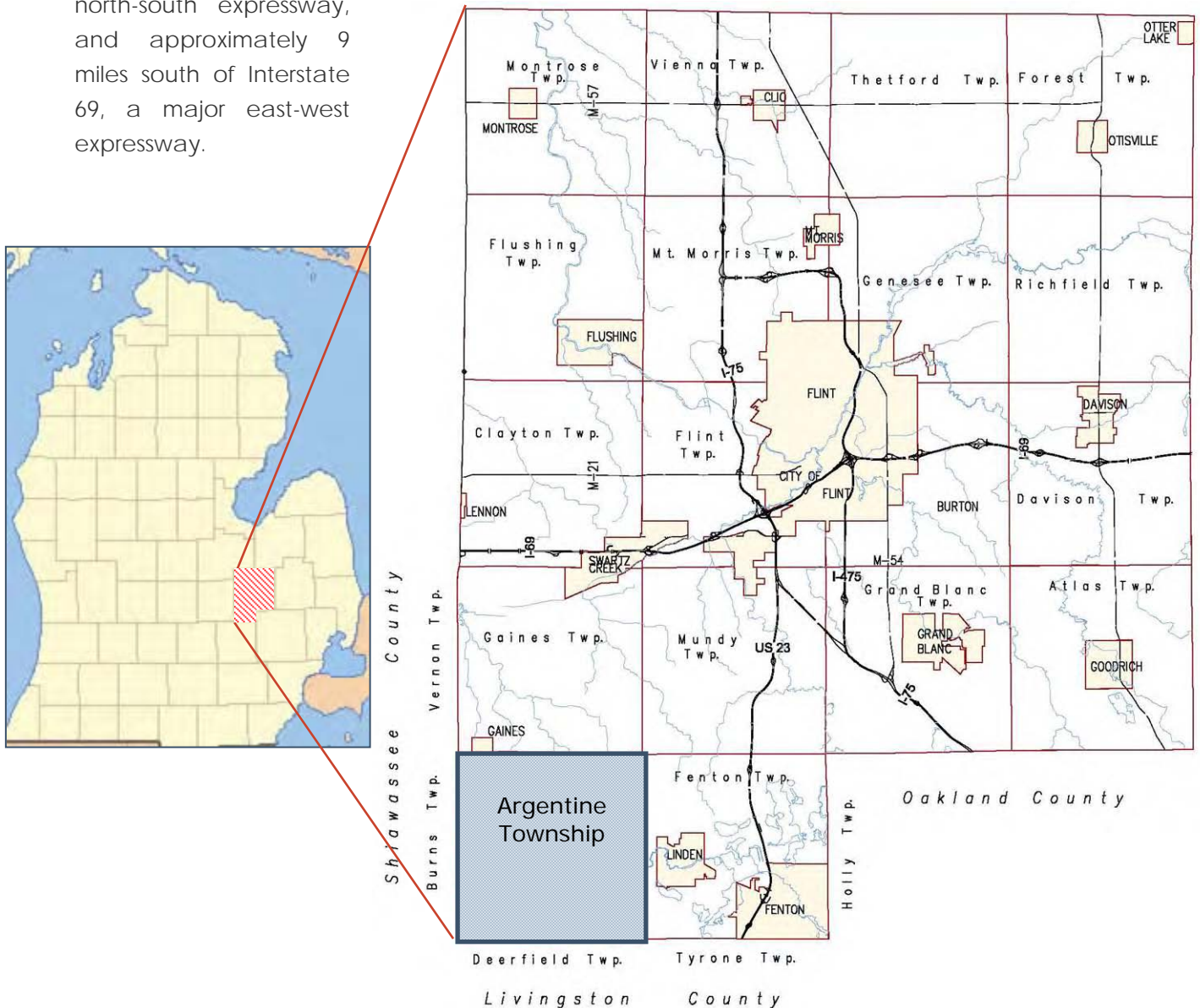




## COMMUNITY DESCRIPTION

### Location

**Argentine Township** is located in southeast Michigan, in the most southwesterly corner of Genesee County. Established in 1836, the entire township covers a land area of approximately 36.3 square miles (or 23,232± acres) and is approximately 15 miles southwest of the City of Flint, with the unincorporated Village of Argentine located within it's the southern region. As shown on the map below, the township is bordered by Gaines Township, the Village of Gaines, and Fenton Township in Genesee County. The City of Linden is also located approximately one mile to the east, within Fenton Township. Being at the edge of Genesee County, Argentine adjoins townships in two other counties; Deerfield Township in Livingston to the south and Burns Township in Shiawassee County to the west. It is located approximately 6 miles west of US 23, a major north-south expressway, and approximately 9 miles south of Interstate 69, a major east-west expressway.



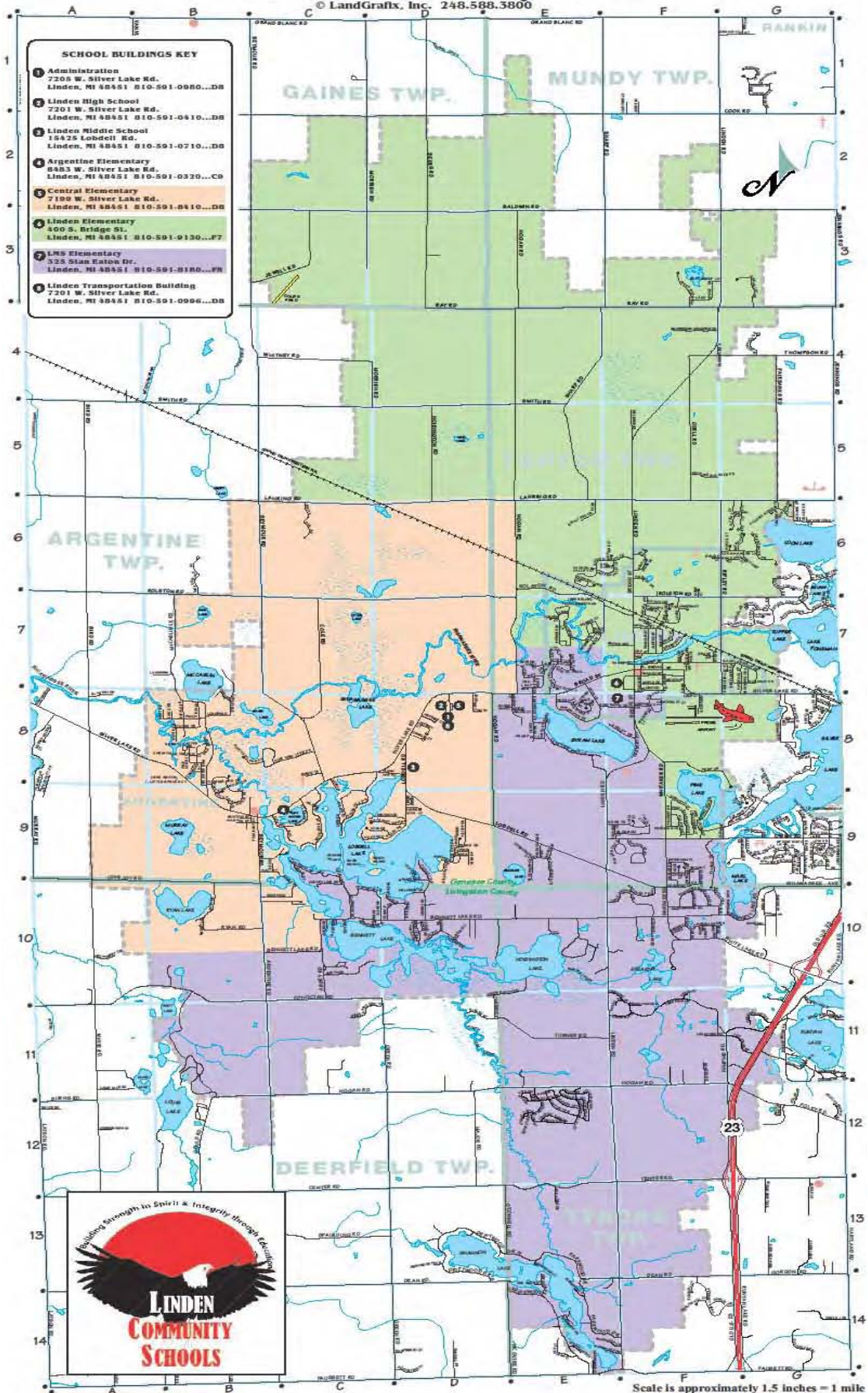


The **Linden Community Schools** district covers a large area of over six townships; Gaines, Mundy, Fenton, Argentine, Deerfield and Tyrone. This district encompasses roughly the east two-thirds of Argentine Township as shown on the map on the following page. The westerly portion of the township falls within the Byron Area School District. There are four public schools located in Argentine Township all of which are part of Linden Community Schools. The schools main campus, located on the east side on the township, is an extensive complex that includes the high school, middle school, one elementary, the transportation facility, and the administrative offices. This campus serves not only the Argentine community but all other communities within the district. There is one elementary school located west of the campus on Silver Lake Road within the township. Two additional elementary schools are located outside of the township. However, this plan focuses on those school facilities that fall within township limits.





# Linden Community Schools





## Population and Social Characteristics

Census Data provides most of the information under this section. Much of it was taken from the 2000 Census which will soon be updated. Unfortunately, according to the Census Bureau there is no 2006 to 2008 mid term census data available for Argentine Township at this time. The present economic recession is also having an effect on the accuracy of these figures as this directly effects population, income and housing statistics. Therefore, this section is brief and only a generalized reference. This being a 5 year plan will be updated in 2015 at which time more current census data will be published.

Argentine township has a population of 6,521 per the 2000 Census data. Other more recent sources ([www.bestplaces.net](http://www.bestplaces.net))\* state the 2009 population to be 7,129 which is a growth of 9.3 percent since 2000. Table #1 shows the Population trends since 1970.

Table #1: Population Trends

Year	Population	Growth Rate
1970	2,901	
1980	4,180	31%
1990	4,651	10%
2000	6,521	29%
2009*	7,129	9%

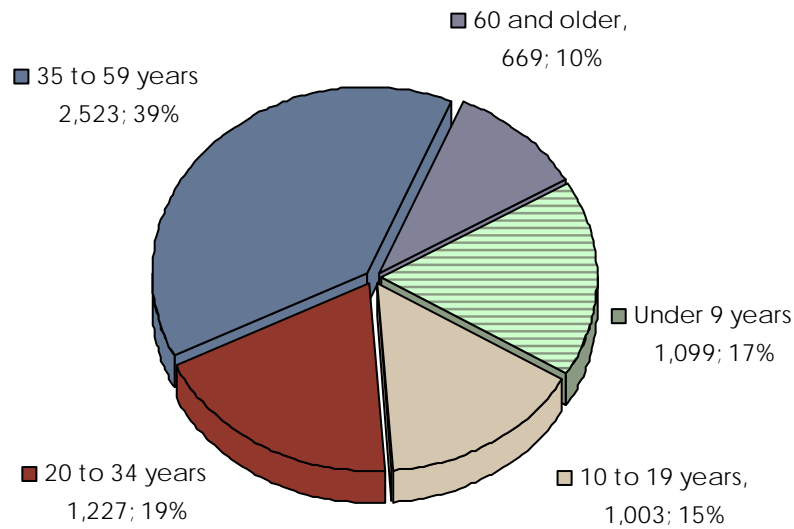
Source: U.S Census Bureau, 1970-2000

\*[www.bestplaces.net](http://www.bestplaces.net)

The majority of the township population falls between 35 to 59 years of age (see figure #2). This group makes up just less than 40 % of the township population. Younger adults between the ages of 20 to 34 are at 19% of the population, being just slightly higher than the group - children 9 years and younger at 17%. However, looking at all children 19 years and younger the percentage is 32%. The smallest population is 60 years and older and the median township age is 34.4 years.



Figure #2: Argentine Township Age Distribution (2000)



Source: U.S Census Bureau, 2000

Another perspective to demonstrate the changing trends in population is in the form of a life stage breakdown. Table #3 shows the changes in population between 1990 and 2000 by life stage. This can be helpful to represent the percent of change and potential recreation demands by user groups. The figures show little change in most groups except in the late career age group (ages 45-64). As the population ages, the 2010 census data will most likely show an increase in the retirement age group as members of the late career age group get older and move into this category.

Table #3: Life Stage Comparisons (1990 – 2000)

Age Group	Group Characteristics	% of 1990 population	% of 2000 population	% of change
Under 5	Preschool	7.5	8.4	0.9
5-17	School aged	21.4	21.3	-0.1
18-24	Collage/pre career	9.0	7.1	-1.9
25-44	Early Career age	35.7	34.4	-1.3
45-64	Late Career age	18.9	21.7	2.8
65+	Retirement Age	7.5	7.1	- 0.4

The 2000 Census shows that the majority of the Argentine township population is Caucasian at 98.4%. American Indian (and Alaskan Natives) make up 1.5% with Asian, African Americans and other nationalities making up the remaining percentage.



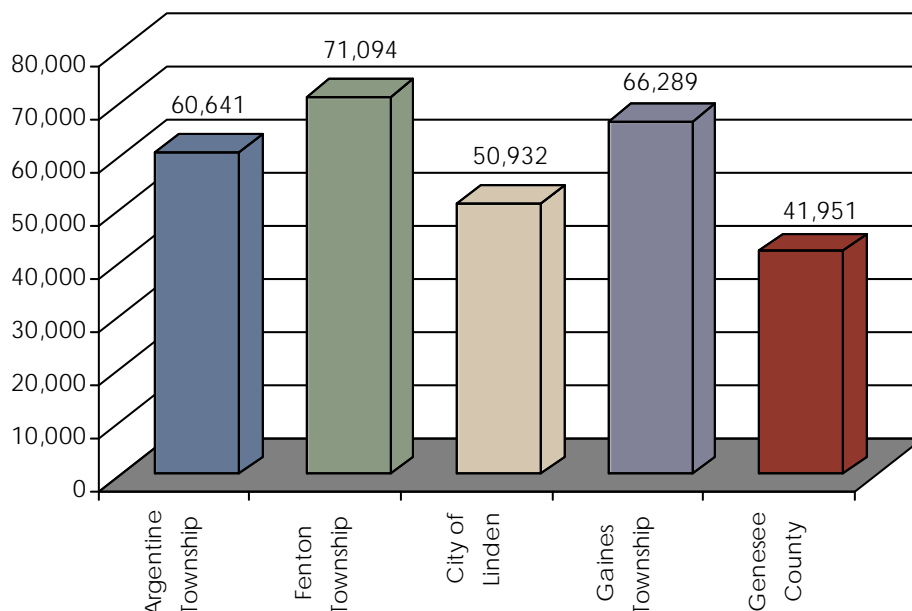
Table #4: Argentine Township Household Comparisons (1990 to 2000)

Category	1990	2000
Total number of households	1,614	2,293
Percent of household with children	44.1%	43.2%
Average family size	3.16	3.18

The 2000 Census shows the total housing units within the township to be 2,293. Of that number 2,076 (90.5%) are owner occupied while renter occupied housing constitutes 217 units (9.5%).

According to the 2000 Census, the majority of household incomes (24.6%) were \$50,000 to \$74,999. The median household income for Argentine Township was \$60,641. On each end of the scale, there were 1.4% earning less than \$10,000 and 0.8% earning \$200,000 or more. The 2000 census gives the median household incomes of adjoining communities as shown in table #5. It is important to note the current economic conditions on both a local and national level affect the accuracy of any current figures.

Figure #5: Median Household Income in dollars (2000)





According to the 2000 census there were 3,243 employed persons over the age of 16 in Argentine Township. A breakdown of occupation types is listed in table #6. The percent is based on the total number of employed persons. Again, the current economic conditions on both a local and national level affect the accuracy of any current figures.

**Table# 6: Occupations of Argentine Residents (2000)**

OCCUPATION	#	%
Management, professional, and related occupations	969	29.9
Service occupations	368	11.3
Sales and office occupations	677	20.9
Farming, fishing, and forestry occupations	0	0.0
Construction, extraction, and maintenance occupations	547	16.9
Production, transportation, and material moving occupations	682	21.0

**Table #7: 2000 Disability Status of Argentine Township non institutionalized population**

Age group	2000 Population	Highest disability class within age group	% within age group
Ages 5 to 20 years	101	Mental	6.5%
Ages 21 to 64 years	570	Employment	14.5%
Age 65 +	167	Physical	35.9%
Total	838		14.1%

Disabilities include sensory, physical, mental, and employment disabilities. Generally employment disability was the highest type in Ages 21 to 64 years. Metal disability was the highest type of ages 5 to 20 years and physical disability was the highest type of ages 65 years +.

According to the U.S. Census Bureau, the 1990 and 2000 census data, related to persons with disabilities, are not comparable due to differences in disability questions. However, in 1990 those with disabilities made up approximately 4.5% of the township population. In 2000 that number rose to 14.1% and will most likely rise as life expectancy rises and modern medicine continues to increase the survival rate of those with significant injuries, illnesses



and birth defects. With this in mind, as well as Michigan's building code requirements and the requirements of the Federal Americans with Disabilities Act all development, including recreational and park improvements, must provide reasonable access for those with disabilities. To take that one step further, the most effective approach is to reach an overall community demographic through "universal design". Universal Design is a fairly new concept that emerged from "barrier free" or "accessible design". It can be defined as the design of products and environments to be usable by *all* people, to the greatest extent possible regardless of ability or disability. The principals of Universal Design are encouraged in new projects whenever feasible.

**Table #8: Past and Projected enrollment for Linden Community Schools**

Year	Past and Projected Enrollment
2007-2008	3,116
2008-2009	3,107
2009-2010	3,123
2011-2012	3,093
2012-2013	3,063
2013-2014	3,033
2014-2015	3,003

*Source: Linden Community Schools*

Table #8 shows the past and projected enrollment within the entire school district. These figures imply that enrollment will slightly decrease over the next 3 to 5 years. If this is the case, it may affect future student programming. However, due to a projected increase in older populations and growing trends in outdoor physical fitness and recreation, the school board is committed to providing the general public with open access to their network of recreational facilities to help service the community, whenever feasible.



## Land use

The land use character of Argentine Township can generally be described as rural residential and agricultural with a small mixture of retail trade and services primary located along Silver Lake Road.

Land use data provides basic information as to the character of a community by breaking the uses down into categories of residential, agricultural, commercial, and so on. The 2005 Argentine Township Master Plan shows the township land uses based on 1992 data below in Table #9. The Future Land Use Map shown in the Mater Plan is shown on page 2.10:

<b>ARGENTINE TOWNSHIP LAND USE</b>		
<b>Use</b>	<b>Acres</b>	<b>Percent of Total Land Area</b>
<b>Developed:</b>		
Residential	1234	5.0%
Commercial/Institutional	59	.27%
Industrial	3	.001%
Transportation/Utilities	190	.82%
Extractive	35	.15%
Recreation	36	.16%
Subtotal, developed acres	1557	6.4%
<b>Non-developed:</b>		
Agricultural	13040	56.1%
Open	2303	9.9%
Forest	4496	19.3%
Water	844	4.0%
Wetlands	1009	4.3%
Subtotal non-developed acres	21692	96.6%
<b>TOTAL</b>	<b>23249</b>	<b>100%</b>

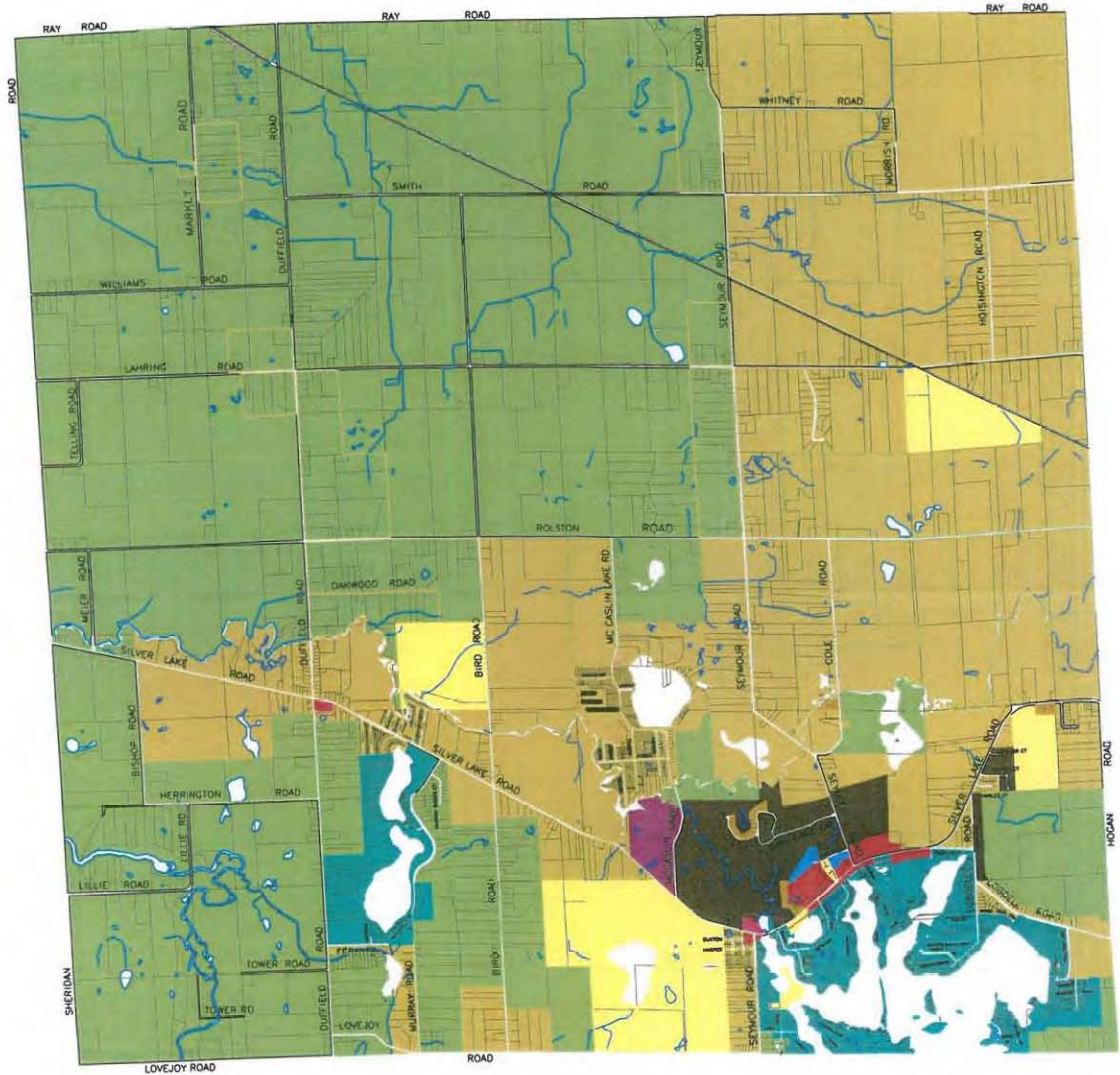
*Source: 2005 Argentine Township Master Plan*

A 2003 land use study prepared by the University of Michigan Flint - Center for Applied and Environmental Research identified a predominance of agricultural farmstead land and rural residential in the north and northwest portions of the township (see map on page 2.11). Small local Retail and neighborhood businesses are located along Silver Lake Road primarily between Seymour Road and Seymour/Argentine Road. There are a number of county owned properties being used for various infrastructure related purposes such as waste water treatment lagoons and the road commission maintenance yard. There is very little in the way of industrial and office uses. The remaining areas particularly to the south are higher density residential and waterfront home sites.













# ARGENTINE TOWNSHIP Future Land Use Map

ADOPTED  
04-14-2005



## LEGEND:

	Agricultural		Institutional
	Rural Residential		Local Commercial
	Urban Residential		General Commercial
	Waterfront Residential		Light Manufacturing
	Multiple Family		Heavy Manufacturing
	Mobile Home Park		



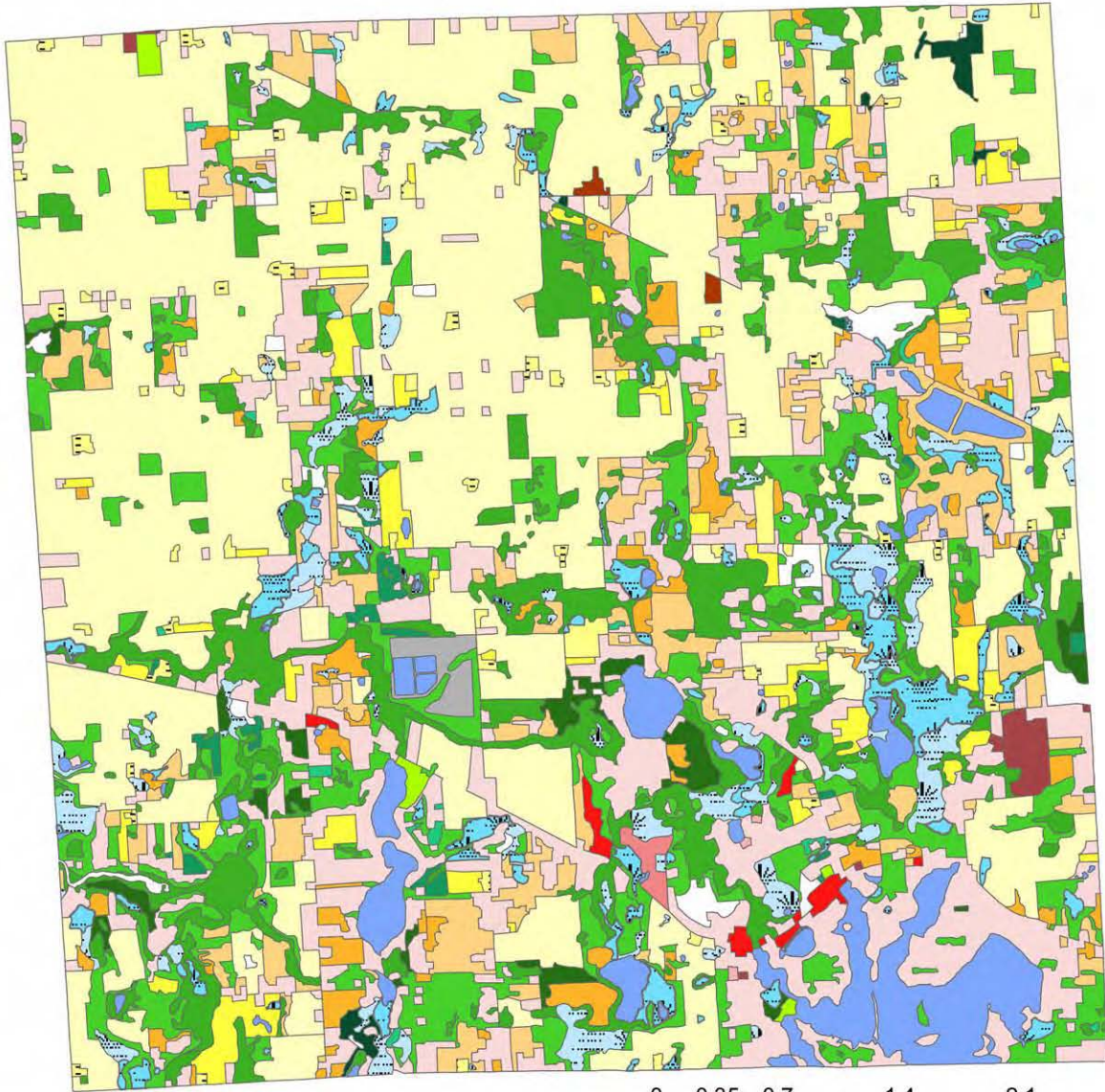
Source: 2005 Argentine Township Master Plan

Draft: January 2010

Gould Engineering, Inc.



# Argentine Township - 2003 Land Use / Cover



0 0.35 0.7 1.4 2.1 2.8 Miles

**Genesee County**

**Legend**

<p><b>Argentine Class</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #e0b0b0; border: 1px solid black; margin-right: 5px;"></span> Multi-family, low rise</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #d9ead3; border: 1px solid black; margin-right: 5px;"></span> Single family / duplex</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f4cccc; border: 1px solid black; margin-right: 5px;"></span> Manufactured home park</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f4cccc; border: 1px solid black; margin-right: 5px;"></span> Shopping center / malls / retail centers</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f4cccc; border: 1px solid black; margin-right: 5px;"></span> Secondary / neighborhood or rural business</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f4cccc; border: 1px solid black; margin-right: 5px;"></span> Institutional</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f4cccc; border: 1px solid black; margin-right: 5px;"></span> Office park</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f4cccc; border: 1px solid black; margin-right: 5px;"></span> Industrial</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f4cccc; border: 1px solid black; margin-right: 5px;"></span> Air transportation</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f4cccc; border: 1px solid black; margin-right: 5px;"></span> Road transportation</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f4cccc; border: 1px solid black; margin-right: 5px;"></span> Utilities</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f4cccc; border: 1px solid black; margin-right: 5px;"></span> Extractive</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f4cccc; border: 1px solid black; margin-right: 5px;"></span> Outdoor recreation</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f4cccc; border: 1px solid black; margin-right: 5px;"></span> Cemeteries</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f4cccc; border: 1px solid black; margin-right: 5px;"></span> Vacant</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; border: 1px solid black; margin-right: 5px;"></span> Under construction / construction sites</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; border: 1px solid black; margin-right: 5px;"></span> Cropland</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; border: 1px solid black; margin-right: 5px;"></span> Orchards, bush-fruits</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; border: 1px solid black; margin-right: 5px;"></span> Confined feeding operations</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; border: 1px solid black; margin-right: 5px;"></span> Permanent pasture</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; border: 1px solid black; margin-right: 5px;"></span> Other agriculture</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; border: 1px solid black; margin-right: 5px;"></span> Farmsteads</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; border: 1px solid black; margin-right: 5px;"></span> Grasses and forbs</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; border: 1px solid black; margin-right: 5px;"></span> Shrubs</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; border: 1px solid black; margin-right: 5px;"></span> Central hardwoods</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; border: 1px solid black; margin-right: 5px;"></span> Lowland hardwoods</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; border: 1px solid black; margin-right: 5px;"></span> Pine</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; border: 1px solid black; margin-right: 5px;"></span> Other upland conifers</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; border: 1px solid black; margin-right: 5px;"></span> Lowland conifers</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; border: 1px solid black; margin-right: 5px;"></span> Upland hardwoods and pine associations</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; border: 1px solid black; margin-right: 5px;"></span> Lowland conifers with hardwood associations</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff2cc; border: 1px solid black; margin-right: 5px;"></span> Lakes</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #a6c9ec; border: 1px solid black; margin-right: 5px;"></span> Reservoirs</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #a6c9ec; border: 1px solid black; margin-right: 5px;"></span> Shrub swamps</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #a6c9ec; border: 1px solid black; margin-right: 5px;"></span> Non-forested wetlands</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #a6c9ec; border: 1px solid black; margin-right: 5px;"></span> Barren</li> </ul>
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© Center for Applied Environmental Research

Source: 2003 Land Use Downloads [www.oursoutherlakes.com](http://www.oursoutherlakes.com)

Draft: January 2010

Gould Engineering, Inc.

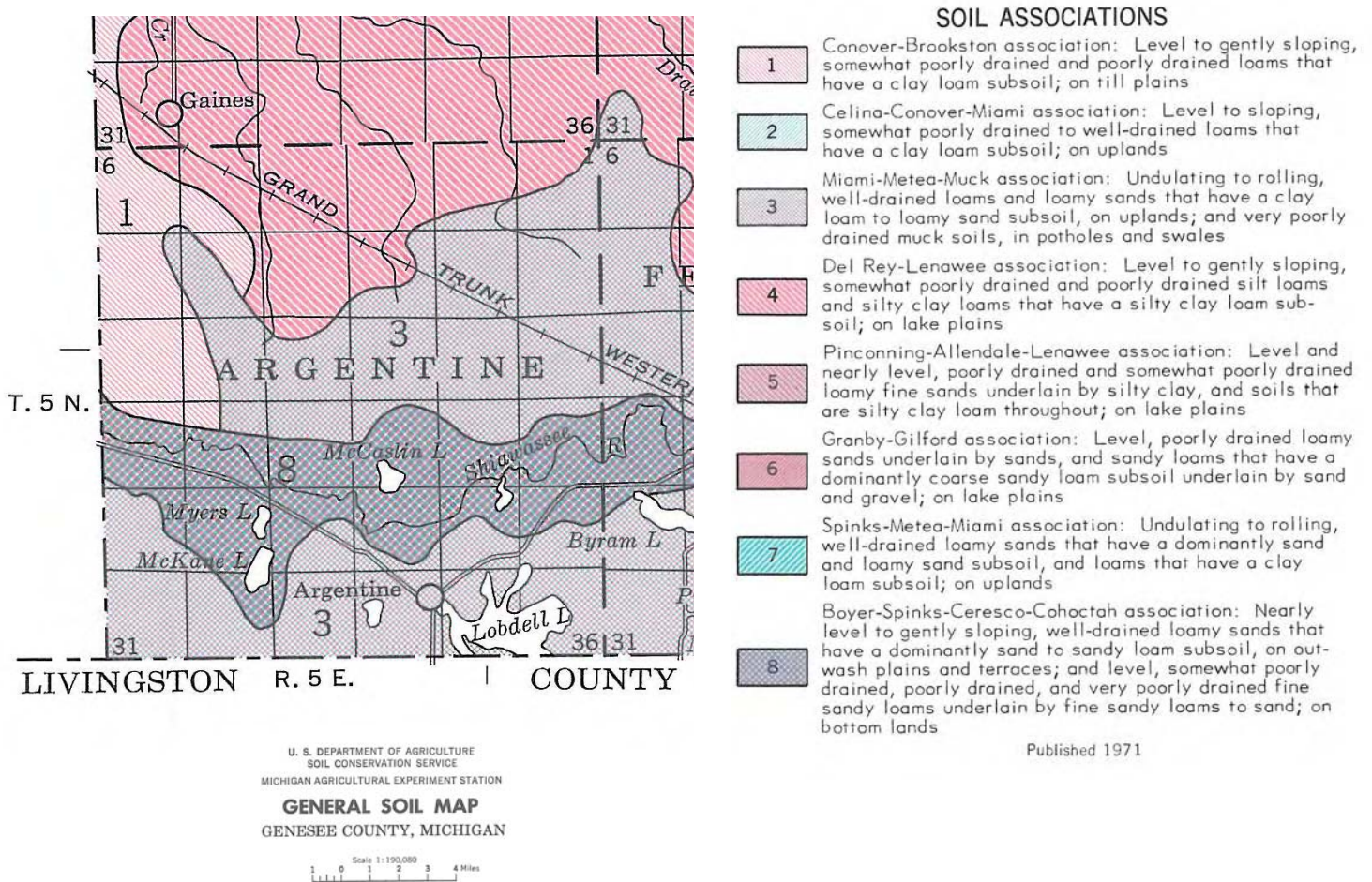


## Soils

Topography in the township is relatively flat to slightly rolling terrain. The 1972 soils survey for Genesee County, completed by the U.S. Department of Agriculture, shows 4 types of general soils classifications within Argentine Township (Figure #9).

Generally the northerly portion of the township is described as level to gently sloping with somewhat poorly drained soils typical of farmlands. The southern portion is described as undulating to rolling with well drained soils in its uplands and very poorly drained soil in depressed areas and swales. There is also a well defined strip of land area running along the Shiawassee River that is described as nearly level to gently sloping with well drained soils on outwash plains and terraces and poorly drain soils on bottom lands typical of river beds fringed with floodplain and wetlands. Having an understanding of the communities soil characteristics can help in the efforts to manage natural resources and planning on a broad based scale around what could be consider difficult soils to develop.

Figure #9: Soils Map for Argentine Township





## Water Resources

There are a number of open water lakes within the township, the largest being Lobdell Lake at 545 acres. Other larger and widely used lakes in the area include McCaslin Lake, McKane Lake and Myers Lake. All of these lakes, including Lobdell, are located in the south portion of the township and have been heavily developed with single family housing. All but McCaslin Lake are considered all sports lakes offering a wide variety of water sports and boating recreation to residents. The only public access site is on Lobdell Lake. Bennett and Hoisington Lakes, all sports lakes, are located in Livingston County just south of Lobdell Lake. These two lakes are attached to Lobdell Lake by a boat accessible channel that runs under Bennett Lake Rd.



There are also numerous wetlands found in the lower three-quarters of the township. The natural features inventory map found in this plan identifies wetland areas as prepared by the Michigan Natural Features Inventory of May 2006. Wetland soils are frequently saturated and contain heavy concentrations of organic material such as peat, marl and decomposed vegetation. They may be unsuitable for certain types of development but play an important role in protecting water quality, wildlife habitats, and migration habits. A permit from the Michigan Department of Natural Resources and Environment (MDNRE) is required prior to performing any activity such as dredging, draining, or filling of a regulated wetland. Regulated wetlands are often found along the edges of lakes, rivers, streams, and in low lying drainage areas, to name a few, therefore a wetland delineation is highly recommended during the planning and design stages of development.



*View of Lobdell Lake from Silver Lake Road*

The township is primarily located within the Shiawassee River Drainage Basin. This river has several tributaries that have headwaters located in northern Livingston County and the northwest corner of Oakland County. It flows through Fenton Township before reaching



Argentine Township where it then runs through Shiawassee County and continues to flow north to the Saginaw River and ultimately out letting into the Saginaw Bay. Within Argentine Township this water shed contains numerous miles of rivers, creeks and drains, providing many values including water quality, and recharge points, wildlife habitats and recreation opportunities. There are several areas where access is available to the public.

Portions of the Shiawassee River, North Ore Creek, Porter Drain and Jones Creek, and some lake areas are within the 100 year floodplain as established by the Federal Emergency Management Administration (FEMA). These floodplain areas are shown on the Natural Features Inventory Map found in this plan. They are used to control the floodwaters of an adjacent stream, river, or lake and are critical to water quality as well as the quality and diversity of various ecosystems. Wetlands are often found to be overlapping or intermingled with floodplain areas. As with wetlands a permit to fill or construct within a floodplain requires a permit from the MDNRE and/or FEMA.



*View of the Shiawassee River*

## Climate

Argentine Township is located in a region with cold winters and warm summers. The annual rainfall is 30 inches per year compared to the US average of 37 inches. The annual snowfall is 46 inches compared to the US average of 25 inches. On average there are 171 sunny days with a July high temperature of 82° and January low of 15°. This provides the community with wide range of weather patterns to consider for recreational planning purposes.

## Transportation

There are two major transportation routes through the township. Sliver Lake Road runs in an east west direction across the township from Byron to the City of Linden and Fenton area. This route also leads to US 23 / I-75, a major north-south expressway to communities such as Ann Arbor or Flint. Seymour Road runs in a north-south direction though the township and leads to Swartz Creek and Flushing. It also allows access to 1-69, a major expressway that leads to communities such a Lapeer and Lansing. Taking Seymour/Argentine Road to the south allows access to M-59, a state route that leads to Howell and the 1-96 expressway which leads to Lansing, to the west, and the Metro Detroit Area to the east. Other highly traveled thoroughfares within the township are Duffield Road, Lahring Road and Ray Road. All public roads within Argentine Township are under jurisdiction of the Genesee County Road Commission.