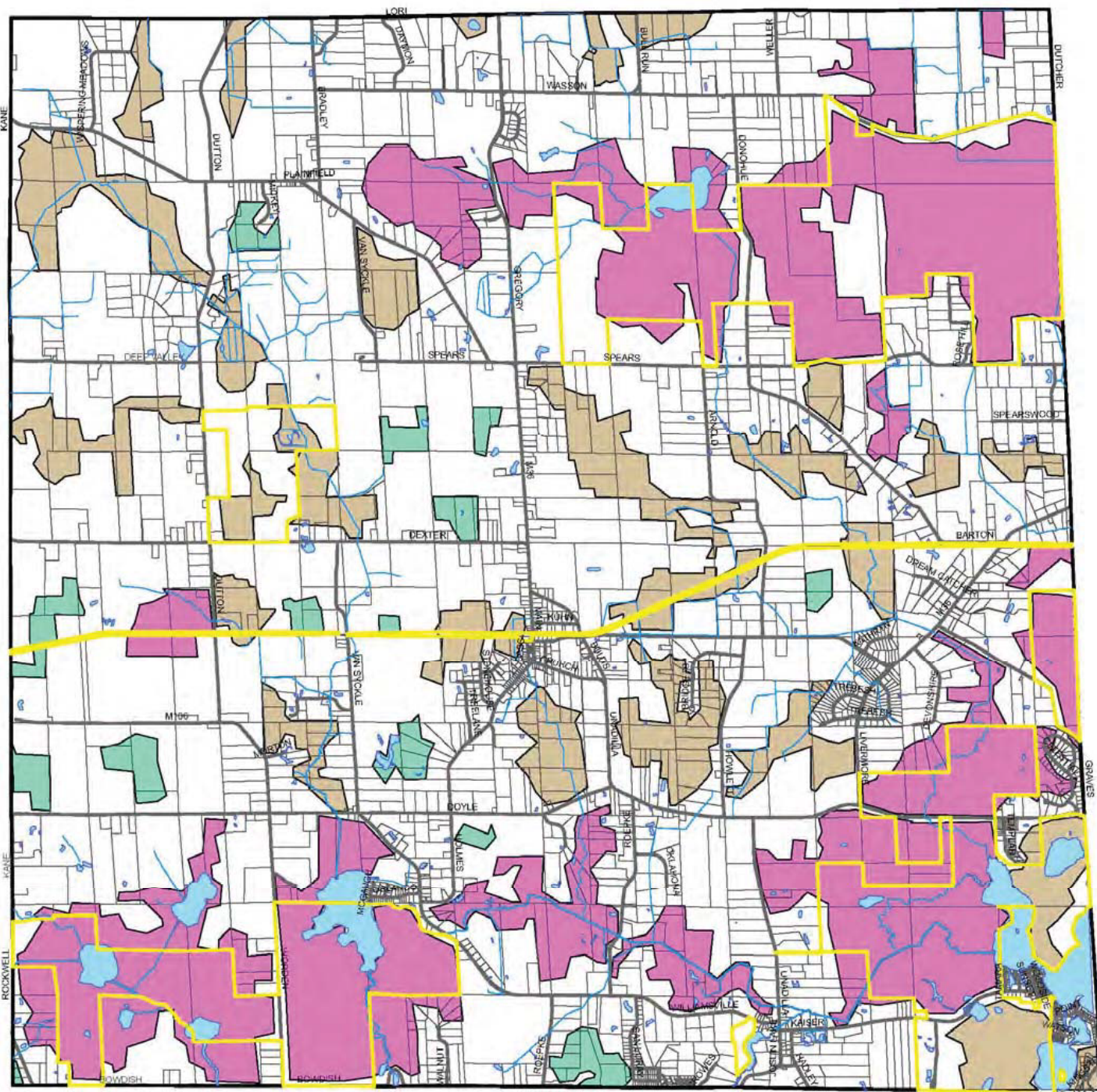


Figure 20. High Quality Natural Areas



- Priority 1 Natural Area
- Priority 2 Natural Area
- Priority 3 Natural Area
- Public Land
- Lakes
- Rivers, Streams, and Drains

High Quality Natural Areas

Unadilla Township, Livingston County



Source: Livingston County GIS
Carlisle/Wortman Associates
October 5, 2016



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Appendices



Appendix A - Public Notices

Public meeting notices - June 14, 2023



Unadilla Township Parks & Recreation Plan Community Input Meeting



A community open house will be held on
Wednesday, June 14, 2023 at 6:00 p.m.
 Unadilla Township Community Park - intersection of Barnum Road & Joslin Lake Road
 In case of rain, event will be held at the Unadilla Township Offices, 126 Webb Street, Gregory, Michigan

Unadilla Township is seeking input from residents regarding recreation opportunities in the community via an open house meeting. Please join us and let us know your thoughts on existing and potential future recreation development in the Township. Your input will have a direct impact on the future of parks, trails, and recreation services in the community.

126 Webb Street | Gregory, MI 48137 | Phone: 734-498-2502 | E-mail: unadillatwp@yahoo.com

[Property Taxes](#)
[Taxes FAQ](#)


Township Announcements

Unadilla Township Parks & Recreation Plan Community Input Meeting
[Click Here to see the Flyer](#)
[READ MORE >](#)

Board Meeting Cancellation
 May Unadilla Township Board meeting has been cancelled next meeting will be June 6th.
[READ MORE >](#)

Calendar of Events

MAY 2023							EV
SU	MO	TU	WE	TH	FR	SA	
30	1	2	3	4	5	6	No Event
7	8	9	10	11	12	13	



[Home](#)
[Departments](#)
[Township Board](#)
[Township Information](#)
[Resources](#)

Unadilla Township Parks & Recreation Plan Community Input Meeting

[Click Here to see the Flyer](#)

12

Stockbridge Community News

June 2023

Active Aging

Gardening is a little piece of heaven



by Mary Schwark
 I love to go barefoot in my garden. Maybe not when I'm hoeing rows or using tools, but definitely when I'm sitting on the grass, feeling the sun on my face, and enjoying the little events that make life so beautiful.

Mary Schwark is a member and volunteer coordinator at the Stockbridge Area Senior Center—a great place to spend time. Visit [stockbridgeareaseeniors.org](#) or call 517-480-0353 for information.

Legal Notice

PLEASE TAKE NOTICE the Village of Stockbridge has filed a lawsuit to quiet title to the property located at 111 W. Main Street, Stockbridge, Michigan.



Unadilla Township Parks & Recreation Plans Community Input Meeting

Unadilla Township Community Park - Intersection of Barnum Rd. & Joslin Lake Rd.
 In case of rain, event will be held at the Unadilla Township Offices, 126 Webb St., Gregory.

Unadilla Township is seeking input from residents regarding recreation opportunities in the community via an open house meeting. Please join us and let us know your thoughts on existing and potential future recreation development in the Township. Your input will have a direct impact on the future of parks, trails, and recreation services in the community.

126 Webb St. | Gregory, MI 48137 | Phone: 734-498-2502 | E-mail: unadillatwp@yahoo.com

July 8, 2021

Unadilla Township

Home

Township Information

Calendar

Board Members

Supervisor

Clerk & Elections

Meeting Minutes

Planning Meeting Minutes

Treasurer

Pay Property Taxes

Assessor

Zoning Department

Parks and Recreation

Police Department

Fire Department

Senior Center

Big Red Barrel

Freedom of Information Act

MISS DIG 811

Friends of Lakeland Trails

Welcome to Unadilla Township "Seasons of Change"

Other Links

Livestock County

Lyndon Township

Potomac Township

State of Michigan

Stockbridge Township

Village of Pinckney

Village of Stockbridge

Vulnerable or Impaired Person Enrollment

Michigan's Guide for Active Drivers and Families

Unadilla PD Facebook Page

Ann Arbor, MI

60°

7:25 am EDT

Cloudy

*Unadilla Township is an equal


Meeting Cancellation

The Board meeting scheduled for June 10 will be July 8, 2021 at 7:00p.m.


NOTICES

UNADILLA TOWNSHIP NEW

THE EMAIL IS CHECKED DAILY. PLEASE EMAIL A MESSAGE DURING BUSINESS HOURS.



community via an online survey. The results of this survey will be used to inform the recommendations of the 2022 - 2026 Recreation Master Plan.




The survey can be accessed at:

<https://survey.sogosurvey.com/r/Unadilla>

Hard copies are available upon request at Township Hall, 126 Webb Street, Gregory. The survey will remain open until 5:00 p.m. on Friday, August 27, 2020. All hard copies of the survey must be received by the Township Hall by that time to be included in the survey results.

Thank you for taking the time to help us better understand the recreation needs for Augusta Township. Your responses will have a direct impact on the future of parks, trails, and recreation services in the community.



126 Webb Street | Gregory, MI 48137 | Phone: 734-496-2502 | E-mail: unadilla@wp@yahoo.com

Stockbridge Health Center Survey

<https://forms.gle/Xx1H8Gd8Kbndn.com?>

Drug Rehab Advice Center - Drug Addiction Rehab United States and Canada

Posts



Unadilla Township Parks and Recreation Committee

8 hrs · 🌐

Hi folks- we hope you are enjoying the outdoors this summer!

The Recreation Committee is asking for you to participate in a quick survey we put together in order to get your thoughts on our Unadilla parks and recreation areas.

The short survey will ask you how you use the parks, what you may like to see in the future, and any thoughts or ideas you may have. You do not need to be a resident of Unadilla and the survey does not ask for any identifying information and is very secure.

Just follow this link to start the survey- THANK YOU!

<https://survey.sogosurvey.com/r/Unadilla>

[SURVEY.SOGOSURVEY.COM](https://survey.sogosurvey.com)

Survey Participation



Like



Comment



Share

30-day Review Period Notice - Website Notice & Affidavit of Publishing



Township Announcements

Notice of Plan Availability for Review

Unadilla Township has revised their Parks & Recreation Master Plan and is seeking public input on the new 2024 - 2028 Plan. The Michigan Department

[READ MORE >](#)

Unadilla Township Police Department Job Posting

[Click here to view Job Posting](#)

[READ MORE >](#)

Summer Tax Bills are due Thursday September 14TH

[READ MORE >](#)



LIVINGSTON DAILY PRESS & ARGUS NEWSPAPERS
323 East Grand River Avenue, Howell MI 48843

BE IT MADE KNOWN THAT THE FOLLOWING LEGAL AD APPEARED IN

UNADILLA TOWNSHIP
126 WEBB ST
GREGORY, MI 48137

REFERENCE: 3244686
FILE NO: 0008791308
THIS IS NOT AN INVOICE

LIVINGSTON DAILY PRESS & ARGUS a newspaper published in the English language for the dissemination of local or transmitted news, which is a duly qualified newspaper, and that annexed hereto is a copy of a certain order taken from said newspaper, in which the order was published on the date indicated below

LEGAL CLERK PRINTED NAME

LEGAL CLERK SIGNATURE

NOTARY PUBLIC STATE OF WISCONSIN COUNTY OF BROWN

MY COMMISSION EXPIRES 5.15.27

Subscribed and sworn to before me on
AUGUST 16TH, 2023

PUBLISHED ON:
8/16/2023

FILED ON: 8/16/2023

of Affidavits: 1
THIS IS NOT AN INVOICE

NANCY HEYRMAN
Notary Public
State of Wisconsin

NOTICE OF PLAN AVAILABILITY FOR REVIEW

Unadilla Township has revised their Parks & Recreation Master Plan and is seeking public input on the new 2024 -2028 Plan. The Michigan Department of Natural Resources requires a minimum 30-day public review process as part of the master planning process. The Plan will be available for review through October 12, 2023, at which time a formal public hearing for adoption of the Plan will be held as part of the regularly scheduled Township Board meeting.

A copy of the draft master plan is available for review at the following locations:

- Unadilla Township Offices, 126 Webb Street, Gregory, MI.
- The draft plan is also available online on the Township's website at <http://twp.unadilla.mi.us> , or can be directly accessed at <https://www.calameo.com/read/005107673e3749b910bd4> .
- For questions or comments, please call 734-498-2502.



LIVINGSTON DAILY PRESS & ARGUS NEWSPAPERS
323 East Grand River Avenue, Howell MI 48843

BE IT MADE KNOWN THAT THE FOLLOWING LEGAL AD APPEARED IN

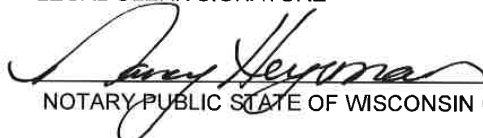
UNADILLA TOWNSHIP
126 WEBB ST
GREGORY, MI 48137

REFERENCE: 3244686
FILE NO: 0008791498
THIS IS NOT AN INVOICE

LIVINGSTON DAILY PRESS & ARGUS a newspaper published in the English language for the dissemination of local or transmitted news, which is a duly qualified newspaper, and that annexed hereto is a copy of a certain order taken from said newspaper, in which the order was published on the date indicated below


LEGAL CLERK PRINTED NAME

LEGAL CLERK SIGNATURE


NOTARY PUBLIC STATE OF WISCONSIN COUNTY OF BROWN

5.15.27
MY COMMISSION EXPIRES

Subscribed and sworn to before me on
OCTOBER 5TH, 2023

PUBLISHED ON:
10/5/2023

FILED ON: 10/5/2023

of Affidavits: 1
THIS IS NOT AN INVOICE

NANCY HEYRMAN
Notary Public
State of Wisconsin

NOTICE OF PUBLIC HEARING

Unadilla Township is seeking public input regarding the Unadilla Township 2024 – 2028 Parks & Recreation Master Plan. The hearing will take place as part of the regularly scheduled Township Board meeting at 7:00 p.m. on October 12, 2023.

A draft copy of the plan has been available for review since early August and will remain available through the date of the hearing. The plan can be viewed at the following locations:

- Unadilla Township Offices, 126 Webb Street, Gregory, MI.
- The draft plan is also available online on the Township's website at <http://twp.unadilla.mi.us>, or can be directly accessed at <https://www.calameo.com/read/005107673e3749b910bd4>.
- For questions or comments, please call 734-498-2502.

LV-0008791498

Appendix B - Recreation Plan Committee Recommendation



December 1, 2023

To Whom It May Concern:

The Unadilla Township Parks and Recreation Committee, as well as the Township Board, have completed the process for adoption of the new Recreation Plan, as mandated by the DNR, and feel that the plan accurately reflects the recreation needs of our community.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lori Cowan".

Lori Cowan
Unadilla Parks and Recreation Committee Chair

Appendix C - Minutes of Public Hearing

Unadilla Township Regular Meeting Minutes October 12, 2023

Meeting called to order at 7:01 p.m.

Pledge to flag.

Present: Walker, Topping, Weiland, Cowan, Cox. Absent: None.

Motion Walker support Weiland to approve the September meeting minutes. Carried.

Motion Walker support Topping to approve bills as presented. Carried.

Call to Public: None.

- * Public Hearing on Recreation Plan. **Motion** Walker support Cox to close regular meeting and open public hearing at 7:03 p.m. Carried. Discussion and explanation by Cowan on updating plan. **Motion** Cowan support Weiland to approve the Recreation Plan. Carried. **Motion** Walker support Cox to close public hearing and return to regular meeting at 7:06 p.m. Carried.
- Planning Report: Currently working on language and overlay area for Solar Ordinance.
- Police Report by Chief Russell, officer Gelman on light duty thru mid-November.
- Decommissioning 2003 car. Interviewing open positions.
- Fire Report by Chief Hause, annual fire open house set for Sunday 11/2. 2 new members starting fire academy, Dominic Beutler moved back and has rejoined. 2022 runs to date 226 2023 runs to date 290, increase in runs every year.
- Recreation Update: Walker received one bid on siding and repairs on old school house, seeking at least 1 more bid. Cowan reports gazebo in Unadilla needs some repairs.
- Unfinished Business: Show causes all on hold all showing some progress.
- Surf Air no new updates, County broadband ongoing.
- New Business: None.
- Final Call to Public: discussion on broadband availability.
- Motion** Walker support Weiland to adjourn at 7:29 p.m. Carried.



Linda Topping, Clerk

UNADILLA TOWNSHIP
LIVINGSTON COUNTY, MICHIGAN

A RESOLUTION TO ADOPT THE
UNADILLA TOWNSHIP PARKS & RECREATION MASTER PLAN 12-2023

DECEMBER 19, 2023

WHEREAS, Unadilla Township has undertaken a planning process to determine the recreation needs and desires of its residents during a five-year period covering the years 2024 to 2028; and

WHEREAS, the Township began the process of developing a Parks & Recreation Plan in accordance with the most recent guidelines developed by the Michigan Department of Natural Resources and made available to local communities; and

WHEREAS, The Township has developed the plan as a guideline for improving recreation opportunities for Unadilla Township; and

WHEREAS, residents of Unadilla Township were provided with a well-advertised opportunities during the development of the draft plan to express opinions, ask questions, and discuss all aspects of the Plan; and

WHEREAS, the public was given a well-advertised opportunity and reasonable accommodations to review the final draft plan for a period of at least 30 days; and

WHEREAS, a public hearing was held on October 12, 2023, at Unadilla Township Hall to provide an opportunity for all residents of the Township to express opinions, ask questions, and discuss all aspects of the Unadilla Township 2024 – 2028 Parks & Recreation Master Plan; and

WHEREAS, after the public hearing, the Board of Trustees voted to adopt said Unadilla Township 2024 – 2028 Parks & Recreation Master Plan; and

WHEREAS, the plan serves as a guideline for park land, open space, and recreation planning by Parks & Recreation; and

WHEREAS, the plan also serves as a planning tool for other Township boards and commissions, such as the Planning Commission; and

WHEREAS, the adoption of a five-year plan is mandated by the Department of Natural Resources for eligibility for DNR-administered grants; and

NOW, THEREFORE, BE IT RESOLVED, that the Unadilla Township Board of Trustees hereby adopts the Unadilla Township Parks & Recreation Master Plan for the years 2024 – 2028.

Motion by WALKER Supported by: COWAN

Absent: NONE Ayes: COWAN, COX, WALKER, WEILAND, TOPPING

Nays: NONE

Resolution Adopted.

CERTIFICATION STATEMENT

I, Linda Topping, the duly qualified Clerk of Unadilla Township, Livingston County, Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted at a special meeting of the Unadilla Township Board of Trustees meeting held on December 19, 2023, and that public notices of said meeting were given pursuant to Act No. 267, Public Acts of Michigan, 1976, as amended.

Linda Topping
Linda Topping

12-19-2023
Date Certified

UNADILLA TOWNSHIP SPECIAL MEETING MINUTES
DECEMBER 19, 2023

Meeting called to order at 11:00 a.m.

Pledge to flag.

Present: Walker, Topping, Weiland, Cowan, Cox. Absent: None.

Motion Walker support Cox to approve the agenda. Carried.

Motion Walker support Weiland to approve the November 30, 2023 regular meeting minutes.
Carried

Call to Public: None.

New Business: **Motion** Walker support Cowan to approve the Recreation Master Plan Resolution. Roll Vote: Ayes: Cowan, Cox, Walker, Weiland, Topping. Nays: None. Absent: None.
Resolution adopted.

Final Call to Public: None.

Motion Cox support Walker to approve the December 19, 2023 special meeting minutes.
Carried.

Motion Walker support Cox to adjourn at 11:08 a.m. Carried.



Linda Topping, Clerk
Unadilla Township

Appendix E - Letters of Transmittal



Carlisle | Wortman

ASSOCIATES, INC.

117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

January 3, 2024

Scott Barb
Planning Director
Livingston County
304 East Grand River
Suite 206
Howell, Michigan 48843

Dear Mr. Barb:

The Unadilla Board of Trustees adopted the attached Parks & Recreation Master Plan at a meeting held on October 12, 2023. The plan has been uploaded to the MDNR website for their review and approval. The plan will be subject to future review and updates as deemed necessary by the Board of Trustees.

Please feel free to contact me if you have any comments regarding this plan.

Thank you for your consideration,

CARLISLE/WORTMAN ASSOC., INC.

Chris Nordstrom, PLA, ASLA
Landscape Architect

cc. Linda Walker, Supervisor
Linda Topping, Clerk
Lori Cowan, Trustee

Richard K. Carlisle, *President* Douglas J. Lewan, *Executive Vice President* John L. Enos, *Principal*
David Scurto, *Principal* Benjamin R. Carlisle, *Principal* Sally M. Elmiger, *Principal* Craig Strong, *Principal* R. Donald Wortman, *Principal*
Laura K. Kreps, *Associate* Paul Montagno, *Associate*



Carlisle | Wortman
ASSOCIATES, INC.

117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

January 3, 2024

Tyler Klifman
Regional Review Office
Southeast Michigan Council of Governments
1001 Woodward Avenue, Suite 1400
Detroit, Michigan 48226

Dear Mr. Klifman:

The Unadilla Board of Trustees adopted the attached Parks & Recreation Master Plan at a meeting held on October 12, 2023. The plan has been uploaded to the MDNR website for their review and approval. The plan will be subject to future review and updates as deemed necessary by the Board of Trustees.

Please feel free to contact me if you have any comments regarding this plan.

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Laura K. Kreps, *Senior Associate* Paul Montagno, *Principal* Megan Masson-Minock, *Principal*

Appendix F - Public Input

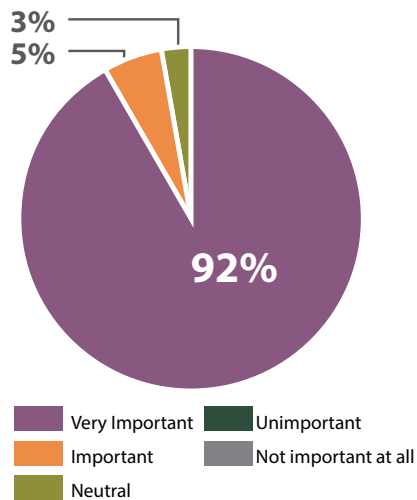
Unadilla Township Recreation Plan Community Survey Results

A community survey was offered online and in hard copy format from July 9 through August 27, 2021. The survey was advertised on the Township website, through a newspaper advertisement, via flyers, and on the Township's social media accounts (see Appendix A). A total of 33 individuals participated in the survey.

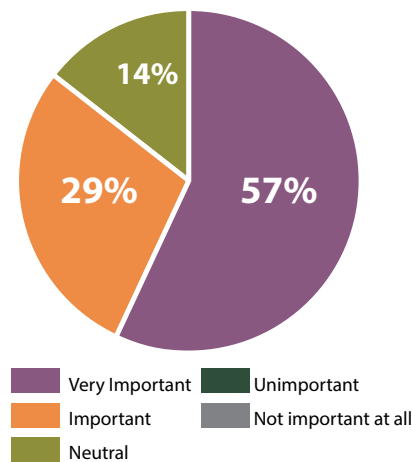
The following pages provides the verbatim responses received. For an analysis of the results, see the Public Participation chapter beginning on page 15.

Question 1: How important are the following items to you and your family?

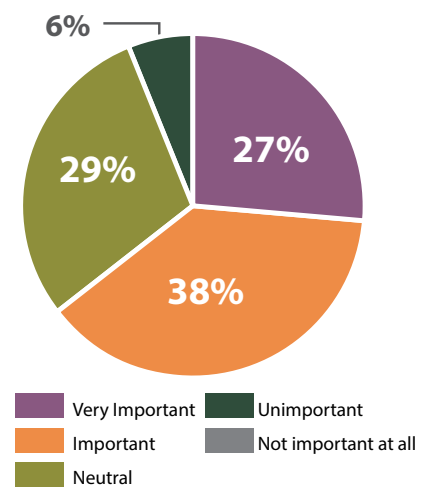
1a: Maintaining existing parks and recreation facilities



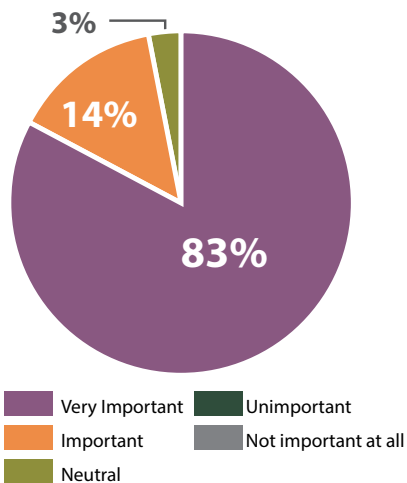
1b: Acquiring and developing new parks and recreation facilities



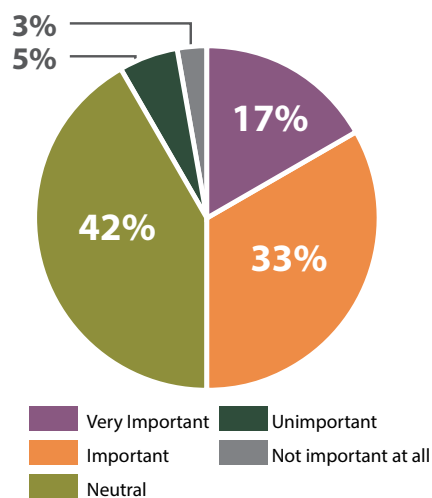
1c: Access to active use facilities (e.g. soccer, football, baseball, tennis, etc.)



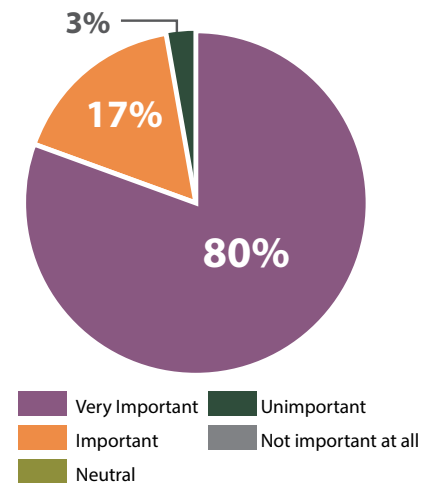
1d: Protecting natural resources



1e: Access to picnic facilities

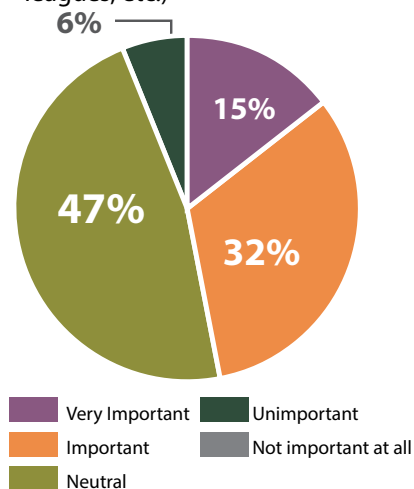


1f: Access to paths and trails

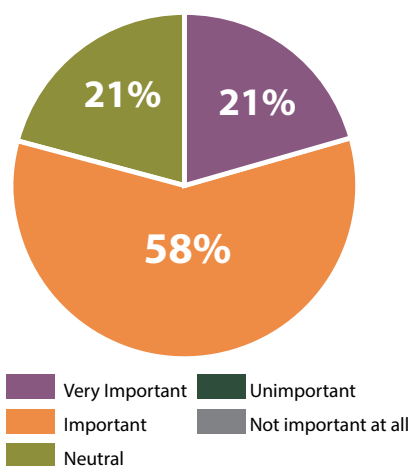
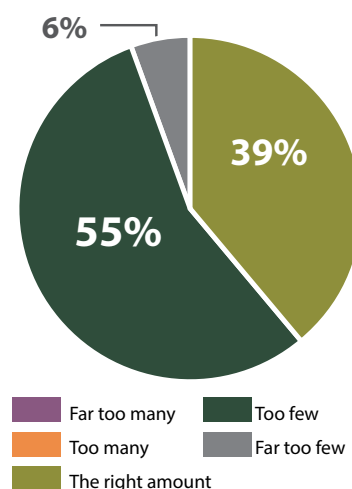


Question 1 (continued)

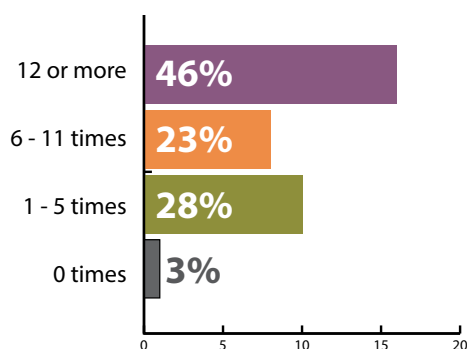
1g: Access to recreation programming (e.g. special events, classes, sports leagues, etc.)



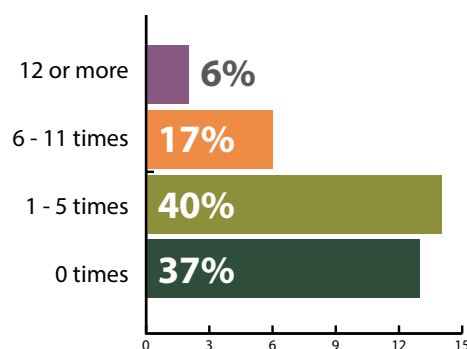
1h: Access to passive use facilities (playgrounds, sitting areas, pavilions, etc.)

**Question 2: Does Unadilla Township have too many, too few, or about the right number of parks?****Question 3: In the past 12 months, how many times have you visited Unadilla Township's recreation facilities?**

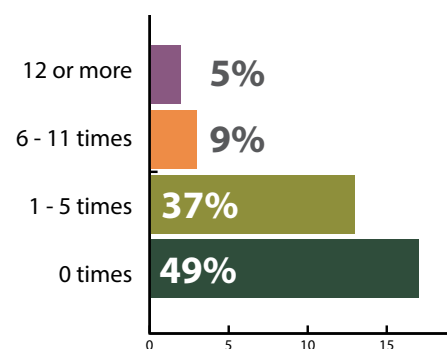
3a: Mike Levine Lakelands State Trail



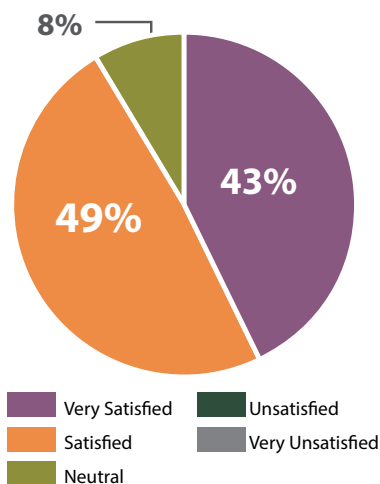
3b: Unadilla Township Community Park



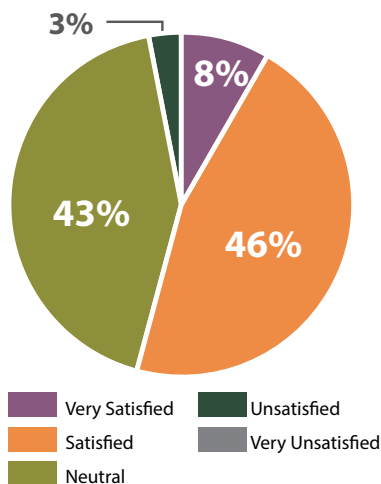
3c: Unadilla Township Hall Playground

**Question 4: How satisfied are you with...**

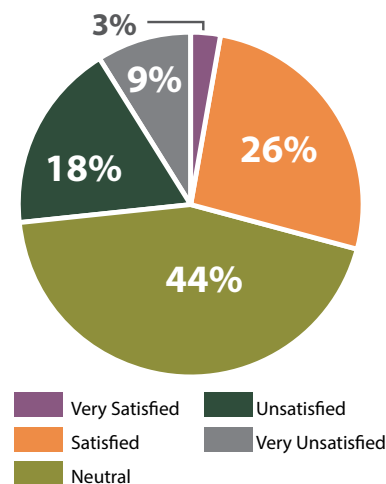
4a: Mike Levine Lakelands State Trail



4b: Unadilla Township Community Park



4c: Unadilla Township Hall Playground



Question 5: What can the Township do to make your experience better at...

5a: Mike Levine Lakelands State Trail

- Continue to improve the Lakeland trail. We love to use it.

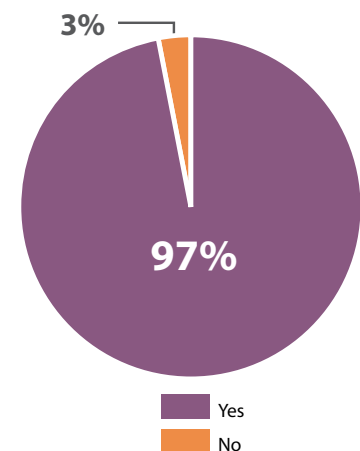
5b: Unadilla Township Community Park

- Add real parking lot, better lighting, more trash bins, more seating, more thing to do , WiFi add.

5c: Unadilla Township Hall Playground

- Upgrade all of it , add more things, trash bins, baseball court fix up, WiFi add
- Update the equipment
- Upgrade the equipment
- Needs an improvement with better playground equipment.
- Add tennis courts and update equipment.
- Improve equipment
- It's pretty outdated. New equipment would be nice.

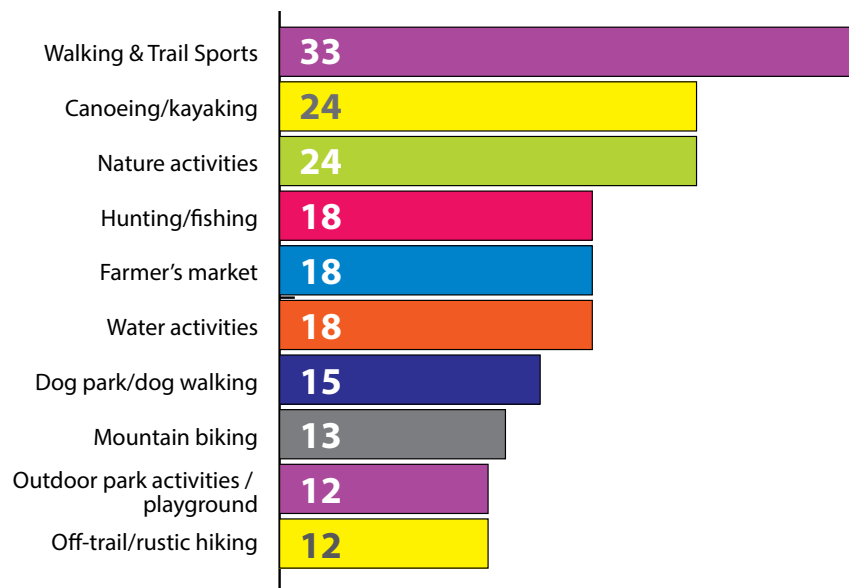
Question 6: Do you or your family visit neighboring community, county, state, or other regional recreation facilities?



Question 6a: If yes, which facilities do you visit?

- | | | |
|---|---|--|
| • Pinckney, Howell, metro parks | • Lakeland trail in Pinckney because it is paved. | • Prior to Covid we went all over the state |
| • Trails, playgrounds | • Mike Levine Trail Stockbridge, Waterloo Recreation Area, | • Waterloo, beckwith, state land trails, half moon lake, south lake |
| • Local public hunting grounds | • pinckney waterloo; green lake; m52 trail; b to b trails. | • State Parks, Biking trails |
| • Pinckney, Chelsea park, Bruin Lake Campground | • Pinckney rec. Brighton rec Pinckney school facilities. Potawatomi trail, DTE trails | • Pinckney State Rec, ILRA, Brighton Rec, Metroparks, PLRA, Proud Lake Rec |
| • Island Lake, Pinckney Rec Area & Kensington | • Sports and playground areas | • Potawatomi, Lakeland Trail. |
| • Metro Parks | • Pinckney Recreation Area | • Pinckney park, Pinckney schools tennis courts, Pinckney rec area. Bruin lake, half moon state park. |
| • State and metro parks | • Falls of Neuse Raleigh NC | • Silver/Crooked Lake (hiking trails), other parts of Waterloo/Pinckney rec areas, path along M-52, soccer field and track at Stockbridge HS, Huron River and assoc. parks |
| • Brighton Rec Area, other state parks | • Bike trails | • Pinckney recreational areas |
| • Metro parks, Pickerel Lake, half moon, silver lake, Pinckney Recreation area trails | • Splash pads | • Pinckney Recreation Area, Huron Metropark |
| • Dexter, Chelsea, Stockbridge | • state parks, metroparks, Pinckney Town Square park | |
| • Blue heron splash bay, Kensington, Pinckney playground, Stockbridge playground | • Waterloo Rec Area, Pinckney Rec Area, Gregory State Game Area | |

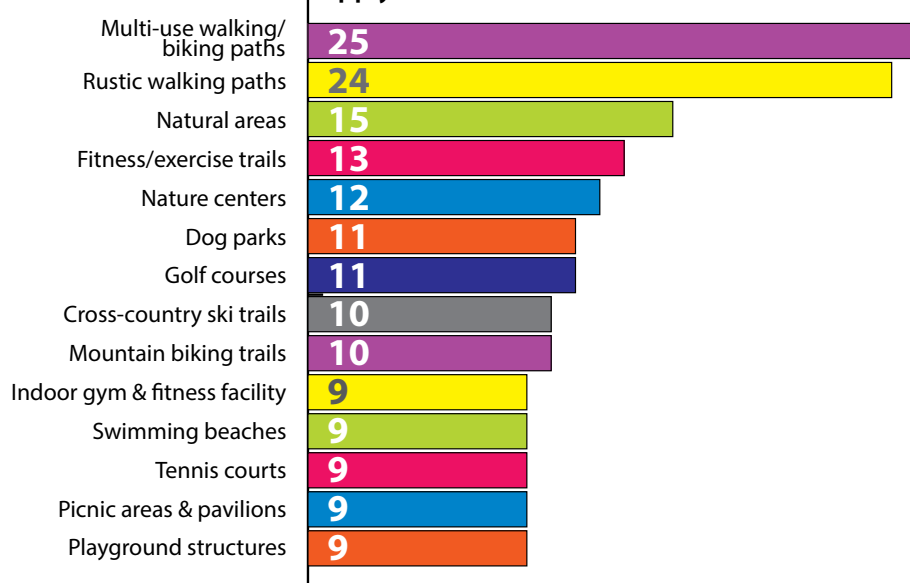
Question 7: What types of activities do you or your family regularly participate in? Choose all that apply



Additional Responses:

- 9 - Picnicking
- 9 - Golf
- 8 - Movie nights/Concerts in the Park
- 7 - Cross country or downhill skiing
- 7 - Court sports (tennis, pickleball, etc.)
- 7 - Field sports (football, soccer, etc.)
- 5 - Sledding
- 5 - Figure skating / hockey
- 4 - Painting or photography
- 3 - Horseback riding
- 3 - Educational programming
- 3 - Kite flying
- 3 - Community gardening
- 3 - Skateboarding
- 3 - Snowmobiling
- 2 - Geocaching
- 2 - Senior programs
- 1 - Paint ball
- 1 - Other - "Trail running on Mike L trail daily"

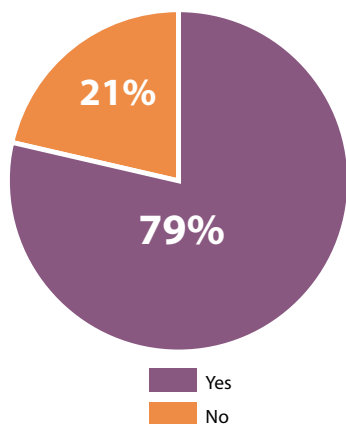
Question 8: Which of the following park amenities would you like to see more of? Choose all that apply



Additional Responses:

- 8 - Swimming beaches
- 8 - Picnic areas & pavilions
- 8 - Playground structures
- 7 - Ice skating rink (outdoor)
- 7 - Fishing docks
- 7 - Outdoor swimming pool
- 6 - Driving range
- 6 - Boat ramps
- 6 - Splash pad
- 6 - Basketball courts
- 5 - Horse trails
- 4 - Sports training center
- 4 - Indoor theater
- 4 - Skate park
- 4 - Disc golf
- 3 - Workout rooms
- 3 - Sand volleyball courts
- 3 - Sled hills
- 1 - Field house/sports dome
- 1 - Amphitheater / stage
- 1 - Pickleball courts
- 1 - Baseball fields
- 1 - Soccer fields
- 1 - Other - "Rifle range/shooting range"

Question 9: Should the Township acquire the historic schoolhouse adjacent to Unadilla Township Community Park for recreation uses?



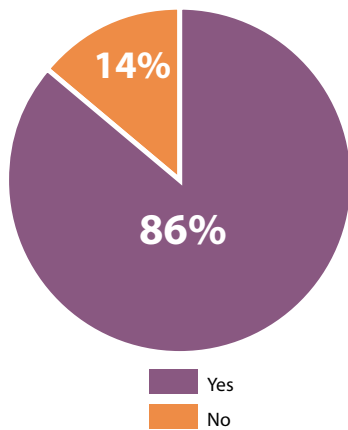
Question 9a: If yes, what kind of uses do you envision for the schoolhouse and its surrounding property?

- Historic, we need to fix it up, save it and protect history, work out geology society, education program, this should be our park
- Nature talks, foraging talks, music jams,
- Running track, gym
- Historical site
- Weddings, arts/crafts programming, fitness classes
- Museum
- Sandwich shop
- Game nights, quilting retreats, book author/lectures, yoga, book club meetings,
- Community History classes
- classes? geocaching? bike maintenance? birding?
- Adult basketball, community center, art classes for families or other family activities, work out facility with weights, treadmills, etc , programs for seniors which include exercise classes
- Educational facilities on history and nature. Paths and wildflower gardens
- Educational and picnicking
- Live music/theater performances, public meetings, family gatherings
- Educational programs
- Is there enough property for hiking or x-country ski trails? Building... something sparking social connections - senior activities? rent the space for events? I really have no idea, but I'm sure others do!
- Historic info, events

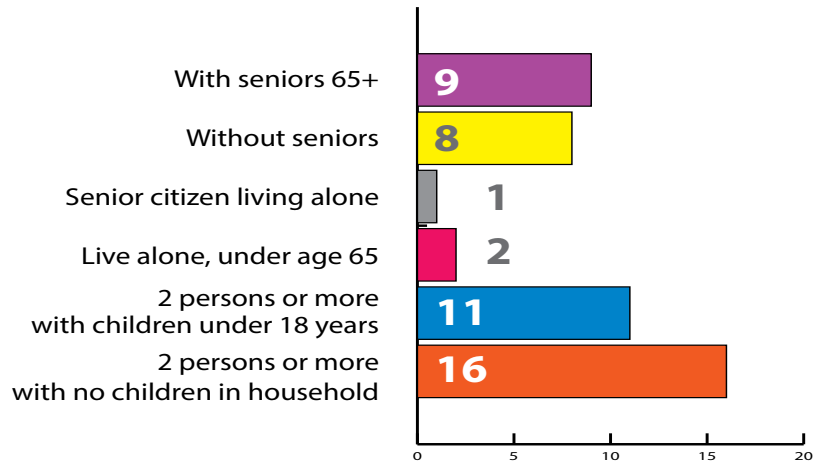
Question 10: Are there any other recreation-related issues you would like to bring to our attention?

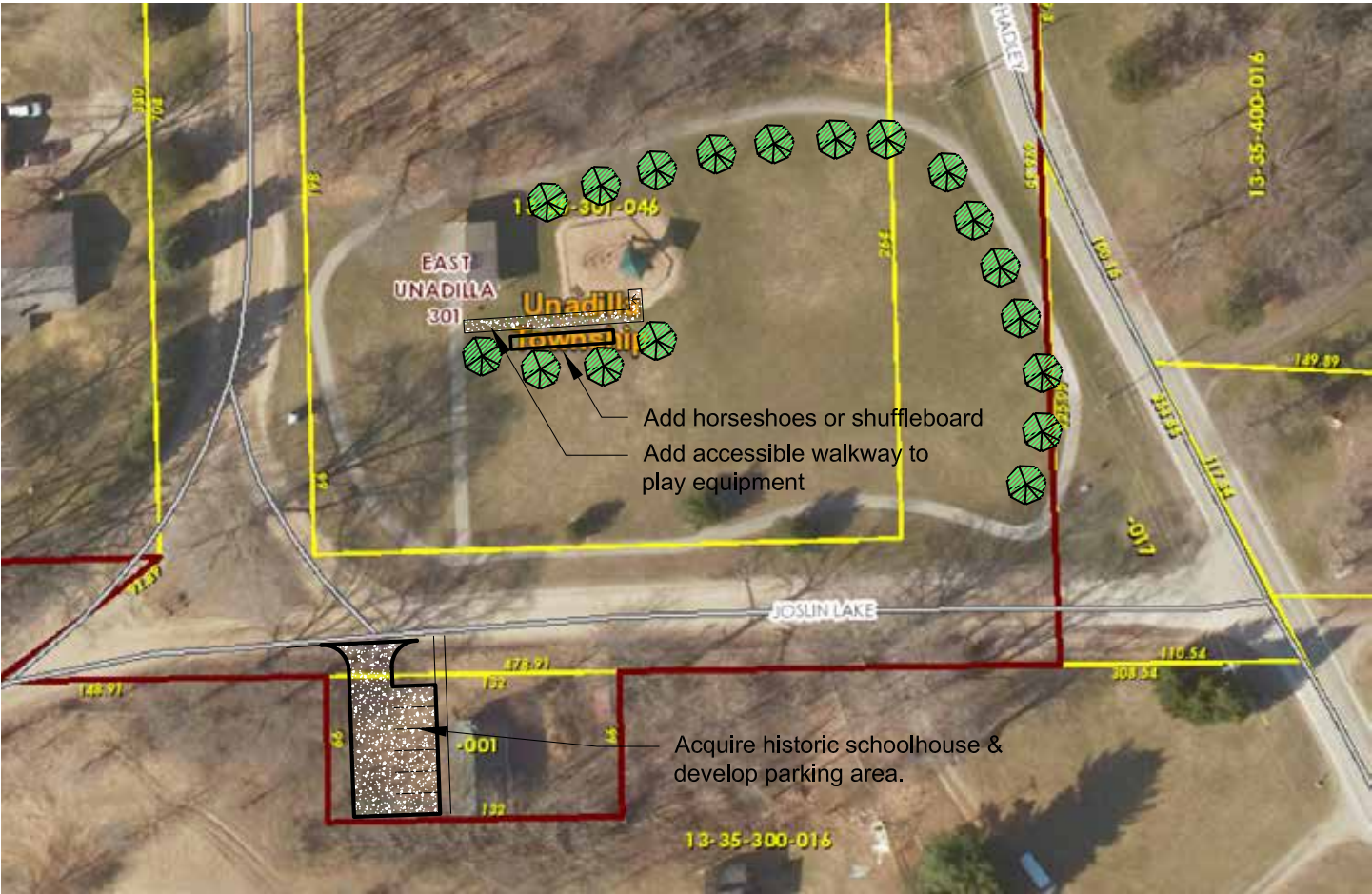
- More trail more, add more trash bins, spray for bugs, add WiFi, more Police patrol on trails, more lighting, better maintenance, need a public contact person for trail and parks issues, fix light also at trail head,
- We noticed the pavilion at the park might need some structural repairs. I would like to see some adult softball leagues, sand volleyball leagues, etc.
- Indoor playground like 242 Brighton
- Christmas decorations with skating at the beginning of trail, get some culture and memories going for families
- It would be nice to have a community pool in the area instead of driving to Chelsea or Pinckney.
- I really love how nice the trail is, and how well used.
- I'd like to see the Lakeland trail edges mowed more often. Possibly even some weed control applied.
- Please continue to maintain and mow the Lakelands Trail
- Rental, art/nature talk, field trips, yoga, meet ups
- Unclear and lack info on this
- giy with golf cart been using lakeland trail. is that allowed?
- Love the upgrades to the lakelands trail and use it daily. It's so much better for walking and biking now. I would love to see tennis courts in Gregory
- absolutely LOVE the trail!

Question 11: Are you a Unadilla Township resident?

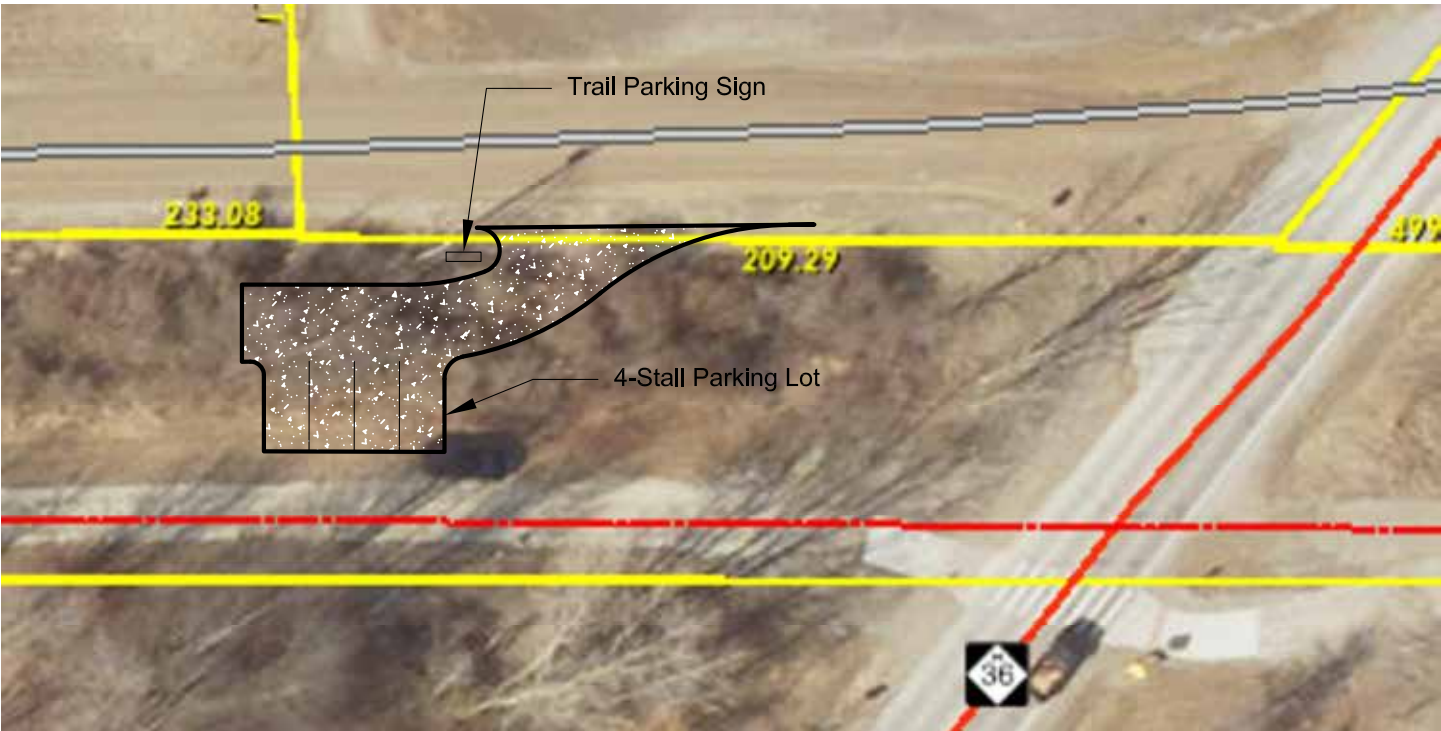


Question 12: Which of the following categories best describe your household?

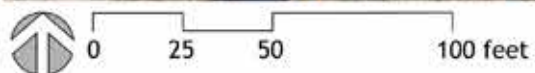
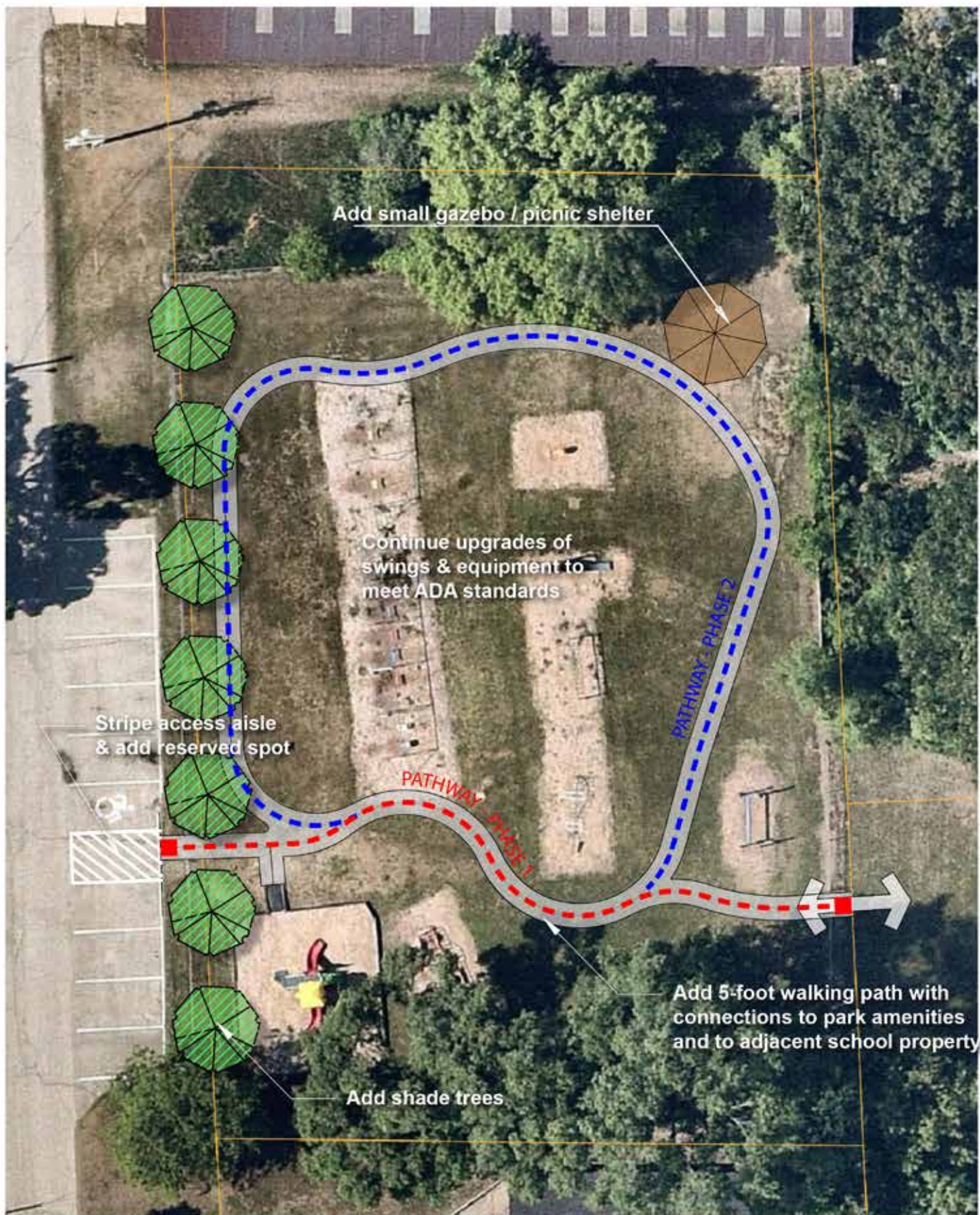




Unadilla Community Park Concept Plan



Barton & M-36 Parking Lot Concept Plan



Township Hall Park Concept Plan



2024 Cohoctah Township Master Plan

Cohoctah Township Master Plan

Cohoctah Township, Michigan

Adopted MONTH YEAR

Written by the Cohoctah Township Planning Commission
with assistance from Carlisle/Wortman Associates, Inc.

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Chapter 1: Cohoctah Township Master Plan Overview

The Cohoctah Township Master Plan is adopted pursuant to the authority of the Michigan Planning Enabling Act, Public Act 33 of 2008. It serves as the guide for the Cohoctah Township Zoning Ordinance pursuant to the Michigan Zoning Enabling Act, Public Act 110 of 2006 as amended.

The Master Plan is not the same as the Zoning Ordinance. A Zoning Ordinance is enforceable by law, whereas a Master Plan is not. Zoning is public regulation of the use of land; a community's land is divided into various zoning districts which permit certain uses of land within that zone (residential, commercial, industrial, etc.). Typical zoning regulations address building height, bulk, lot area, setbacks, parking, and landscaping.

By contrast, a Master Plan is a guide to the future use of land in Cohoctah Township. Local officials use this document as a decision-making guide when considering rezonings and other development requests, potential public improvements and other investments that have long-term implications for the community. The Master Plan identifies and examines a wide range of physical issues including population, housing, natural resources, traffic and circulation, public services, and land use. The analysis of each of these physical issues is then translated into a series of goals and objectives for the Township. The Master Plan process culminates into the creation of a Future Land Use Plan and Map, which divides the land into future land use designations (not districts) with recommended development guidelines and illustrates how the Township should develop over time.

Purpose

The Plan is intended to be a tool to assist decision making for a number of planning related issues. The Plan and its supporting documentation contain most of the data necessary to assist elected and appointed officials and the public with:

1. Zoning Decisions

This Master Plan blueprints the future of Cohoctah Township. Zoning decisions should be in keeping with the goals and objectives of the plan. The Cohoctah Township Zoning Ordinance, when aligned with the Cohoctah Township Master Plan, will be the Plan's main tool for implementation.

2. Land Use Decisions

A primary function of Cohoctah Township government is the recommendation and review of land use decisions that preserve the health, safety, and welfare of its residents. Decisions regarding special uses, variances, site plans, and transportation are regular agenda items for the Township Board and Planning Commission. The Master Plan provides necessary land use information for making difficult decisions.

3. Public Infrastructure

Prime development land combined with highway access and location within easy commuting distance of several major labor markets, has made Livingston County one of the fastest growing counties in Michigan. This rapid growth is steadily moving from the southeast corner of the county to the rest of the county, and it is straining local infrastructure. The Master Plan is a component of the decision-making process when proposing public services. While public water and sewer service is not currently an issue in Cohoctah Township, it could be in the future. Roads also play an important role in growth. To be fiscally responsible and give the township a measure of control over future growth, new infrastructure must correspond with the Master Plan.

1. **Vision**

The development of this Plan required many different entities concerned with the future of Cohoctah Township to work together. Through a combination of public meetings, surveys, and inventories of existing land uses, the community has developed this Plan to preserve and protect the rural character of Cohoctah Township.

Plan Components

Background Studies and Trends

Many chapters of the Master Plan provide an inventory of specific conditions. For example, Chapter 2: Community Character explains the location, history, and community resources of the Township; and Chapter 3: Demographic Profile summarizes the population, housing, income, occupations, education and agricultural data and trends of the Township. These background studies allow the Planning Commission and Township Board to develop and implement a Master Plan based on an assessment of the existing and future trends of Cohoctah Township.

Goals & Objectives

A vital part of the Master Plan is the goals and objectives, often called policy statements. These statements aid in decision making based on principles the Township has decided are vital to the future well-being of the community. The goals and objectives also provide valuable background in the development of the future land use plan and map. The goals and objectives state what the community plans to do when faced with certain decisions. For example, the Township could have as a goal “the protection of the Township’s rural character”. When faced with a rezoning or site plan that would involve inappropriately high densities or an inordinate number of curb cuts, the Township may be justified in denying the request based on the Master Plan goal and related objectives.

Future Land Use Plan

The Master Plan also contains a description of the kinds of land uses planned for the future and a map showing the areas proposed for each kind of use. The Plan designations (or categories) identify portions of the Township for specific land uses. These may include residential, commercial, agricultural, etc. This section of the Plan will probably be the most used of the entire plan due to its relationship to other planning issues.

Appendices

The appendices of the Master Plan contain a variety of resources that were key components in establishing the body of the Plan. They include the following:

Citizen Survey – X survey responses were submitted from township property owners. The survey asked a number of questions related to the future vision of the Township. These responses contributed to the development of Master Plan goals and objectives, which in turn were used to develop the plan map.

Cohoctah Township Master Plan Goals & Objectives Fact Sheet – This reference list of demographics and planning trends were identified through the research and analysis that went into creating chapters of the 2024 Cohoctah Township Master Plan. The fact sheet was used as a source material for developing the goals and objectives of the Plan.

How the Plan was Prepared

The current Cohoctah Township Comprehensive Plan was adopted in January 2011. With the passage of more than ten years, the 2011 plan no longer reflects current conditions and issues. Additionally, the passage of the Michigan Planning Enabling Act (Public Act 33) in 2008, requires that master plans be reviewed and updated no less than once every five years. With these facts in mind, the Cohoctah Township Planning Commission recognized the need for an updated Master Plan and began preliminary work. A citizen survey was sent out by mail in mid-2023 to obtain citizen input in the Master Plan. The surveys were due at the end of May 2023. In October of 2023 the Township hired Carlisle Wortman Associates, Inc. to assist the Cohoctah Township Planning Commission with the preparation of the plan.

After the Cohoctah Township Planning Commission proposed a draft Master Plan, the Plan was submitted to the Cohoctah Township Board for review and comment. The Township Board approved the distribution of the proposed draft, and it was sent to the notice list that received the notice of intent to plan.

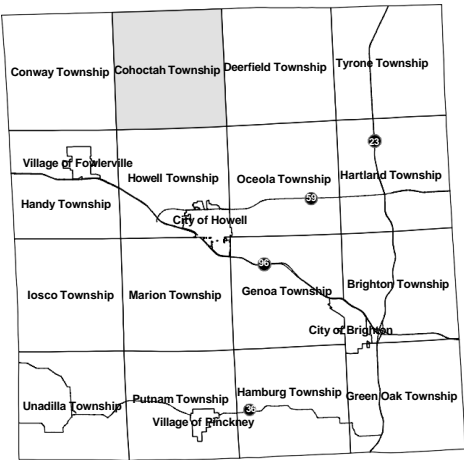
A public hearing was noticed and held after the public comment period ended. The hearing was held on **December 2, 2010** at the Cohoctah Township Hall. The Cohoctah Township Master Plan was adopted by the Township Board on **January 13, 2011**. Following adoption, the Planning Commission Secretary submitted copies of the adopted master plan to the same entities to which copies of the proposed master plan were required to be submitted.

Commented [JP1]: Add dates when available

Chapter 2: Cohoctah Township Community Character

Livingston County has been ranked the fastest growing county in Michigan for over ten consecutive years, and because of this distinction, Cohoctah Township has also experienced development pressures and population growth. The location, history and facilities of the Township have shaped and continue to shape the character of this rural community.

Location



Cohoctah Township is located in the northernmost tier of Livingston County townships. The Township borders the Livingston County communities of Conway Township to the west, Howell Township to the south and Deerfield Township to the east. The Township borders Burns Township in Shiawassee County to the north.

The Township is approximately 36 square miles in land area. A commuter lifestyle is prevalent in Cohoctah Township since there are no major employers located within the Township. The center of Cohoctah Township is approximately nine (9) miles north of I-96, approximately thirteen (13) miles west of U.S. 23, and ten (10) miles south of I-69 between Lansing and Flint. Therefore, the Township is not highly accessible from a regional perspective. State Highway M-59

which travels east-west is slightly closer to the Township at approximately 8 miles south of the Township, and State Highway M-52 which travels in a north-south direction, is approximately nine (9) miles to the west.

The Township has three settlements: Cohoctah Center in the northwest, Cohoctah in the northeast, and Oak Grove in the southeast. The City of Howell lies approximately six miles south of the township, and the Village of Fowlerville is approximately a four-mile drive from Cohoctah Township's southwestern corner. The Village of Byron lies four miles north of the Cohoctah settlement.

The Southeast Michigan Council of Governments (SEMCOG) is the regional planning agency for a seven-county area, including Cohoctah Township in Livingston County. The remaining SEMCOG counties include Washtenaw, Oakland, Wayne, Monroe, Macomb, and St. Clair.

Community History

Cohoctah Township was originally known as Tuscola Township. In 1857 the name was changed to Bristol Township, and in 1867 it was changed again, to its present name. It is believed that Cohoctah was the name of a former Indian chief, although no one knows for sure.

Settlers and speculators began purchasing land in Cohoctah Township in 1833. At that time there were many more swamps and marshes which have since been drained to make the land tillable. There was much evidence of the Native American population, although reportedly none were permanent inhabitants of the township at the time of settlement. Many were seen on hunting excursions, however, or on their way to Detroit.

The territory was bought by two types of purchasers; those intending to settle and develop the land, and investors. A trader named Gilbert W. Prentiss was the first settler in the township. He made two claims in the NE $\frac{1}{4}$ of Section 22, totaling 120 acres, in 1833. The first permanent resident, and second settler, was John Sanford from New York. He came in the summer of 1834 and began what was known as Sanford Settlement in Section 27 (Byron and Chase Lake Road) which was for some time the center of the township's population. Three-quarters of the township's acreage was purchased in one year, beginning in May of 1836, with an average size of 146 acres per sale. The first surveyor's record of the first regular highway in Cohoctah was in 1836 from Howell to John Sanford's residence.

In 1846 the first grist mill and dam were built on a 40-acre tract of land in the north part of Section 36 on Bo-bish-e-nung Creek, which at this point had a fall of over 13 feet. About the same time a small store was also built, and soon a village began to develop. It was called Chemungville after a county in New York. The post office was called Oak Grove.

There were several German-speaking settlers in early Cohoctah. In the late 1850's or 1860's, the area known as Sprungtown grew around a steam sawmill near the current Cohoctah Center. It was named after a prominent citizen, Isaac Sprung, and at its peak Sprungtown contained two stores, two blacksmith shops, about a dozen homes, and a population of fifty. It was hoped that the railroad would come to Sprungtown. In 1857 Tuscola was renamed Bristol Township, and in 1867 it was changed again to Cohoctah. In 1874 the Sprungtown post office was moved to Cohoctah.

Sources: Mrs. Chester Randles in *History & Folklore of Livingston County* (1969, Livingston County Extension Council) and *History of Livingston County, Michigan, 1880*.

Community Resources

Over time, community resources in Cohoctah Township have grown to meet the increased needs of the township population. Those needs have changed because of the gradual transition from an agricultural community to a more rural residential community. It is anticipated that the demands on community resources will continue to increase as the township's population grows.

Township Offices

The Cohoctah Township Hall is located at 10518 Antcliff Road in the settlement of Cohoctah Center. The Township Hall was previously a general store. The facility has been utilized for township government since 1950. The Township Hall houses the offices of Cohoctah Township elected officials such as the Township Supervisor, Clerk, Treasurer, and various other township personnel. In anticipation of future growth in the Township, the Township Board recently purchased approximately 42 acres of land across from the current township hall. The property may be used for a future township hall, a second fire station, a township park, or a combination thereof.

Public Safety and Emergency Services

Cohoctah Township is serviced by the Howell Area Fire Department which maintains a fire substation in the Township. The substation is located at Oak Grove Road and Chase Lake Road near the settlement of Oak Grove. The substation is manned by two firefighters on weekdays and by on-call firefighters on the weekends.

Police protection is provided by the Livingston County Sheriff Department and the Michigan State Police. Police are dispatched under the "closest car" policy. If there is an emergency requiring police service, the closest car to the emergency is dispatched to the scene. The closest car could be either a County Sheriff car or a State Police car. Back-up assistance is provided under the same policy.

Emergency ambulance service in Cohoctah Township is provided by Livingston County Ambulance Service. The closest hospital facility is Saint Joseph Mercy Livingston Hospital in the City of Howell (14.5 miles south).

Utilities

Cohoctah Township residents are served by individual septic systems and private wells. One development in the Township (the Church of Nazarene camp) is serviced by a private water system, however there is currently no municipal sewer or water provision in the Township.

Cemeteries

The township has two cemeteries located in the southeast quadrant of the Township. Sanford Cemetery is an eight (8) acre cemetery located in Section 27, and Boutel Cemetery is an approximate two and 1/2 (2.5) acre cemetery located in Section 24. Cohoctah Township is currently expanding the Boutel Cemetery.

School Districts

Cohoctah Township is part of three public school districts, the largest being Howell Public Schools. A northern segment of the township is part of Byron Area Schools, while a western segment of the township is part of Fowlerville Community Schools. Cohoctah Township does not contain any school facilities that are a part of these school districts.

In addition to Cohoctah Township, the Howell Public School District includes all of the City of Howell, much of Genoa, Marion, Oceola, Howell and Deerfield Townships, and parts of Iosco, Handy and Putnam Townships. The School District includes twelve (12) school facilities within a 143 square mile area, eight of which are located in the City of Howell.

Byron Area Schools contain three (3) school facilities that are located in the Village of Byron in Shiawassee County. The school district is 80 square miles in size.

Fowlerville Community Schools not only includes a portion of Cohoctah Township, it includes all of the Village of Fowlerville, most of Conway, Handy and Iosco Townships, and parts of Howell and Unadilla Townships. The school district contains five (5) school facilities within a 113 square mile area.

Recreation

The two primary recreational resources in Cohoctah Township are the Cohoctah Township Park and the Oak Grove State Game Area.

Cohoctah Township Park is located at the corner of Preston and Allen Roads in the southeast corner of the Township, and it is easily accessed from Oak Grove Road, a paved primary roadway. The 40-acre park is open from April 1 through October 31 from dawn to dusk each day. Two riding rings, an announcer's booth, a gravel parking facility, and a playground are the only improvements to the park at this time. Many 4-H and equestrian events are held at this recreation site.

The Oak Grove State Game Area is located along the eastern boundary of Cohoctah Township and western Deerfield Township. The Cohoctah portion of the game area consists of over 800 acres of land located in Sections 24, 25 and 36. The Game Area provides natural habitat for hunting and hiking.

Residents of Cohoctah Township also have access to additional public recreational resources through Lutz County Park and the Howell Area Parks & Recreation Authority. Lutz County Park is located in the northwest portion of Deerfield Township near the Cohoctah Township line. This county park opened in 2008 and it contains hiking trails and picnic facilities. Howell Area Parks & Recreation Authority offers a variety of programs for a non-contributing government participation fee.

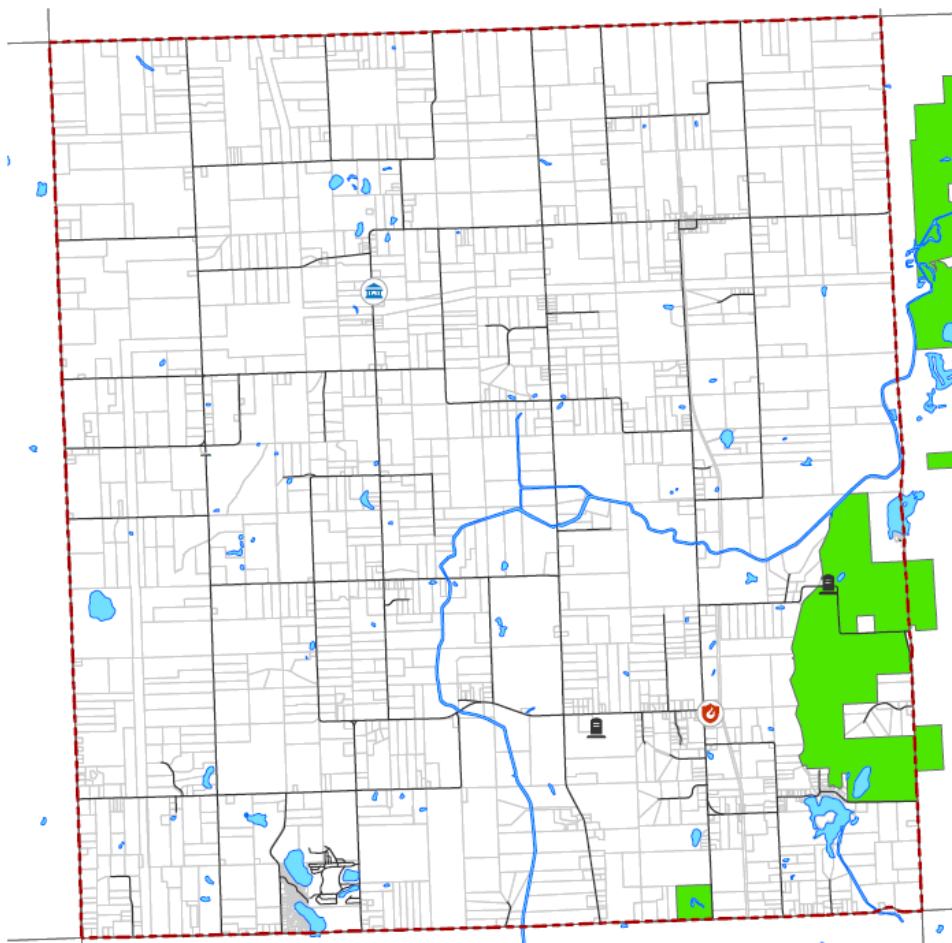
Private recreational resources are also present in the Township, such as Hunters Ridge Golf Course on Byron Road in Section 22 of the Township.

Other Community Facilities

A U.S. Post Office is located in the settlement of Cohoctah on Cohoctah Road.









Resources in Neighboring Communities

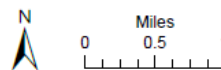
Cohoctah Township is located between the Village of Fowlerville and the City of Howell where many additional community resources are located. For instance, Township residents in the Fowlerville School District have access to the Fowlerville District Library in the Village of Fowlerville and Township residents in the Howell School District have access to the Howell Carnegie District Library in the City of Howell.



Community Resources and Facilities

Cohoctah Township
Livingston County, Michigan

- | | |
|--|---|
|  Fire Station |  Township Boundary |
|  Cemetery |  Lakes and Creeks |
|  Townhall |  Parks |
|  Roads |  Parcels |



Date: Livingston County GIS, MDCIT
12/13/2023



Chapter 3: Cohoctah Township Demographic Profile

In preparation for the development and amendment of the Cohoctah Township Master Plan, several demographic characteristics were compiled and analyzed to add understanding to the unique community needs of Cohoctah Township as compared to surrounding communities and Livingston County as a whole. 2010 and 2020 Census figures were utilized when analyzing the demographic profile of the Township.

Population

The Township's population remained relatively stable for decades until more rapid population growth occurred after 1960. Since 2000, there has been relatively little change in population.

Table 3-1: Population Profile / Projections									
1960	1970	1980	1990	2000	2010	2020	2030	2040	2050
1,160	1,454	2,436	2,693	3,394	3,317	3,246	3,235	3,295	3,308

Source: U.S. Census, SEMCOG Community Profiles

Between the 2010 and 2020 censuses, the Township population has experienced little change, only a 2% decrease. Between 2010 and 2000, the township has followed the same trend of a slowly dwindling population.

Cohoctah Township's percent population change has been trending downward since 2000

Table 3-2: Percent Population Change				
2000 Census	% change 2000-2010	2010 Census	% change 2010 - 2020	2020 Census
3,394	-2.3%	3,317	-2.1%	3,246

Source: U.S. Bureau of the Census

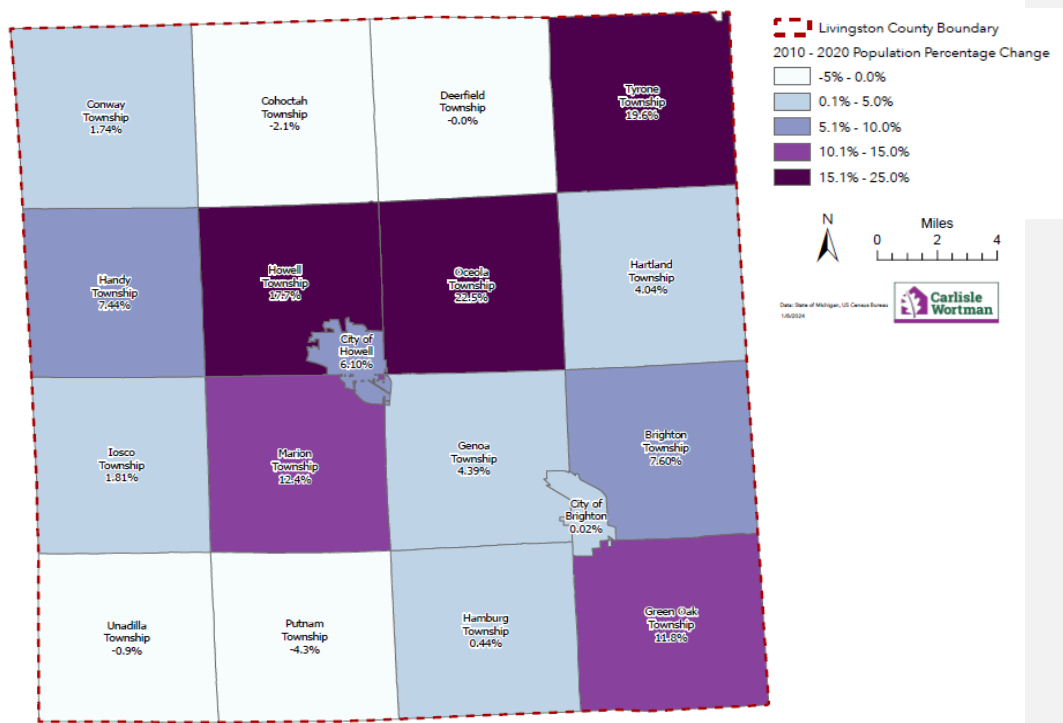
Compared with the surrounding communities of Conway, Deerfield, Handy, and Howell Townships in Livingston County, Cohoctah Township is the only community to experience a decline in population within the past decade.

Table 3-3: 2010 – 2020 Population Comparison				
Community	2010 Population	2020 Population	Numerical Change 2010 – 2020	% Change 2010 - 2020
Cohoctah Township	3,317	3,246	-71	-2.1%
Conway Township	3,546	3,608	62	1.7%
Deerfield Township	4,170	4,166	-4	0.0009%
Howell Township	6,702	7,893	1,191	17.8%
Handy Township	5,120	5,651	531	10.4%
Livingston County	180,967	193,866	12,899	7.1%

Source: U.S. Census, SEMCOG Community Profiles

Cohoctah Township has lost 71 residents within the last decade. Cohoctah Township's 2.1% population decrease is significant, as it was the only declining population among the surrounding communities and much lower than Livingston County's growth rate of 7.1%.

County Population Percentage Change



The Southeast Michigan Council of Governments (SEMCOG) estimates that Cohoctah Township's population as of July 2022 is 3,213, even lower than that of the 2020 census. This reflects a numerical change of -214 persons in a twelve-year time period from 2010. This estimate suggests a - 6.3% population growth for this decade, which is considerably less than the 26% growth rate of the 1990 – 2000 decade.

In the long term, SEMCOG forecasts that Cohoctah Township's population will grow slightly to 3,235 by 2030, 3,295 by 2040, and 3,308 by 2050. This reflects a 2020 to 2050 population gain of 62 persons for a percent change of 1.9%. As a result, growth is expected to be very incremental between the years 2020 and 2050, with very little gains per decade.

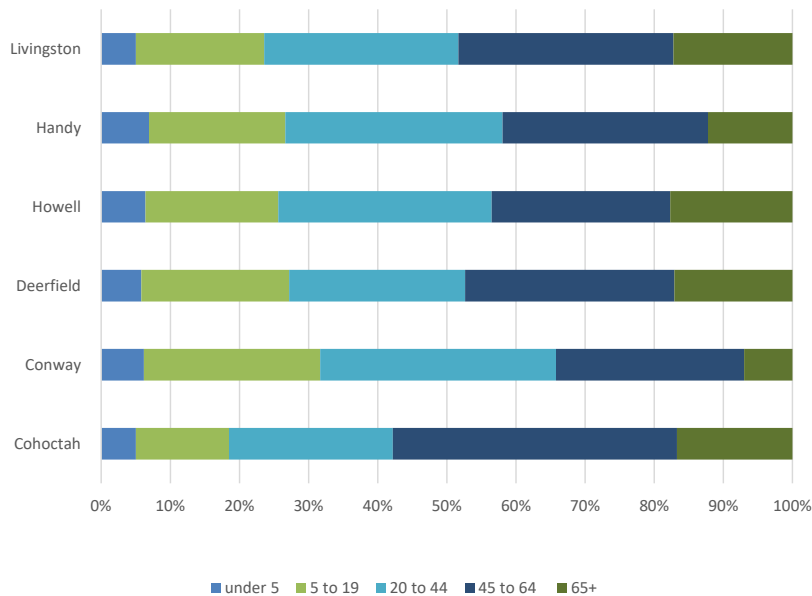
Compared to the surrounding communities, Cohoctah Township is expected to gain the least amount of residents between 20020 and 2050. A total gain of 62 people is expected in Cohoctah Township, while Conway Township is expected to gain 716 new residents, and Deerfield Township is expected to gain 426 new residents. Howell and Handy Townships is expected to gain significantly more new residents in this 2020-to-2050-time frame, with gains of 3,116 and 2,371 respectively.

Age Distribution

Different age groups within a population have certain needs, as each group is in a different stage of life. Determining which age groups are the largest can help communities target and plan for certain

land uses that will best cater to those needs. Having the ability to snapshot the current age distribution within the Township is a helpful tool in gauging which types of development will best cater to the needs of the Township. Based on the figure below, more than 50% of the population within the Township is aged 45 or higher, the largest percentage when compared to surrounding communities.

This indicates that developments that are more appealing to aging populations, for example additional multi-family housing such as condos and duplexes can help provide more options for families looking to downsize who still want to experience the rural and high-quality way of life that Cohoctah Township provides.



Source: 2020 ACS 5-year estimates

Housing

Although population is an important factor to consider when contemplating the potential future impacts upon a community, it is the built environment or housing units that will accommodate future population growth and have the most impact on future land use.

Table 3-6: Housing Unit Comparison

Community	Total Housing Units			
	2010	2020	Change	
			#	%
Cohoctah Township	1,176	1,217	41	3.5%
Conway Township	1,199	1,285	86	7.2%
Deerfield Township	1,481	1,676	195	13.2%
Howell Township	2,531	3,114	583	23%
Handy Township	2,991	3,411	420	14%
Livingston County	67,380	78,441	11,061	16.4%

Source: 2020 ACS 5-year estimates

The number of housing units in Cohoctah Township grew very little between 2010 and 2020, with only 41 new housing units being constructed during this time (3.5% increase). Cohoctah Township's growth in housing units is lower than that of surrounding Livingston County communities. In terms of total housing units, the surrounding communities of Deerfield, Howell and Handy Townships surpass Cohoctah Township.

Table 3-7: Household Comparison

Community	Total Households		2020 Census Family Households		2020 Census Non-Family Households		Average Household Size	Average Family Size
	2010	2020	#	%	#	%		
Cohoctah Township	935	1,328	854	64.3%	474	35.6%	3.00	3.00
Conway Township	968	1,174	915	77.9%	259	22.1%	3.06	3.44
Deerfield Township	1,155	1,499	1,048	69.9%	451	30.1%	2.84	3.50
Howell Township	1,838	2,605	1,960	75.2%	637	24.8%	2.71	3.10
Handy Township	2,161	3,044	2,165	71.1%	879	28.9%	2.76	3.25
Livingston County	50,578	72,905	52,171	71.6%	20,734	28.4%	2.60	3.06

Source: 2020 ACS 5-year estimates

Cohoctah Township has gained 393 households since 2010, which represents a 42% percent increase. This 2010 – 2020 numerical change in households is greater than all Conway and Deerfield Townships, but less than that of Howell and Handy Townships. The Township's 1,328 households contain a larger average household size (3.0 persons) than all communities except Conway Township, but the smallest average family size (3.0 persons) among the surrounding Livingston County communities. Most of the surrounding communities have average household sizes under 3 persons whereas Cohoctah and Conway Townships have an average household size over 3 persons. Like all Livingston County townships, Cohoctah Township households are predominantly composed of families (64.3%) with a lesser number of households consisting of a non-family composition (35.6%).

Cohoctah Township's median housing value of \$237,400 is slightly lower than the county's median value (\$256,100) but greater than the rest of the surrounding communities. The value of most Cohoctah Township homes ranges from \$200,000 to \$499,999, with the largest number of homes valued in the \$300,000 to \$499,999 category. The change in these values over the last 10 years has been dramatic. Between the 2010 and 2020 censuses, Cohoctah Township's median housing value increased by 28.5% as shown in table 3-9 below. In comparison, all surrounding communities had less of a change in numeric value and rate of increase.

The value of most Cohoctah Township homes fall in the \$100,000 to \$149,999 category

Table 3-9: Comparison of Median Housing Values				
Community	Median Value of Owner-Occupied Units			
	2010	2020	# Change	% Change
Cohoctah Township	\$184,700	\$237,400	\$52,700	28.5%
Conway Township	\$198,200	\$209,300	\$11,100	5.6%
Deerfield Township	\$216,700	\$235,900	\$19,200	8.9%
Howell Township	\$170,800	\$203,200	\$40,000	18.9%
Handy Township	\$163,200	\$169,400	\$6,200	3.8%
Livingston County	\$216,400	\$256,100	\$39,700	18.3%

Source: 2020 ACS 5-year estimates

Income

Livingston County has the highest median household income in the state (\$100,139) and is second only to Oakland County for the highest median family income (\$75,284). Cohoctah Township's median values of \$63,889 (household) and \$95,268 (family) are in the upper half of Livingston County community values.

Table 3-10: Median Income Comparison						
Community	Median Income 2010		Median Income 2020		Household Change	
	Household	Family	Household	Family	#	%
Cohoctah Township	\$63,899	\$71,023	\$63,889	\$95,268	-\$10	-0%
Conway Township	\$68,077	\$76,638	\$86,771	\$83,594	\$18,694	27.5%
Deerfield Township	\$62,331	\$78,955	\$78,860	\$99,706	\$16,529	26.5%
Howell Township	\$70,081	\$75,500	\$72,911	\$84,394	\$2,830	4.0%
Handy Township	\$53,750	\$69,073	\$63,864	\$67,774	\$10,114	18.8%
Livingston County	\$72,129	\$82,637	\$84,274	\$100,663	\$12,145	16.8%

Source: 2020 ACS 5-year estimates

The Township's income figures are most comparable to Howell and Conway Township. Over the last ten years, Cohoctah Township's household median income has increased by \$13,556 or 30.8%. Most Cohoctah Township households have a household and family income in the \$75,000 and \$99,999 range.

Most Cohoctah Township households have an income range of \$75,000 to \$99,999

Occupations

According to the 2020 Census, Cohoctah Township has an employed civilian population aged 16 and over, consisting of 2,815 workers. Most of these workers (81%) are private wage and salary workers with self-employed workers in their own unincorporated business comprising the second largest class of workers in the Township (12.8%) and government workers comprising the third largest class of workers in the Township (6.1%).

As recorded in the 2020 Census, the dominant occupation category in Cohoctah Township is *Management, Business, Science, and Arts Occupation*. 476 or 25.9% of the 1,670 workers claim this as their occupation. *Natural Resources, Construction, and Maintenance Occupations* is the second largest occupation category with 413 workers or 22.5% of the employed civilian population aged 16 and over. The third largest occupation category in the Township is *Sales and Office Occupations*. This occupational category has 373 workers or 20.4% of workers.

Table 3-11: Cohoctah Township Occupations		
Occupation	Number	Percent
Management, Business, Science, and Arts	476	25.9%
Service Occupations	345	18.9%
Sales and Office	373	20.4%
Natural Resources, Construction, and Maintenance	413	22.5%
Production, Transportation, and Material Moving	225	12.3%
Total	1,832	100%

Source: 2020 ACS 5-year estimates

Education

Cohoctah Township is part of three public school districts, the largest being Howell Public Schools. A western segment of the township is in the Fowlerville Community Schools district, while a northern segment of the township is in the Byron Area Schools district. Cohoctah Township does not contain any of school facilities that are a part of these districts.

The 2020 Census recorded 538 Cohoctah Township residents age 3 years and older that are enrolled in school. The majority of these students (46.4%) are enrolled in elementary school grades 1 through 8. The second largest percentage of students (32.5%) are enrolled in high school grades 9 through 12 and the third largest percentage of students are enrolled in college or graduate school (19.7%).

Cohoctah Township consists of a well-educated population aged 25 years and older. 85% of this adult population group have graduated from high school or obtained a higher degree level. Cohoctah

Township’s educational attainment level is slightly lower than surrounding communities and Livingston County’s 95.5% high school graduate or higher attainment.

Table 3-12: Educational Attainment Comparison Population 25 years and over						
Community	Population 25 years and over	Less than 9 th grade	9 th – 12 th grade, no diploma	High School graduate	% High School graduate or higher	% Bachelor's degree or higher
Cohoctah Township	2,490	13	361	823	85%	13.9%
Conway Township	2,233	11	101	906	95%	20.6%
Deerfield Township	2,909	23	82	950	96.4%	26.0%
Howell Township	4,862	118	125	1,660	95%	25.8%
Handy Township	5,711	62	277	2,295	94.1%	17.5%
Livingston County	134,751	1,261	4,736	35,200	95.5%	36.5%

Source: 2020 ACS 5-year estimates

Cohoctah Township does not have as large a percent of population 25 years and over that have obtained a bachelor’s degree or higher. 13.9% of this adult population group in Cohoctah Township has obtained a bachelor’s degree or higher as compared to 36.5% in Livingston County as a whole.

Agriculture

Agricultural activities figure prominently in the Cohoctah Township way of life. U.S. Census of Agriculture figures are only compiled on a county-wide basis, therefore the best local indicator of agricultural activity is by tracking the number of farms enrolled in Public Act 116 Farmland and Open Space Preservation contracts.

Each of these agreements between the State and a landowner, represents a temporary restrictive covenant regarding the use of the land. A landowner voluntarily agrees to preserve their land for agriculture in exchange for certain tax benefits and exemptions for various special assessments. An agreement runs with the land and is for a jointly agreed upon length of time (at least 10 years).

The thirty-two (32) current Farmland and Open Space Preservation contracts in Cohoctah Township far outnumber most other Livingston County communities with the exception of Conway, Handy and Unadilla Townships. The table below illustrates the location of the Farmland and Open Space Preservation contracts in Cohoctah Township.

Table 3-13: Cohoctah Township Farmland and Open Space Preservation Contracts

Size in Acres	Section Number	Quadrant of Township
75	32	Southwest
40	33	Southwest
160	33	Southwest
130	33	Southwest
130	35	Southeast
20	35	Southeast
11	6	Northwest
85	17	Northwest
40	8	Northwest
15	18	Northwest
91	7	Northwest
98	7	Northwest
64	7	Northwest
40	18	Northwest
78	8,9	Northwest
21	7	Northwest

Size in Acres	Section Number	Quadrant of Township
47	18	Northwest
28	18	Northwest
98	7	Northwest
Not Found	17	Northwest
190	6	Northwest
64	18	Northwest
117	6	Northwest
60	3	Northeast
69	3	Northeast
118	12	Northeast
10	12	Northeast
44	3	Northeast
65	3	Northeast
60	1	Northeast
40	3	Northeast
101	1,2	Northeast

Table 3-14: Summary Table of Farmland and Open Space Preservation Contracts

Quadrant of the Township	Total Number of Contracts	Total Number of Acres Under Contract
Northeast	9	567
Northwest	17	1000+
Southeast	2	150
Southwest	4	405
TOTALS	32	2,209

Source: Michigan Department of Agriculture, Farmland and Open Space Preservation Program, November 2023

Most of the Farmland and Open Space Preservation contracts in Cohoctah Township (53%) are in the northwest quadrant of the township; particularly sections 6,7,17 and 18. The second highest number of contracts are in northeast quadrant, followed by the southwest and southeast quadrants.

The largest amount of acreage held in these contracts was also in the northwest quadrant where over 1,000 acres (49% of the acreage preserved in all Cohoctah Township contracts) are preserved in 17 contracts. The largest amount of acreage held in a single contract is 190 acres in section 6 of the northwest quadrant. More than half of the contracts (24 out of 32) in Cohoctah Township are for less than 100 acres.

Like most communities in Livingston County, agriculture is not as prominent in Cohoctah Township as it was in years past. Each decade, agricultural land use has diminished due to various circumstances such as future generations choosing not to farm, low return on commodities making farming unprofitable, and increased residential growth and development.

Demographic Trends in Cohoctah Township

From the demographics analyzed in this section, we can identify some trends that should influence future planning and development in Cohoctah Township. Following are identified trends and how they may impact Township planning.

- **Trend:** In similar comparison with the surrounding municipalities, Cohoctah Township has The highest percentage of population aged 45 and older. **Planning Implication:** The need for senior housing options may start to increase, a portion of the Township should be master planned for senior living in the coming years. Settlement areas in the Township are the logical location for senior uses because these areas offer more services (post office, stores, etc.) than more rural areas of the Township.
- **Trend:** Cohoctah Township's population is currently experiencing a decline and is projected to continue. **Planning Implication:** Future planning should focus on promoting development that will improve the quality of life for current residents, rather than preparing for new ones.
- **Trend:** Cohoctah Township has a larger average household size and a smaller average family size than most surrounding Livingston County communities. **Planning Implication:** Larger dwelling units may prevail in the Township. Future residential land use should accommodate family-scale housing in variable sized to accommodate smaller families. Future recreation planning should consider the activity needs of families.
- **Trend:** Compared with surrounding communities, Cohoctah Township has one of the lowest household median income, with family median income ranking higher. **Planning Implication:** The Master Plan could allow for limited expansion of commercial and industrial development that may add employment opportunities in the community, thereby impacting income. Commercial and industrial future land use planning could concentrate on growth in agricultural-related commerce and industry.
- **Trend:** Agricultural activities figure prominently in the Cohoctah Township way of life. The thirty-two (32) current Farmland and Open Space Preservation contracts in Cohoctah Township far outnumber most other Livingston County communities with the exception of Conway, Deerfield, and Handy Townships. **Planning Implication:** A future land use classification in Cohoctah Township could encourage the continuation of agricultural activities.

Chapter 4: Cohoctah Township Transportation Profile

This chapter of the Plan will address transportation issues within Cohoctah Township. This information is helpful when weighing the impacts of proposed development in the community.

Cohoctah Township is not highly accessible from a regional perspective. The center of Cohoctah Township is approximately nine (9) miles north of I-96, approximately thirteen (13) miles west of U.S. 23, and ten (10) miles south of I-69 between Lansing and Flint. State Highway M-59 which travels east-west is slightly closer to the Township at approximately 8 miles south of the Township, and State Highway M-52 which travels in a north-south direction, is approximately nine (9) miles to the west.

Existing Road Conditions

Cohoctah Township's existing roadway system is predominantly made up of county primary and county local roads. County local roads are designed to receive traffic from the larger county primary roads and redistribute the traffic throughout the Township to dwelling units. Cohoctah Township contains 25.75 miles of county primary roads and 54.46 miles of county local roads. There are very few smaller roadways in Cohoctah Township, such as subdivision roads or private roads.

The surface of most roads in Cohoctah Township are gravel. The table below shows that Cohoctah Township has 60.72 miles of gravel roads as compared to only 19.12 miles of paved roadway. In comparison to surrounding Livingston County townships, Cohoctah Township has more paved roadway than Conway and Deerfield Townships, but significantly less than Howell Township. Interestingly, Cohoctah Township's 80.21 total miles of county primary and local roadway is higher than most other Livingston County townships; only the more urbanized communities of Tyrone, Hartland, Brighton, Green Oak, Genoa and Hamburg Township have more total miles of county roadway.

Table 4-1: Cohoctah Township Road Surface Type (In miles)									
Primary Paved	Local Paved	Subs Paved	Total Local Paved	Total Roads Paved	Primary Gravel	Local Gravel	Subs Paved	Total Local Gravel	Total Roads Gravel
17.84	1.28	0	1.28	19.12	7.76	52.96	0	52.96	60.72

Source: Livingston County Road Commission, October 2023

Transportation Improvements

The Transportation Improvement Program (TIP) for Southeast Michigan is a listing of all transportation projects receiving federal funding in Southeast Michigan. The TIP contains the short-range transportation projects due to be completed from 2023 – 2026; projects that are in keeping with the 2045 Regional Transportation Plan for Southeast Michigan (RTP). The 2045 RTP is the long-range vision for the transportation network in the seven-county Southeast Michigan region. It serves as a guide for developing a transportation system that is accessible, safe, and reliable and contributes to a higher quality of life for the region's citizens. The Plan is necessary to meet requirements allowing federal transportation money to be spent in the region. It contains \$35 billion in federal, state, and local funding for road and transit projects, as well as policies and initiatives designed to guide the region forward.

The TIP lists short-range regional transportation projects receiving federal funding, and the 2045 RTP conveys the long-range vision for the regional transportation network

The TIP lists one short-range transportation project for Cohoctah Township, which consists of a bridge replacement located on East Cohoctah Road. The RTP does not contain any transportation projects specific to Cohoctah Township; however, it does contain county-wide projects that will benefit Cohoctah Township residents.

Traffic Volumes

Two-way, twenty-four-hour traffic counts for roads within Cohoctah Township are recorded by the Livingston County Road Commission and by the Michigan Department of Transportation. The traffic count data in the table below and on the next page, shows that the most recent traffic counts in Cohoctah Township were taken in the years 2021 and 2023. During this time period, twenty (20) segments of roadway in the township had traffic counts of over one thousand (1,000). The majority of these high traffic count roadway segments are hard top roads, implying that an increase in traffic volume occurs if the roadway is paved.

**Table 4-4: 2008 and 2009 Cohoctah Township Traffic Counts
Greater than 1,000**

Year of Traffic Count	Traffic Count	Road	Road Segment
2023	6,511	Oak Grove	From Allen to Sanford S
2023	4,425	Oak Grove	From Sanford S to Jacob Hill
2023	4,292	Oak Grove	From Sanford N to Chase Lake
2023	4,077	Oak Grove	From Preston to Sanford N
2023	3,348	Oak Grove	From Gannon to Cohoctah
2023	2,626	Oak Grove	From Chase Lake to Jones
2023	2,539	Oak Grove	From Jones to Stelzer
2023	1,998	Oak Grove	From Stelzer to Gannon
2023	1,799	Oak Grove	From Richards to Lovejoy
2023	1,783	Oak Grove	From Cohoctah to Richards

**Table 4-4: 2008 and 2009 Cohoctah Township Traffic Counts
Greater than 1,000**

Year of Traffic Count	Traffic Count	Road	Road Segment
2021	1,174	Chase Lake	From Byron to Oak Grove
2021	1,147	Chase Lake	From Burkhart S. to Schrepfer
2021	1,084	Chase Lake	From Geer E. to Handy
2021	1,312	Cohoctah	From Byron to Durand
2021	2,292	Cohoctah	From Oak Grove S to Stelzer
2021	1,832	Cohoctah	From Durand to Oak Grove S
2021	1,409	Faussett	From Larch to Fisher
2021	1,525	Faussett	From Sanford to Larch
2021	1,253	Owosso	From Allen to Chase Lake
2021	1,362	Sanford	From Oak Grove S. To Faussett

Source: Livingston County Road Commission, Michigan Department of Transportation

The traffic counts offer a good indication of where traffic volumes are the greatest in Cohoctah Township. The greatest traffic flows are found along the following six (6) township roadways: Oak Grove; Sanford; Chase Lake; Cohoctah; Faussett; and Owosso. The majority of these roadways (4) are paved primary roadways, while two (2) roadways are local gravel (Sanford and Owosso).

Cohoctah Township's highest 2021/2023 traffic counts are on 3 paved primary roadways and 2 gravel local roadways.

Different facilities and land uses have been shown to generate different amounts of traffic. Any facility or land use which attracts or causes traffic is known as a traffic generator. By using a process known as trip generation it is possible to

estimate the volume of trips going to or leaving a particular facility or land use. The Institute of Transportation Engineers (ITE) has calculated trips for a variety of uses, which are listed below as a reference for future development. In this table, Peak Hour Trips refer to the p.m. hours of 4 p.m. to 6 p.m. A "trip" is a one-way movement; for instance, 10 trips = 5 in + 5 out. For example, if a development is proposed with ten new single-family homes, the expected traffic generated daily (on weekdays) would be around 96 one-way vehicle trips (9.57×10 homes). During peak evening hours, about 10 trips can be expected for the development (1.02×10 homes).

Traffic impact studies look at a proposed project and estimate the number of vehicle trips the project will generate. The table below is applied, along with an analysis of what direction traffic will approach from, and a review of the site plan for access and circulation issues. Traffic impact studies will be developed by a qualified preparer with experience and background in traffic-related analyses. Cohoctah Township will consider requiring traffic impact studies for any project that may cause or attract traffic such as medium to large sized residential developments.

Table 4-5: Traffic Generator Characteristics		
Type of Land Use	Peak Hour Trips*	Average Daily Trips*
Residential Uses (per unit)		
Single Family Home (detached)	0.94	9.43
Apartment	0.51	6.74
Condominium	0.57	7.20
Mobile Home	.58	7.12
Commercial Uses (per 1,000 sq. ft. floor area, if not otherwise noted)		
Hardware/Paint Store (per employee)	3.67	27.69
Convenience Store	49.11	762.28
Supermarket	8.95	93.84
Fast Food Restaurant (with drive-thru)	33.03	467.48
Service Station (per pump)	13.91	172.01
Drugstore (without drive-thru)	8.51	90.08
Industrial Uses		
Light Industrial	0.65	4.87
Industrial Park	0.34	3.37
Manufacturing	0.74	4.75
Warehousing	0.18	1.71

Source: ITE Generation Manual 11th Edition

Traffic Accidents

The Southeast Michigan Council of Governments (SEMCOG) traffic crash data reveals that several intersections in Cohoctah Township have sustained a high number of accidents over the last five years between 2017 and 2021. The ten intersections in the Township that have incurred the most vehicle accidents, are listed in the table below.

Table 4-6: Top Ten High Crash Intersections in Cohoctah Township 2004-2008		
Intersection	Total Crashes 2017 - 2021	Year That the Most Crashes Occurred
Cohoctah Road @ Durand Road	6	2018,19,20 (2 crashes)
Chase Lake Road @ Oak Grove Road	6	2018,20 (2 crashes)
Cohoctah Road @ Oak Grove Road	5	2019 (3 crashes)
Oak Grove Road @ Stelzer Road	5	2021 (3 crashes)
Oak Grove Road @ Allen Road	5	2017,18 (2 crashes)
Oak Grove Road @ Gannon Road	4	2017,18,19,20 (1 crash)
Burkhart Road @ Chase Lake Road	4	2017,18,19,21 (1 crash)
Oak Grove Road @ Sanford Road	4	2019,21 (2 crashes)
Oak Grove Road @ Jacob Hill Road	4	2017,19 (2 crashes)
Cohoctah Road @ Byron Road	3	2021 (2 crashes)

Source: Southeast Michigan Council of Governments (SEMCOG)

Note: This crash report includes all crashes occurring within 150 feet of the intersection.

During the five year span a total of forty-six (46) accidents have occurred at these intersections. Intersections that included Oak Grove Road figured most prominently in the highest crash intersections (5 out of 10 intersections). The Oak Grove Road intersection at Gannon Road has incurred at least one traffic crash per year between 2017 – 2020.

There were no fatalities recorded at any of these ten intersections during the five-year time period. Out of the 46 crashes occurring at these intersections, only 1 resulted in a crash in which the outcome was a serious injury, 7 resulted in a crash with other injuries, and the bulk of crashes resulted in property damage only (38 or 82.6%).

The majority of accidents at these intersections involved a single vehicle. Deer were involved in a total of 19 crashes or approximately 41% of all the crashes at these ten intersections. Alcohol played a part in 1 of the total 46 crashes.

SEMCOG's 2017-2021 traffic crash data by road segment is depicted in the table below. This data reveals that two hundred and ninety-one (291) accidents have occurred on the township's top ten highest crash road segments over the five-year span. The most accidents of any segment (73) have occurred on Oak Grove Road from Chase Lake Road to Cohoctah Road West.

Road Segment	Total Crashes 2017 - 2021	Year That the Most Crashes Occurred
Oak Grove Road from Chase Lake Road to Cohoctah Road West	73	2019,20 (17 crashes)
Oak Grove Road from Marr Road to Sanford Road	45	2018 (13 crashes)
Faussett Road from Sanford Road to Latson Road North	35	2019 (10 crashes)
Byron Road from Marr Road to Chase Lake Road	29	2018 (7 crashes)
Burkhart Road North from Marr Road to Chase Lake Road	28	2019 (8 crashes)
Cohoctah Road West from Antcliff Road North to Oak Grove Road	27	2018 (11 crashes)
Hayner Road from Fowlerville Road North to Hayner Road	20	2019 (6 crashes)
Owosso Road from Marr Road to Chase Lake Road	16	2017,20 (4 crashes)
Oak Grove Road from Oak Grove Road to Chase Lake Road	10	2021 (4 crashes)
Chase Lake Road from Byron Road to Oak Grove Road	8	2017 (3 crashes)

Source: Southeast Michigan Council of Governments

Note: Road segments extend beyond the township boundaries.

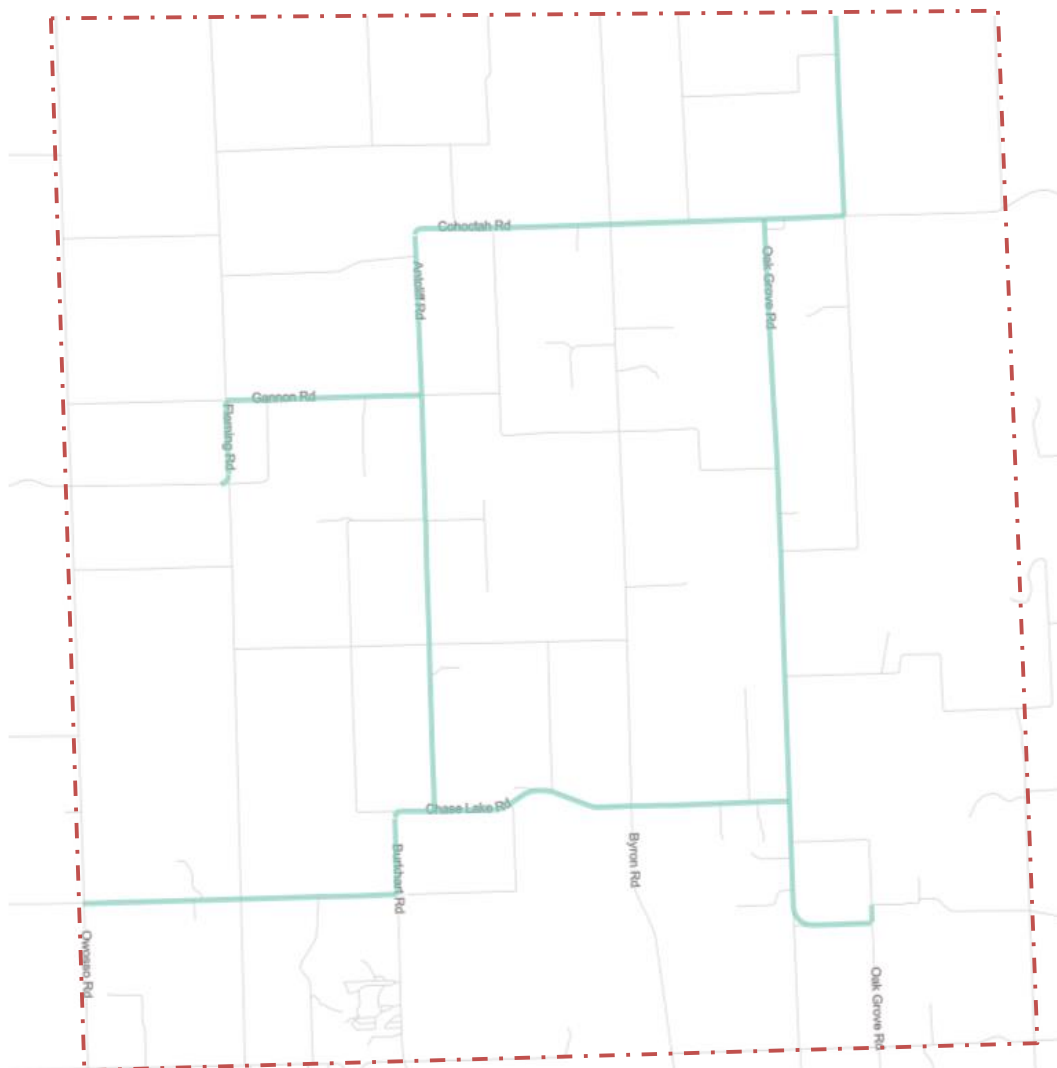
There was one fatality reported in the 291 crashes occurring on the eleven high crash road segments. The fatality occurred on Burkhart Road North between Marr Road and Chase Lake Road. The majority (88%) of accidents resulted in property damage only. The largest contributing factor to these crashes was deer (57%).

Other Transportation Resources

The only existing public transportation available to Cohoctah residents, is a county-wide small bus dial-a-ride service from Livingston Essential Transportation Service (L.E.T.S.). L.E.T.S. has lift-equipped small buses that provide service within the county, limited service for persons to county dialysis centers, and a regional service for medical appointments in Ingham, Genesee, Oakland and Washtenaw Counties. Persons with a documented disability or who are at least 60 years of age, ride at a reduced fare.

Maple Grove Airport in neighboring Conway Township is the closest public airport to Cohoctah Township. This small, privately owned airport is located near the Conway/Cohoctah township line on Sherwood Road. The Spencer J. Hardy Airport, located in Howell Township, is another public airport within close proximity of the Township. This airport is owned and operated by Livingston County government. The Capital City Airport in Lansing and Bishop International Airport in Flint are the closest public airports with commercial airline passenger service.

Cohoctah Township has one active railroad line. The Great Lakes Central Railway (GLC) freight carrier travels north/south from the City of Ann Arbor through the City of Howell and northward through Cohoctah Township into Shiawassee County.




Average Daily Trips



 Township Boundary

Township Daily Traffic Counts

Source: SEMCOG 

Chapter 5: Cohoctah Township Natural Features

The natural environment forms the basis of a community's development. It is important to inventory the natural features of Cohoctah Township in order to allow the community to grow in a manner that preserves the natural features that attracted people to the community in the first place. The following inventory is an important tool in deciding land use issues, guiding future growth and development, and preventing the destruction of valuable natural features. Development in the Township should be directed to areas that are most capable of sustaining physical changes to the landscape without negatively impacting the community's natural features. Conversely, those areas of the Township that contain valuable natural features should be master planned for less intensive development.

Geology and Topography

The bedrock of the eastern part of the Upper Peninsula and the entire Lower Peninsula of Michigan is made up of Paleozoic and Mesozoic sedimentary rocks of Cambrian to Jurassic age. These gently dipping rocks constitute a large geological structure known as the Michigan basin. The Paleozoic rocks of the Michigan basin contain important resources of petroleum, limestone, dolomite, shale, salt and gypsum.

Repeated advances of large continental glaciers during Pleistocene time eroded and broke down soil and rocks and then redeposited this material as sediments as the glaciers melted and retreated. Most of Michigan is covered by glacial sediments or gravels, sands, and clays derived from them. Virtually all of the geographic and topographic features of Michigan, particularly of the Lower Peninsula, were shaped by glacial and melt water action^a.

The vast majority of Cohoctah Township sits upon bedrock composed of Coldwater Shale. A very small portion of the Township at the northern edge of Sections 1,2,3 sits upon bedrock composed of Marshall Sandstone. Both types of bedrock are composed predominantly of shales, and they were created during the Paleozoic Era.

The elevation of Cohoctah Township ranges from a low 840 to a high of 960 feet above sea level. The topography throughout most of the township varies between 850 and 895 feet. The lowest spot in the Township at 840 ft. is near the juncture of Bogue Creek and C&C Union drains in Section 24. The highest spot in the Township at 960 ft. is near the middle of Section 31 in the southwest corner of the Township.

Cohoctah Township is generally level with few locations of steep slopes (>18%). Steep slopes are most abundant in the southern half of the Township where the majority of the township lakes and streams are located. The only exception to this pattern is Section 4 in the northern tier of Cohoctah Township sections.

Steep slopes of >18% tend to be more concentrated in the southern half of Cohoctah Township near lakes and streams

Areas that contain steep slopes should remain undisturbed. These areas should be viewed as natural and aesthetic open space areas. If development should occur, sensitive site planning would be required along these slopes to prevent soil erosion. Care must be taken to ensure that extensive grading is minimized and to ensure that other natural features such as vegetation and topsoil are retained.

^a Michigan Department of Environmental Quality (MDEQ), Geological and Land Management Division (GLMD), 2003

Soils and Septic Limitations

According to the Soil Survey of Livingston County, Michigan, soils in Cohoctah Township consist of five soil Associations: Miami-Conover, Miami-Brookston, Miami-Hillsdale, Carlisle-Houghton-Gilford, and Spinks-Oakville-Boyer-Oshtemo. Each soil association is comprised of more than one kind of soil as described below.

Miami-Conover soils are the dominant soil association in Cohoctah Township and throughout Livingston County. This soil association makes up about 33 percent of county soils. This soil association can be characterized as follows: *Nearly level to strongly sloping, well-drained and somewhat poorly drained, medium-textured soils on till plains and moraines*. About 35 percent of the Miami-Conover association is made up of Miami soils, about 15 percent of Conover soils and about 50 percent of minor soils. The minor soils in this association are Owosso, Metea, Metamora, Brookston, and Carlisle. This soil association is present throughout the middle and southern portions of the Township in Sections 18 – 36. Sections 19, 20, 29 and 30 consist entirely of this soil association. Most areas of these soils are used as cropland, pasture and woodland.

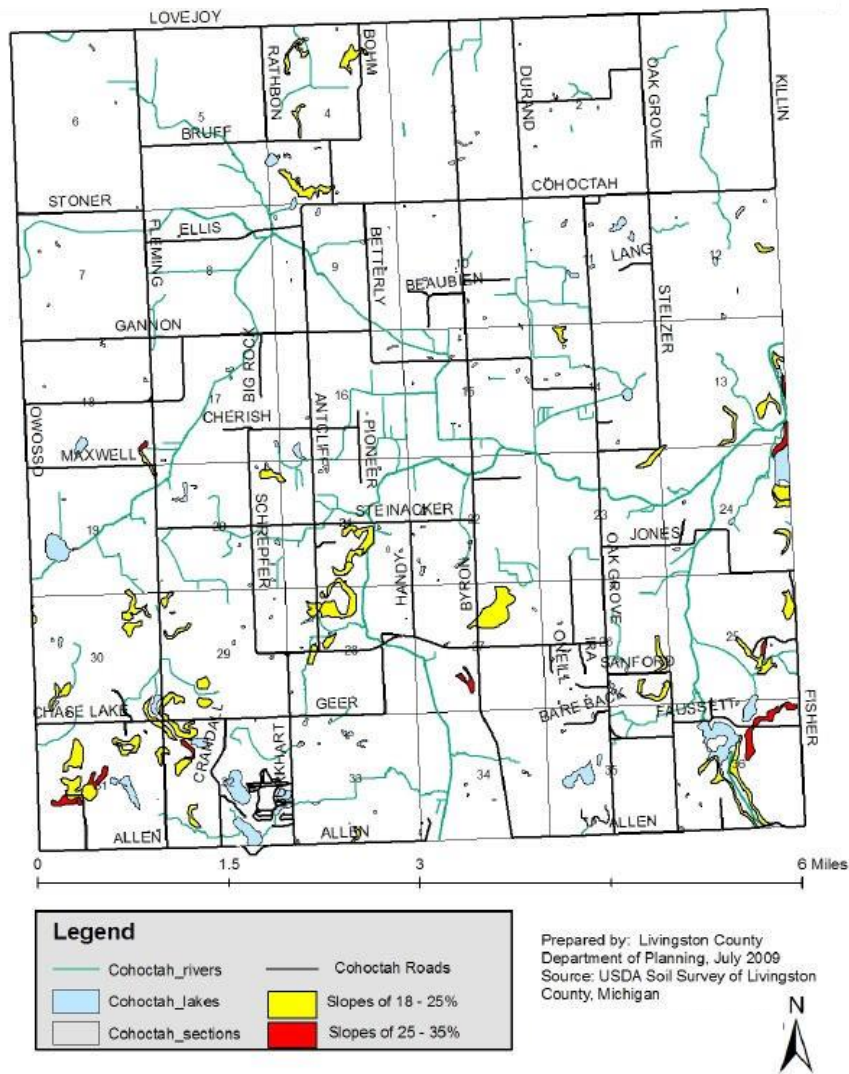
The second largest soil association in Cohoctah Township is Miami-Brookston. This soil association comprises about 4 percent of the county. About 50 percent of the association is made up of Miami soils, about 25 percent of Brookston soils, and about 25 percent of minor soils. The minor soils in this soil association are Hillsdale, Metamora, Locke, and Linwood. Miami-Brookston soils can be described as: *Nearly level to gently sloping, well-drained and poorly drained, medium-textured soils on till plains*. This soil association is found throughout the northern half of the Township in Sections 1 – 12 and 16 – 18. Sections 2,3,6 and 8 consist entirely of Miami-Brookston soils. Most areas of these soils are used as cropland, pasture and small woodlots.

Miami -Hillsdale soils can be characterized as follows: *strongly sloping to hilly, well-drained, medium-textured and moderately coarse textured soils on moraines and till plains*. County-wide this soil association makes up about 6 percent of the soils. The major soils in this association are Miami soils (50 percent), and Hillsdale soils (30 percent). Minor soils make up about 20 percent of the soil association and include Conover, Brookston, Spinks, Fox, Boyer, and Carlisle. This soil association is present only in the northeast corner of Cohoctah Township in Sections 1 and 12. The less sloping areas of these soils are used for crops while the more hilly areas are used for pasture, as woodland, and for recreation.

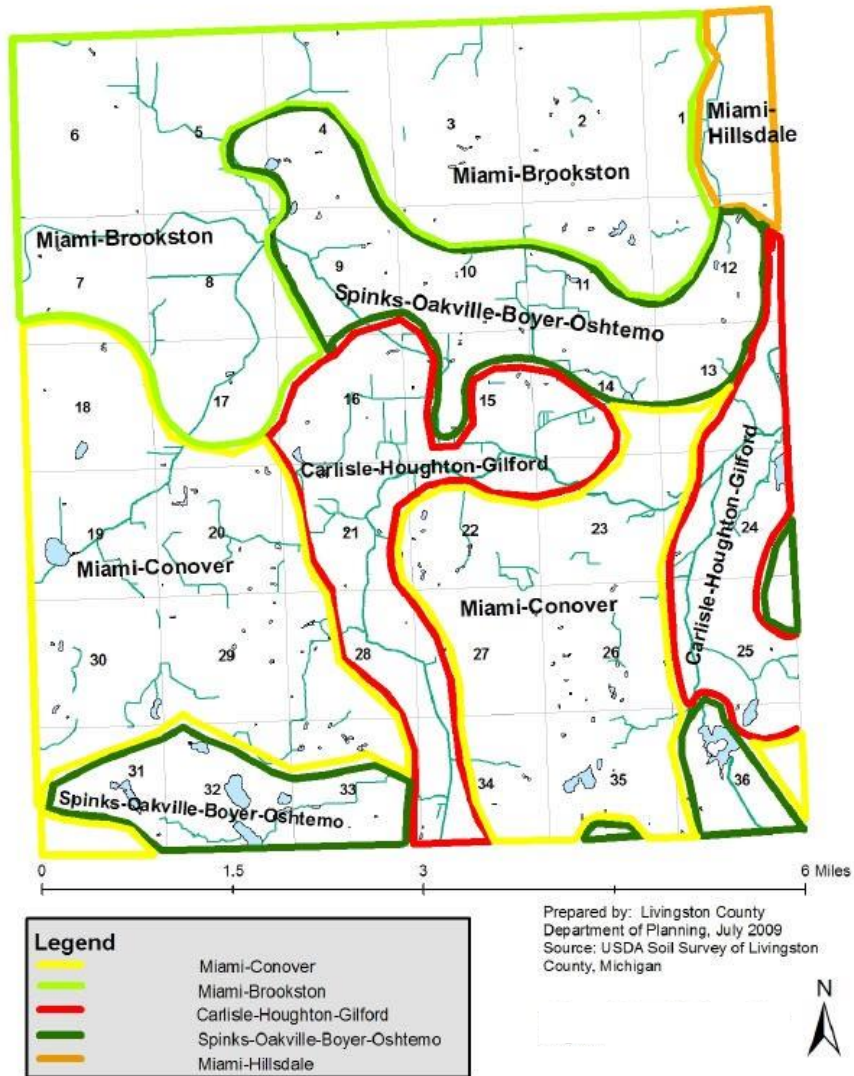
Carlisle-Houghton-Gilford soils comprise about 19 percent of the county. This soil association can be described as follows: *Nearly level, very poorly drained, organic soils and moderately coarse textured soils on outwash plains, in glacial drainageways, and on lake plains*. The major soils in this association are Carlisle (45 percent), Houghton (10 percent), Gilford (10 percent) and minor soils (35 percent). The minor soils in this association are Wasepi, Colwood, Brady, and Bronson. This soil association extends in a ribbon from the southeast corner to the middle of the Township. Land use in this soil association varies, most of the land area is idle or used as woodlands. Some areas are used as cropland and pasture, if adequately drained.

Three smaller areas of the Spinks-Oakville-Boyer-Oshtemo association are found in the Township in both the northern and southern halves of the Township. This soil association can be characterized as follows: *Strongly sloping to hilly, well-drained, coarse-textured soils dominantly on moraines*. Across the county this soil association makes up about 6 percent of the soils. About 50 percent of the association is made up of Spinks-Oakville loamy sands, about 40 percent Boyer-Oshtemo and about 10 percent minor soils consisting of Fox, Brady, Rifle and Tawas. Most areas of these soils are idle or are used for woodland or recreation. The soils are poorly suited for crops grown in the area and are only moderately well suited to pasture and as woodland.

Cohoctah Township Steep Slope Classifications



Cohoctah Township General Soil Associations



In these five general soil associations, each soil has a different capacity for drainage and therefore a varying ability to support onsite septic disposal. A map of the septic limitations of these soils is a great tool to use when deciding where to direct development. Areas under greater septic constraints should be planned for less density. Another useful tool is the table below which illustrates whether the most common soil types in Cohoctah Township have Slight, Moderate or Severe limitations for septic systems.

Table 5-1: Soils Classified by Septic System Limitations		
Slight (soil name and slope)	Moderate (soil name and slope)	Severe (soil name and slope)
BrA Boyer loamy sand (0-2%)	BuA Brady loamy sand (0-2%) Moderate to Severe	By Brookston loam (0-2%)
BrB Boyer loamy sand (2-6%)	BwA Bronson loamy sand (0-2%)	BtE Boyer-Oshtemo loamy sand (18-25%)
BrC Boyer loamy sand (6-12%)	BsA Boyer loamy sand, silty (0-2%)	BtF Boyer-Oshtemo loamy sand (25 - 35%)
BtA Boyer-Oshtemo loamy sand (0-2%)	BsB Boyer loamy sand, silty (2-6%)	Cc Carlisle muck (0-2%)
BtB Boyer-Oshtemo loamy sand (2-6%)	BtD Boyer-Oshtemo loamy sand (12-18%)	Cr Colwood fine sandy loam (0-2%)
BtC Boyer-Oshtemo loamy sand (6-12%)	FrD Fox Boyer Complex (12-18%)	CvA Conover Loam (0-2%)
FoA Fox sandy loam (0-2%)	HID Hillsdale sandy loam (12-18%)	CvB Conover Loam (2-6%)
FoB Fox sandy loam (2-6%)	MnA Metea loamy sand (0-2%) Moderate to Severe	CxA Conover –Miami Loams (0-2%)
FoC Fox sandy loam (6-12%)	MnB Metea loamy sand (2-6%) Moderate to Severe	Gd Gifford sandy loam (0-2%)
FrB Fox-Boyer complex (2-6%)	MnC Metea loamy sand (6-12%) Moderate to Severe	FrE Fox Boyer Complex (18-25%)
FrC Fox-Boyer complex (6-12%)	MoD Miami Loam (12-18%)	FrF Fox Boyer Complex (25-40%)
HdB Hillsdale loamy sand (2-6%)	OmA Owosso-Miami sandy loam (0-2%)	HIE Hillsdale sandy loam (18-25%)
HdC Hillsdale loamy sand (6-12%)	OmB Owosso-Miami sandy loam (2-6%)	Ho Houghton muck (0-2%)
HIB Hillsdale sandy loam (2-6%)	OmC Owosso-Miami sandy loam (6-12%)	Lm Linwood muck (0-2%)
HIC Hillsdale sandy loam (6-12%)	OmD Owosso-Miami sandy loam (12-18%)	LoB Locke sandy loam (0-4%)
HmB Hillsdale-Miami loams (2-6%)	SvD Spinks-Oakville loamy sands (12-18%)	MIB Metamora sandy loam (0-4%)
HmC Hillsdale-Miami loams (6-12%)		MoE Miami Loam (18-25%)
MoA Miami Loam (0-2%)		MoF Miami Loam (25-35%)
MoB Miami Loam (2-6%)		Rf Rifle muck (0-2%)
MoC Miami Loam (6-12%)		SvE Spinks-Oakville loamy sands (18-25%)
MrB Miami-Conover loams (2-6%)		SvF Spinks-Oakville loamy sands (25-35%)
SvB Spinks-Oakville loamy sands (0-6%)		Tm Tawas muck (0-2%)
SvC Spinks-Oakville loamy sands (6-12%)		WeA Wasepi sandy loam (0-2%)

Watersheds

A watershed is an area of land that drains to a common point. Ultimately a watershed drains into a particular watercourse or water body such as a Great Lake. The rationale for watershed management is that if we properly manage activities on the land that drains to bodies of water, we will protect and improve the water resources of the state.

Nearly all of Cohoctah Township drains into the Shiawassee River Watershed, which drains to Lake Huron. The southwest corner of the Township is the only exception; this land area drains into the Grand Watershed which ultimately drains to Lake Michigan.

The headwaters of the Shiawassee River Watershed are primarily located in Livingston and Oakland counties. This watershed is one of the best examples of a warm-water river system in its eco-region. The watershed is about 742,400 acres in size. Its waters support over 40 species of fish, including darters, minnows, and channel catfish, and 12 species of freshwater mussel. The river also plays an integral role in the travels of migratory waterfowl and shorebirds. The swamps and fens adjacent to the river's headwaters support several globally rare species, including the Indiana bat, eastern massasauga rattlesnake, Blanding's turtle, and insects such as the Poweshiek Skipperling.^b

Lakes, Ponds, Rivers, Creeks, and Drains

Surface water in the township is in the form of lakes, ponds, rivers, creeks and drains. There are 8 small lakes and ponds in Cohoctah Township that consist of 5 acres or more; they are described in the following table:

Table 5-2: Cohoctah Township Lakes and Ponds of 5 Acres or More

Lake Name	Section(s)	Acreage	Maximum Depth In Feet	Public Access
Schuler	4,5	7.2	Unknown	No
Sabine	19	18	Unknown	No
Hidden	24	5.3	Unknown	No
Lake Cohoctah/ Sandy Bottom	32	21	Unknown	No
Cook	32	6.2	15	No
Mud	32	8.1	Unknown	No
Oak Grove Mill Pond	36	49	8	No
Hosley Pond	36	13	Unknown	No

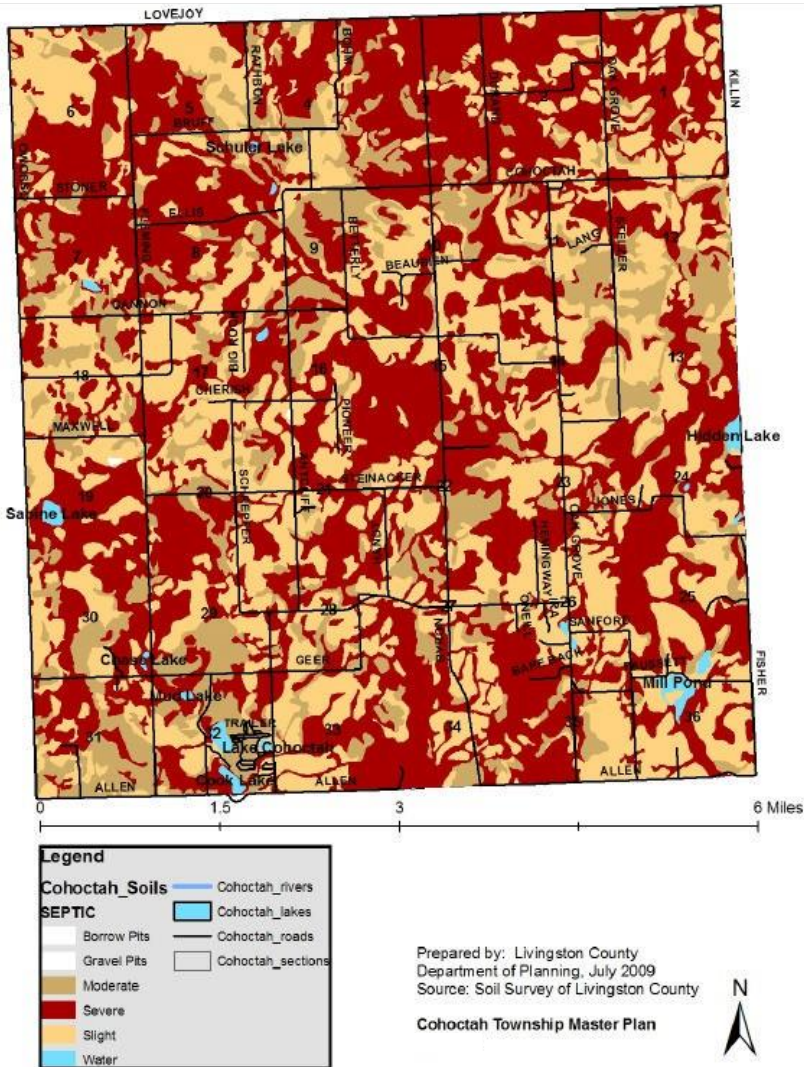
Source: Michigan Lake Inventory Bulletin No. 47 by Humphrys and Green

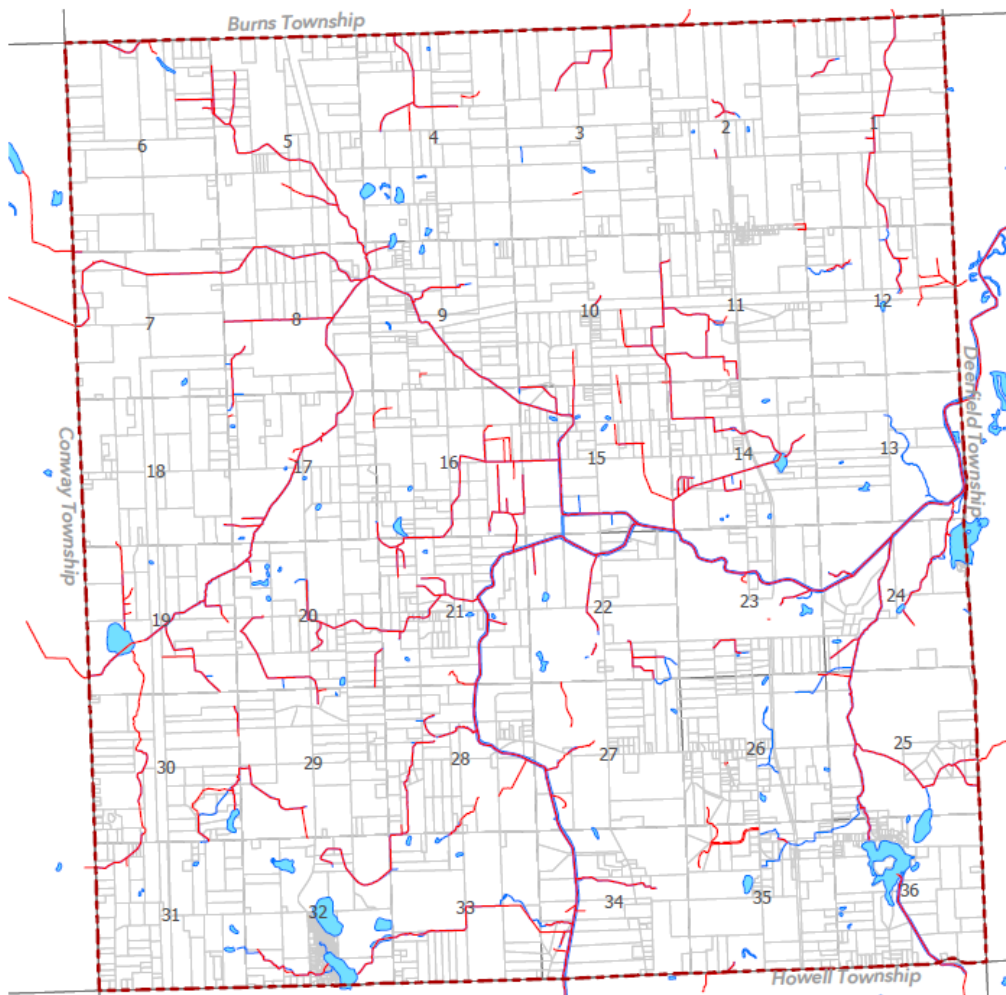
Lake and pond resources in Cohoctah Township can be described as small and scattered throughout the Township. None of these water resources have public access. The largest water bodies, Lake Cohoctah/Sandy Bottom Lake, and the Oak Grove Mill Pond are found in the southernmost tier of the Township in Sections 32 and 36. Lake Cohoctah/Sandy Bottom Lake is the site of the Church of Nazarene camp.

Most of the lake lots in Cohoctah Township were created decades ago and they are very narrow in width. Many were constructed as summer homes but have been converted to year-round use.

^b Shiawassee River Watershed, The Nature Conservancy website, 2009

Cohoctah Township Septic Limitations

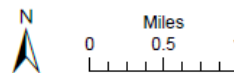




Lakes, Pond, Rivers, Creeks and Drains

Cohoctah Township
Livingston County, Michigan

- | | |
|-------------------|------------------|
| Township Boundary | Lakes and Creeks |
| Open Drains | Parcels |
| Rivers | Sections |



Date: Livingston County GIS, MDOIT
12/13/2023



Dense Lakefront development presents many environmental challenges. For instance, this type of development often results in groundwater contamination from septic systems located near lake shores in high water table areas. Surface waters are also polluted from runoff over impervious surfaces such as driveways, roads, and roofs. This runoff carries with it tar, rubber, salt, oil, gasoline, and other fluids from automobiles. Lakefront lawns also contribute to lake pollution by sending runoff into lakes that carries fertilizer, weed killer, insecticides, and other chemicals with it.

The South Branch of the Shiawassee River roughly bisects the southern half of the township to its center, then runs eastward into Deerfield Township. Several tributaries, including Sprague Creek, and drains scattered around the township empty into the river. This combination of natural and manmade drainage, when combined with the township's wetlands, provides areas of water storage and dissipation.

Wetlands and Floodplains

Existing in many different forms such as bogs, marshes, and swamps, wetlands are one of the most important natural resources upon which a community depends. Wetlands are complex ecological systems that function in a number of beneficial ways. Wetlands reduce flood hazards by providing storm water storage. Wetlands that overlay groundwater recharge areas improve groundwater quality by filtering the water as it percolates through the soil. They act similarly near surface water by filtering run-off. They are also highly productive ecosystems which provide an essential habitat for much of Michigan's fish and wildlife at some time during their life cycles.

Wetland areas are interspersed throughout the township. The wetlands often act as transitional areas between the aquatic ecosystems and the surrounding uplands. The largest wetland systems are primarily adjacent to lakes or rivers. The largest wetland systems in the Township are associated with Sabine Lake and Sprague Creek in Section 19, the South Branch of the Shiawassee River in Sections 33, 34 and 27, and the Oak Grove State Game area in Sections 24 and 25.

There are three primary types of wetlands in Cohoctah Township: 1) emergent wetlands; 2) scrub/shrub wetlands; and 3) forested wetlands with an overstory of trees and an understory of shrubs. As water levels rise and fall, some ecological succession may be occurring as the wetlands shift from emergent marsh to forested wetlands.

Under Public Act 451 of 1994, certain wetland areas are protected more stringently by the Michigan Department of Environmental Quality. These include wetlands that are contiguous to an inland lake, pond, river, stream, or similar surface water feature and wetlands that are five acres or larger in area and located in counties which contain a population of at least 100,000 people, which includes Livingston County. Data for this map was compiled from the National Wetlands Inventory. Although this mapping data has proven to be highly accurate and helpful, the only foolproof way to identify wetlands is through a site visit.

Like most communities in Michigan, some areas of Cohoctah Township are susceptible to flooding. A floodplain is the low-lying area adjacent to a watercourse that is prone to flooding. Areas with a high degree of wet soils and limited drainage may also be susceptible to flooding. Periodic flooding of these areas is critical to the types of vegetation and animal species which live here. Floodplains also contain water during periods of high stream levels. Development in floodplains will be limited due to the inability to site septic systems and building foundations, and the threat of property damage. Any alteration to a floodplain will disrupt the drainage flow during high water periods and potentially divert flooding to other areas. Federal, state and local laws regulate encroachment, dredging and filling with flood plain areas. The middle of Cohoctah Township is where the largest floodplain area lies, surrounding the convergence of creeks, drains and the branches of the Shiawassee River.

Agricultural Land

Agricultural land serves a variety of benefits to the township. It provides locally grown food and important wildlife habitats. Beyond these obvious benefits, the township's agricultural land serves as a part of the rural atmosphere that attracts residents to Cohoctah Township, provides food for wildlife, helps to control flooding, protects wetlands and watersheds, and helps to maintain good air quality.

As explored in Chapter 3: Demographic Profile, Cohoctah Township farmers are active participants in the State of Michigan's P.A. 116 Farmland and Open Space Preservation program. Enrollment in this program is voluntary. A landowner agrees to preserve their land for agriculture in exchange for certain tax benefits and exemptions for various special assessments. An agreement runs with the land and is for a jointly agreed upon length of time (at least 10 years). There are currently thirty-two (32) Farmland and Open Space Preservation contracts in Cohoctah Township which far outnumbers most other Livingston County townships.

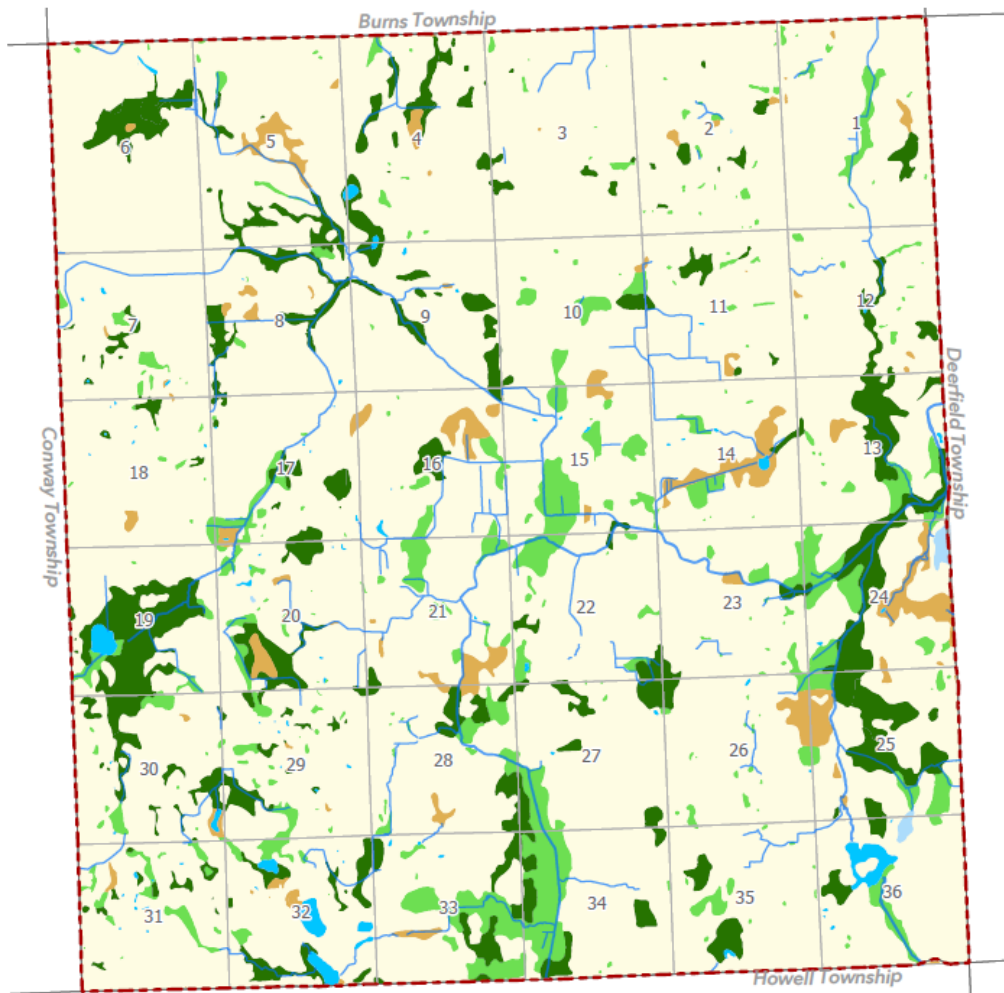
The map on page 37 shows prime farmland in the township. Prime farmland soil types exhibit the following characteristics: zero to six percent slope, slight erosion hazard, slow runoff and moderately rapid to moderately slow permeability. Soils classified on the map as "prime farmland in drained areas" exhibit the same characteristics but are subject to ponding and insufficient natural drainage. These soils are well suited to farming only if they are adequately drained. Soil types associated with the map are listed in the table below. Prime farmland typically produces higher crop yields and may require less intensive management practices. The two largest crops grown in Cohoctah Township are corn and soybeans. The largest area of contiguous Prime Farmland soil is in the northeast corner of the Township primarily in Sections 1,2,3,11 and 12. This northeast area of Prime Farmland corresponds with the township quadrant that has the second highest number of P.A. 116 contracts.

The *Soil Survey of Livingston County* contains detailed soil data descriptions and maps, as well as information on suitability for farming, development, wildlife, and other categories. The survey was developed by the Soil Conservation Service (a division of the United States Department of Agriculture (USDA) Natural Resources Conservation Service).

Table 5-3: Prime Farmland Soil Types

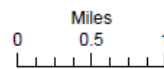
Prime Farmland Soil Types	Prime Farmland in Drained Areas
ApA Arkport fine sandy loam (0-2% slope)	Ba Barry sand loam
ApB Arkport fine sandy loam (2-6% slope)	Be Berville loam
BuA Brady loamy sand (0-2% slope)	Bv Breckenridge loamy sand
BwA Bronson loamy sand (0-2% slope)	By Brookston loam
FoA Fox sandy loam (0-2% slope)	Cr Colwood fine sandy loam
FoB Fox sandy loam (2-6% slope)	CvA Conover loam (0-2% slope)
HdB Hillsdale loam sand (2-6% slope)	CvB Conover loam (2-6% slope)
HIB Hillsdale sandy loam (2-6% slope)	CxA Conover-Miami loams (0-2% slope)
HmB Hillsdale-Miami loams (2-6% slope)	Gd Gilford sandy loam
MnA Metea loamy sand (0-2% slope)	Lc Lamson fine sandy loam
MnB Metea loamy sand (2-6% slope)	LoB Locke sandy loam (0-4% slope)
MoA Miami loam (2-6% slope)	MIB Metamora sandy loam (0-4% slope)
MoB Miami loam (2-6% slope)	Pc Pewamo clay loam
MrB Miami-Conover loams (2-6% slope)	Se Sebewa loam
OmA Owosso-Miami sandy loam (0-2% slope)	Wh Washtenaw silt loam
OmB Owosso-Miami sandy loam (2-6% slope)	

Source: Soil Survey of Livingston County, Soil Conservation Service and the Michigan State Agricultural Experiment Station, Issued November 1974, and reissued December 1993.



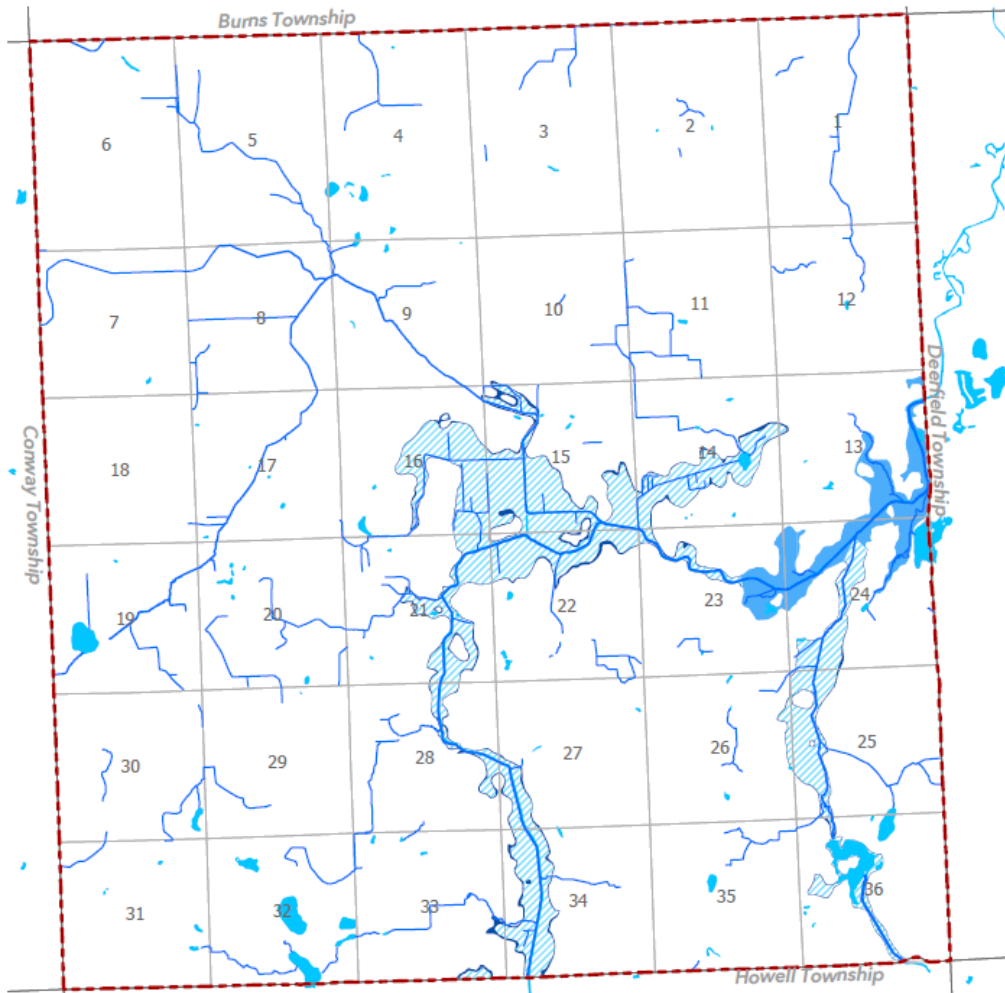
Wetlands

Cohoctah Township
Livingston County, Michigan









Data: Livingston County GIS, MDOT
12/14/2023

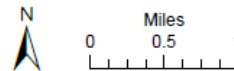




Township Floodplains

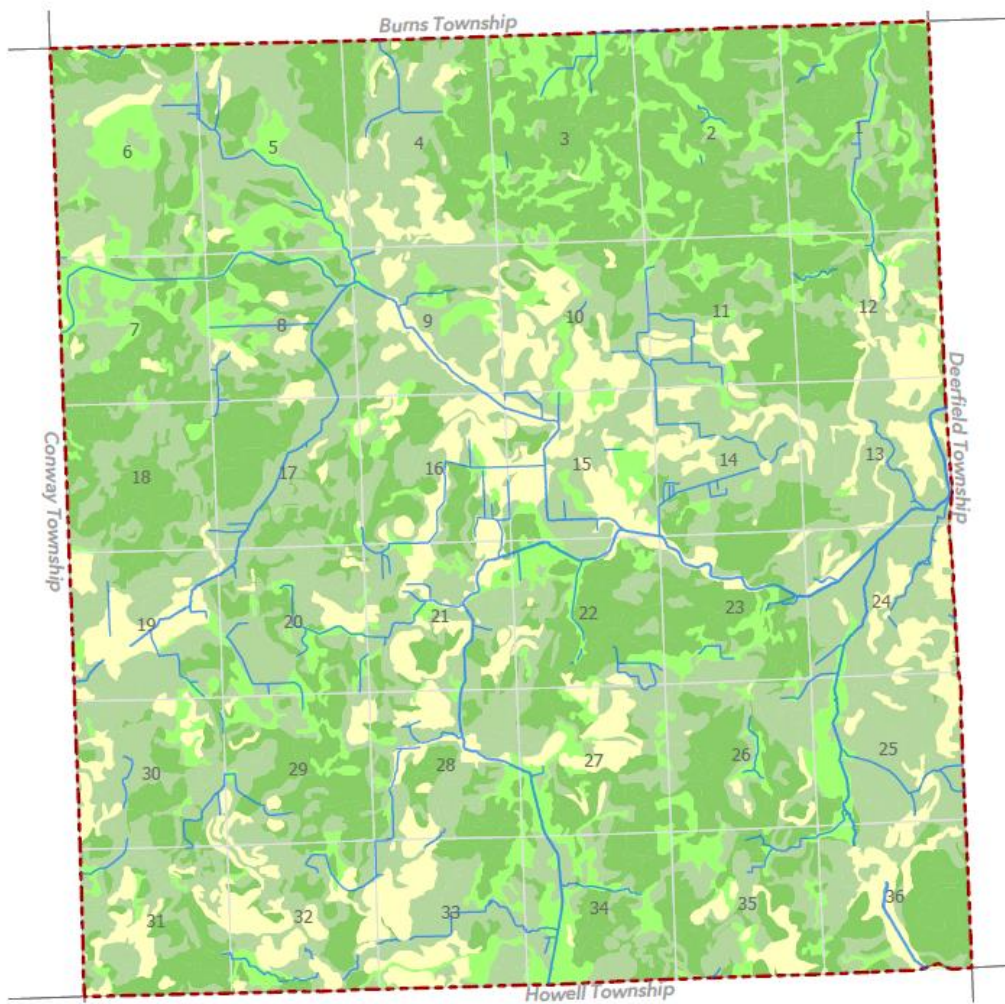
Cohoctah Township
Livingston County, Michigan

-  Township Boundary
-  Rivers
-  Lakes and Creeks
-  1% Annual Chance Flood Event
-  1% Annual Chance Flood Event Base Flood Elevation (BFEs)
-  Areas of moderate flood hazard



Data: Livingston County GIS
10/13/2023

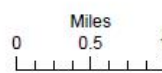




Prime Farmland

Cohoctah Township
Livingston County, Michigan

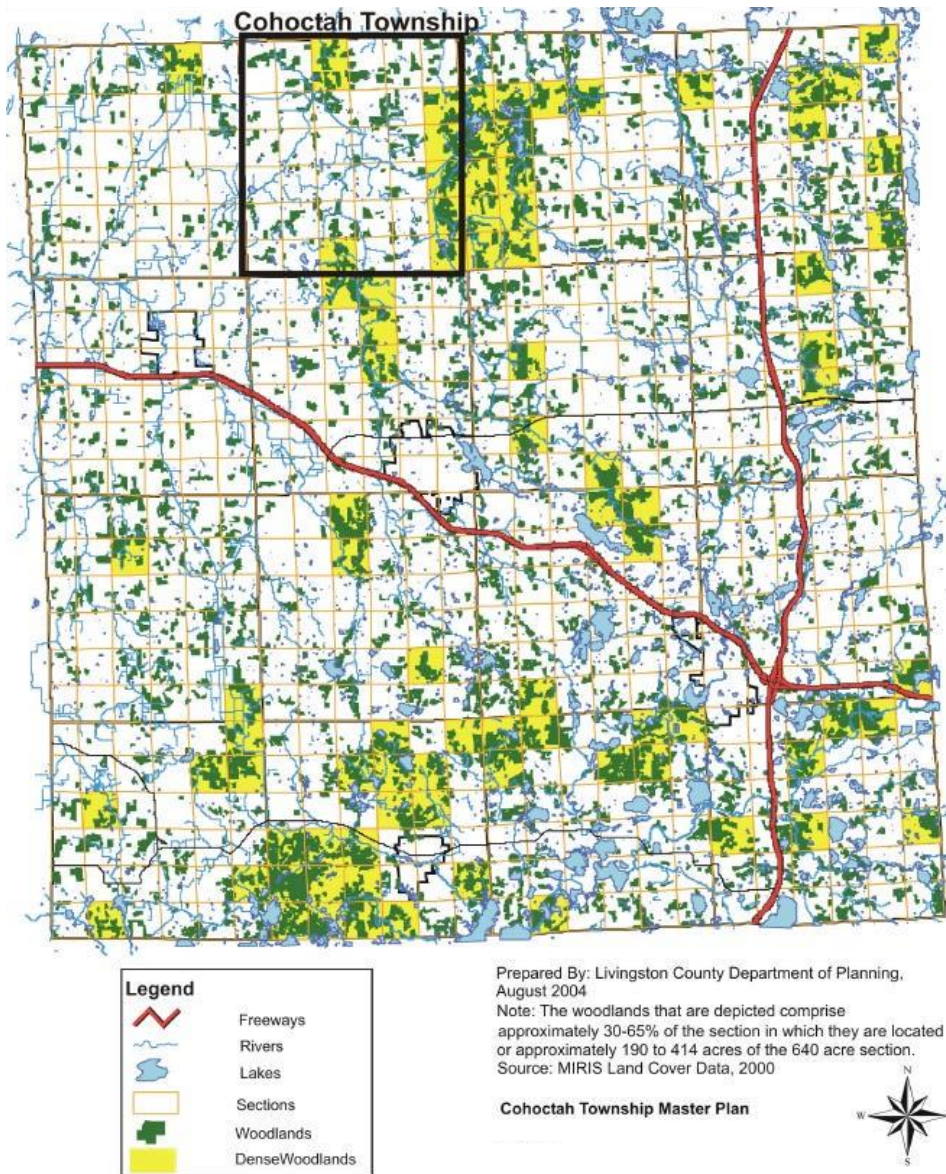
- | | | | |
|---|------------------------------|---|--------------------|
|  | All areas are prime farmland |  | Not prime farmland |
|  | Farmland of local importance |  | Township Boundary |
|  | Prime farmland if drained |  | Rivers |



Data: Livingston County GIS
12/16/2023



Livingston County's Largest Woodland Areas



Woodlands

The preservation of woodlands in the township is important for a number of reasons. Besides adding to the rural character of the township, woodlands provide habitat for wildlife and plants, recreation opportunities for citizens, and scenic landscapes. Woodlands located near the roadway contribute to the rural character of the township by creating a sense of enclosure because of the close proximity of the vegetation to the roadway. Woodlands also serve as buffers between developments further accentuating the rural feel that is desired by those living in the township, and they filter noise and dust and contribute to air quality and atmospheric cooling.

It is important to consider the extent and type of woodlands present when making land use decisions. Developments that occur within woodlands should be carefully designed to keep as many trees standing as possible.

The Southeast Michigan Council of Governments (SEMCOG) updated land use/land cover for each community in the Southeast Michigan region indicates the Township comprises of 10,185 acres of tree canopy (41.4% of the Township), significantly more compared to Handy (6,421 acres), Howell (8,377 acres), Conway (7,678 acres) Townships.

In the *Hazard Mitigation Plan Livingston County, Michigan*, woodlands have been examined on a section-by-section basis throughout the county for emergency management purposes such as assessing the risk of wildfire. Most sections in Livingston County are one square mile in size or 640 acres. The largest woodland areas in the county are those that comprise approximately 30-65% of the section or approximately 190 to 414 acres of the 640-acre section.

Seven of the thirty-six sections in Cohoctah Township meet these standards; largely because much of the land in these sections is publicly owned and preserved. Sections 12,13, 24, 25 and 36 along the eastern boundary of the Township is one such large woodland area. Collectively these five sections form the largest contiguous area of woodlands in Cohoctah Township. Much of the woodland area in these sections is preserved in public ownership by the Michigan Department of Natural Resources (MDNR) in the Oak Grove State Game Area. Sections 4 and 33 are two other sections in the township that contain significant woodlands (see map shown above, Livingston County's Largest Woodland Areas).

Livingston County's High-Quality Natural Areas

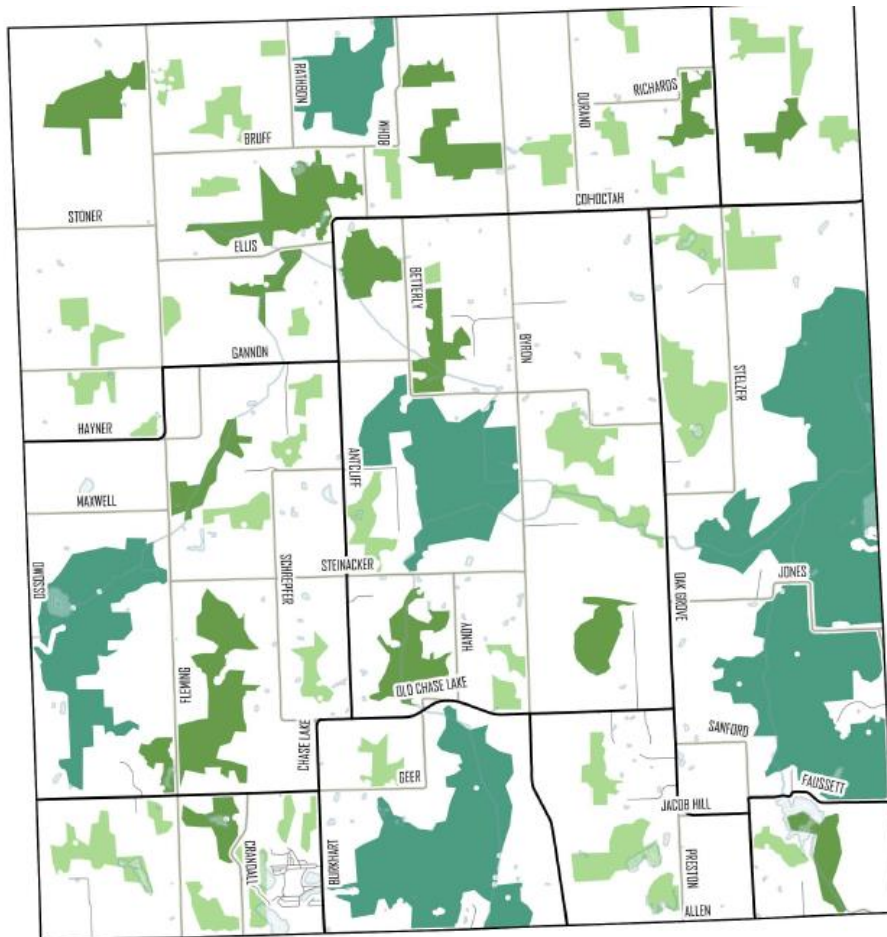
In partnership with a group of county citizens and government officials, aerial photography was used to map natural areas throughout the county resulting in a 2022 Livingston County Department of Planning study entitled: Livingston County's High-Quality Natural Areas.

The natural areas were then prioritized by using a set of criteria to differentiate one natural area from another. These criteria include: the size and shape of the natural area, the presence of rivers or streams, and the amount of connection one natural area has to surrounding natural areas, among others. Using these criteria natural lands are grouped into three categories of varying conservation priority; Priority 1, Priority 2 and Priority 3 natural areas with "Priority 1" areas having the highest cumulative scores and being considered the most ecologically valuable.

The map on the next page illustrates that Cohoctah Township contains six (6) Priority I areas scattered throughout the township, primarily in the mid to southern half of the township. The largest Priority 1 natural area includes two nearly contiguous areas along the eastern boundary of the township in Sections 12,13, 23, 24, 25, 26, and 36. These two areas total 2,379 acres of land, much of which is owned by the Michigan Department of Natural Resources as part of the Oak Grove State Game Area. Another large Priority 1 area consisting of 1,023 acres in Sections 27, 28, 33 and 34 is primarily owned by Heritage Acres LLC.

Priority II areas are more abundant and are scattered throughout the township. In Cohoctah Township these areas typically range between 40 and 150 acres in size, and they are privately owned. Priority III areas are typically less than 40 acres in size. These areas are also scattered throughout the Township, and they are privately owned.

One of the most straightforward planning methods for preserving the high quality of natural areas that have been identified through this study, is an open space development or planned unit development option enabled through a zoning ordinance. When working with a developer proposing an open space or planned unit development, a community may be able to negotiate what portions of the site are preserved. Using the Livingston County's High-Quality Natural Areas report, a community can insist that high quality natural areas are preserved as open space, focusing residential land uses onto adjacent vacant or cleared land. Doing so will preserve high quality natural areas, while also serving as a selling point for development.



Cohoctah Township High Quality Natural Areas – 2021



High Quality Natural Areas are defined as places on the landscape dominated by native vegetation that have various levels of potential for harboring high quality natural areas and unique natural features. Scoring criteria used to prioritize sites included: total size, size of core area, length of stream corridor, landscape connectivity, restorability of surrounding land, parcel fragmentation, vegetation quality, and biological rarity score.

Data Sources: Livingston County GIS, Natural Features Inventory (MNFI) Biotics Database, SEMCOG

- Interstate
 - US Highway
 - State Highway
 - Major Road
 - Minor Road
 - Waterbody
- High Quality Natural Areas
Priority Class and Score
Priority 1 (17 - 45)
Priority 2 (11 - 16)
Priority 3 (0-10)

Environmental Concerns

The Environmental Health Division of the Livingston County Health Department compiles and maps information on known or suspected sites of environmental sensitivity in Livingston County (Livingston County Environmental Awareness Handbook 2002). The six (6) categories of sites they identify are:

- 1.) Sites of Environmental Contamination
- 2.) Open/Closed Leaking Underground Storage Tanks
- 3.) Areas of High Nitrate Levels
- 4.) Areas of High Arsenic Levels
- 5.) Closed Dump/Landfill Sites
- 6.) Active Septage Disposal Sites (See Map "Environmental Concerns").

Sites of Environmental Contamination - Part 201 (Environmental Remediation) of the Natural Resources and Environmental Protection Act (1994 P.A. 451, as amended) regulates sites of environmental contamination in Michigan. A site of environmental contamination is defined as: "the release of a hazardous substance, or the potential release of a discarded hazardous substance, in a quantity which is or may become injurious to the environment or to the public health, safety or welfare." Clean-up of these sites is administered by the Environmental Response Division of the Michigan Department of Environmental Quality. Cohoctah Township has no known sites of environmental contamination.

Underground Storage Tanks - Underground storage tanks are widely used by large and small industries, farmers, and individual homeowners to store fluids such as petroleum fuels, acids, metals, solvents and chemical wastes. Leaking underground storage tanks account for roughly 50% of all groundwater contamination sites. There are underground storage tanks listed with the Michigan Department of Environmental Quality (MDEQ) as "Open" and "Closed." "Open" means that the site is currently listed with MDEQ as either "inactive" or "Cleanup Actions Taken or in Progress". "Closed" means a site where cleanup actions have been completed, although the site may not meet current environmental standards. Cohoctah Township does not have any "Open" or "Closed" Underground Storage Tanks.

Areas of High Nitrate Levels - Nitrate is a naturally occurring form of nitrogen found in soil and groundwater, that in moderate amounts is a harmless part of food and water. However, nitrates in sufficient concentrations in drinking water can be toxic to infants and young animals. This happens when nutrients, especially nitrogen and phosphorous, leach into the ground and enter the ground water. The sources of the nutrients are usually from water running off well-fertilized agricultural fields, water containing high levels of phosphorous-based detergents, or some industrial process. Excessive levels of nitrate can cause methyhemoglobinemia, or blue baby disease, which is a blood disorder that primarily affects infants under six months of age.

According to the Livingston County Health Department, high nitrate levels are often associated with poorly constructed or improperly located wells. Newly installed wells should be installed uphill and at least 100 feet away from septic systems, barnyards, feedlots, and chemical storage facilities.

The U.S. EPA has established a maximum contaminant level of 10 milligrams per liter for public water systems. The Livingston County Department of Public Health has chosen 5 milligrams per liter as an indicator of possible aquifer vulnerability. Using this standard, there are eight (8) sites of elevated nitrate levels in Cohoctah Township. Seven (7) of these sites existed prior to 1994, most of which are located in the southwest quadrant of the Township. One (1) water supply site was compromised between 1994 and 2001. This site is on Chase Lake Road in Section 27.

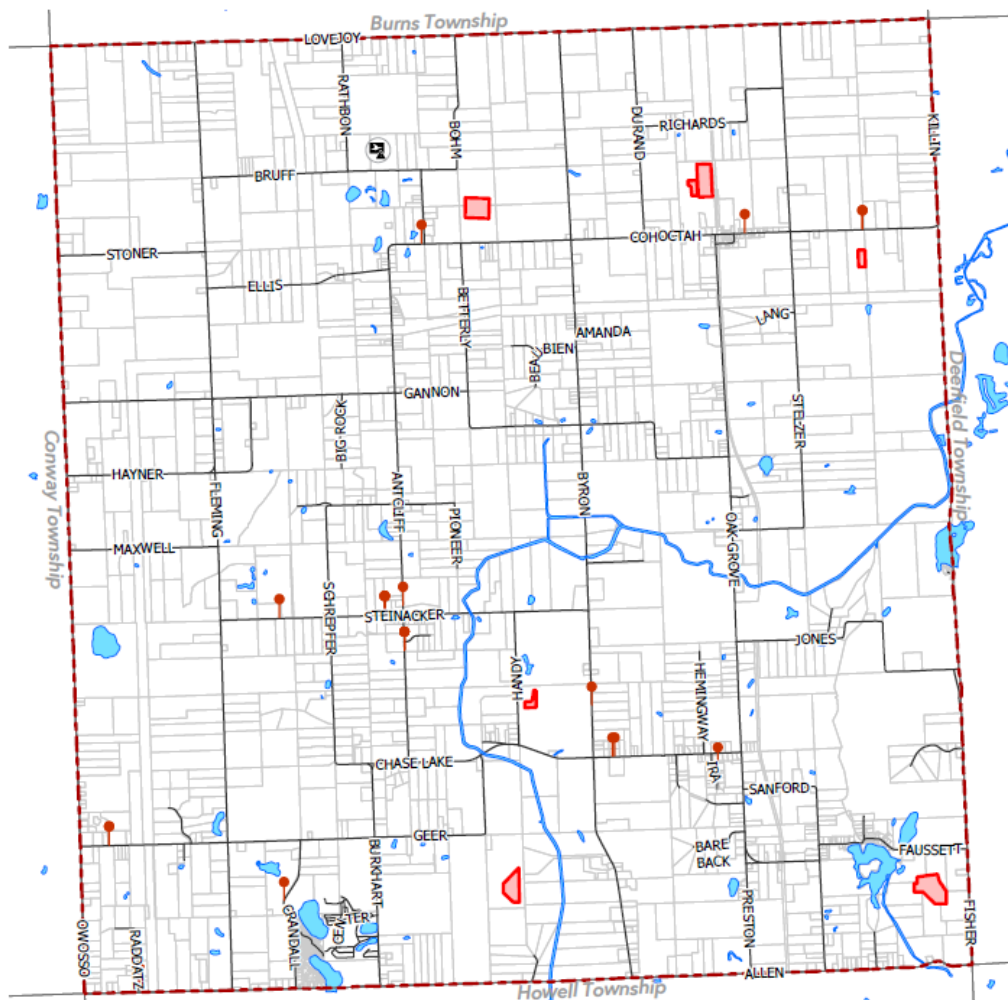
Areas of High Arsenic Levels - Arsenic is a naturally occurring element that, through erosion and weathering of rock, can end up in groundwater, soil, and plants. Arsenic can combine with other elements to form inorganic and organic arsenicals. Inorganic arsenicals are generally more toxic than organic arsenicals and are more often found in drinking wells and groundwater. The primary danger from arsenic is that it is a known carcinogen, but other effects of arsenic consumption are nausea, vomiting, diarrhea, thickening and discoloration of the skin (which may lead to skin cancer), and numbness of feet and hands. Arsenic has also been associated with the development of diabetes and has been reported to affect the human vascular system.

Based on guidelines from the Safe Drinking Water Act, the United States Environmental Protection Agency (U.S. EPA) set the Maximum Contaminant Level (MCL) of arsenic at 10 micrograms per liter or parts per billion (ppb). Arsenic has been detected in six (6) well samples in Cohoctah Township. Three wells have an arsenic level of less than 10 micrograms per liter and three wells have an arsenic level between 11 - 25 micrograms per liter.

Closed Dump and Landfill Sites – The Livingston County Department of Public Health maintains a list of closed dump/landfill sites within the County. The information includes where the landfill was located, who operated it, and when the landfill closed. In general, little information is available and there are a number of landfill sites around the County that are either untraceable or unknown entirely, possibly because they were illegal operations. There are currently 18 known closed landfill sites in Livingston County, one of which is found in Cohoctah Township. This landfill near the intersection of Bruff and Rathbon in Section 4 closed in the early 1970's.

Licensed Septage Disposal Sites – Septage is defined as the anaerobic slurry of residual wastes, sludge and scum that is mechanically pumped from a septic tank and subsequently transferred to a licensed disposal facility. The most common method of septage disposal used to be direct land application at a licensed septage disposal site. Recent state legislation radically changed the way septage must be handled and a septage receiving station was built by Livingston County government in Hartland Township to accommodate septage volumes. The intent of this station is to eliminate the very real groundwater contamination risks associated with land application practices and get this material into the sewers. Similar to way that many lakes in our community have installed sewers to stop the contamination of their lake from septic systems, this facility treats septage wastes in an effort to prevent groundwater contamination.

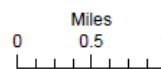
The two (2) formerly licensed septage disposal sites in Cohoctah Township were located in Section 2 along Byron Road, and Section 36 near Fisher and Allen Roads.



Environmental Concerns

Cohoctah Township
Livingston County, Michigan

- Township Boundary
- Outlying Townships and Cities
- Lakes and Creeks
- Closed Landfill
- Historical Septage Disposal Sites
- Areas with Elevated Nitrates
- Roads
- Parcels



Data: Livingston County GIS
12/14/2023



Chapter 6: Cohoctah Township Existing Land Use

Existing land use in Cohoctah Township was analyzed by using the Southeast Michigan Council of Governments (SEMCOG) land coverage map. SEMCOG's most recent update of land use/land cover data for the county was in the year 2020. The Township Existing Land Use map depicts this land coverage analysis, and it can be found at the end of this chapter.

Land Use Categories

SEMCOG uses the following twenty-one (21) land use categories to describe and map land use throughout the region.

Single-Family Residential consists of detached housing units intended to be occupied by families of all shapes and sizes. These developments can be within subdivisions, neighborhoods, or on large lots.

Attached Condo Housing includes condominium developments which are intended to house generally two families in one housing unit, each with its own dedicated space.

Multi-Family Housing includes developments such as apartment buildings where many family units can be located within a single structure.

Mobile Home includes prefabricated homes and are generally located in mobile home parks.

Agricultural / Rural Residential includes any residential parcel containing 1 or more homes where the parcel is 3 acres or larger.

Mixed Use includes those parcels containing buildings with Hospitality, Retail, or Office square footage and housing units, sometimes within the same structure.

Retail consists of commercial businesses, restaurants, grocery stores, and other similar uses that are intended to provide services to the public.

Office includes buildings which provide office space to various types of businesses.

Hospitality consists of uses such as hotels and other accommodations which provide temporary stay and various services to traveling populations.

Medical includes hospitals, urgent care, and other similar services which provide medical care to residents.

Institutional consists of government owned facilities and property used for various agencies.

Industrial includes areas designated for uses such as manufacturing, processing, and treatment of various materials.

Recreation / Open Space includes parks and land designated for the enjoyment of residents as well as preserving the natural resources and environment of a community.

Cemetery consists of areas set aside for burials and other related activities.

Golf Course are intended for providing space for the public to engage in golf activities and consist of courses, driving, ranges, and sometimes lodging for golfers.

Parking is areas designated for public parking, and is generally located near commercial and retail uses, as well as many businesses.

Extractive includes areas where various materials are removed from the ground and transported to various uses.

TCU stands for transportation, communication, and utilities which are areas designated for facilities and land uses that provide these services to the general public, sometimes in the form of easements.

Vacant are parcels where no land use currently exists on site. These sites provide great opportunities for future development or conservation.

Water is classified as areas where natural bodies of water are found, such as lakes, ponds, streams, and wetlands.

Not Parceled includes all areas within a community that are not covered by a parcel legal description.

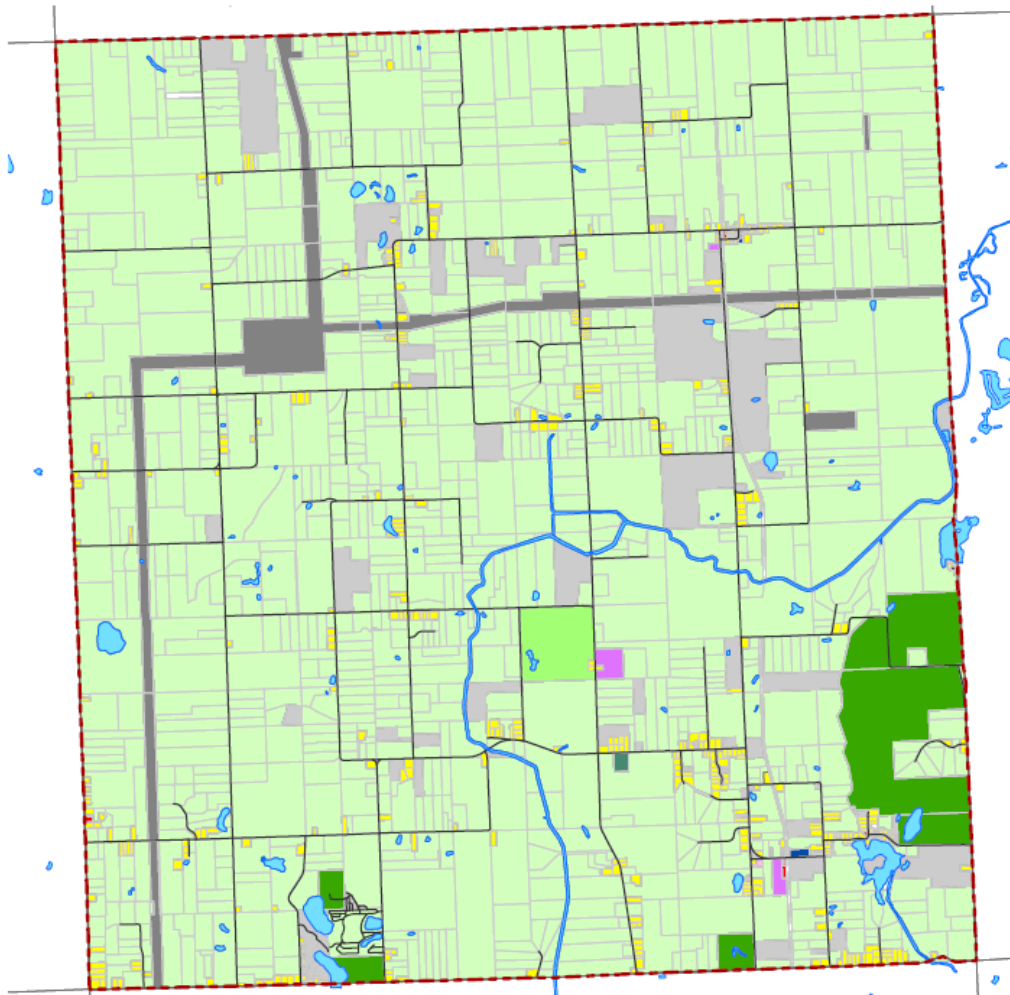
The table below on page 47 is SEMCOG's profile of the twenty-one land use categories described above. This profile summarizes change in land use and land cover from 2015 to 2020.

Alternative Energy is a new category that does not originate from SEMCOG but is original to Cohoctah Township. Land uses within this category consists of wind, solar, hydro, and other forms of green energy. These types of uses should be properly screened from conflicting land uses, and be constructed in a manner that does not impact the natural and rural character of the Township.

Note: The Existing Land Use map condenses some of the above categories in order to provide for greater organization and ease of viewing.

Table 6-1: Cohoctah Township Land Use Change, 2015 – 2020				
Land Use	Acres 2015	Acres 2020	Change	% Change
Single-Family Residential	641.4	640.4	-1.1	-0.2%
Attached Condo Housing	0	0	0	0%
Multi-Family Housing	0	0	0	0%
Mobile Home	0	0	0	0%
Agricultural/Rural Residential	21,255.8	20,432.2	-823.7	-3.9%
Mixed Use	33.6	0	-33.6	-100%
Retail	6.5	6.5	0	0%
Office	2.3	2.3	0	0%
Hospitality	0	0	0	0%
Medical	0	0	0	0%
Institutional	82.4	6.6	-75.7	-92%
Industrial	39.7	39.7	0	0%
Recreational/Open Space	740.1	773.7	33.6	4.5%
Cemetery	8.1	8.1	0	0%
Golf Course	156.6	156.6	0	0%
Parking	0	0	0	0%
Extractive	0	0	0	0%
TCU	713.8	713.8	0	0%
Vacant	532.4	1,432.9	900.5	169.1%
Water	294.7	294.7	0	0%
Not Parceled	94.4	94.4	0	0%
Total	24,601.8	24,601.8	0	0%

Source: Southeast Michigan Council of Governments (SEMCOG)



Existing Land Use

Cohoctah Township
Livingston County, Michigan

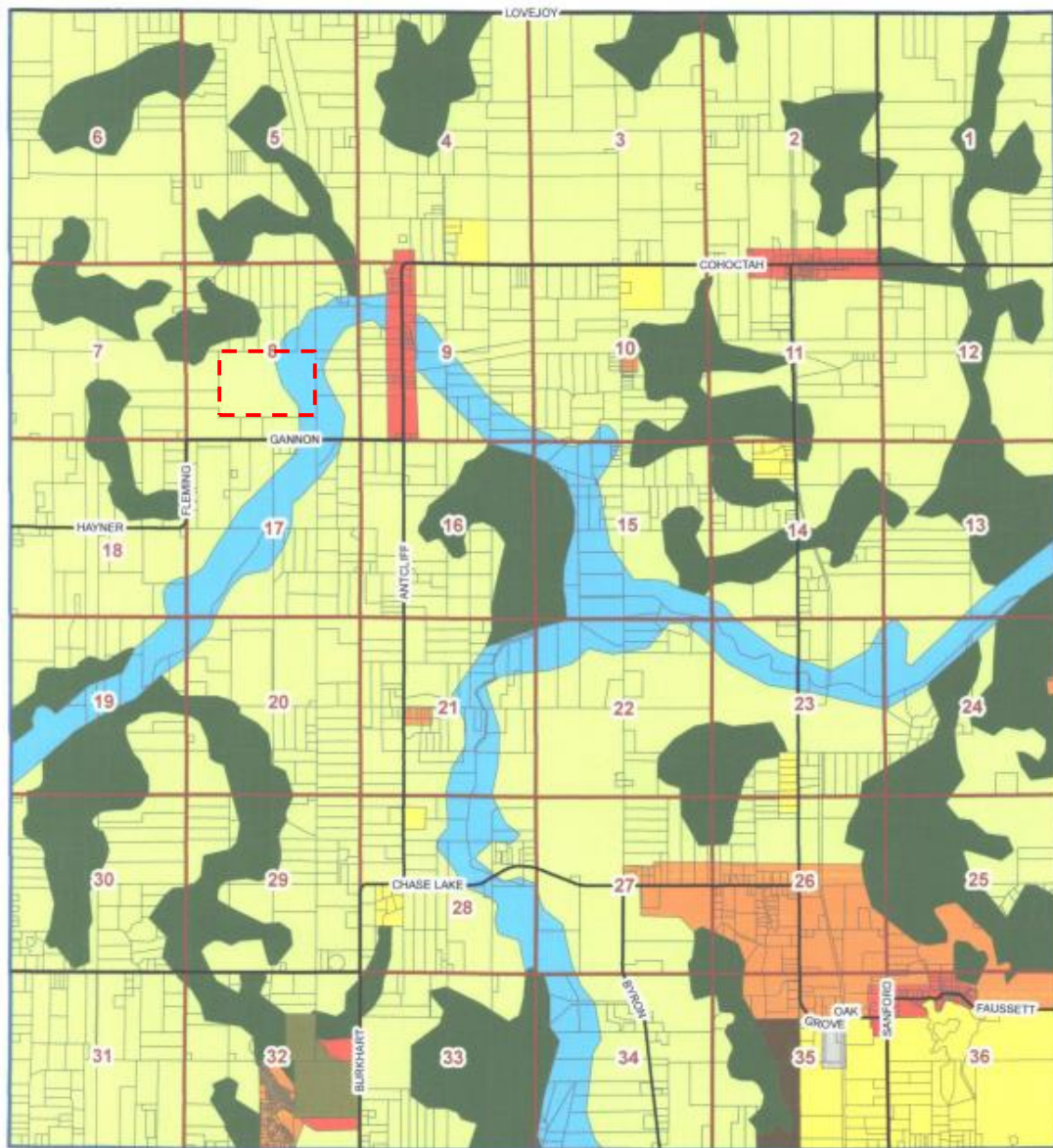
- | | |
|--|--|
| Agricultural / Rural Residential | Cemetery |
| Single-family Housing | Transit / Communications / Utilities |
| Office | Vacant |
| Retail | Water |
| Industrial | Township Boundary |
| Institutional | Parcels |
| Recreation / Open Space | Roads |
| Golf Course | |



Miles
0 0.5 1

Data: Livingston County GIS, SEMCOG
12/14/2023





- | | | | |
|--|--|---|---|
| <ul style="list-style-type: none"> Major Road Cohoctah Township Boundary Cohoctah Township Sections Cohoctah Parcels | Zoning <ul style="list-style-type: none"> Neighborhood Service Commercial District, NSC Waterways Resource Development District, WRD Agricultural Residential District, AR | <ul style="list-style-type: none"> Light Industrial District, LI Mobile Home Residential District, MHR Resource Development District, RD Rural Residential District, RR | <ul style="list-style-type: none"> Limited Recreation Residential District, LRR Suburban Residential District, SR Settlement District, S Solar Overlay District |
|--|--|---|---|

Chapter 7: Cohoctah Township Goals and Objectives

Master Plan goals and objectives aid local decision-making by establishing principles that the township has decided are vital to the future well-being of the community. Goals and objectives also serve as township policy statements for land use decisions and provide valuable background in the development of the future land use map. For purposes of this plan, the relationship between goals and objectives is defined as follows:

- Goals: Broad conceptual statements of what Cohoctah Township would like to achieve and accomplish over time.
- Objectives: Measurable detailed statements of how Cohoctah Township will work toward achieving the goals.

Development of Goals and Objectives

The goals and objectives of the Cohoctah Township Master Plan were created through the review of several information sources. For instance, several themes emerged from resident responses to the Cohoctah Township Citizen Survey (see Appendix A). Regarding residential development in the Township, survey responses revealed that 28% of residents feel the rate of residential growth is much too fast while 44% felt the rate of growth was about right. Additionally, most prefer that single family homes be developed on lots of 10 acres or more in size. Regarding future land use planning, respondents called for the continued preservation of farmland and natural resources as the highest planning priority, as well as expanding the blight ordinance to maintain the condition of properties and structures. Planning issues that were deemed unimportant to survey respondents were the development of small box stores, and if any development were to be introduced, the favored location was the downtown Cohoctah area. When asked about the possibility of new Township park improvements, respondents indicated that additional community events would be a welcome incentive to use park facilities. The expansion of play equipment was also a recurrent response. When asked about the state of development within the Township over the next five to ten years, the preservation of rural character and farmland was the most recurring answer, as well as better internet access and road maintenance.

In addition to the results of the citizen survey, the Cohoctah Township Planning Commission considered the goals and objectives of the 2002 Cohoctah Township Comprehensive Plan and 2010 Master Plan, the goals and objectives of the Livingston County Comprehensive Plan, and a reference list of demographics and planning trends that were identified through the research and analysis that went into creating chapters of the 2024 Cohoctah Township Master Plan (see Appendix B for Cohoctah Township Master Plan Goals and Objectives Fact Sheet). Each of these source materials stimulated ideas that were formed into the goals and objectives of the following fifteen (15) subject headings:

- Planning and Zoning
 - Township Services and Facilities
 - Transportation
 - Natural Features and Open Space Preservation
 - Agriculture
 - Housing and Residential Development
 - Commercial Areas and Development
 - Industrial Areas and Development
 - Hazard Mitigation
- Alternative energy (solar/wind)
 - Tiny homes
 - Mobile home parks
 - Small box stores
 - Short term rentals
 - Medium/high density residential development

Planning and Zoning

GOAL: Coordinate planning efforts with neighboring communities.

Objective: Minimize zoning and future land use conflicts along boundaries with neighboring communities.

Objective: Coordinate planning efforts regarding shared resources such as watersheds and road, greenway and water corridors.

Objective: Collaborate with neighboring communities on the provision of governmental facilities and services.

GOAL: Maintain easy to understand, action-oriented master plan language that guides future land use decisions and includes a procedure for periodically updating the plan while providing meaningful public participation in the process.

Objective: Use the Cohoctah Township Master Plan as a basis for establishing zoning regulations that are easily understood by citizens and developers.

Objective: Encourage a balance between growth and development, and protection and enhancement of the quiet, scenic, rural character of Cohoctah Township.

Township Services and Facilities

GOAL: Develop township services and facilities as necessary and financially practical.

Objective: Increase public services and facilities only when consistent with demand from township population growth.

Objective: Support the implementation of the Cohoctah Township Parks & Recreation Plan.

Objective: Assist the Township Board of Trustees in identifying development options for township land holdings.

Transportation

GOAL: Provide adequate access to the road system with as few traffic interruptions as possible.

Objective: Keep curb cuts to a minimum to lessen their impact on road maintenance, traffic flow, safety, and aesthetics.

Objective: Preserve the rural feel of the current road network, including continuing the current mix of paved and unpaved roads, preserving the tree canopy, and screening buildings from the view of passers-by on roads.

Transportation

GOAL: Maintain Township Road system at its current level of service or at an improved level of service.

Objective: Consider requiring traffic impact studies for any project that may cause or attract traffic such as medium to large sized residential developments.

Natural Features and Open Space Preservation

GOAL: Preserve and enhance the township's rural character, natural systems, and open space.

Objective: Development in the Township should be directed to areas that are most capable of sustaining physical changes to the landscape without negatively impacting the community's natural features.

Objective: Encourage preservation of existing trees and natural features on new development sites, especially when they act as a visual or physical buffer along roads and neighboring land uses.

Objective: Explore the use of land conservancies or trusts to protect natural features and open space in Cohoctah Township.

Agriculture

GOAL: Keep farming a viable and visible part of Cohoctah Township's future land use plan.

Objective: Use zoning and site planning techniques to preserve agricultural land, open space, and unobstructed views of fields, pastures, and agricultural buildings.

Objective: Support the landowner's Right to Farm when proper agricultural practices are followed.

Objective: Protect drainageways for agricultural land use.

Objective: Give farmers the tools or range of options necessary to develop portions of their property while keeping farming viable on the rest.

Objective: Explore transfer of development rights (TDR), purchase of development rights (PDR), land conservancy, P.A. 116, or other methods to preserve working agricultural lands.

Objective: Encourage property tax policies that assess farmland for present use rather than potential use.

Housing and Residential Development

GOAL: Preserve a traditional rural character to the land use pattern in the township while planning for orderly future residential development.

Objective: Carefully review development in settlement areas to preserve the unique character of these communities.

GOAL: Provide a more environmentally sensitive residential environment by preserving the natural character of open fields, stands of trees, ponds, streams, hills, and similar natural features.

Objective: Promote open space developments, innovative residential design, and site development standards that maintain the rural character of the township and conserve farmland and open space.

Objective: Group lots for development on private roads to lessen the number of driveway curb cuts on public roads and decrease the visual impact of residential build-out along roads.

Objective: Encourage new development in densities appropriate for what the roads, soils, and drainage will bear.

Commercial Areas and Development

GOAL: Encourage only commercial development that serves the needs of the township residents.

Objective: Continue the use of home occupations to accommodate small scale office and service establishments.

Objective: Limit small box stores to only settlement districts.

Industrial Areas and Development

GOAL: Allow light industrial uses in appropriate areas that do not create adverse impacts on surrounding existing or future land uses.

Objective: Allow only light industrial uses that can be supported by existing paved roads.

Hazard Mitigation

GOAL: Conserve natural features and protect residents and property from natural or man-made hazards.

Objective: Prevent new construction in flood plains and construction which would degrade wetlands; and in sensitive natural resource areas only allow development harmonious with the preservation of natural features on the site.

Objective: Keep the township's Hazardous Materials Ordinance updated and timely.

Objective: Enact a natural features buffer in which no development of any kind can take place.

Alternative Energy

GOAL: Provide opportunities for alternative energy options to be introduced to the area while still preserving the rural character of the Township.

Objective: Work with state agencies and potential developers to ensure the goals of the Township are being met.

Objective: Adopt solar and wind farm ordinances which can be used as a guideline for future developers.

Small Box Stores

GOAL: Provide residents with opportunities to access various commercial options within the Township.

Objective: Limit small box stores as only a permitted use in the Settlement district.

Objective: Ensure new small box stores are constructed and designed in a manner that fits the aesthetics and character of the neighborhood it is located in.

Medium/High Density Residential Development

- GOAL:** Allow the development of medium to high density residential developments within the Township to provide growth opportunities for the community and residents of all ages.
- Objective:** Limit the location of such developments to within the Settlement District of the Township.
- Objective:** Ensure new developments are constructed and designed to be compatible with the surrounding historical architecture of the community.

Chapter 8: Cohoctah Township Future Land Use

The future land use plan is a combination of the township's current goals and its vision for the future, which is a desire to preserve the township's rural character. It is intentionally general in scope and was developed based on the township's goals and objectives, an analysis of natural features, current and future demographics, existing land use, and the results of a Cohoctah Township Citizen Survey.

The future land use map designates development densities that carry out the goals of the future land use plan. The district boundaries drawn on the map do not necessarily correspond to property lines. As properties are proposed for development or rezoning, they are analyzed on a case-by-case basis to determine their relationship to the future land use plan and map. The future land use map is expected to guide Cohoctah Township's future land use development and it will be reviewed at least every five years.

Another component of the future land use plan is the provision of services. Development should not occur unless the appropriate public services are in place and available. This includes roads, police and fire protection, emergency services, general governmental and other services. There are currently no plans in the foreseeable future for the township to provide public sewage disposal or water. If appropriate services are not in place, the landowner may, with the Township Board's approval, assume the financial burden of providing services independently and to the township's standards.

A classic growth-related issue in the township is roads. While some people living along dirt and gravel roads clamor for improvements (mainly paving), the majority have identified the dirt and gravel roads as characteristic of a rural community. They note that paving roads will only attract more (and faster) traffic and more development, leading to the further deterioration of the rural qualities that are so inviting to so many. While unpaved roads may be a nuisance to those who must drive them with any frequency, they are a part of living in the country, like farm odors, car/deer collisions, and a ten-mile excursion to the grocery store. There are many trade-offs that come with the decision to live in the country.

The Master Plan portrays a community's vision for the future. The plan provides future land use categories with recommended guidelines for development in each category. This is called the Future Land Use Plan.

Master Plan = Policy Guidelines

The Future Land Use Plan of the Cohoctah Township Master Plan is implemented through the legally binding regulations of the Cohoctah Township Zoning Ordinance which establishes zoning categories for each type of land use.

Zoning Ordinance = Legally binding zoning regulations

Future Land Use Classifications

Cohoctah Township is a rural community with predominantly agricultural and residential uses. In surveys and public meetings, residents and township officials placed preserving rural character and open space as a top priority. Many attributes describing "rural" were identified, some of which include farms, farmland, and farm animals; trees; wetlands; gravel roads; sparse development; rivers; scenic views; and wildlife. Preserving and protecting these attributes are a major focus of the future land use plan.

When assigning future land uses, many factors come into play. Each type of use has a different set of criteria that must be met, the compatibility between neighboring land uses must be considered, as must the available infrastructure, and the overall interactions between land uses in the township as a whole must be scrutinized. Maintaining a sense of balance is fundamental to the future land use map.

Residential developments should be placed or screened in such a manner that they are as out of sight as possible from public roads and preserve trees and natural features found on each site. Minimal industrial and commercial growth is planned and limited to neighborhood-type businesses meeting the needs of Township residents. All development should minimize the number of curb cuts onto public roads, by sharing driveways and the use of private roads, to maximize road safety and smooth traffic flow. Specific development standards and lot sizes are set out in the Township zoning ordinance.

Many factors were taken into consideration when future land use districts were delineated. The lack of public water and sewer make soil types one important consideration. The types of soils and steep slopes found in Cohoctah Township limit development potential in many areas. Not all soils are suitable for residential or other types of development, and lots larger than the minimum size allowed will sometimes be necessary to support septic systems. Another factor is whether roads are paved or unpaved. Paved roads' higher carrying capacities are more suitable for higher density development. The preservation of agricultural uses, open space, and rural character is another consideration which residents have consistently indicated is important to them. Proximity to the township's three Settlements, in an effort to keep density more concentrated around historic village-like areas, is also a factor.

Chapter 5: Natural Features explains soils found in Cohoctah in greater detail, including areas of steep slopes, lists of soil classifications with septic system limitations and prime farmland soil types.

The land use classifications found on the Cohoctah Township Future Land Use map, are described below.

Residential Land Uses

Recommended residential densities on the future land use map primarily range from a minimum of one acre-per-unit to ten acres-per-unit unless an area is located within the settlement district or manufactured home residential district. Actual buildable lot sizes will vary, and it may not be possible to develop land at the highest density allowed. Residential development should be placed or screened in such a manner that it is out of sight as much as possible from public roads and preserves trees and natural features found on each site. Farming and a rural lifestyle should continue to be the primary focus of residential land uses.

Residential development will respect agricultural uses and be located away from them whenever possible. Residential development must also respect the farmer's right to farm and realize that some farming activities cause noise, smells, or activities that some non-farmers may find offensive. Farming plays an important role in the history, character, and economy of Cohoctah Township. This Plan encourages the continuation and further development of farming and farm-related businesses and activities in the township.

Settlement

There are three Settlement areas in the township: Oak Grove, Cohoctah Center, and Cohoctah. Each has a mainly residential land use pattern at higher densities than most other areas of the township, and has some other uses mixed in: Oak Grove has a church, Cohoctah has a feed mill, post office, and gas station, and Cohoctah Center is home to the Township Hall. Future development in the Settlements is limited to uses in keeping with the current and historic character of each, and will be at a similar scale, density, and lot size. The township reviews projects proposed in Settlements to evaluate the impact on adjacent land uses and the Settlement as a whole.

This future land use designation corresponds to the Settlement zoning district in the Cohoctah Township Zoning Ordinance. The Settlement District has a minimum lot area of 30,000 square feet.

Agriculture/Residential

Agricultural/Residential comprises the majority of the land area in the township. This classification is intended to encourage the continuation of agricultural activities while providing opportunities for low-density residential development in areas of significant agricultural resources. Low density development is appropriate because of the lack of public sewer or water, mostly unpaved roads, frequently poor soil conditions for septic systems, and the Township's and residents' desire to preserve agricultural uses, open space, and rural character. The minimum recommended single family lot size is 10 acres. Farming and residential uses should be allowed by right. Residential development should respect agricultural uses and should be located away from them whenever possible. Residential development must also respect the farmer's right to farm and realize that some farming activities cause noise, smells, or activities that some non-farmers may find offensive.

Farming plays an important role in the history, character, and economy of Cohoctah Township. This Plan encourages the continuation and further development of farming and farm-related businesses and activities in the Township.

This future land use designation corresponds to the Agricultural Residential zoning district in the Cohoctah Township Zoning Ordinance. This district has a minimum lot area of 20 acres with the exception of single-family residential uses as referred to above.

Rural Residential

The majority of the Rural Residential area lies north and west of the Suburban Residential area along Oak Grove and Chase Lake Roads. Both are paved, and for the most part have soils with "slight" or "moderate" septic system limitations. There are a few exceptions, however, where soils are severely limited for septic systems and two acre lots may not meet Livingston County Environmental Health standards for septic fields. The Chase Lake Road Rural Residential area is a natural extension of the denser Suburban Residential area around the Oak Grove settlement, and the Oak Grove Road corridor links the Oak Grove and Cohoctah settlements via a main thoroughfare. Also, the township fire station is located on Oak Grove Road at Chase Lake, central to the higher density areas of the township. Lastly, the Cohoctah Road Rural Residential area links the Cohoctah and Cohoctah Center settlements along a paved, primary thoroughfare.

The following criteria apply to Rural Residential areas:

- Areas of Rural Residential density, with a recommended minimum density of 2 acres per dwelling unit, should be located along paved roads. Paved roads are better able than gravel roads to accommodate new traffic generated by this type of residential development.
- Rural Residential areas should be located contiguous to areas classified at a higher density, such as Settlements or Suburban Residential areas, or link areas of higher density. They may be used as buffers between lands designated at higher and lower densities. This plan strongly discourages the creation of future "islands" of residential areas that are not contiguous to a more densely designated area.
- For the minimum recommended density of 2 acres per dwelling unit, soils will have to be able to support septic systems at that density. Chapter 5: Natural Features classifies Livingston County soil types by their septic system limitations (slight, moderate, or severe). The desired soil characteristics for this density fall in the "slight" classification, with limited areas of "moderate" septic system limitations.

The siting of new homes and lots in this classification should 1) have adequate road setbacks and take advantage of natural features or new plantings to screen homes from the view of passers-by on roads, 2) be located along shared driveways or private roads in order to reduce the number of curb

cuts onto the pavement, and 3) preserve trees and other natural features. These measures are to protect the rural feel and character of the township while acknowledging the desire for controlled development at this density.

The Rural Residential future land use designation corresponds to the Rural Residential zoning district in the Cohoctah Township Zoning Ordinance. The Rural Residential district has a minimum lot area of 2 acres.

Table 8-1: Future Land Use Residential Designations and Corresponding Zoning Districts

Residential Future Land Use Designation	Future Land Use Development Densities	Corresponding Zoning District (s)	Zoning District Development Densities
Settlement	Similar scale, density, and lot size as existing Settlement lots	Settlement	30,000 square feet
Agricultural /Residential	1 dwelling unit per 10 acres	Agricultural Residential	20 acres except as otherwise provided in the zoning ordinance
Rural Residential	1 dwelling unit per 2 acres	Rural Residential	2 acres
Suburban Residential	1 dwelling unit per 1 acre	Suburban Residential	1 acre 21,780 sq. ft. with public or common sewer and water
Manufactured Home Residential	15,000 sq. ft. with public or common sewer and water 25,000 sq. ft. without public or common sewer and water	Mobile Home Residential	15,000 sq. ft. with public or common sewer and water 25,000 sq. ft. without public or common sewer and water
Recreation Residential	Similar scale, density, and lot size as existing Recreation Residential lots	Settlement	30,000 square feet

Source: Cohoctah Township Zoning Ordinance, Adopted 1987.

Suburban Residential

The Suburban Residential future land classification is the densest of the residential classifications. The southeast corner of the township, where most land of this classification is located, has a larger percentage of soils suitable for development at this density than most other areas of the township. It also has good access to paved roads (Oak Grove, Chase Lake, and Faussett Roads) and abuts an existing Settlement area. The southeast corner of the township is best suited to future suburban-type development because of its good access due south on Oak Grove Road to the City of Howell. Like the Rural Residential classification, lots in Suburban Residential areas will whenever possible be configured to share driveways or private roads, preserve natural features and trees, and screen houses from the view of passers-by on roads.

In Section 32, east of Crandall Road, the Indian Springs Lake Subdivision is designated Suburban Residential. This is an existing, platted, small-lot subdivision. It does not meet all the criteria for Suburban Residential areas, but that designation best matches its existing high density, since that

density is not expected to decrease during the life of this Plan. The following criteria apply to Suburban Residential areas:

- Areas of Suburban Residential density, with a minimum recommended density of one acre per dwelling unit, should be located along paved roads. Paved roads are capable of handling the traffic volume generated by this type of residential development.
- Suburban Residential areas should be located contiguous to Settlements. This is in keeping with the township's desire to keep growth on smaller lots concentrated around existing historic settlement areas.
- Suburban Residential lands should be located in areas of soils most likely to support septic systems at this density. Chapter 5: Natural Features classifies Livingston County soil types by their septic system limitations (slight, moderate, or severe). The desired soil characteristics for this density fall in the "slight" classification.

The Suburban Residential future land use designation corresponds to the Suburban Residential zoning district in the Cohoctah Township Zoning Ordinance. This zoning district has a minimum lot area of 1 acre.

Manufactured Home Residential

The intent of the Manufactured Home Residential future land use category is to provide township land area that can be developed in the future as single-family home lots sited with manufactured housing. Due to the potential high-density nature of this type of housing development, manufactured housing is planned for land area along paved roadway within close proximity of higher density housing. This future land use is also intended to buffer industrial areas from residential areas.

In Section 35, south of Oak Grove Road, the west side of Preston Road is designated Manufactured Home Residential. This is an existing area of manufactured housing sited on single family lots. It does not meet the paved road criteria for Manufactured Home Residential, but it is located within close proximity of higher density housing. The designation provides a transition in future and existing land use from the Light Industrial and Rural Residential (2 acre) designations/uses on the east side of Preston Road and the Agricultural/ Residential (10 acre) designation/land use adjacent to the west of the Manufactured Home Residential designation.

This future land use designation corresponds to the Mobile Home Residential zoning district in the Cohoctah Township Zoning Ordinance. This zoning district has a minimum lot area of 15,000 square feet for lots with public or common sewer and water and 25,000 square feet for lots without public or common sewer and water.

Recreation Residential

This classification provides for the preservation of natural features as well as the provision of residential and recreation amenities to the residents of Cohoctah Township and visitors to the Township. This designation has been planned for the Church of Nazarene camp within Section 32 of the Township. Land uses permitted within this classification would include single family residences, campgrounds, places of assembly, and recreational amenities such as bike paths, pedestrian trails, athletic fields, beach areas and associated facilities.

Future development in Recreation Residential is limited to uses in keeping with the current and historic character of the Church of Nazarene camp, and will be at a similar scale, density, and lot size. New development in this area must be sensitive to surrounding land uses, the environment and the carrying capacity of well and septic and/or water and sewer provision in the camp. The township will

review projects proposed, to evaluate the impact on adjacent land uses and the Church of Nazarene camp as a whole.

This future land use designation corresponds to the Settlement zoning district in the Cohoctah Township Zoning Ordinance. The Settlement District has a minimum lot area of 30,000 square feet.

Open Space and Rural Preservation Development District

This is a special residential development alternative that is not found on the Future Land Use Map, but instead may be applied to any district that allows single-family residential housing in Cohoctah Township, with the exception of Settlement areas.

The minimum required project size for an Open Space and Rural Preservation development is ten acres, and a minimum of 50% of the site must be permanently protected as open space.

Conservation and Recreation Land

River Conservation

Rivers, streams, creeks, and wetlands are greatly influenced by encroaching development. In some cases, trees and natural vegetation are removed from the shoreline to give homeowners improved access and views of the water. Fertilizers, pesticides, and other chemicals from lawns and gardens near waterbodies and wetlands may damage water quality, kill native species, or cause excessive algal blooms. Land development, fill, or excavation may lead to shoreline erosion caused by increased surface runoff. In one way or another, traditional development of waterfront or wetland-front property causes visual and environmental damage at the development site and connected or downstream areas.

In addition, wetlands store flood waters and trap nutrients and sediments that otherwise would enter streams, lakes and groundwater supplies. These include oil, grease, lead, zinc, copper and mercury from roads, parking lots and sidewalks, and nitrogen phosphorous and pesticides from lawn care procedures. Wetland plants utilize excess nutrients that otherwise would cause algae growth in lakes. Their holding capacity for all of these things is limited, however.

River Conservation areas include the Shiawassee River corridor, Sprague Creek, Bogue Creek, other perennial streams and creeks, and wetlands associated with these waterways. The river, streams, and creeks are buffered for 500 feet on each side. All wetlands that fall partially or entirely within this buffer are included in the River Conservation area and have their own 100-foot buffer (see next paragraph). The 500-foot stream buffer was determined by Michigan's wetland statute, Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Digital wetland data used to map these areas correlates with the National Wetlands Inventory maps.

Each of the wetlands included in the River Conservation area has a 100-foot buffer (which often overlaps with the 500-foot stream buffer). To prevent adverse impacts to wetlands as well as their associated rivers, streams, or creeks, no development should take place within this wetland buffer area. This includes dwellings, accessory structures, or roadways. In the 100-foot buffer zone, no vegetation should be removed or altered. The vegetation helps control erosion, filter sediment from runoff, provide shade, maintain scenic character, and provide plant and animal habitat.

Lands within the River Conservation area should only be used for conservation, recreation, or residential land uses. Because of these lands' important contributions to groundwater recharge, surface water, flood control, and wildlife habitat, development should be limited to one dwelling per ten acres.

When a parcel falls into two Future Land Use districts, one of which is River Conservation, development should be located outside of the River Conservation portion of the site whenever possible.

This future land use designation corresponds to the Waterways Resource Development zoning district in the Cohoctah Township Zoning Ordinance. This zoning district has a minimum lot area of twenty (20) acres.

Public/Recreation

This classification includes both publicly owned as well as privately owned land for recreation or governmental purposes. The classification includes uses such as the game area, the Township lands, fire hall, cemeteries, and golf course.

Hunter's Ridge is the only golf course in the township, and it provides valuable recreation opportunities. The State Game Area provides wildlife habitat, preserved forest areas, and opportunities for hunting, hiking, and similar outdoor recreation. The Township Park consists of 40 acres with two riding rings, an announcer's booth, a gravel parking facility and a playground.

This future land use designation corresponds in part to the Resource Development zoning district in the Cohoctah Township Zoning Ordinance. This zoning district has a minimum lot area of 20 acres in area, except as otherwise may be provided in the Cohoctah Township Zoning Ordinance.

Commercial and Industrial Land Uses

Minimal industrial and commercial growth is planned due to the township's current limited infrastructure, and it is limited to neighborhood-type businesses meeting the needs of township residents. When siting new commercial or industrial uses, each development's impact will be measured in terms of demands it would place on local services, roads, and surrounding land uses. Proposals for new commercial or light industrial will understand and acknowledge, through appropriate site design, this Plan's goal of preserving the township's rural character and identity. Several factors discourage commercial or industrial development at any scale greater than a local one serving resident's needs: the township's location is not convenient to major highways; there are few paved primary roads; and the township's population is sparse. Uses that require large amount of power and resources, such as crypto mining, is discouraged.

Commercial

Commercial uses are limited to local-scale businesses that serve the residents of Cohoctah Township. Permitted uses envisioned for commercial areas are small retail (such as gas stations, video stores, convenience, or hardware stores) and service establishments (such as beauty shops, insurance or real estate offices, or banks). Small scale office and service establishments may be accommodated as home occupations outside of commercial areas at the discretion of the township. On the future land use map, the area designated for new commercial development has frontage along two sides on Oak Grove Road, which is paved and the most heavily traveled of the township's roads. It also has good access to the Oak Grove settlement area.

This future land use designation corresponds to the Neighborhood Service Commercial zoning district in the Cohoctah Township Zoning Ordinance. This zoning district has a minimum lot area of one (1) acre except where a lot or parcel is serviced by a public or common water supply system and public wastewater disposal and treatment system, in which case the lot or parcel may have a minimum area of 15,000 square feet per principal use.

Light Industrial

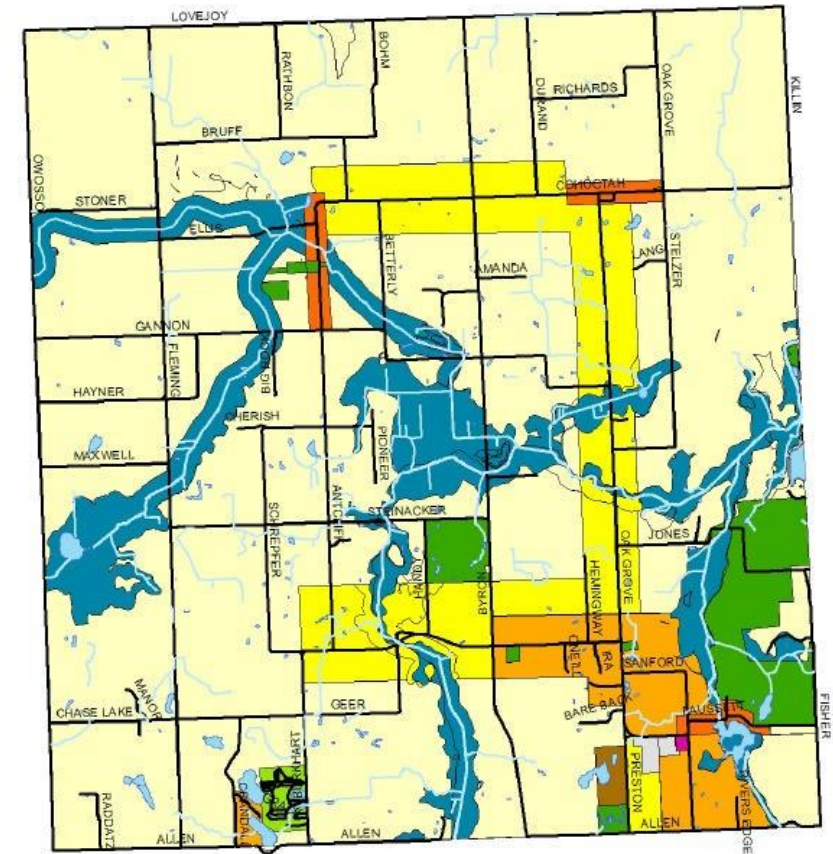
Cohoctah Township has few paved primary roadways, which limits truck traffic, and no direct access to major highways. The Light Industrial classification is intended to allow uses such as warehousing, assembly, packaging, tool and die shops, and other small manufacturing uses. As in the Commercial area, these are small, local-scale operations. The Light Industrial area on the future land use map is located near the Commercial area, and features good, paved access on Oak Grove Road (the township's most heavily traveled road). In addition, the rail line passes through the site, offering shipping alternatives.

This future land use designation corresponds to the Light Industrial zoning district in the Cohoctah Township Zoning Ordinance. This zoning district has a minimum lot area of two (2) acres except where a lot or parcel is serviced by a public or common water supply system and public wastewater disposal and treatment system, in which case the lot or parcel may have a minimum area of 40,000 square feet per principal use.

Table 8-2: Future Land Use Non-Residential Designations and Corresponding Zoning Districts			
Non-Residential Future Land Use Designation	Future Land Use Development Densities	Corresponding Zoning District (s)	Zoning District Development Densities
River Conservation	500 ft. stream buffer 100 ft. wetland buffer	Waterways Resource Development	20 Acres
Public/Recreation	Not specific	Resource Development	20 Acres except as otherwise provided in the zoning ordinance
Commercial	Not specific	Neighborhood Service Commercial	1 acre 15,000 square feet with public sewer & water
Light Industrial	Not specific	Light Industrial	2 acres 40,000 square feet with public sewer & water

Source: Cohoctah Township Zoning Ordinance, Adopted 1987.

Cohoctah Township Future Land Use



Legend	
Future Land Use Designation	
Agriculture/Residential	Commercial
Rural Residential	Light Industrial
Suburban Residential	Recreation Residential
Settlement	Public/Recreation
Manufactured Home Residential	River Conservation

Prepared by: Livingston County
Department of Planning, June 2010
Source: Livingston County Geographic
Information System
Cohoctah Township Master Plan
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Chapter 9: Cohoctah Township Implementation Strategies

Implementation is not only the most important part of a Master Plan, but also the most difficult. Once adopted, the Cohoctah Township Master Plan is the official policy guide to be used by the Township Board and the Planning Commission for making future zoning and land use decisions. The text and the maps within the Master Plan provide a base level of understanding about current planning conditions and about the community's desire for future growth and development. As the composition of Township officials, trustees and planning commissioners change over the years, this plan will provide continuity regarding planning policy.

Implementation Strategies

Cohoctah Township will use the following strategies to implement the Plan to the township's best advantage.

Use the Plan for Making Zoning and Land Use Decisions

- Reference the Master Plan for land use decisions. Relying on the Plan as a basis for land use decisions gives the Plan, Planning Commission and Township Board greater credibility.
- Use the Plan in a consistent manner so the integrity of the Plan is not compromised.
- Keep properties that are proposed for rezoning consistent with the future land use map. This is an effective, long-term method of carrying out the future land use plan.

Periodically Update the Plan and Associated Ordinances

- Update sections of the Master Plan as needed to reflect changing conditions and resident perspectives in the township. This includes reviewing the goals and objectives section of the Plan periodically.
- Hold a joint meeting between the Township Planning Commission and Township Board periodically to review the Master Plan and make necessary updates.
- Revise the Township Zoning Ordinance where necessary to reflect the Master Plan. Zoning is the major tool used to put the Plan into action and shape future growth and development. It is used to support the goals and policies of the Master Plan.
- Review the Township General Ordinance to make sure they are aligned with the goals and policies of this Plan.
- As required by the Michigan Planning Enabling Act, P.A. 33, as amended, at least every five years after the adoption of a Master Plan, the Township Planning Commission will review the Master Plan and determine whether to take any action to amend the Plan or adopt a new Master Plan. This review and the Planning Commission's findings will be recorded in the Planning Commission minutes.

Community Education

- Educate residents on the intent of the Master Plan and involve them in carrying out its mission whenever possible. Public understanding and support is critical to the effectiveness of the planning process.

Flexible Development Options

- **Open Space and Rural Preservation Development District** – The Cohoctah Township Zoning Ordinance provides the flexible development option of Open Space and Rural Preservation Development in those districts that allow single-family residential housing as a permitted principal use. This excludes the Mobile Home Residential, Light Industrial, and Neighborhood Service Commercial districts. Open Space and Rural Preservation Development is also not allowed in the Settlement District.

This concept offers an alternative to reduce the disruptive environmental impacts of traditional subdivision and single-family development and encourages innovative housing development that is sensitive to the environment and strives to preserve the traditional rural character of Cohoctah Township's land use pattern. This is accomplished through the permanent dedication of open space in each development and reduced lot size to allow more sensitive placement of homes.

Single-family housing developments that use the Open Space and Rural Preservation alternative must demonstrate that they are preserving the rural character and natural environment of the township. These developments must preserve the natural character of natural features such as, but not limited to, open fields, stands of trees, large individual trees, ponds, streams, hills, wetlands, and other natural features, as well as agricultural uses. These features define Cohoctah Township's rural character, give it economic viability (through farming), and provide significant wildlife habitat, drainage, and water recharge areas.

The minimum required project size for an Open Space and Rural Preservation development is ten acres, and a minimum of 50% of the site must be permanently protected as open space.

- **Planned Unit Development District** – Another flexible development option enabled by the Cohoctah Township Zoning Ordinance is the Planned Unit Development (PUD) District.

The intent of the PUD District is to permit greater flexibility and consequently more creative design of various types of development than are possible under conventional zoning regulations. It is the intention of this district to allow flexible land use composition and design without sacrificing the basic principles of sound zoning practice. The basic zoning districts and their permitted uses as established in this Ordinance will form the land use base for designing a combination of uses permitted in each district. Development will take the form of clustering principal uses and activities at a higher density than would otherwise be possible under the respective district regulations, on a preferred portion of a parcel while maintaining the overall density of development of the parcels consistent with the district regulations. Another option would be to combine the planning of land uses and activities from several districts as one project on the same clustering principle.

A PUD must also include a land, water or land/water permanent open space area constituting not less than twenty-five percent of the total (a) land area, or (b) land area, plus no more than 300 feet into or no more than one-half the width or distance across, a natural surface water area of the waterfront parcel. The required open space must be set aside in the form of an irrevocable conveyance.

All development in this district shall be limited to tracts of land having an area of at least the minimum number of acres required for the respective types of PUD Districts. All development in this district shall also be restricted to sites having access to a hard surfaced roadway and accepted and maintained by the County Road Commission, except for RR, and Planned Unit Development Districts.

Appendix A: Cohoctah Township Citizen Survey

The Cohoctah Township Planning Commission conducted a township-wide citizen survey as part of their efforts to gather community information for the preparation of the 2024 Cohoctah Township Master Plan. The master plan citizen survey was made available to residents of the Township in the form of hard paper copies located in the Township Hall as well as online through the Township website. The survey was due May 15th, 2023, and 109 surveys were returned to the Planning Commission.

On the following pages is a copy of the survey form with responses inserted and highlighted in bold. Not everyone who returned a survey filled out every question, so response rates correspond to the number of people who answered that question (not the number that turned in a survey).

Q1 How do you feel about the residential growth in the township over the last 5 years

Answered: 109 Skipped: 0

ANSWER CHOICES	RESPONSES	
Much too fast	28.44%	31
A little too fast	26.61%	29
About right	44.04%	48
Too slow	0.92%	1
TOTAL		109

Q2 Which lot size or density for single family homes do you think is appropriate for future residential development

Answered: 109 Skipped: 0

ANSWER CHOICES	RESPONSES	
Houses clustered on small parcels leaving undeveloped open spaces	1.83%	2
One house on 1 acre	6.42%	7
One house on 2 acres	20.18%	22
One house on 5 acres	22.94%	25
One house on 10 acres or more	48.62%	53
TOTAL		109

Q3 In regard to land use planning, the township should:

Answered: 108 Skipped: 1

ANSWER CHOICES	RESPONSES	
Focus on the preservation of farmland	84.26%	91
Focus on the preservation of natural resources	53.70%	58
Expand the blight ordinance	35.19%	38
Total Respondents: 108		

Q4 What improvements, additions or activities would you like to see added to the township park?

Answered: 43 Skipped: 66

#	RESPONSES	DATE
1	None	5/23/2023 1:35 PM
2	N/A	5/16/2023 6:06 AM
3	walking paths, lighting	5/15/2023 9:13 AM
4	I'm sorry, I'm not prepared to answer this at length at this time. I am very happy to see the start of a Pickleball court!	5/14/2023 7:34 PM
5	Walking paths & an unlocked gate so residents can use it	5/8/2023 7:07 PM
6	Areana	5/7/2023 6:45 PM
7	None	5/7/2023 6:30 PM
8	Unlock the gates	5/7/2023 1:04 PM
9	More movie night type events	5/6/2023 5:31 PM
10	Gazebo for family events	5/6/2023 9:57 AM
11	None it's a waste	5/6/2023 9:41 AM
12	None	5/6/2023 7:32 AM
13	Maybe some swings for the children.	5/6/2023 2:17 AM
14	Playground	5/5/2023 8:40 PM
15	Solar celebration for the work done to preserve our rural township	5/5/2023 6:05 PM
16	? Never used the park.	5/5/2023 3:44 PM
17	Better restroom facility	5/5/2023 3:44 PM
18	Cohoctah is a large township, I would like to see a separate park more west that has playground equipment for children.	5/5/2023 2:40 PM
19	Annual Community Picnics, with added petting Zoo, Beer Tent, Live Music, team competitions etc....a true community event	5/5/2023 2:12 PM
20	Flowers	5/5/2023 1:55 PM

21	Covered arena	5/5/2023 1:38 PM
22	More equipment	5/5/2023 11:39 AM
23	Ice rink, movie/concert series	5/5/2023 10:56 AM
24	Boardwalk at the millpond	5/5/2023 10:29 AM
25	Expanded playground area and walking trail	5/5/2023 10:18 AM
26	Expanded kids playground	5/5/2023 10:07 AM
27	The park is great. It doesn't need to be a rule restricted fancy park. A person can find a park like that anywhere. Go to town.	5/4/2023 12:25 PM
28	Basketball courts	5/4/2023 7:43 AM
29	Having a nice place for us to hang is great.	5/3/2023 9:10 PM
30	N/A	5/3/2023 1:11 AM
31	None at this time	5/2/2023 9:30 PM
32	No opinion	5/2/2023 12:45 PM
33	Is there room for more picnic pavilions?	5/1/2023 7:00 PM
34	Some swing sets for all ages.	5/1/2023 5:14 PM
35	Never has used it.	5/1/2023 1:52 PM
36	We never use it; we go to Howell City Park	5/1/2023 11:41 AM
37	Community Pool	4/30/2023 6:40 PM
38	Need things in there for kids, Pavilions walking/running paths unless I missed things.	4/30/2023 2:15 PM
39	haven't been there so can not say.	4/30/2023 11:56 AM
40	None. Do away with it	4/30/2023 11:18 AM
41	Community gatherings. Flower show dog shows farmer's market	4/29/2023 9:55 PM
42	I don't use so I don't have an opinion	4/29/2023 3:32 PM
43	More play sets for the children.	4/29/2023 2:47 PM

Q5 Would small box stores, like Dollar General, be beneficial for township residents?

Answered: 109 Skipped: 0

ANSWER CHOICES	RESPONSES	
Yes	5.50%	6
No	84.40%	92
If yes, where?	10.09%	11
TOTAL		109

Q6 Are you in favor of using agricultural land for:

Answered: 91 Skipped: 18

ANSWER CHOICES	RESPONSES
Solar	12.09% 11
Wind	6.59% 6
Other green energy	9.89% 9
Other (please specify)	81.32% 74
Total Respondents: 91	

#	OTHER (PLEASE SPECIFY)	DATE
1	None	5/31/2023 7:20 AM
2	Use it as farm land	5/23/2023 1:35 PM
3	FARM LAND	5/16/2023 6:06 AM
4	I suggest using it for Agriculture (!) and/or protected wildlife areas.	5/14/2023 7:34 PM
5	None	5/13/2023 8:33 AM
6	Single family homes only	5/12/2023 4:57 PM
7	Farming	5/9/2023 8:11 PM
8	Farm	5/9/2023 8:37 AM
9	None adds blight to community	5/9/2023 7:04 AM
10	NO! to all of the above	5/8/2023 7:07 PM
11	Nothing	5/7/2023 6:45 PM
12	Agricultural land for ag ONLY	5/6/2023 5:31 PM
13	Food	5/6/2023 4:09 PM
14	None of the above	5/6/2023 2:43 PM
15	recreational use and preservation of green space	5/6/2023 2:10 PM
16	No	5/6/2023 1:17 PM
17	None- only farming and hunting	5/6/2023 12:43 PM
18	FARMING	5/6/2023 7:32 AM
19	Leave the land alone	5/6/2023 6:36 AM
20	No	5/6/2023 5:43 AM
21	Farming	5/6/2023 2:17 AM
22	None of the above! Use the land to grow food supplies	5/5/2023 8:52 PM
23	Only agriculture	5/5/2023 6:58 PM
24	Farming only	5/5/2023 6:42 PM
25	Ag Farming only	5/5/2023 6:05 PM
26	None of the above	5/5/2023 4:22 PM

27	Power plants in urban areas	5/5/2023 3:44 PM
28	NO! Leave things alone.	5/5/2023 3:44 PM
29	Farm only. Block all utility use of wind solar and other power facilities. Private Solar - one per plot is ok	5/5/2023 3:44 PM
30	None	5/5/2023 3:18 PM
31	None of the above	5/5/2023 2:54 PM
32	No, most of the area is too residential.	5/5/2023 2:40 PM
33	No Industrial on Agricultural Land	5/5/2023 2:12 PM
34	Leave the land the way it is	5/5/2023 1:55 PM
35	Farming food resources	5/5/2023 12:56 PM
36	No	5/5/2023 11:39 AM
37	No	5/5/2023 10:56 AM
38	Agriculture	5/5/2023 10:28 AM
39	Farming/ hunting	5/5/2023 10:18 AM
40	No. I am interested in the area remaining as it was planned to be when I investigated before I moved here.	5/4/2023 12:25 PM
41	Not really	5/4/2023 7:43 AM
42	NO	5/3/2023 9:10 PM
43	I support the land being used for agricultural purposes only. If it gets to a point where green energy is going to be used, why not make the set back requirements farther than the minimum requirements? If you are trying to take a neutral stance, but support what most the community wants (which is no Solar), then increase set back requirements from rural/residential neighbors who will be impacted by sound, runoff, aesthetics.	5/3/2023 3:10 PM
44	farming	5/3/2023 9:12 AM
45	Kept agricultural. No industrial solar, or wind projects. Those should only be placed in industrial zoned areas.	5/3/2023 9:08 AM
46	No	5/2/2023 8:53 PM
47	farm land only	5/2/2023 5:17 PM
48	Farming	5/2/2023 12:45 PM
49	NOT AT ALL	5/1/2023 7:00 PM
50	Food	5/1/2023 5:14 PM
51	agricultural use	5/1/2023 4:17 PM
52	Agricultural–Absoltely nothing "green" by today's definition.	5/1/2023 8:25 AM
53	Whatever gives the farmers money to survive. Except selling it for mass housing development.	4/30/2023 6:40 PM
54	Farming only	4/30/2023 4:08 PM
55	No commercial scale faciliti	4/30/2023 2:54 PM
56	Not in favor for using agricultural land for any solar or wind	4/30/2023 2:49 PM
57	Wind: you can still use land	4/30/2023 2:15 PM

58	not any of it. The name say it, AGRICUTLURAL, NOT energy systems that do not work. Solar in Michigan? What a joke. Wind? The blades all come from china and CAN NOT be recycled.	4/30/2023 11:56 AM
59	We cannot afford to lose agricultural land for unproven energy sources such as solar farms, wind turbines, etc.- cause & effect of these energy sources is unknown for the long term.	4/30/2023 11:40 AM
60	Farmland.	4/30/2023 11:12 AM
61	for farmland	4/30/2023 11:07 AM
62	Crops	4/30/2023 7:50 AM
63	Crops	4/30/2023 7:40 AM
64	farming	4/30/2023 7:34 AM
65	food production	4/30/2023 6:54 AM
66	Absolutely not!	4/29/2023 10:25 PM
67	Preservation of farm land and orchards	4/29/2023 9:55 PM
68	The growing of crops for humans and animals	4/29/2023 8:09 PM
69	I am not in favor of agricultural land being used for solar wind or other green energy	4/29/2023 7:52 PM
70	No Leave our township the way it is.	4/29/2023 5:06 PM
71	no on all green energy	4/29/2023 5:04 PM
72	Keep farm land for crops. NO GREEN ENERGY	4/29/2023 3:31 PM
73	NO GREEN ENERGY USE!!!!	4/29/2023 2:47 PM
74	None of these	4/28/2023 11:50 AM

Q7 What would you like to see over the next 5-10 years regarding developments or improvements within the township?

Answered: 87 Skipped: 22

#	RESPONSES	DATE
1	Preserve rural farmland	5/31/2023 7:20 AM
2	Don't develop keep as is	5/23/2023 1:35 PM
3	Road improvements	5/20/2023 7:56 AM
4	Open space and nature, wildlife preservation. Police presence to slow down fast insane drivers on Oak Grove Road. Let all the other townships around grow and get congested, polluted, crime filled, traffic issues and undesirable to families. Lets work to keep Cohoctah township the special, cozy, relaxing place it is. For what its worth live over by the turn on Oak Grove Road where it's becoming dead mans curve with dangerous drivers and gets worse every year. Preserve what's left and let us continue to be blessed to call Cohoctah our home.	5/16/2023 6:06 AM
5	improved internet access, road improvements, possible recycling program	5/15/2023 9:13 AM
6	Efforts to continue to protect our rural living, maintain the natural resources and enhance education to encourage land owners to do the same. (Reducing autumn olives and other invasive species). Our native plants and wildlife numbers have drastically dropped as well as wetland areas. Thank you Cohoctah board members. You are appreciated!	5/14/2023 7:34 PM
7	Pave main dirt roads, improve dirt roads, expand internet to entire township	5/13/2023 8:33 AM
8	Better wi-fi in the area.	5/12/2023 4:57 PM

9	Continue to maintain our rule lifestyle.	5/9/2023 8:11 PM
10	Do want to see subdivisions in the township.	5/9/2023 8:37 AM
11	Create access to Oak Grove Mill Pond for recreational fishing and swimming like it use to be	5/9/2023 7:04 AM
12	Better roads, both paved & gravel!	5/8/2023 7:07 PM
13	Roads	5/7/2023 6:45 PM
14	Nothing, keep status quo	5/7/2023 6:30 PM
15	No more gas stations or stores	5/7/2023 1:04 PM
16	No sub divisions. Those ruin rural areas. Keep it simple!	5/7/2023 7:08 AM
17	Better internet throughout the township.	5/6/2023 5:38 PM
18	Please continue to fight the solar and wind developments. We love our township the way it is. Thank you so much for all you do!	5/6/2023 5:31 PM
19	Better roads	5/6/2023 4:09 PM
20	More road grading .	5/6/2023 2:43 PM
21	Better drainage, dirt roads with better gravel, Lovejoy has very few pot holes between Fleming and Rathbun but Fleming has lots of pot holes. Garbage removal cheaper, and the supervisor in charge of ensuring garbage isn't dumping on vacant lots to take care of the matter such as the garbage in the field on the south side of lovejoy. Filled a complaint about it months ago and the garbage is still there.	5/6/2023 12:43 PM
22	Get in the Howell park system. Upgrade the dirt roads. Stop residents from turning their properties into junkyards, it's gotten real bad in this township	5/6/2023 9:41 AM
23	I just want to preserve as much farmland as possible in our area. We moved out to the country to live in the country.	5/6/2023 8:04 AM
24	High speed internet for everyone.	5/6/2023 6:36 AM
25	Better road maintenance. Higher penalties for blight within the Township. Lower speed limits within the township, especially where there are homes. More people are on bikes and speed limits are too high for the riders safety. People drive WAY above posted limits!!!!	5/6/2023 6:21 AM
26	No Solar farms!! I would like to see them preserve the farming community and less subdivisions.	5/6/2023 2:17 AM
27	Preserve the Rural character of Township! Stop the goldiggers from destroying our way of life.	5/6/2023 12:24 AM
28	Expand internet access	5/5/2023 8:52 PM
29	Dust control on dirt roads applied sooner More Recycling	5/5/2023 6:58 PM
30	Small home development low density.	5/5/2023 6:42 PM
31	Improved roads - owosso especially. NO INDUSTRIAL SCALE SOLAR.	5/5/2023 6:12 PM
32	High speed Internet	5/5/2023 6:05 PM
33	Better care and management of our roads.	5/5/2023 3:44 PM
34	Better roads, better internet. Pave dirt roads and police traffic issues (reckless driving and speed) we must take care of blight and homes with debris and junk. Need enforcement and fines	5/5/2023 3:44 PM
35	Infrastructure for high speed fiber optic Internet access.	5/5/2023 3:18 PM
36	Better road care or maybe a few more paved	5/5/2023 2:49 PM

37	I just don't want to see subdivisions in Cohoctah or a Dollar General. Sadly, we have Mugg and Bopps now and I do feel that serves what Cohoctah residents need. Kroger and the Dollar General are close enough. People have moved here to get away from the stores, lights and traffic. My family has been here for 100 years and have seen the changes and have accepted them. But we don't need anymore developments.	5/5/2023 2:44 PM
38	1. All roads need completely redone. I have replaced shocks on 3 vehicles, and 2 of them need them replaced again. Dirt roads are decaying at a faster rate than can be repaired, and continued scraping does nothing to fix them. and is a constant complaint with all residents. Need to move to Gravel road vs a Dirt Road. 2. Better CELLPhone and WIFI Service	5/5/2023 2:12 PM
39	Its great the way it is	5/5/2023 1:55 PM
40	Keeping this area rural and not being over developed, More small community events like parades, Allowing Airbnb in accessory buildings	5/5/2023 1:38 PM
41	Better internet options. Not becoming another suburb. Small community events. Dredge Madden Drain so it isn't standing water.	5/5/2023 1:37 PM
42	I would like to see some cleanup of properties around here. Too many that have a lot sitting out looking bad.	5/5/2023 11:39 AM
43	INTERNET!!!!!!!!!!!!	5/5/2023 10:56 AM
44	Boardwalk at the Oak Grove millpond for people to fish safely from. Sidewalk from the village of Oak Grove to the new gas station for kids to walk safely on.	5/5/2023 10:29 AM
45	Better internet, roads, and affordable trash service.	5/5/2023 10:18 AM
46	Natural gas, food/bar in downtown.	5/5/2023 10:10 AM
47	Internet	5/5/2023 10:07 AM
48	I moved here because it was a small rural area, without all of the stores and signs and people and rules. I would like to see it remain as is.	5/4/2023 12:25 PM
49	Restaurant or bar on corner oak Grove and cohoctah.	5/4/2023 7:43 AM
50	I would like Old Chase Lake Rd paved, and many more paved roads.	5/3/2023 9:10 PM
51	I know it is a county issue, but Pavement or better up keep of dirt roads.	5/3/2023 3:10 PM
52	keeping natural corridors and natural landscape on roadways to conceal development	5/3/2023 9:12 AM
53	Tighter regulations on home owners whose property looks like a junk yard. Made to clean them up. Improvements made to the dirt roads. More frequent dust control.	5/3/2023 9:08 AM
54	More paved roads	5/3/2023 1:11 AM
55	Keep it rural. Continue to allow home occupations as a first option to expand business within the community before allowing box type stores.	5/2/2023 9:30 PM
56	Please try to keep solar and wind out. No more gas stations/stores. Stay rural, 10 acre minimum, & crack down on all the homes with so much blight. When we moved here 26 years ago we had a hard time finding country property to move to (I commuted 65 miles oneway to metro airport every day & it was worth it). Country living is even harder to find now. I enjoy the quiet, privacy & all the wild life. And always keep the 4 of July it's so nice you see it twice parade!	5/2/2023 8:53 PM
57	Put lime on all the roads so they will not be so full of pot holes. Not only for the golf course.	5/2/2023 5:17 PM
58	Fix the cohoctah rd bridge	5/2/2023 12:45 PM
59	Paving Durand Road. Fixing the bridge that is out on Cohoctah road. Of course both of those fall under the road commission.	5/1/2023 7:00 PM
60	Road improvements	5/1/2023 5:14 PM
61	if possible, access to cable internet in some areas easiest to provide as a start	5/1/2023 4:17 PM

62	INTERNET!!! Roads! Work on paving roads that are still gravel. Like the rest of Burkhardt Rd, and Chase Lake. Also Byron at least up to Chase Lake. These are main roads and have too much traffic, the road graders can't keep up with them.	5/1/2023 4:02 PM
63	ditch digging of drains	5/1/2023 2:26 PM
64	More community activities	5/1/2023 1:52 PM
65	Join the Howell Area Parks & Recreation Authority	5/1/2023 11:41 AM
66	Pave Byron from Allen to Chase Lake. Pave Durand Rd from Cohoctah Rd to Lovejoy. Pave Chase Lake Rd from Antcliff to Township line but ideally to Robb Rd. In that order.	5/1/2023 8:25 AM
67	Drive in theater.	4/30/2023 6:40 PM
68	Continued dirt road improvements. Mowing ditch row by roads.	4/30/2023 4:08 PM
69	as little development as possible	4/30/2023 2:49 PM
70	Good question. Came back here for country living don't want it to grow too fast and be wanting to move to get my country living again. Dollar general wouldn't be bad but going in the old general store would be best. To not take up anymore land. Along with areas cleaned up better.	4/30/2023 2:15 PM
71	Leave a good thing alone.	4/30/2023 11:56 AM
72	The obvious – better road system care & maintenance, whether Cohoctah Township performs this work or not. They represent the residents of this area. Additionally, some restrictions/controls regarding trash, abandoned vehicles, equip., etc. in yards of homeowners. Our property values for tax purpose keep increasing which is hard to believe with all the junk yards around the township.	4/30/2023 11:40 AM
73	I think they need to address the drainage system. Redo, retrench.	4/30/2023 11:18 AM
74	We need to improve on blight in our community. There are too many homes that look like junkyards. Unfortunately this does effect the value of their neighbors home.	4/30/2023 11:12 AM
75	The house across the street from the Townhall is being run into the ground and I don't understand why they are allowing that they need to be a good tenant in there that will care for the home.	4/30/2023 11:10 AM
76	blight ordinance, drive down Cohoctah rd, township looks like a shithole with some of the houses.	4/30/2023 11:07 AM
77	Drainage improvement on township, especially Schrepfer Rd	4/30/2023 7:50 AM
78	Pave a major road like Byron, Chase Lake, Burkhardt, to help alleviate traffic on other paved roads	4/30/2023 7:34 AM
79	better care of the roads by the county	4/30/2023 6:54 AM
80	No large subdivision approvals and ZERO solar. We must preserve our farmland.	4/29/2023 10:25 PM
81	I like it just the way it is, that is why I live here	4/29/2023 8:09 PM
82	Keep us agricultural and limit to the best of your ability the takeover of our farmland from green energy. Keep crypto farming out of our township all together.	4/29/2023 5:19 PM
83	natural gas	4/29/2023 5:04 PM
84	Reasonable guide lines and rules as to the safety and appearance of our area. Clean up of properties. Lets fix what we have before building more.	4/29/2023 3:32 PM
85	No wind or solar farms. Tearing up our land, reducing our farmland for "green energy" that we won't even get to benefit from. Stop this nonsense!	4/29/2023 3:31 PM
86	I like it the way it is now.	4/29/2023 2:47 PM
87	No solar farms.	4/28/2023 11:50 AM

Appendix B: Cohoctah Township Master Plan Goals and Objectives Fact Sheet

The following reference list of demographics and planning trends was identified through the research and analysis that went into creating chapters of the 2010 Cohoctah Township Master Plan. The purpose of the list was to summarize some of the major findings of fact revealed in the Plan, so that the Planning Commission might address these facts when drafting the goals and objectives of Chapter 7.

General Points

- Cohoctah Township borders Shiawassee County
- The Township has four (4) settlements
- Cohoctah Township has experienced less population growth than surrounding Livingston County communities (projected to decline).
- Cohoctah Township has a low % of population under 18
- Cohoctah Township has a low % of population over 65, the greatest age group is 45 to 64
- The Township's median household income is in the lower half of Livingston County while family income has improved.
- Cohoctah Township has a well-educated population – 85% of the adult population has graduated from high school or obtained a higher degree

Township Services and Facilities

- 42 acres of vacant land is owned by the Township across from the hall – for a future township hall, a second fire station, a township park or combo.
- Howell Area Fire Department has a fire substation in the Township.
- No municipal sewer or water provision – septic and well
- Cohoctah Township has a 40-acre township park that has horse facilities.
- 800 acres of the Oak Grove State Game Area is located along the eastern township boundary – natural habitat for hunting and hiking.
- The largest private recreation resource in the township is Hunter's Ridge Golf Course.
- A U.S. Post Office is located in the settlement of Cohoctah on Cohoctah Road.
- Cohoctah Township is midway between the Village of Fowlerville and the City of Howell – the many resources of these two communities are available to township residents.

Transportation

- Cohoctah Township's roadway system is predominantly county primary and county local roads – 79.66 miles which is higher than most Livingston County Townships.
- There are very few smaller roadways in Cohoctah Township, such as subdivision roads or private roads.
- The surface of most roads in the Township is gravel.
- Most of the gravel roads in the Township are of better quality and can accommodate more traffic than the countywide average.

Transportation (continued)

- Cohoctah Township will consider requiring traffic impact studies for any project that may cause or attract traffic such as medium to large sized residential developments.
- Intersections that included Oak Grove Road figured most prominently in the highest crash intersections.
- The vast majority of accidents have occurred on Oak Grove Road from Chase Lake Road to Cohoctah Road west.
- The only existing public transportation available to Cohoctah residents is LETS – the county-wide small bus dial-a-ride service.
- The Great Lakes Central Railway (GLC) freight carrier travels north/south from the City of Ann Arbor through the City of Howell and northward through Cohoctah Township into Shiawassee County.
- A commuter lifestyle is prevalent.

Commercial and Industrial Areas of Development

- No major employers in Township
- The dominant occupation category in Cohoctah Township is Management, Business, Science, and Arts. Second is Service Occupations. Third is Sales and Office.
- Limited expansion of commercial and industrial development may add employment opportunities in the Township, thereby impacting income.
- Commercial and Industrial future land use planning could concentrate on growth in agricultural-related commerce and industry.

Natural Features and Open Space Preservation

- Development in the Township should be directed to areas that are most capable of sustaining physical changes to the landscape without negatively impacting the community's natural features.
- Those areas of the Township that contain valuable natural features should be comprehensively planned for less intensive development.
- Cohoctah Township is generally level with few locations of steep slopes (>18%) – steep slopes are most abundant in the southern half of the Township where the majority of lakes and streams are located.
- Areas that contain steep slopes should remain undisturbed or developed with sensitive site planning to prevent soil erosion.
- Areas of the Township with severe septic limitations should be planned for less density.
- Nearly all the Township drains into the Shiawassee River Watershed which drains to Lake Huron. - the rationale for watershed management is that if we properly manage activities on the land that drains to bodies of water, we will protect and improve the water resources of the state.
- The headwaters of the Shiawassee River Watershed are primarily located in Livingston and Oakland counties.

Natural Features and Open Space Preservation (continued)

- There are 8 small lakes and ponds scattered throughout Cohoctah Township - each consists of 5 acres or more.
- No water resources in the Township have public access
- The largest water bodies are found in the southern tier of the Township
- Wetland areas are interspersed throughout the Township.
- The largest wetland systems are adjacent to lakes or rivers (e.g. Shiawassee, Sabine Lake, Sprague Creek, and Oak Grove State land)
- Developments that occur within woodlands should be carefully designed to keep as many trees standing as possible.
- 5 sections along the eastern boundary of the Township form the largest contiguous area of woodlands in the Township (much in game area)
- Cohoctah Township contains 6 Priority 1 High-Quality Natural Areas – primarily in the mid to southern half of the Township.
- The largest Priority 1 area includes two nearly contiguous areas along the eastern boundary of the Township – 2,442 acres (much in game area)
- When working with a developer of a PUD or open space development, the Township may be able to negotiate what portions of the site are preserved – the High-Quality Natural Areas should be preserved.

Agriculture

- The Township's agricultural land serves as a part of the rural atmosphere that attracts residents to Cohoctah Township
- Cohoctah farmers are active participants in the P.A. 116 program – there are currently 32 P.A. 116 agreements in the Township which far outnumbers most Livingston County townships
- Most Cohoctah P.A. 116 agreements are in the NW quadrant of the Township (also most acres) – the second highest number are in the NE quadrant.
- The largest area of contiguous Prime Farmland soil is in the northeast corner of the Township.
- SEMCOG land use data shows that between 2015 and 2020 there was a decline in the number of acres used for agricultural pursuits and farmsteads.
- A future land use classification in the Township should encourage the continuation of agricultural activities.
- Gradual transition from an agricultural community to a rural residential community.

Housing and Residential Development

- Lake lots in the Township are very narrow in width – most of the homes on these lots were constructed as summer homes but are now used year-round
- The greatest change in Township land use between 2015 and 2020 was an increase in vacant land (169% increase)
- Gradual transition from an agricultural community to a rural residential community.
- The number of housing units in the Township has grown steadily, however the growth in housing units is slower than that of surrounding communities.
- The median housing value in the Township is slightly lower than the County's median housing value and higher than most Livingston County communities.

Housing and Residential Development (continued)

- The township has a larger average household size and a larger average family size than most surrounding Livingston County communities.

Hazard Mitigation

- Lakefront development often results in groundwater contamination from septic systems located near lake shores in high water table areas.
- Lakefront development also results in surface water pollution from runoff over impervious surfaces such as driveways, roads and roofs.
- Lakefront lawns also contribute to lake pollution by sending runoff into lakes that carries fertilizer, weed killer, insecticides and other chemicals.
- Wetlands reduce flood hazards by providing storm water storage.
- Floodplains are in low-lying areas next to watercourses that are prone to flooding.
- Development in floodplains will be limited due to the inability to site septic systems and building foundations, and the threat of property damage.
- The middle of the Township is where the largest floodplain lies surrounding the convergence of creeks, drains and the branches of the Shiawassee River.
- Wild fire risk - 5 sections along the eastern boundary of the Township form the largest contiguous area of woodlands in the Township (much in game area)
- Areas that contain steep slopes should remain undisturbed or developed with sensitive site planning to prevent soil erosion.
- To avoid high nitrate levels, wells should be installed uphill and at least 100 feet away from septic systems, barnyards, feedlots and chemical storage facilities.
- Most of Cohoctah Township's high nitrate level areas are in the SW quadrant of the Township.

Appendix C: Cohoctah Township Board Resolution of Approval And Adoption Of 2011 Master Plan (To be replaced)

TOWNSHIP OF COHOCTAH COUNTY OF LIVINGSTON, MICHIGAN

COHOCTAH TOWNSHIP BOARD RESOLUTION OF APPROVAL AND ADOPTION OF 2011 MASTER PLAN

WHEREAS, the Michigan Planning Enabling Act (PA 33 of 2008 as amended) authorizes the Planning Commission to prepare a Master Plan for the use, development and preservation of all lands in the Township; and

WHEREAS, the Planning Commission has prepared a proposed Master Plan and submitted the plan to the Township Board for review and comment in accordance with the Michigan Planning Enabling Act; and

WHEREAS, on September 9, 2010, the Cohoctah Township Board received and reviewed the proposed Master Plan prepared by the Planning Commission and authorized distribution of the Master Plan to the Notice Group entities identified in the Michigan Planning Enabling Act; and

WHEREAS, notice was provided to the Notice Group entities as required by the Michigan Planning Enabling Act; and

WHEREAS, the Planning Commission properly noticed and held a public hearing on December 2, 2010 to consider public comment on the proposed Master Plan, and to further review and comment on the proposed Master Plan; and

WHEREAS, the Township Board has exercised by resolution its right to approve or reject the proposed Master Plan pursuant to the authority to do so as provided in MCL 125.3843; and

WHEREAS, the Planning Commission has undertaken the review of existing land uses in the Township, a review of the existing Master Plan provisions and maps, input received from the Township Board and public hearing and with the assistance of the Livingston County Planning Department; and

WHEREAS, the Planning Commission and Township Board find that the proposed Master Plan is desirable and proper and furthers the use, preservation, and development goals and strategies of the Township; and

WHEREAS, the Planning Commission and Township Board find that the Master Plan will accurately reflect and implement the Township's goals and strategies for the use, preservation, and development of lands in Cohoctah Township; and

WHEREAS, the Planning Commission and Township Board find the proposed Master Plan, is coordinated, adjusted, harmonious, efficient, and economical; and

WHEREAS, the Planning Commission and Township Board considered the character of the Township and its suitability for particular uses, judged in terms of factors such as trends in land and population development and believes the proposed Master Plan will best promote public health,

safety, morals, order, convenience, prosperity and general welfare in accordance with the Township's present and future needs; and

WHEREAS, the proposed Master Plan addresses one or more of the following: a system of transportation to lessen congestion on the streets, safety from fire and other dangers, light and air, healthful and convenient distribution of population, good civic design and arrangement as well as wise and efficient expenditure of public funds, public utilities such as sewage disposal and water supply and other public improvements, recreation and the use of resources in accordance with their character and adaptability; and

WHEREAS, the Planning Commission has recommended the approval and adoption of the 2011 Master Plan.

THEREFORE BE IT HEREBY RESOLVED AS FOLLOWS:

1. **Approval of 2011 Master Plan.** The Cohoctah Township Board hereby approves the proposed 2011 Master Plan and adopts the Master Plan which shall be known as the 2011 Master Plan, including all of the chapters, figures, maps and tables contained therein.

2. **Distribution of the 2011 Master Plan.** The approval granted is the final step for adoption of the 2011 Master Plan and the 2011 Master Plan shall be effective immediately. The Cohoctah Township Board hereby authorizes distribution of the 2011 Master Plan according to the Planning Enabling Act.

The foregoing resolution was offered by Shurrar

Second offered by Bock

Upon roll call vote the following voted:

"Aye": Friedick, Meek, Buckner, Bock, Thurner

"Nay": none

The Supervisor declared the resolution adopted.

Brenda Meek
Brenda Meek, Township Clerk

I certify the foregoing is a true Resolution adopted by the Cohoctah Township Board at a regularly scheduled meeting duly noticed and conducted in compliance with the Open Meetings Act on the 13 day of January, 2011.

Brenda Meek
Brenda Meek, Township Clerk