

**THE TOWNSHIP OF ARMADA**  
MACOMB COUNTY, MICHIGAN

**Master Plan Update**

Prepared by:

Armada Township Planning Commission

Adopted January 7, 2015

Assisted by:

**clearzoning**



## ACKNOWLEDGEMENTS

### **Armada Township Planning Commission**

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Ken DeCock, Vice Chair	Maureen Finn
Beth Abercrombie, Secretary	Joe Jabara
Dennis LeMieux, Township Liaison	Norm Wieske

### **Armada Township Board**

John Paterek, Supervisor

Mary Swiacki, Clerk	Al Goetzing
Peg Smith, Treasurer	Dennis LeMieux

Christine White, Planning and Zoning Secretary



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This 2014 Master Plan update confirms the direction of the township's 2004 Master Plan, and assesses the plan's vision and direction in the context of current demographic data and updated information about existing conditions.

The Armada Township Master Plan offers an opportunity to direct new development in the township through the establishment of goals, objectives, strategies, and plans. The Master Plan is comprehensive, providing for future land use, housing, preservation, and transportation in a coordinated fashion. It is a clear statement of community goals and objectives that establishes a vision of the future, and includes plans to achieve the vision. In addition, the Plan promotes a land use pattern that is consistent with the community's goals.

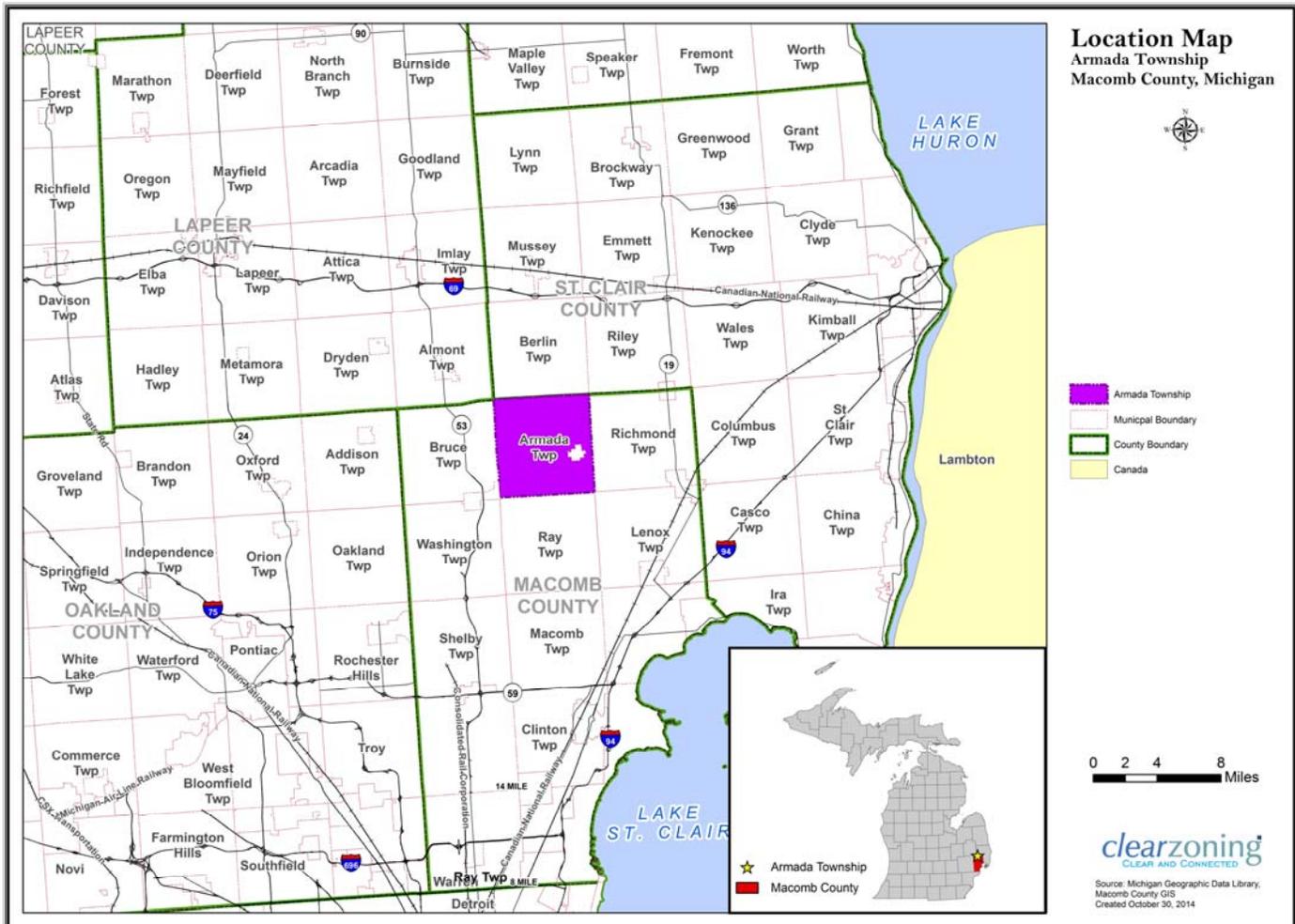
The information and concepts presented in the Master Plan are used by the Planning Commission and Township Board to guide local decisions regarding public and private uses of land and the provision of public facilities and services. The Master Plan, however, is a living set of policies, strategies and plans to enhance and improve a community over a long planning horizon. While the Zoning Ordinance and Zoning Map regulate current and proposed land use, it is the Master Plan, its maps, and policy statements that guide land use decision-making for 10-20 years.



### Why Prepare a Master Plan?

Per the Michigan Planning Enabling Act of 2008, “A local unit of government may adopt, amend, and implement a master plan as provided in this act.” In addition, the Michigan Zoning Enabling Act of 2006 requires that the zoning ordinance be based upon a plan designed to promote the public health, safety, and general welfare.

Zoning is a regulatory mechanism for controlling the classification and regulation of land use. It has the force of law. The Master Plan is not an ordinance, does not change the zoning of anyone’s property, and does not have the force of law. It is a set of policies, strategies and plans to enhance and improve the community over a long-range planning horizon. While the Zoning Ordinance and Zoning Map regulate current land use, the Master Plan and its maps and policy statements are intended to guide future land use decision-making. The Master Plan is the community’s “vision,” while the Zoning Ordinance governs the path to that vision. With a Master Plan in place, zoning decisions consistent with the Plan and Ordinance are presumed by the courts to be valid.



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# BACKGROUND



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## A. Township Character and Regional Setting

Armada Township is a rural farming and bedroom community located in far northern Macomb County, Michigan. It shares boundaries with Bruce Township and the Village of Romeo to the west, Ray Township to the south, Richmond Township to the east, Berlin Township in St. Clair County to the north, and the Village of Armada, which is located entirely within the township.

Large farms, orchards, farm markets, and single family homes are the predominant land uses in the township, with small amounts of industrial land in the southwest corner and near the village, as well as pockets of commercial development near the village and along 32 Mile Road, the township's southern boundary. The township's southeastern corner is an important gas field; Consumers Energy's Ray Compressor Station stores enough natural gas to serve 40 percent of the company's winter needs. The Township is also home to the annual Armada Fair, which has run for 142 years.

The township is within commuting distance of Detroit, but is not crossed by any major roads, and has therefore maintained a distinct rural charm that many of the nearby townships have slowly lost as urbanization has spread northward. This chapter discusses some of the demographic and economic trends that have defined Armada Township's growth to date and that will influence its development in the future.



## B. Demographics

### Population

From 2000 to 2010, Michigan lost population. While the most well-known loss occurred in the state's largest cities, many rural communities and small cities also lost residents. The rural townships of northern Macomb County located in the major transportation corridors along Gratiot and M-53 grew modestly, while Armada and Ray Townships experienced negligible change in population, each dipping slightly. Table one compares Armada Township's population change to that of nearby communities.

**Table 1: Population Change in Armada Township and Surrounding Areas, 1990-2010**

	1990	2000	% Change	2010	% Change
Armada Township	2,943	3,673	24.8%	3,649	-0.7%
Village of Armada	1,548	1,573	1.6%	1,730	10.0%
Village of Romeo	3,520	3,721	5.7%	3,596	-3.4%
Berlin Township	2,407	3,162	31.4%	3,285	3.9%
Bruce Township	4,193	6,395	52.5%	6,947	8.6%
Ray Township	3,230	3,740	15.8%	3,739	0.0%
Richmond Township	2,528	3,416	35.1%	3,665	7.3%
Macomb County	715,240	788,149	10.2%	840,978	6.7%
Michigan	9,295,297	9,938,444	6.9%	9,883,640	-0.6%

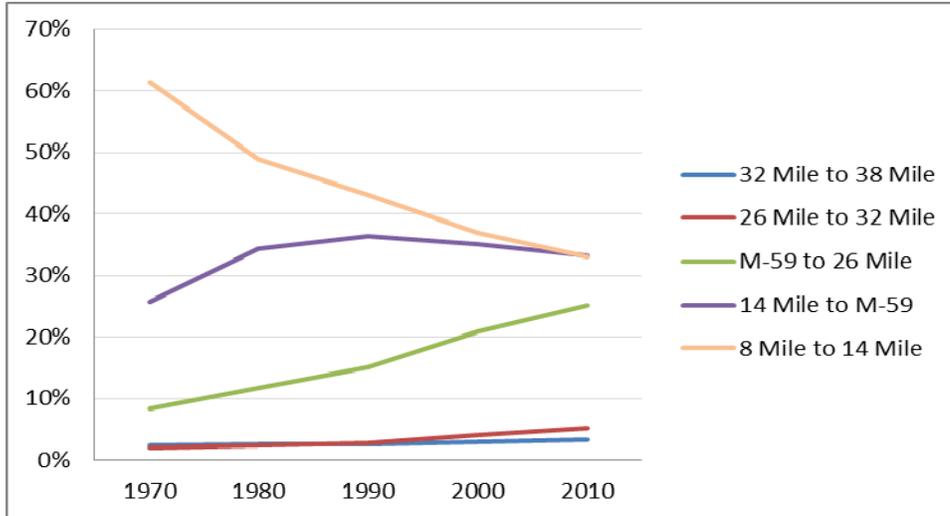
Source: US Census, 1990, 2000, 2010

Population growth patterns in the area around Armada Township reflect two historical trends: the spread of growth along the I-94/Gratiot and M-53 corridors, and the gradual shift of population northward, away from Detroit. The share of the county's population living in the southernmost portion of the county has declined dramatically, while the county's central band of communities has grown significantly, as shown in Figures 1 and 2. The townships along the county's northern boundary have yet to experience the sort of rapid urbanization that characterized the last few decades in Clinton and Shelby Townships, but if trends hold, all of them will see an influx of new residents in the future.

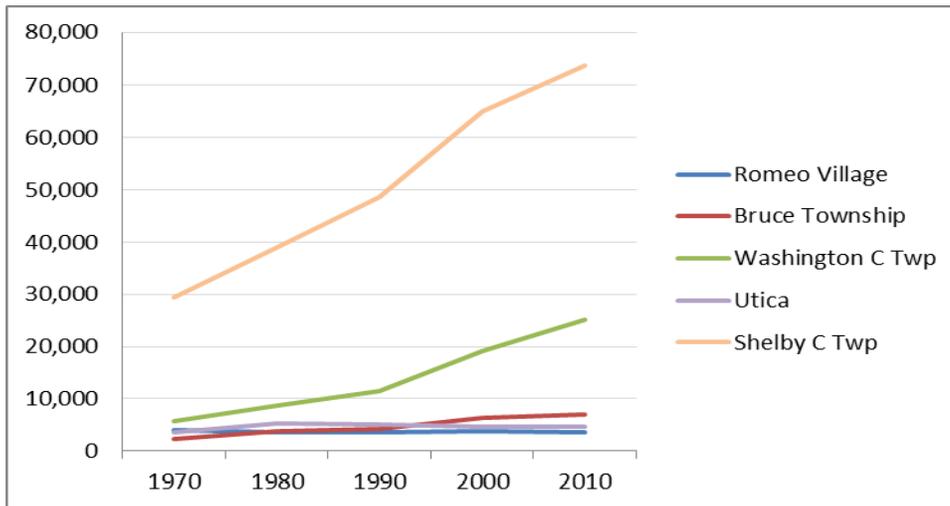
The M-53 corridor runs close to Armada Township's western edge, and it is likely that development along M-53 will play a major role in the township's future population and job growth. Figure 1 shows how Macomb County's population has shifted north since 1970, with the portion of the population living between 8 Mile and 14 Mile declining from nearly two thirds to less than a third as the communities between 14 Mile and M-59 and between M-59 and 26 Mile have grown. The two bands of communities in the county's northern portion have grown less than their counterparts to the south, but as the middle townships approach build-out, development will likely begin to move further into less developed communities. Figure 2 shows how the townships of the M-53 corridor have grown sequentially, from south to north.



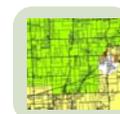
**Fig 1: Share of Population by East-West Corridor, Macomb County 1970-2010**



**Fig 2: Population Growth in the Northern M-53 Corridor, Macomb County 1970-2010**



While growth is slowly moving toward Armada Township, and the Village of Armada, located within the township, has grown significantly, development in the unincorporated township itself is likely to be limited in the near future due to the lack of access to water and sewer systems. If water and sewer become available based on continuing planning efforts by the Township, this trend will likely shift and result in additional residential units and non-residential development.



Age

The populations of both Michigan and the United States are getting older, with expected large increases in the over-65 population in the next decade. Armada Township's population is also aging, and Table 2 shows how dramatic this trend was from 2000 to 2010. The township saw a large decline in the number of school-age children, very significant losses of 25 to 44-year-olds, and large increases in all population groups over the age of 45.

**Table 2: Population by Age, Armada Township, 2000 and 2010**

	2000	% Total	2010	% Total	% Change
Under 5 Years	250	6.8%	150	4.1%	-40.0%
5-9 Years	286	7.8%	206	5.6%	-28.0%
10-14 Years	319	8.7%	298	8.2%	-6.6%
15-19 Years	314	8.5%	287	7.9%	-8.6%
20-24 Years	182	5.0%	214	5.9%	17.6%
25-34 Years	365	9.9%	277	7.6%	-24.1%
35-44 Years	719	19.6%	446	12.2%	-38.0%
45-54 Years	581	15.8%	764	20.9%	31.5%
55-64 Years	364	9.9%	534	14.6%	46.7%
65-74 Years	172	4.7%	302	8.3%	75.6%
75 Years +	121	3.3%	171	4.7%	41.3%
Total	3,673		3,649		-0.7%

Source: US Census, 2000, 2010

Table 3 compares the township's changes in selected age groups to the statewide changes. The aging trend, coupled with the loss of children and adults of prime working and family-starting age could have profound implications for the township going forward. In order to retain current residents, the township must plan to accommodate a rapidly growing senior population. If such dramatic losses among 25 to 34-year-olds continue, it will be difficult for the township's population to grow naturally in the future, and this is reflected in the steep decreases among the under-19 age groups.

**Table 3: Children, Seniors and 25-34s, Armada Township and Michigan, 2000 and 2010**

	2000	% Total	2010	% Total	% Change
Armada Township 0-19	1,674	31.9%	1,475	27.4%	-11.9%
Michigan 0-19	2,884,065	29.0%	2,648,885	26.8%	-8.2%
Armada Township 25-34	589	11.2%	430	8.0%	-27.0%
Michigan 25-34	1,362,171	13.7%	1,164,149	11.8%	-14.5%
Armada Township 65+	464	8.8%	735	13.7%	58.4%
Michigan 65+	1,219,018	12.3%	1,361,530	13.8%	11.7%

Source: US Census, 2000, 2010



## Race and Ethnicity

The current population of Armada Township is 98 percent non-Hispanic white. As the township's population grows in the future, it is likely that it will be gradually become more racially and culturally diverse, as has slowly happened in the townships to the south as development activity increased.

## **C. Housing**

Armada Township has historically been a community of homeowners, with very few rental or multifamily properties. From 2000 to 2010, the township followed national trends somewhat, seeing a rise in the number of rental properties, but even with this change, the vast majority of households are owner-occupiers. Relative to many of its regional neighbors, the township has a low housing vacancy rate, in spite of the fact that the number of housing units in the township increased from 2000 to 2010 while the population remained essentially the same.

**Table 4: Housing Units, Armada Township, 2000 and 2010**

	2000	% Total	2010	% Total	% Change
Occupied	1,715	97.4%	1,894	95.0%	10.4%
Vacant	46	2.6%	100	5.0%	117.4%
Owner-Occupied	1,567	91.4%	1,684	88.9%	7.5%
Renter-Occupied	148	8.6%	210	11.1%	41.9%
Total Housing Units	1,761		1,994		13.2%

Source: US Census, 2000 and 2010

**Table 5: Housing Units by Type**

	Number	% Total
Single-Family Detached	1,847	92.6%
Multi-Family	118	5.9%
Mobile Home	0	0.0%
Total	1,994	

Source: 2011 American Community Survey

## Household Size

At 2.79 people, Armada Township has a much higher household size than the statewide average of 2.54. However, this represents a 7.3 percent decrease in average household size from 2000, while the state's average household decreased only 0.8 percent. These numbers reflect a long national decline in household size, and the trend is likely to continue. In order to maintain population in the future, Armada Township will need to attract new households.



## D. Economics

When reviewing economic figures spanning the years from 2000 to 2010, it is important to frame them in the context of the 2008 global economic downturn, which negatively affected the vast majority of places in the United States in the form of lower real wages, higher unemployment, longer periods of unemployment, and loss of municipal revenue.

### Income

Real incomes (incomes expressed in inflation-adjusted dollars) fell from 2000 to 2010 across the nation, and Macomb County was especially hard-hit, as shown in Table 6; countywide, median household incomes fell by a fifth. Armada Township fared slightly better than the county as a whole, but losses outpaced the statewide average. It bears noting, however, that Armada Township began and ended the period in question with incomes considerably higher than the rest of the county, and the buying power of residents relative to the whole county's population actually increased.

**Table 6: Income, 2000-2010**

	2000*	2010	% change
<b>Armada Township</b>			
Median Household Income	\$86,641	\$70,451	-18.7%
Per Capita Income	\$31,361	\$26,991	-13.9%
<b>Macomb County</b>			
Median Household Income	\$65,977	\$51,932	-21.3%
Per Capita Income	\$30,955	\$25,521	-17.6%
<b>Michigan</b>			
Median Household Income	\$56,392	\$48,432	-14.1%
Per Capita Income	\$28,071	\$25,135	-10.5%

\*All dollar figures in 2010 dollars.

Source: US Census, 2000; ACS 2010

Generally, Armada Township has a much lower than average portion of its population living in poverty, especially among children. However, seniors are the fastest-growing age group in the township, and the 2010 Census shows that many of them are living below the poverty line. As the township plans for senior housing and other facilities moving forward, affordability will be an important consideration.

**Table 7: Poverty Rate, 2000-2010**

	2000	2010	65+ 2000	65+ 2010	Under 18 2000	Under 18 2010
Armada Township	2.0%	6.1%	3.1%	11.1%	1.6%	4.8%
Macomb County	5.6%	7.5%	6.4%	7.6%	7.3%	14.7%
Michigan	10.5%	14.8%	8.2%	8.3%	13.9%	20.5%

Source: US Census, 2000, 2010



## Employment

Armada Township has historically had a higher percentage of its over-16 population participate in the labor force than the state and county. This is partly a reflection of the township's agricultural character and the number of family businesses that operate here. The township experienced a rise in unemployment after 2008 in line with the state, but has maintained a slightly lower overall rate of unemployment.

**Table 8: Employment Status, 2012**

	Total Pop over 16	In Labor Force	Employed	Unemployment Rate
Armada Township	4,334	68.6%	61.0%	11.2%
Macomb County	672,562	65.1%	56.8%	12.6%
Michigan	7,849,558	62.3%	54.4%	12.6%

Source: 2012 American Community Survey, 5-year average\*

\*These are the latest available Census figures. The Bureau of Labor Statistics estimates that Michigan's unemployment rate fell below 8 percent in January 2014.

## Commuters

Armada Township residents have generally longer commutes than the average Michigander, with nearly half taking between 30 and 59 minutes to get to work and more than ten percent needing between one hour and an hour and a half. The majority of Michiganders spend less than half an hour commuting to work.



## E. Adjacent Land Uses in Surrounding Communities

Armada Township is directly bordered by four other townships and the Village of Romeo, and shares corners with four additional townships. The township surrounds the Village of Armada. Land use decisions are not made in a vacuum, and those made by surrounding communities will affect what happens in the township.

### The Village of Armada

The Village of Armada is home to a historic downtown that serves as the commercial center of Armada Township. Incorporated in 1867, the village had 1,730 residents as of the 2010 Census. Residential development within the village is relatively dense, and this density is enabled in part by the existence of the village's water and sewer system. The township offices are located in the village on Main Street.

The Village's most recent Master Plan, adopted in 2005, calls for the annexation of certain township land around the edges of the village. These annexations would, among other things, place the Middle School and the fairgrounds inside the village. The township takes the position that land uses and services of the village should not expand via annexation. The township should maintain communication with the village as it pursues future development and service agreements.

### The Village of Romeo

The Village of Romeo has planned for future industrial development on its eastern edge. The adjacent area of the township is also zoned industrial.

### Bruce Township

Much of the Armada Township land that shares a boundary with Bruce Township is agricultural. Bruce Township's land use plan calls mostly for large-lot residential on the townships' shared boundary, with a small amount of industrial land near Romeo.

### Washington Charter Township

Washington Township shares a corner with Armada Township; land on both sides of the boundary is planned for industrial use.

### Ray Township

Ray Township shares the whole southern boundary of Armada Township, along 32 Mile Road. Ray Township's 2010 Land Use Plan projects most of this land to remain agricultural, with some low-density residential, commercial and industrial development across from Armada Township's southwestern corner, near the small airport.



The Village of Armada



### Lenox Township

Lenox Township's northwestern corner touches Armada Township's southeastern corner. Armada Township is dominated by Consumers Energy's Ray Compressor Station in this area. The Lenox Township Future Land Use map designates the Township's northwestern corner as a Rural Preservation district.

### Richmond Township

Richmond Township shares Armada Township's eastern boundary, defined by Omo Road. Richmond Township's land use plan calls for agriculture and low-density residential along the whole boundary, with a small commercial node at Armada Ridge Road and Omo.

### Riley Township

Riley Township, located in St. Clair County, meets Armada Township at the northeastern corner. This corner of Riley Township is agricultural in character.

### Berlin Township

Berlin Township, located in St. Clair County, shares Armada Township's northern boundary, partly defined by Bordman Road. Berlin Township plans for the land across the boundary line from Armada Township to remain primarily agricultural.

### Almont Township

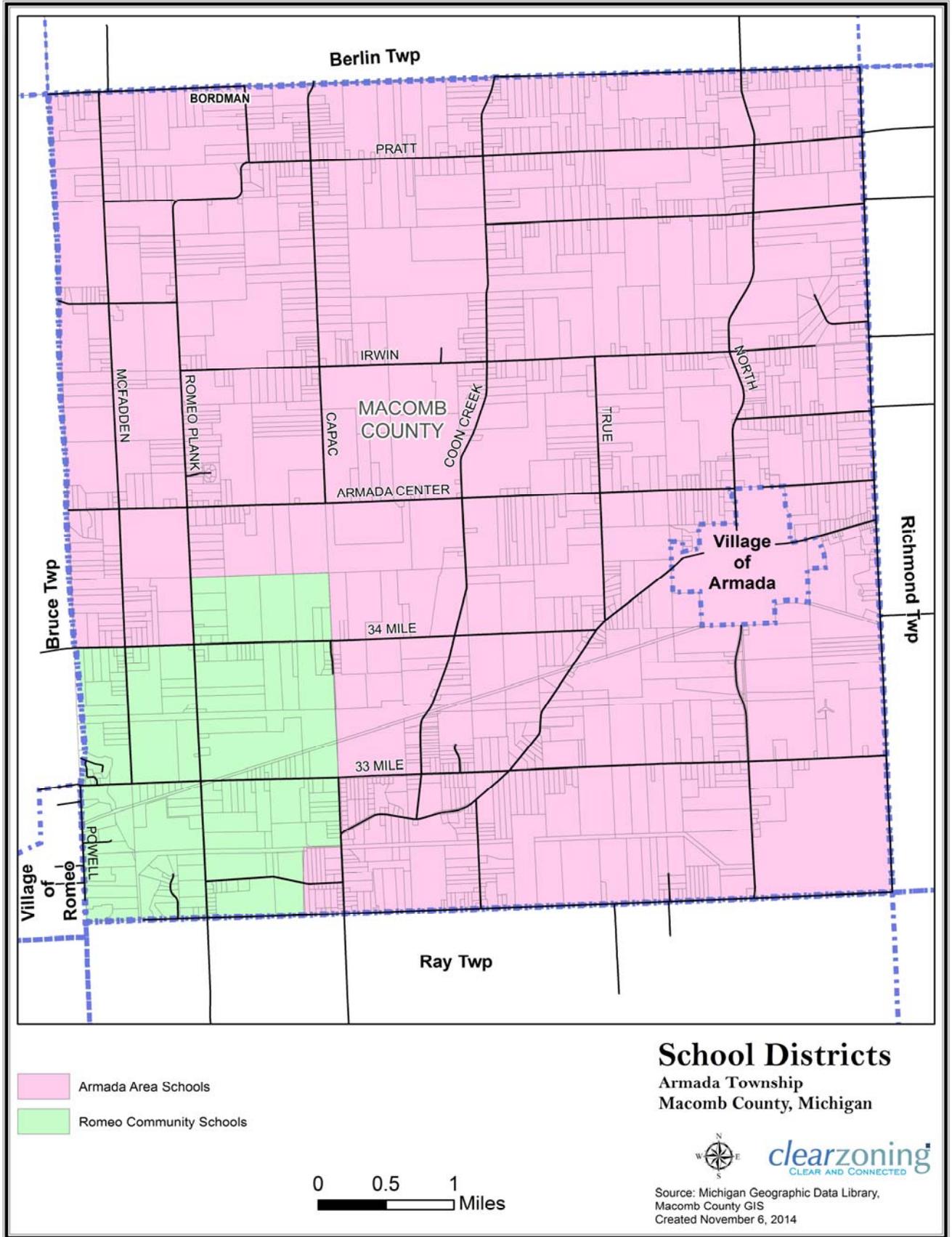
Almont Township, located in Lapeer County, touches Armada Township at the northwestern corner. This corner of Almont Township is planned for agriculture and low-density residential uses.

## **F. Armada Area Schools**

Armada Area Schools serve the Village of Armada and parts of Armada, Berlin, Bruce, Lenox, Ray, Richmond and Riley Townships. In addition to elementary, middle and high schools, the Armada Area Schools district is home to the Macomb Academy of Arts & Sciences and the Armada Conservatory of the Arts, as well as a Continuing Education Program. 96 percent of the district's students attend college after graduating. The southwestern corner of Armada Township is served by Romeo Community Schools, which also covers the Village of Romeo, Washington Township and portions of Addison, Bruce, Oakland, Ray and Shelby Townships.

The map on the following page shows how the township is divided into the two school districts.





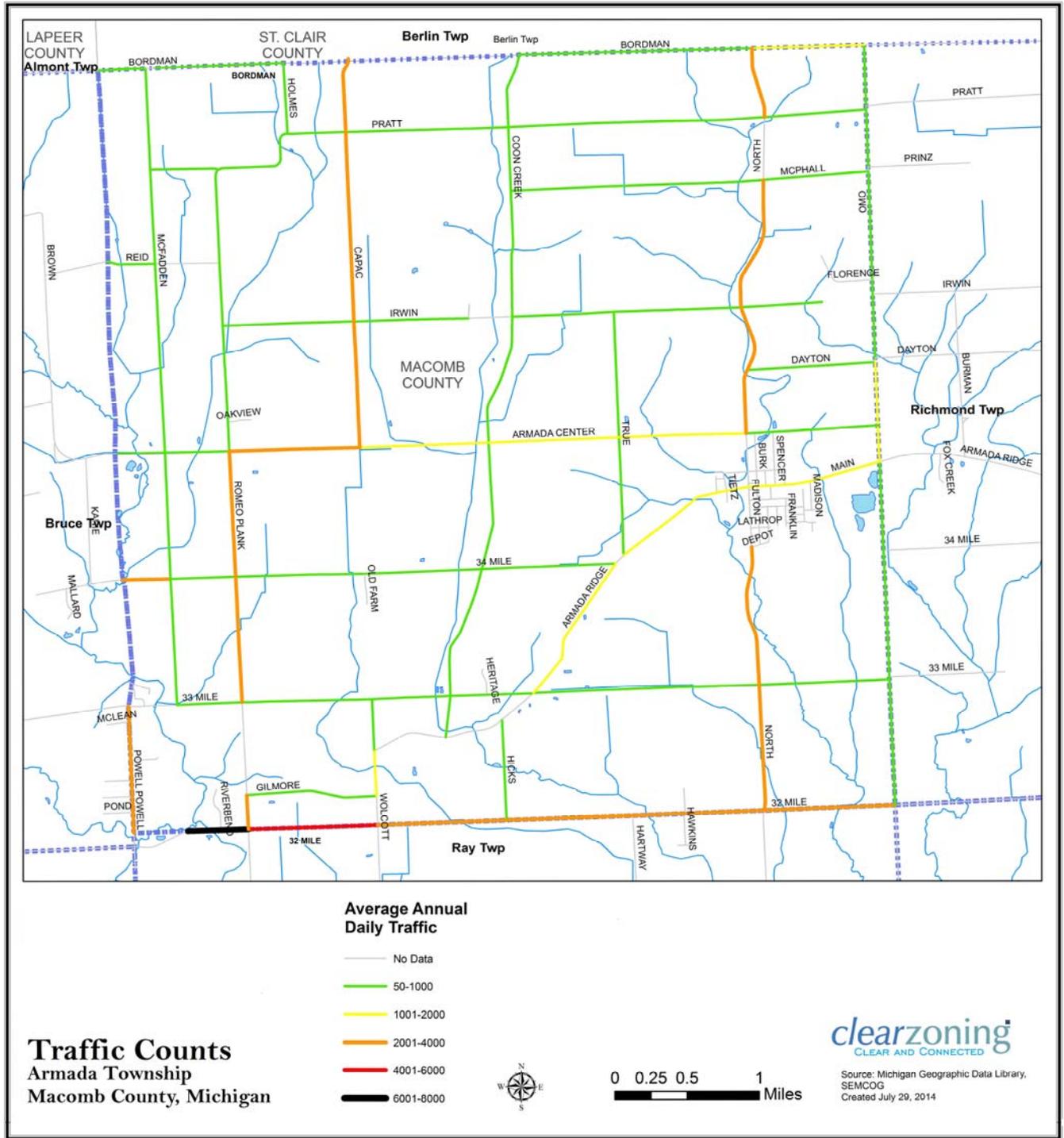
## G. Traffic

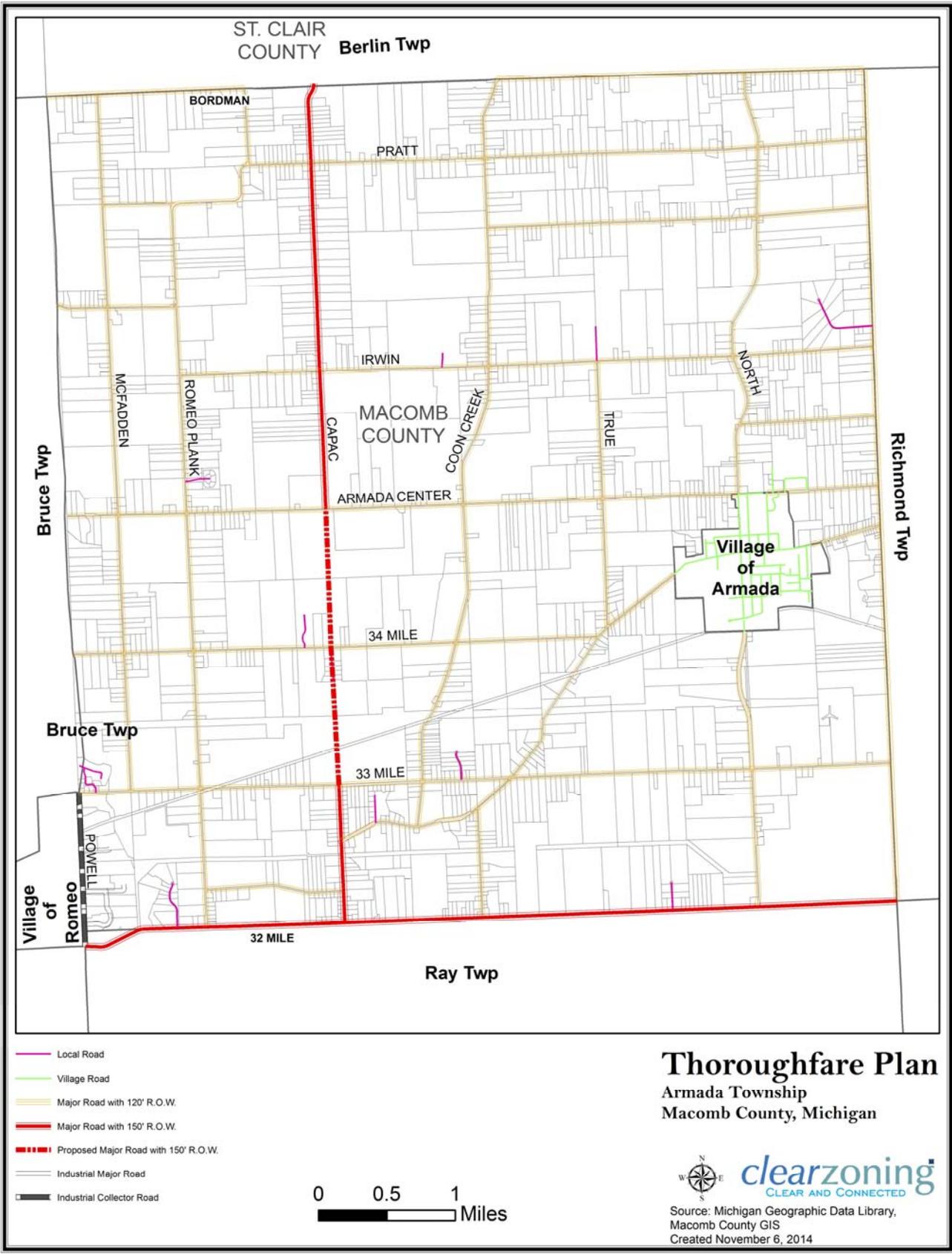
As a rural community, Amada Township has low traffic volumes on many of its roads. However, a few routes through the township and along its southern edge do have fairly robust average annual daily traffic volumes. 32 Mile has the highest traffic volumes in the township, with especially high volumes at its western end, near the Romeo State Airport. The stretch of 32 Mile between Powell and Romeo Plank is the only road in the township with average daily volumes over ten thousand vehicles. Other roads with relatively high volumes include North, Bordman between North and Omo, and a north-south route through the western portion of the Township running down Capac to Armada Center, then west to Romeo Planck and down to 32 Mile. These volumes should play a role in locating future commercial development. The following pages illustrate traffic counts and show the planned future width of road right of ways throughout the township.



The relatively busy intersection of North and 32 Mile is a possible future location for commercial development; it is also the gateway to the Village Center area.







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## H. Community Facilities

### Township Hall

The Township Hall is located within the Village of Armada at 23121 E. Main Street and houses all of the township's departments except for the Fire Department. The main floor is organized around a central gathering room where all meetings of the Planning Commission and Township Board are held. The Township Hall is an adequate facility for the needs of the community at present.

### Police

Police protection in the township is provided primarily by the Michigan State Police and Macomb County Office of the Sheriff, which responds to emergency calls.

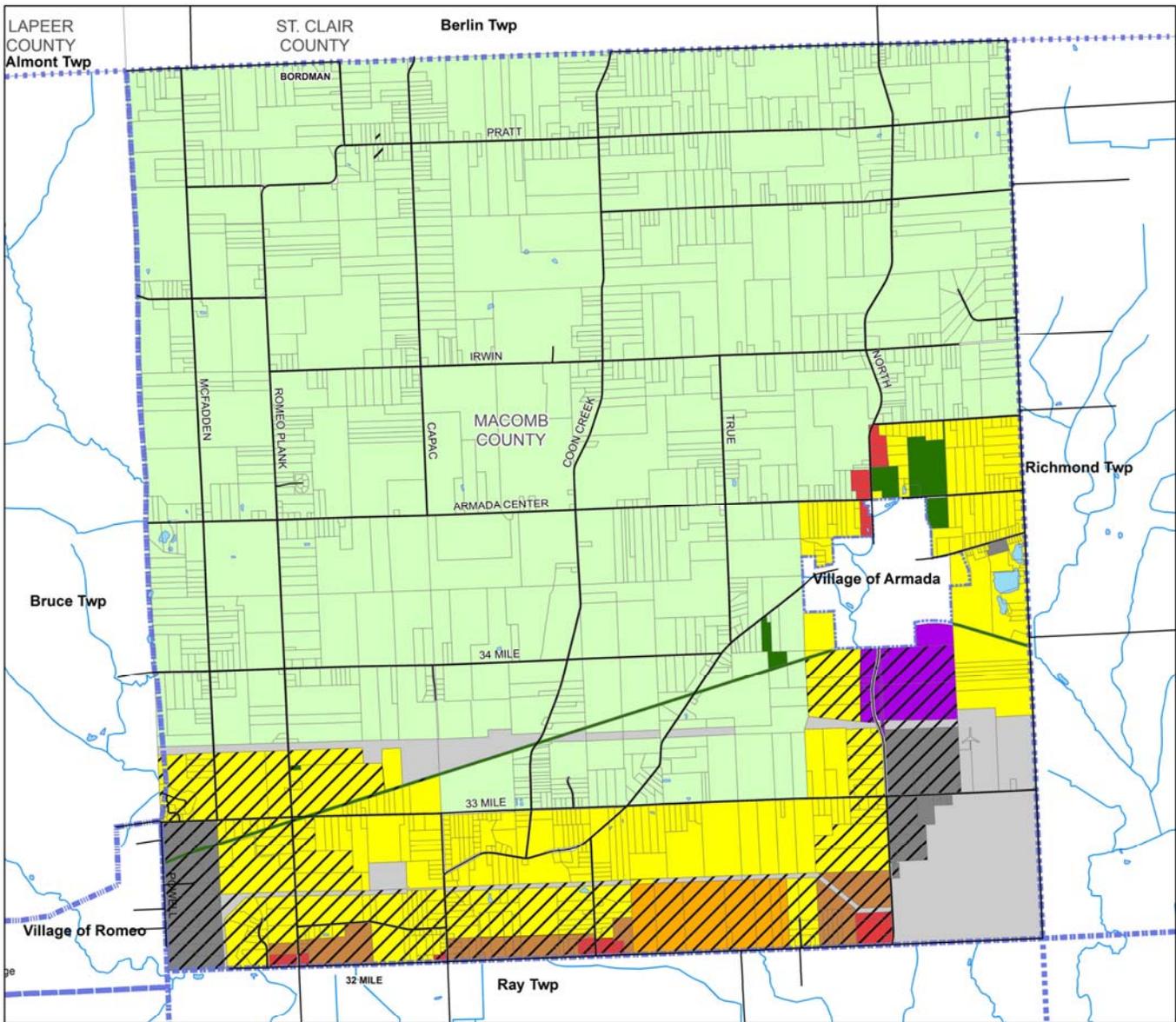
### Fire

The Armada Township Fire Department serves both the township and the Village of Armada and is located just north of the village on Armada Center Road. The department provides fire, rescue, and Advanced Life Support ambulance service with a staff of ten, augmented by more than two dozen paid-on-call firefighters. Full time staff serves the township and village at a ratio of 1.8 firefighters per 1,000 residents, while paid on call staff brings the ratio to 6.5 firefighters per 1,000 residents, well above the regional average. The Fire Department budget is derived from ambulance transport revenue and a millage. The Fire Department owns a parcel near 33 Mile and Romeo Plank for a possible future substation, which could be built if development in the township's southwestern corner reaches a point where the need for additional service in closer proximity arises.

### Utilities

Currently, the township is not served by water or sanitary sewer lines. The villages of Armada and Romeo each have sanitary sewer systems, though these systems' capacity to serve the township's long-term development needs is limited. The Preliminary Sewer District referenced in this plan is a long-term project expected to be developed over decades. The Macomb County Public Works Office plans an expansion of the Macomb County Wastewater Disposal District to include Ray and Armada Townships. Phase One of this plan constructs an interceptor and meter pits to address needs in Ray and Washington Townships; Phase Two adds a six-mile interceptor extension following the future Hayes Road right-of-way along the boundary between Ray and Washington. This second phase will reach Armada Township's southwestern corner, and a meter station will be constructed near the intersection of Powell Road and 32 Mile. Sewer and water service will extend into the township from this point in response to demand. The build-out analysis found in the Plans chapter estimates the maximum need for future water and sewer service in the preliminary sewer district.



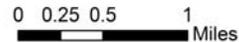


**Preliminary Sewer District**  
 Armada Township  
 Macomb County, Michigan



**clearzoning**  
 CLEAR AND CONNECTED

Source: Michigan Geographic Data Library,  
 Macomb County GIS  
 Created August 29, 2014



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## Parks & Recreation

The township adopted its most recent Recreation Master Plan in January, 2013. This plan remains the guiding document for parks and recreation planning in the Township.

Township residents' regional park needs are served by Wolcott Mill Metropark in Ray Township. The Macomb Orchard Trail provides an off-street walking and bicycling link to the region, including Romeo, Richmond, and the Village of Armada.

Armada Township Park, at Armada Center and North, has been recently upgraded with new play equipment, and offers social amenities such as a pavilion, as well as ball fields and a soccer pitch. The park is also home to the Senior Center, which offers meeting and program space for seniors. These recreational facilities are supplemented by fields and playscapes at the township's three schools, as well as privately owned but generally accessible ball fields and soccer fields at the Amvets hall (across the street from the park), and the Creek Center Banquet Hall.



Due to Armada Township’s rural development pattern, most residents’ immediate open space needs are met at home, where in a denser community with definable neighborhoods, these needs might be met with a neighborhood park. Once the extension of sewer and water service into the township begins, the township will need to consider purchasing small parcels for neighborhood park development in order to preserve open space as density increases. For the time being, however, demand cannot justify the development of neighborhood parks.

The township owns a parcel southwest of the village with frontage on Armada Ridge Road and the Macomb Orchard Trail, and preliminary plans to develop it as a park and trailhead have been developed; implementation of those plans is funding-dependent.

The 2013 Recreation Master Plan offers these four main goals:

1. Enhance and increase the quality of life for Armada Township residents as well as the overall Armada community by providing a full range of recreation facilities and programs.
2. Avoid duplicating the development of public and commercial recreation opportunities that are available in the Armada community and other nearby communities.
3. Cooperate with the School Districts, County, and other regional recreation providers in the delivery of recreation opportunities, facilities, and recreational routes to all township residents.
4. Utilize the township’s existing natural features (woodlands, wetlands, topography and floodplains), for open space and recreation purposes.



Top to bottom: the Armada Township Senior Center, the Macomb Orchard Trail, and the Township Park Pavilion



# POLICIES

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**Policy:** Promote the preservation of active farmland in the township and recognize the importance of farming and other agricultural uses to the township’s history and economy.

- a. Continue participating in the Purchase of Development Rights (PDR) program and actively promote the purchase of development rights.
- b. Promote the Generally Accepted Agricultural Management Practices (GAAMPs) developed by the State to help provide protection for farmers and farming activities that utilize appropriate farming practices.
- c. Maintain low density residential development in those areas of the township where farming is promoted and expected to be maintained over the timeframe of the Master Land Use Plan.

**Policy:** Promote the preservation of the natural environment using a systems approach that recognizes the inter-relationship between environmental features.

- a. Use the site plan review process to promote the preservation of natural features as defined in the Master Land Use Plan.
- b. Work within the context of the Clinton River Watershed Sub-groups to educate residents of the benefits of environmental preservation.
- c. Develop ordinances that require or promote the preservation of the natural environment such as open space zoning, overlay zoning, planned unit development, and natural feature setbacks.
- d. Collaborate with the Macomb County Public Works Office to minimize channelizing and clear cutting and preserve county drains and recognized streams and rivers in their natural state.

**Policy:** Promote a diversity of residential densities throughout the township as sewer and water utilities become available. Among other factors, densities should be based on available sewer capacity in those areas planned for water and sewer service and the ability of conventional septic systems to accommodate residential development for those areas not served by sewer utilities.

- a. Develop different zoning classifications based on the densities set within the Master Plan. These may include, but are not limited to, moderate density single family, low density single family, multiple family residential, and manufactured housing or land lease development.
- b. Require higher density developments to be located on and have direct access to paved, major thoroughfares as defined in the Master Plan and by the County Road Commission.
- c. Recognize that a majority of the township is not well suited for residential development on septic fields and that lower residential densities are expected in these areas to limit the burden on the natural environment.
- d. Continue to work with the Macomb County Health Department to develop acceptable lot size standards based on soil conditions and limitations; implement these standards through changes to the Master Plan and Zoning Ordinance.



**Policy:** Encourage creative developments and best management practices (BMPs) that incorporate and enhance the existing natural features of the township.

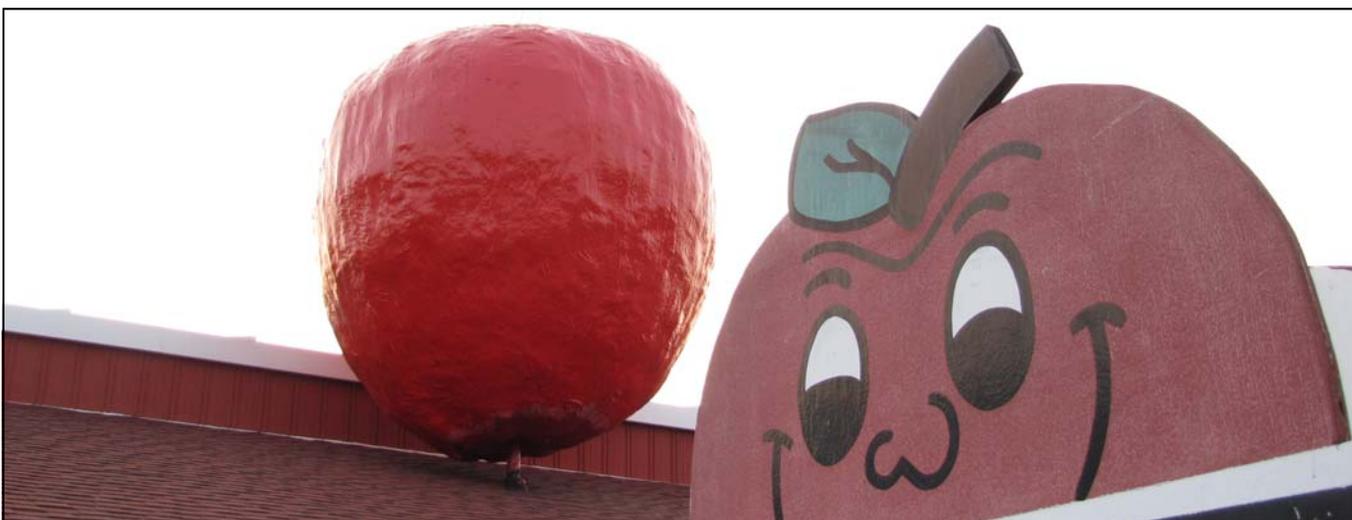
- a. Work within the Clinton River Watershed Group to continue reviewing BMPs that the township can incorporate into the Master Plan, Zoning Ordinance, regulatory ordinance, or general township practice.
- b. Develop flexibility within the Zoning Ordinance, including allowances for mixed uses, relaxation of setback requirements, and reduction of parking requirements.

**Policy:** Continue to develop uses that will generate tax base within the township in order to balance anticipated costs for municipal and school services over the time frame of the plan.

- a. Conduct a fiscal impact study to estimate the fiscal needs of the township over the next 10-20 years based on anticipated growth.
- b. Develop commercial and industrial districts that are appropriately sized and located based on demand, availability of infrastructure, and compatibility of use.

**Policy:** Plan for commercial land uses that respect the presence of the existing Village of Armada downtown, while still providing necessary convenience shopping areas to township and village residents and providing additional tax base for the township.

- a. Recognize that the traffic volumes where North Avenue and Romeo Plank intersect with 32 Mile Road will justify larger, more intense commercial activity relative to commercial areas elsewhere in the township.
- b. Develop smaller, more localized commercial activity nodes at the intersections of 32 Mile Road (other than Romeo Plank and North Avenue).
- c. Promote complementary commercial and office uses to the south of the village along North Avenue.



**Policy:** Balance the development of commercial and industrial areas between the two school districts within the township .

- a. Develop a new industrial land use area within the eastern half of the township either along 32 Mile Road or North Avenue .
- b. Encourage high quality commercial development of the township’s planned commercial areas; regardless of size, high quality facilities will increase tax value.

**Policy:** Develop planned industrial areas within the township that provide opportunities for all types and sizes of industrial development.

- a. To ensure that industrial sites are developed in a manner acceptable to the township, develop flexible guidelines for the development of industrial sites, including setbacks, façade treatment, construction, screening, landscaping, and parking.
- b. Coordinate planned industrial areas with similar or compatible surrounding uses, roadway capacity and accessibility, proximity to alternative means of transportation, and utility availability.
- c. Encourage the development of a second industrial subdivision within the township, located in the Armada Area Schools district.

**Policy:** Allow for the extension of infrastructure in an appropriate and timed manner, considering initial as well as future costs and benefits of such an extension.

- a. Develop sewer and water master plans for appropriate pipe sizing, flow rate, location, design, and other factors.
- b. Conduct a cost/benefit analysis to determine the long-term economic feasibility of infrastructure extensions.
- c. Maintain the originally established sewer and water district. Extensions outside of the originally planned area should only be reviewed as a part of a Master Plan review and sewer and water plan review comparing available capacities, flow rates, line sizes, road capacities, existing and planned densities, and other relevant factors.

**Policy:** Realize that the areas planned for sewer service exceed the projected population growth for the township and that the extension of infrastructure should be phased in conjunction with actual and realized population growth.

- a. Continually re-assess the rate of population growth versus existing sewer capacity and infrastructure limits to determine if further extensions are necessary.



**Policy:** Provide passive and active recreational opportunities throughout the township within the township’s limited budget and resources.

- a. Continue to review and update the long term park plan for the current Township Park as well as undeveloped properties through the township’s adopted Recreation Plan.
- b. Pursue recreation grants through the State of Michigan as well as foundations and other private entities for the continued development of parks on current township property.
- c. Develop and implement potential greenway corridors in conjunction with the Master Plan as well as the County’s Plan.
- d. Plan for recreational opportunities in conjunction with the Macomb Orchard Trail running through the township.
- e. Develop planned park areas in those portions of the township where higher densities are planned and expected.

**Policy:** Implement Complete Streets principles throughout the township as appropriate in order to provide safe, efficient and well-maintained roadways that accommodate all modes of transportation throughout the township.

- a. Develop Complete Streets guidelines for new developments.
- b. Develop guidelines for the rebuilding of existing roadways in a manner that accommodates all users and modes.
- c. Determine how best to apply Complete Streets principles in different areas of the township, respecting that the same standards may not be appropriate for all places.

**Policy:** Amend the Zoning Ordinance to support the goals, objectives and policies of the Master Plan.

- a. For rezonings and large developments, require a Development Impact Statement that accounts for availability of infrastructure, economics and market conditions, environmental impacts, and new traffic.
- b. Amend the submission requirements of the Zoning Ordinance to ensure that sufficient information is provided to conduct comprehensive site plan, special land use and/or rezoning reviews.
- c. Amend the Township Zoning Map as needed to allow for desired development.
- d. Amend the Township Zoning Ordinance to include additional or updated development standards that regulate building design, site landscaping, access management, land use relationships, and other land use issues that affect the aesthetic environment of the township as well as the health, safety, and welfare of residents and visitors.



# PLANS

## 1 Introduction

### Future Land Use Plan

The Future Land Use Plan is a guiding document intended to document the goals and intentions of the township regarding land use and future development. Future decisions regarding the township zoning ordinance and map will reference the framework provided by this plan. This chapter addresses agricultural, residential, commercial, mixed use, and industrial development.

## 2 Background

### Overall Concepts and Factors to Consider

The amount of land to be devoted to a given use is determined with the help of criteria that help guide decisions. Existing land use within the community and region, roads, soils, topography, economic potential, and changes in the community and region's population and demographic characteristics all inform the placement and acreage afforded to different land uses.

The concept land use plan included on this page reserves much of the community for agriculture and very low-density rural residential uses. The map acknowledges the utility use in the township's southeast corner as a distinct area not intended for further development in the foreseeable future.

## 3 Policies

The remaining land, primarily in the southern portion of the township and in the area around the village, is designated for development, including single family homes, flexible residential, commercial, mixed use, and industrial uses. Given the historical spread of development in Macomb County, this is the area most likely to be affected first by future development. The intensity of development in the Development Area will be dependent on the extension of water and sewer service into the area. The township's preliminary sewer district is shown on the Preliminary Sewer District map. Portions of the Development Area are not projected to be sewered, and lot sizes in these areas will be accordingly larger, providing a transition to the Agriculture and Rural Residential Area.

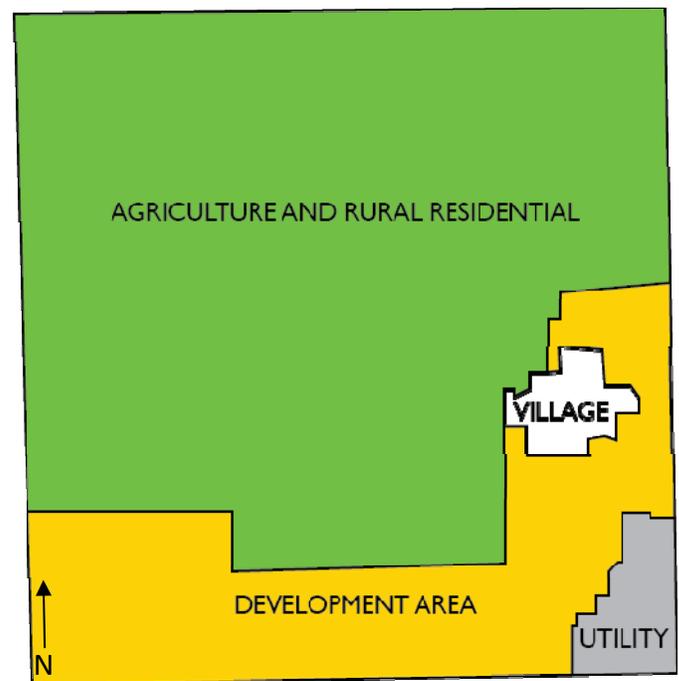
## 4 Plans

### Preparing for Resumed Growth

As discussed in the Background chapter, the unincorporated township's population did not grow from 2000 to 2010, though the Village of Armada grew by ten percent. The Southeast Michigan Council of Governments projects that the township's population, including that of the village, will remain fairly steady into the foreseeable future. This projection, however, does not take into account the possible introduction of water and sewer infrastructure in the southern portion of the township, an extension of infrastructure that could potentially make that part of the township more attractive to developers and new residents.

## 5 Implementation

Fig. 4-1 Conceptual Land Use Plan



The conceptual land use framework intentionally limits growth in the primarily agricultural northern two thirds of the township. This area is intended to be preserved well into the future as a low-density district comprised mostly of farms and residences on large lots. Plans to extend the sanitary sewer interceptor to the southwest corner of the township are already in place, and sanitary sewer infrastructure will be phased into the township slowly over a long time period, in response to demand and the economic feasibility of such an expansion. The projected initial sewer area will serve the township’s southwestern corner, including the industrial area, the commercial area at Romeo Plank and 32 Mile, and some single family residential neighborhoods.

As new residential and industrial uses arrive in the township over time, new residents and workers will need access to a range of services. The land use plans that follow identify portions of the preliminary sewer district that coincide with the area’s major intersections for more intensive commercial or mixed use development that could serve these needs. The plan also provides for complementary development along North Avenue south of the village. It is important to keep in mind projections for slow, minimal growth when considering these plans; they provide a framework for directing development patterns when growth eventually occurs.



### Village Expansion

The township surrounds the Village of Armada and borders the Village of Romeo. In the past, both villages have discussed annexation of township lands in conjunction with extension of services into the township. At present, the township takes the position that any expansion of services into the township from either village would require a mutually negotiated intergovernmental agreement and would not involve boundary adjustments or land transfers. This facilitates tax revenue sharing. The township does not promote the expansion of urban services or the transfer of property into either village through the annexation process.



## AGRICULTURAL AND LOW-DENSITY RESIDENTIAL AREA PLAN

A primary goal of Armada Township is to preserve its agricultural heritage and economic sector. Greenfield development, including the redevelopment of former farms into housing subdivisions and commercial developments, is occurring at a rapid pace in the middle of Macomb County, and while this development will take time to spill northward into the township, the community still must have a framework in place that accomplishes the goal of preserving a portion of the township for agricultural use into the distant future. Michigan's Right to Farm Act and Generally Accepted Agricultural Management Practices (GAAMPs) provide some powerful protections for existing farms in the face of encroaching development and broadly lend regulatory support to this goal.

The township's 2004 Master Plan identified valuable agricultural land within the township, and very little of the land that was devoted to farming at the time of that plan has since been repurposed. This plan includes a map of Prime Farmland in the township, and nearly all of the township falls under this designation.

While the majority of farmland in the township falls within the Agriculture and Rural Residential area on the concept map, the Development Area also includes a number of working farms; the preservation of these farms is encouraged as well.

### Special Agricultural Activities

The township recognizes that certain activities related to agriculture may be appropriate on a limited basis and at limited locations within its agricultural district. The township has identified the property at the northwest corner of Capac and Armada Center as a location that has a unique historical presence in the community that has included expansion into non-traditional ancillary agricultural activities such as the manufacture of food and beverage products from fruit grown primarily on the premises. It is anticipated that the township zoning ordinance may require the establishment of an overlay district to accommodate expansion of these unique agriculture-related activities on this site.



## Planning to Support Agricultural Preservation

Armada Township recognizes that over the timeframe of the Master Plan, some agricultural land will be converted to other uses. The township can support its goal of preserving farmland and agricultural uses by continuing to pursue a suite of complementary strategies that offer both farmers and the township a measure of control over what happens to agricultural land. These strategies are as follows:

### *Minimize the Amount of Agricultural Land Converted to Residential Uses*

Planning to direct as much urban development as possible into the southern portion of the township where sanitary sewer service is planned will prevent the loss of large amounts of farmland in the Agriculture and Rural Residential area. The projected sewer district will offer more than enough capacity to absorb projected growth for the foreseeable future.

### *Retain Rural Road Status in Areas Planned for Farming or Extremely Low Density Residential*

Land use capacity is directly tied to road carrying capacity. Higher-density subdivisions require road construction, and industrial uses generally require roads that can support heavy truck traffic. Rural roads, and especially unpaved rural roads, by their nature limit the uses that can be supported in a given area. Opting against paving or expanding roads in the Agriculture and Rural Residential area can be an effective means of controlling the pace of redevelopment, and can also keep traffic speeds low, minimizing conflicts between automobile and farm equipment traffic. Preserving farmland also reduces the need for new roads, which helps control infrastructure maintenance costs.

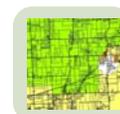
### *Promote Purchase of Development Rights (PDR)*

The township supports farmland preservation through its Master Plan and zoning and land use policy regulations. These regulations will evolve over time as circumstances change. PDR is a technique that can preserve agricultural land in perpetuity, benefitting the landowner through financial compensation for agreeing to preserve the use of the land, and benefitting the community through the preservation of a valuable economic and environmental resource.

### *Promote Enrollment in the Michigan Farmland Preservation Program*

The Michigan Farmland Preservation Program offers funding support for local PDR programs and also has a range of voluntary agreements that landowners can enter into:

- Farmland Development Rights Agreements – offers tax benefits and special assessment exemptions in exchange for farmland preservation
- Conservation Easement Donations – Permanently restricts redevelopment of farmland or open space through agreement with the State of Michigan
- Local Open Space Easements – Temporarily restricts redevelopment in exchange for tax benefits
- Designated Open Space Easements – Similar to Local Open Space Agreements, but agreement is entered into with the State of Michigan rather than the township

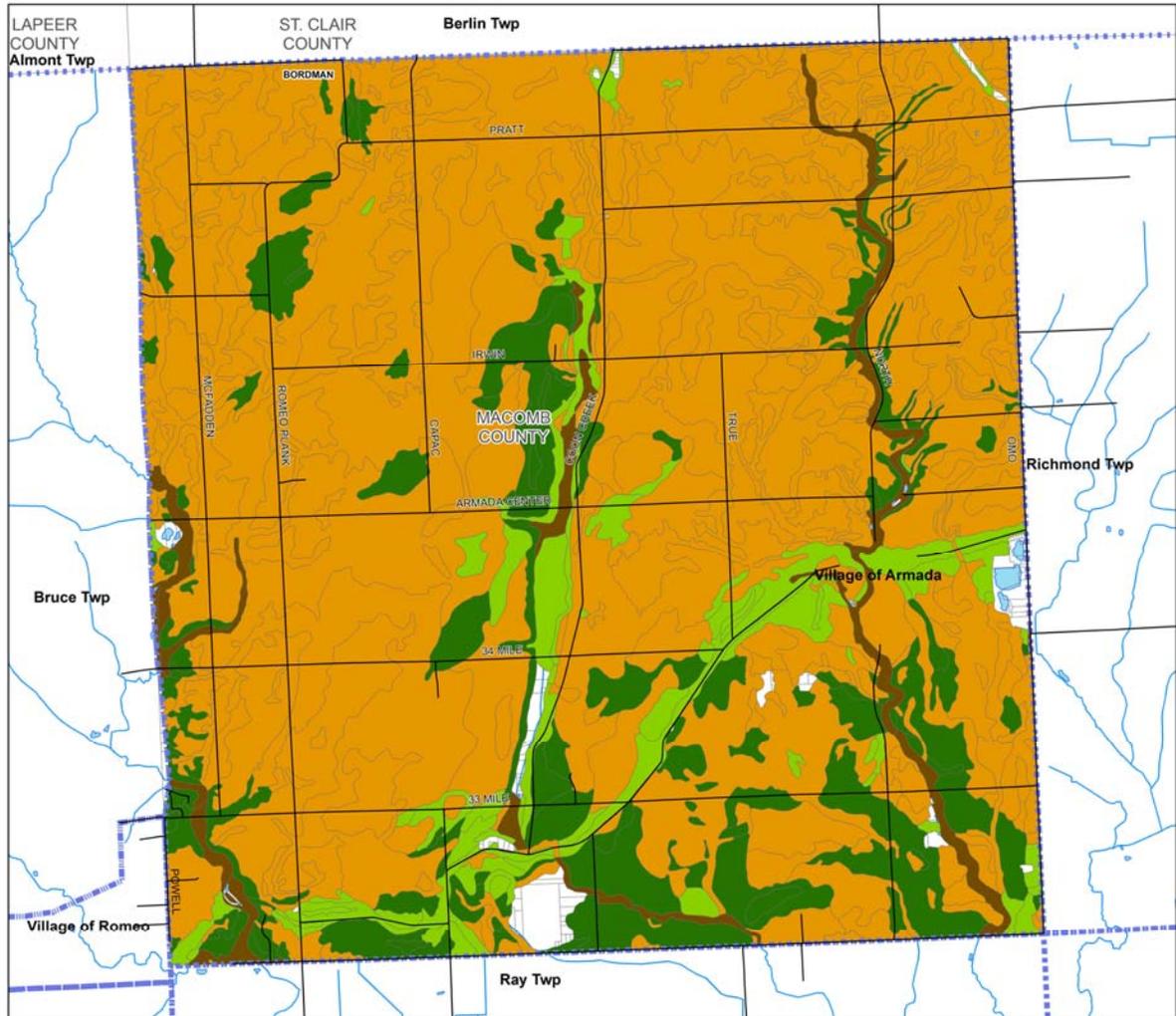


*Minimize Conflict between Existing Farmland and New Residential Development*

The township refers to the State of Michigan’s GAAMPs as a guiding policy document for agricultural management. Adhering to these standards reinforces the right to farm while also protecting neighboring uses from spillover effects of agricultural activities.

*Reflect The Township’s Rural and Agricultural Heritage in New Development*

Ensure that new development, and especially development that is more intensive than the previous use, respects the township’s agricultural and rural character in the design of both buildings and site.



- Prime Farmland
- Farmland of Local Importance
- Prime Farmland if Drained
- Prime Farmland if Drained and Protected From Flooding or not Frequently Flooded During the Growing Season

**Prime Farmland**  
Armada Township  
Macomb County, Michigan



**clearzoning**  
CLEAR AND CONNECTED

0 0.25 0.5 1  
Miles

Source: Michigan Geographic Data Library  
Macomb County GIS  
Created August 29, 2014



## RESIDENTIAL AREAS PLAN

Mapping the township's intended residential development types and densities provides a basis for guiding development in a sensible and organized manner and also The Future Land Use Map identifies several different land use classifications that accommodate residential development:

**Rural Residential.** Rural Residential is synonymous with the Agriculture and Rural Residential planning area; the paramount goal of the township in this area is the preservation of agricultural land.

**Single Family Residential.** The area designated Single Family primarily supports detached single-family housing at moderate density; density in the future will vary based on the provision of sanitary sewer service. A portion of this area is also identified as a possible location for manufactured housing. Open Space or Conservation Subdivisions are encouraged in this district.

**Flexible Residential.** Flexible Residential, found in the projected Preliminary Sewer District along 32 Mile, will be developed in accordance with future sanitary sewer capacity and might include multi-family housing, attached single-family housing, or detached single-family housing.

**Mixed Use.** Located near the village in the projected Preliminary Sewer District, the Mixed Use district could accommodate residential units on upper floors of multi-story buildings.

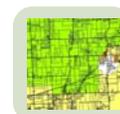
**Flexible Development.** The Flexible Development area along 32 Mile is intended to respond to future market demand and provide for the possibility of future development in a Single Family, Mixed Use or Flexible Residential pattern. The use of Planned Unit Development (PUD) procedures is anticipated to encourage flexible, coordinated development in this area.

The township encourages maintaining agriculture in any of these districts.

### Residential Densities

Planned residential densities vary from district to district. In portions of the Development Area, planned densities will change over time in conjunction with the extension of sanitary sewer service.

	Planned Density
Rural Residential	Maximum 1 unit per 1.75 acres
Single Family Residential (No Sewer)	Maximum 1 unit per acre
Single Family Residential (Sewer)	Maximum 2.5 units per acre
Flexible Residential/ Flexible Development	Maximum average district density: 4 units per acre Multi-family density: up to 7 units per acre
Mixed Use	Stand-alone multi-family: up to 7 units per acre Mixed commercial/residential: up to 10 units per acre



It must be noted that in areas where no sewer service is planned, homes will require conventional wells and septic systems, and not all soils in the township have the same capacity to accommodate septic systems; in some cases, multiple adjacent lots of 1.75 acres will tax this capacity. Septic systems should also be placed a minimum of 100 feet from open bodies of water; the Macomb County Health Department issues guidelines for the development of septic systems.

In areas where sewer service is planned to be phased in, the lower density Single Family designation will remain in place until sewer service arrives, at which point the area must be rezoned to a classification that will accommodate the higher density. This classification will have to be crafted and added to the Zoning Ordinance in the interim.

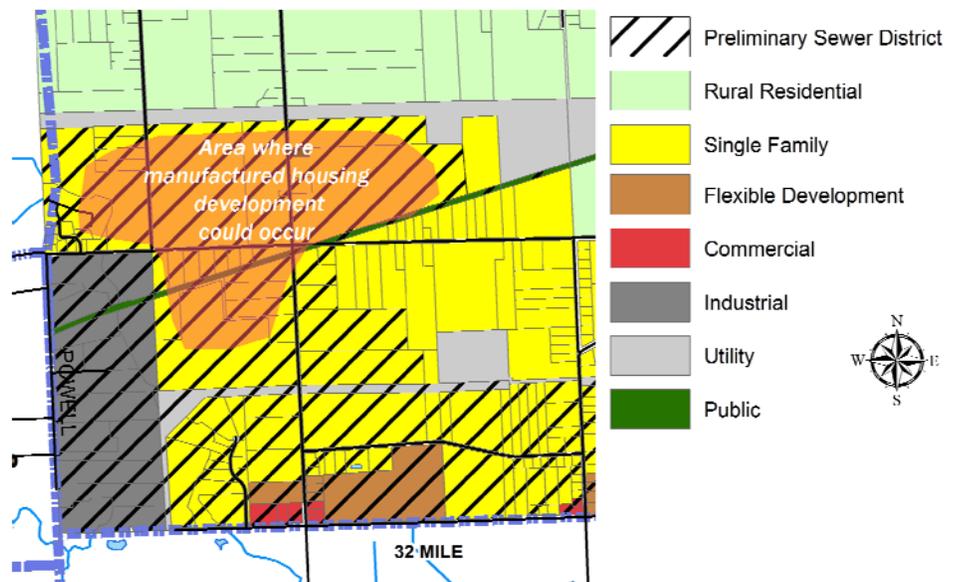
In the Flexible Residential, Flexible Development, and Mixed Use districts, accommodation must be made for a sensible density and distribution of residential units attached either to each other or to commercial structures (typically on upper floors). In the Flexible Residential and Flexible Development districts, multi-family housing may be constructed at a density of up to 7 units per acre, so long as the average density of the district does not exceed 4 units per acre. In the Mixed use district, a stand-alone structure of attached residential units can be developed to a maximum density of 7 units per acre, while a true mixed use structure, with commercial uses on the street-facing side of the ground floor may developed with a residential density of up to 10 units per acre. In all three districts, the density limits for Single Family Residential without sewer service will prevail until sewer service becomes available.

### Manufactured Housing

The 2004 Master Plan identified criteria for the location of manufactured housing developments as well as locations within the township that met these criteria. Fig. 4-2 is a generalized map of these locations. It is unlikely that such a development will be constructed in the township prior to the extension of sewer service. Multiple manufactured housing

developments are not planned due to limited road capacities, the significant school population generated, the potential for environmental concerns, limited planned sewer and water capacities, known weak market demand in northern Macomb County, and the ability of the township to provide its fair share of manufactured housing within a single development.

Fig. 4-2 Potential Manufactured Housing Locations



### Criteria for Locating Manufactured Housing

- The main access roadway is paved and has a planned right-of-way of a major roadway.
- Ability to provide multiple access points, on two different roads.
- Manufactured housing developments not to exceed 100 acres.
- The site falls within the planned sewer district.
- The site is proximal to community facilities and commercial areas.

### Senior Housing

As the township population continues to age, consideration must be given to providing for the housing needs of seniors. Accommodations that allow seniors to remain in their communities can take many forms, from retrofitting an existing single family home for accessibility to full assisted living facilities. The township's plans for mixed use and flexible development areas offer places where higher permitted densities could accommodate more intensive senior housing developments, including developments in close proximity to convenience shopping and services.



## COMMERCIAL AREAS PLAN

As development occurs in northern Macomb County during the timeframe of this plan, three factors have the potential to drive demand for more commercial square footage in the township: population changes within the township, population increases in surrounding communities, including the village, and the volume of traffic passing through the township to and from other destinations. As population increases, traffic on the township's major transportation corridors will increase. The township's 32 Mile Road Corridor Study and 2004 Master Plan identified relatively high-traffic intersections along 32 Mile Road as possible commercial nodes; this plan further identifies flexible development areas in this corridor that could be rezoned for commercial activity if demand arises.

North Avenue is the other thoroughfare designated for commercial development; some of this already exists, including a small commercial node just north of the village. The Mixed Use district identified on the Future Land Use Map is intended to accommodate some commercial uses as well.

### Commercial Needs

The 2004 Master Plan estimated the need for approximately 50 acres of commercial property, based on the township's population, disposable income of residents and sales per square foot multipliers. The plan designated a total of 145 acres for new commercial uses. Given that the township's population has not increased in the meantime, and that very little of the land designated for future commercial uses in the plan has since been developed for those uses there is little need at this time to expand the amount of land specifically designated for commercial development. The Flexible Development areas specified on the Future Land Use Map are intended to provide the township with the ability to easily rezone land for commercial uses in certain locations in the event that land presently zoned Commercial cannot accommodate a proposed use or an increase in demand.

### Balancing Commercial Development in the Township and Village

The Village of Armada provides for many of the specialty and general retail needs of township residents. The village downtown also serves as a community focal point, and the township has an interest in ensuring that it remains economically healthy. Therefore, future commercial development in the township should be sensitive to the interdependence of the village and the township and not seek to compete directly with the village center. Certain large-scale commercial uses might be more appropriately located within the township than the village.



## Compatibility with Rural Character

In order to ensure that future commercial and industrial development in the township does not detract from the area's generally rural character, the township should develop a set of design guidelines that guide the appearance of development and establish a feel that respects the township's rural heritage. Design Standards could be implemented with a Rural Character Design Overlay covering the 32 Mile and North Avenue corridors.

### Commercial and Industrial Design Framework

Rather than strictly prescribing architectural styles and site elements, these design guidelines draw on elements of the community's existing character and provide a framework for imparting rural character to new commercial and industrial development.

#### Respond to the Context of the Site

Development that occurs in prominent areas, such as major corners or gateways, should reflect the importance of the location through signage and sensitive treatment of the landscape. Commercial or industrial development requiring retention ponds should take care to make the pond appear natural by clustering trees and including wetland elements.



#### Landscaping

Much of the landscaping found throughout the township is fairly informal. Stones unearthed on the property are often used to edge areas of deliberate planting. Many fields are edged with narrow rows of native vegetation. Tree lines commonly delineate property lines and road edges.

Generally, drainage is accomplished with swales; even in a sewer district, swales could be used to feed a storm sewer and for direct site drainage.

It is possible to strike a balance between this sort of informal, easily maintained landscaping and the sort of formal landscaping more commonly found in built-up districts. Native plants can be used to help accomplish this kind of look. Tree lines could be used in industrial zones to provide a sense of distinction between properties.



Fences

Many properties in Armada Township are not fenced, but a variety of fencing styles exist in the township and could be drawn upon in a design overlay in order to provide a menu for developers to choose from.

Fences can be combined with other landscaping standards to give developers many options that nonetheless lead to a unified appearance.

To the right are examples of typical fencing styles that might provide a basis for design standards going forward. Simple bare-wood split rail fences are common. Basic, white rail fences are also fairly common. The corral-style fence shown second from the bottom is somewhat more elaborate and less common, but could provide an interesting third style reference.

Embellishments such as stone piers are acceptable, particularly if finished in a manner that resembles fieldstone.



## Driveways

Treatment of the end of driveways in a potential industrial or commercial area can help integrate these properties aesthetically into the rural fabric of the community.

Culverts under driveways often have stone framing them, and this could be adopted as a standards for a design overlay. The presence of the stone also serves a practical anti-erosion purpose.

Many homes display their addresses on simple posts by the roadside, and this standard, if applied at a scale appropriate to a commercial or industrial district, could offer another way to provide visual parallels with the existing community.

Other decorative elements at the ends of driveways are common in the township. The example at bottom left shows a pair of wagon wheels framing the driveway. Freestanding stone or concrete gate piers, corner fences, and open gates are common elements framing the ends of driveways. A selection of rural elements should be provided in design standards to give developers a variety of ways to visually link their properties to the surrounding area.



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### Building Appearance and Placement

It is important that commercial and industrial buildings reflect a sense of quality as well as local character. The following framework elements are established:

- Facades facing a public street should be faced primarily with durable, high-quality materials such as brick, stone, decorative block, and similar materials.
- One-story buildings should have minimum ceiling heights of about 14 feet and should include design elements that give their street-facing facades greater prominence.
- Pitched roofs are generally more reflective of surrounding development and preferred to flat roofs.
- Buildings should generally be sited in the front half of the lot with limited parking in the front. The balance of parking should be placed in the side and/or rear yard, as shown in the example below.



Design Example

This design example shows how the framework elements could be applied to the development of a shopping center to capture some of the rural feel in the community and set the buildings in a context that respects the heritage of the area. The front swale is planted with native grasses, trees are placed in naturalistic clusters, and the parking lot is screened by a farm-style fence. This design further shows buildings designed to be taller than their single-story layouts might otherwise suggest; this provides a sense of scale that gives the development presence from the roadway. Additionally, parking is screened by a low wall at the rear lot line.



## INDUSTRIAL AREAS PLAN

Industrial uses have traditionally provided municipalities with a stable job base as well as additional tax base to support desired services. Armada Township is largely on the fringe of the types of transportation and sanitary infrastructure that industrial land uses typically seek. The southwestern corner of the township has long hosted a privately owned industrial subdivision; though it occupies only a small portion of township land, this area provides substantial tax revenue. The industrial area is located entirely within the Romeo Community Schools district; the township desires to balance its industrial tax base between its two school districts.

To accomplish this, the township has identified land along North Avenue, bounded on the east by the Consumers' Energy gas field as a potential site for future industrial development. The provision of sanitary sewer service to this area will likely be necessary to facilitate the development of this land as designated in the Master Plan.

### Special Development Considerations for Industrial Areas

While the Design Framework can be applied to the township's industrial districts, industrial uses often require additional screening from nearby uses, owing to their relatively high intensity. The township, in an effort to sustain or enhance industrial values, has established industrial development standards, which if properly implemented, will minimize impacts to the surrounding neighborhood, increase the aesthetics of the planned industrial areas and finally, increase industrial property values.

- Ensure that all outdoor storage areas are adequately screened from public view as well as adjacent properties. This can be accomplished through the use of evergreen screening, decorative concrete walls, rolling earthen berms and the like.
- Buildings fronting on public or existing private thoroughfares should be constructed of decorative brick, stone, split face block or other acceptable materials for all facades visible to the public.
- Provide protection between planned industrial areas and existing residential dwellings or planned single family residential areas. The screening methods can be those utilized for screening outdoor storage areas.
- Coordinate access drives between users to reduce the total number of driveways, while still allowing adequate access to the site for both typical automobiles as well as industrial truck traffic.
- Ensure that uses conform to the township's adopted performance standards regulating noise, vibration, hazardous materials, etc.
- Excess parking may be land banked in a designated, landscaped area, to be developed if needed at a future date.





The Township's existing industrial park is well-landscaped and functions like a cohesive district (see above and below).



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## COMPLETE STREETS

Complete Streets is a term used to describe a transportation network that includes accommodation for vehicles, pedestrians, cyclists, and other legal users. Complete Streets provide transportation choices, allowing people to move about their communities safely and easily.

### Traffic Safety

According to SEMCOG, from 2004 to 2013 there were 1,385 total vehicle crashes (138.5 annually, or one every 2.6 days on average), 13 of which were fatal and 316 of which led to injuries. 949 of these, nearly 69 percent, were single-vehicle accidents. One accident involved a pedestrian, and another involved a bicyclist. 401 crashes (29 percent) involved deer. Because of the township's generally rural character, the occasion for conflict between automobiles and other human users is relatively rare. The township does, however, have a higher-than average crash fatality rate, due in part to the high speeds of travel on rural roads.

### Mobility

Armada Township is not served by public transportation. Nearly 40 households in the township, and a further 25 in the village, do not have access to a vehicle. Providing non-motorized transportation options for members of these households is important.

### Complete Streets in the Township

The Township's development pattern, generally featuring long, straight paved thoroughfares under the jurisdiction of the Macomb County Road Commission, smaller secondary paved roads in neighborhoods, and dirt connector roads, does not strongly support conventional Complete Streets measures such as sidewalks and bicycle lanes. The length of the roads, narrowness of paved areas, presence of swales immediately



Paved thoroughfares, dirt roads and paved secondary streets are the three basic road types in the township.



adjacent to the roadway, low density of development, and low traffic volumes all present physical, market, and financial barriers to this type of infrastructure.

Complete Streets implementation in the township at present will consist largely of developing guidelines for future development and building awareness in motorists that they are expected to share the road with other users.

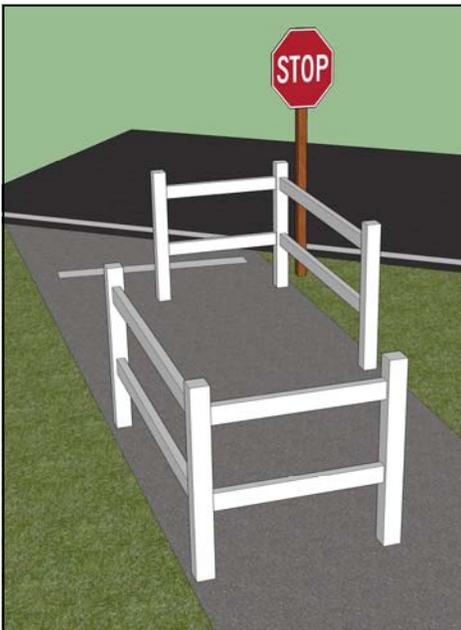
Educational materials available at the Township Hall could alert drivers to the dangers of traveling at high speeds, the presence of deer, and their duty to cede roadway to bicyclists and pedestrians. Likewise, pedestrians and bicyclists should be aware of their responsibilities when using the roadway.

The township should work with the Macomb County Road Commission and the Michigan Deer Crash Coalition to investigate measures that can be taken to decrease potential conflicts on roads in the Township. Additional signage warning about the presence of deer and the Macomb Orchard Trail crossings could increase driver caution. Establishing recognized bike routes marked with signs could also focus bicycle travel onto the most appropriate roads.

Township roads with highest crash frequency

Number of crashes 2004-2013

- North (281)
- Armada Center (213)
- Romeo Plank (205)
- Capac (198)
- Armada Ridge (124)
- 32 Mile (116)



Bicyclists on the Macomb Orchard Trail who fail to stop at crossroads can cause conflicts. Speed calming measures at trail crossings such as the corral fence above could reduce potential safety hazards and vehicle-bicyclist conflicts.

As development increases along 32 Mile and North, shared lane markings and wider paved shoulders could become necessary. An off-street path parallel to the roadway may also be considered. If traffic volumes on roads crossing the Macomb Orchard Trail rise significantly, crossings with flashing lights could provide greater safety and visibility for non-motorized users.

Macomb County Non-Motorized Plan

Aside from the existing Macomb Orchard Trail, the Macomb County Non-Motorized Plan calls for a single, unspecified bicycle facility running along Wolcott Road to Armada Ridge Road, and then along Coon Creek Road to the Macomb Orchard Trail. This route is intended to connect the trail with Wolcott Mill Metropark in Ray Township. Particularly given the fact that Coon Creek is a narrow dirt road, this route is initially most likely to take the form of signage. Prior to implementation, consideration should be given to improving safety for non-motorized users on Wolcott and Armada Ridge Roads. The township’s 2013 Parks & Recreation Plan also notes the potential to connect Wolcott Mill to the Macomb Orchard Trail via the north branch of the Clinton River, an option that would offer a dramatically lower potential for conflicts between motorized and non-motorized users.



## BUILD-OUT ANALYSIS

It is unlikely that the full potential number of housing units or full potential commercial square footage that could be built under the future land use plan will be constructed in the near future. However, some development will occur, and it is useful to know the total amount of development that would occur under this land use plan if all possible building were to occur. In particular, this analysis should be referenced in discussions regarding the extension of water and sewer service into the township, as it provides an indication of the necessary potential capacity and size of water and sewer interceptors and leads.

Table 9 shows the number of housing units possible in the preliminary sewer district, assuming that all areas designated as part of the district on the map are eventually provided with water and sewer service. The Mixed Use district yields different housing unit densities based on the type of units constructed, and therefore, the table shows multiple potential build-out numbers. Totals are meant to show potential and do not account for existing development.

Buildable acreage numbers are arrived at by subtracting wetland acreage from the total acreage in each planned use district, and multiplying the remainder by 0.7. We assume buildable acreage to be 70% of total non-wetland acreage to account for roads and other limitations of site development. The maximum average housing unit density for the entire sewer district is 3.4 units per acre, much of which would be concentrated in multi-family structures in small areas.

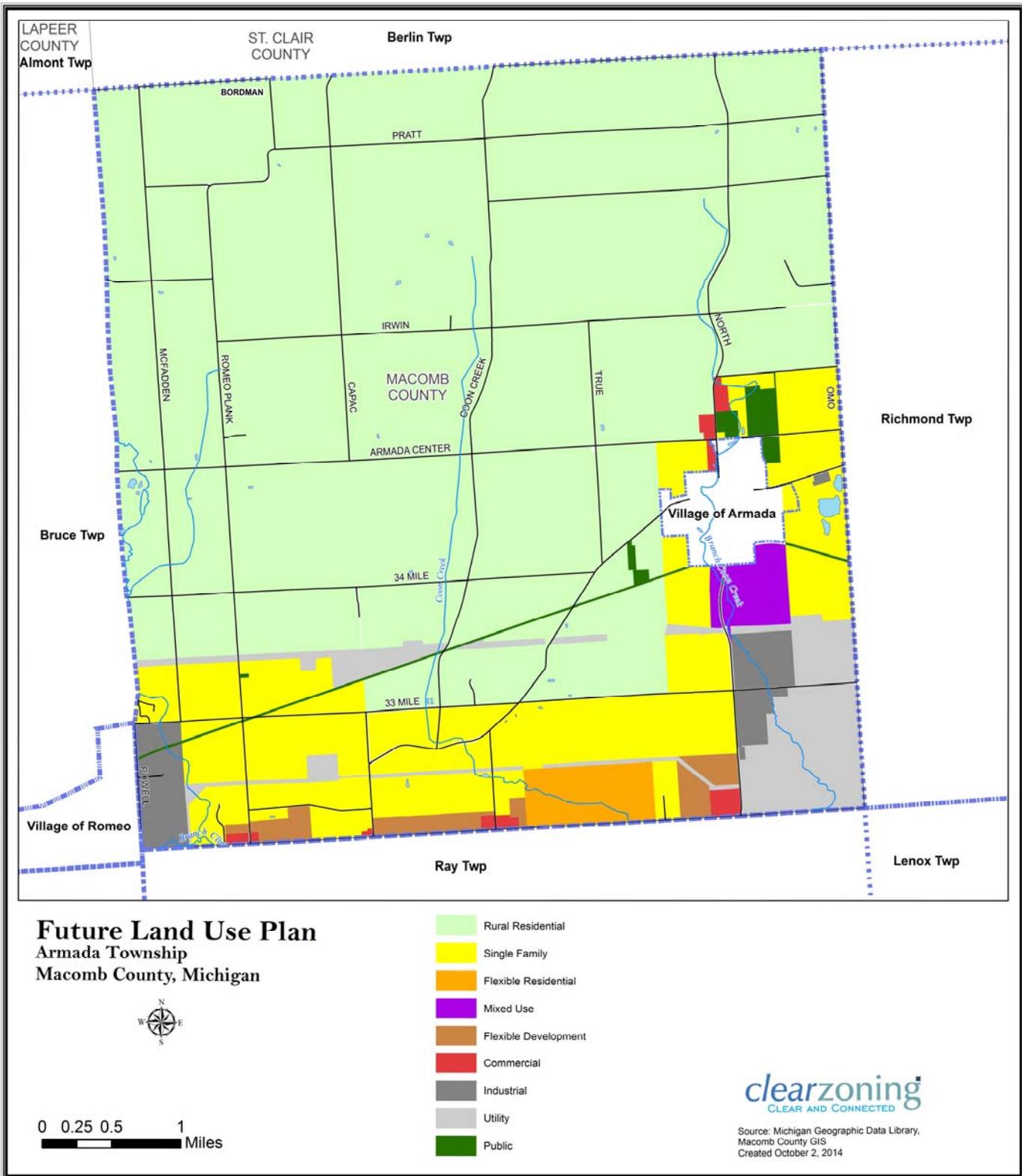
**Table 9: Armada Township Preliminary Sewer District Residential Development Potential\***

Use	Buildable Acreage**	Housing Units	Max Housing Units
Flexible Development	202.2	808	
Flexible Residential	222.3	889	
Mixed Use (low)	146.5	1,025	1,465
Single Family	1,264.8	3,162	
Sewer District Total	1,835.8	5,884	6,324
Average Density		3.2 units/acre	3.4 units/acre

\* Assumes full build-out of Preliminary Sewer District

\*\* 70% of total acreage less wetlands





# IMPLEMENTATION

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The implementation strategies of this chapter will assist the township in putting the key recommendations of the Master Plan to work. This chapter first discusses the tools that will allow the township to pursue its goals, then follows with an implementation program. The implementation program sets priorities and correlates specific plan proposals with the appropriate implementation tools. These tools should be referred to frequently and used systematically so that the outcome is a consistent program of implementation over whatever period of time is required to achieve the Master Plan recommendations.

## Implementation Tools

### Zoning Ordinance Standards

The most effective tool to implement the land use arrangement of the Master Plan is zoning standards and districts. A zoning ordinance is not meant to be a static document. The experiences communities undergo in the application of their zoning rules and the review of unusual new land uses constantly change the body of professional knowledge related to planning and zoning standards. Periodic review of the zoning ordinance will result in the application of the most up-to-date standards in the design of new uses and the maintenance of existing developments.

### Special Design Plans and Functional Plans

Sometimes a Master Plan must be followed by more detailed design studies in order to illustrate specific concepts that can only be covered briefly in the plan. Functional plans can also help to implement certain ideals outlined in the plan.



## Code Enforcement

Simple code enforcement can often turn the tide with regard to the image of an area.

## Subdivision and Condominium Regulations

Subdivision Regulations and Condominium Regulations are valuable tools in achieving the type of residential development desired by the township. These ordinances should be periodically reviewed and updated to incorporate effective standards that will result in high quality, attractive residential developments.

## Site Plan, Special Land Use, and Rezoning Approval

Many essential components of the plan will be the subject of a site plan or special land use application, in some cases preceded by an application for rezoning. The township should develop criteria for zoning changes that will establish a rational process for changing the map as the sewer district arrives and expands over time. Now is also the appropriate time to review the community's site plan and special land use approval processes and standards. The standards should clearly set forth any discretionary powers the township feels it must reserve. Once such standards are in place, the Planning Commission must adhere to them consistently when reviewing development proposals. The implementation of the Plan is likely to take 20 years or longer. In order to maintain the vision, consistent application of design criteria and development standards will be essential.

## Federal and State Grant Programs

Federal and State grants are much smaller and more competitive than in their heyday during the 1950's through the mid-1980's. There are still programs in place, however, particularly for pollution abatement (sanitary sewers), pedestrian enhancements (related to roadway projects), and parks and recreation. Proper planning in advance is generally the key to success in securing these grants. Often, the granting agency is particularly interested in innovative projects that stretch the grant dollars or present a concept that is transferable to other communities. Projects that involve two or more neighboring municipalities often receive priority for funding.

## Re-evaluation and Adjustment of the Plan

The final – and sometimes most difficult – step in the planning process is re-evaluation and adjustment. The process is never really finished. A community's population, economic status, goals, land uses, land use problems, and political climate are constantly changing. It is important to assess how well the Plan is addressing the present land use issues in the community, and whether amendments should be made to keep the Plan relevant and make it the most appropriate guide for the community's future land use. If the Plan no longer reflects the vision of the community, the Planning Commission can then begin the planning process again.



## Implementation Program

Implementation approaches to the goals and recommendations of this plan fall into two broad categories: strategies and policies. Strategies are concrete actions or series of actions that can be taken to reach a stated objective, after which the work will be complete or will change to achieve a follow-up objective. Policies are adopted as ongoing efforts; a designated party within the township, most often within the government, takes responsibility for ensuring that these policies are applied in the day-to-day operation of the township.

This chapter first addresses strategies, establishing priorities and general timeframes, and then outlines policies and responsible parties. Complete Streets implementation strategies are broken out into a Complete Streets Strategy. A Zoning Plan then addresses necessary changes to the ordinance and map and establishes a framework for implementing those changes.

### Implementation Strategies

Objective	Strategy	Priority	Timeframe
<b>Administrative Objectives</b>			
Promote the preservation of natural features as defined in the Master Plan.	Establish a site plan review standard that specifically addresses the treatment of natural features in new development.		Near-term
Develop acceptable lot size standards based on soil conditions and limitations, water/sewer availability.	Incorporate lot size recommendations in the plan into the Zoning Ordinance. Work with the Macomb County Health Department to determine if further changes to standards are necessary.		Near-term
Understand the likely future fiscal needs of the township.	Conduct a study to estimate the fiscal needs of the township over the next 10-20 years based on anticipated population change and capital improvements.		Mid-term
<b>Community Facilities Objectives</b>			
Provide diverse recreation opportunities for residents and visitors of all ages.	Pursue grants to fund implementation of the adopted Recreation Master Plan.		Near-term/ long-term
Plan for recreational opportunities in conjunction with the township's portion of Macomb Orchard Trail.	Study the feasibility of phased park development on the township's Armada Ridge Road property.		Mid-term
Plan for park land in portions of the township where higher densities are planned and expected.	Develop criteria for acquisition of parkland in conjunction with arrival and expansion of the sewer district and corresponding rezoning.		Long-term



Objective	Strategy	Priority	Timeframe
<b>Commercial &amp; Industrial Areas Objectives</b>			
Develop planned industrial areas in both school districts that provide opportunities for all types and sizes of industrial development.	This plan identifies the existing industrial park as well as new land to be rezoned industrial as water/sewer capacity grows and road capacity is upgraded. The Planning Commission should develop criteria for triggering this rezoning.		Long-term
Ensure quality industrial development that is well-harmonized with neighboring development and support industrial property values.	Establish industrial development standards based on the recommendations in this plan and incorporate them into the Zoning Ordinance.		Near-term
Ensure that future commercial and industrial development in the township reflects a sense of quality as well as the township's rural and agricultural heritage.	Develop design guidelines that govern the appearance of development and establish a feel that respects the township's rural heritage based on the framework elements established in this plan. Consider a Rural Character Design Overlay for the 32 Mile and North Avenue corridors.		Near-term
<b>Environmental Objectives</b>			
Preserve the valuable and distinctive natural features of the township as new development occurs.	Produce a development guide promoting the township's Open Space and Farmland Communities option.		Near-term
	Identify best management practices and incorporate them as appropriate into the township ordinances.		Mid-term
<b>Infrastructure Objectives</b>			
Allow for appropriately timed and economically beneficial extension of infrastructure.	Develop sewer and water master plans for appropriate pipe sizing, flow rate, location, design, and other factors.		Mid-term
	Conduct a cost/benefit analysis to determine the long-term economic feasibility of infrastructure extensions.		Mid-term
<b>Residential Area Objectives</b>			
Shore up future population levels.	Market the township as a family-friendly place with excellent schools and amend ordinances to allow for diverse housing options to attract young families to live here.		Near-term
Accommodate the township's growing senior population.	Enable residential retrofits for accessibility and plan for a diversity of housing styles.		Near-term

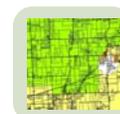
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## Complete Streets Strategy

The township's goal is to provide safe, efficient and well-maintained roadways that accommodate all modes of transportation throughout the township. These Complete Streets implementation strategies offer several methods for working toward this goal.

Objective	Strategy	Priority	Timeframe
Determine how best to apply Complete Streets principles in different areas of the township.	Identify road types and develop a set of standards for non-motorized accommodations on each type.		Near-term
Ensure equal access for all users in new developments.	Develop Complete Streets guidelines for new developments.		Near-term
Plan for the long-term accommodation of all road users.	Develop guidelines for the rebuilding of existing roadways in a manner that accommodates all users and modes.		Mid-term
	Set traffic volume thresholds for the addition of paved shoulders, shared lane markings, bike lanes, off-street paths, lighted crossings, and other non-motorized accommodations.		Mid-to-Long-term
Educate about common dangers of rural roads (high speeds, animal-vehicle conflicts), and road users' duty to share.	Produce small info sheets to distribute at the Township Hall and to driver's education students in the township.		Near-term
Decrease the potential for conflicts on township roads.	Work with the Macomb County Road Commission and Michigan Deer Crash Coalition to improve warning signage for large animals.		Near-term
	Introduce speed-calming measures on Macomb Orchard Trail at road crossings; improve signage and striping on the roads.		Near-term
Increase safety on township roads for bicyclists.	Establish bike routes marked with signs to focus bicycle travel onto the most appropriate roads.		Mid-term
Establish a Wolcott Mill Metropark-Macomb Orchard Trail link.	Study ways to improve safety on the route proposed in the Macomb County Non-Motorized Plan.		Near-term
	Seek possible alternative routes for a connector, including consideration of a non-street greenway.		Near-term
Develop greenway corridors.	Study the most feasible routes for future greenway corridors, considering connections to other non-motorized facilities.		Mid-term
	Establish a public engagement process to study routes and secure buy-in from owners whose property falls along potential routes.		Mid-term



## Policies

Some of the objectives established in this plan are essentially ongoing strategies and policy goals to be employed by township staff, officials, and appointees. These policies are outlined below.

Policy	Department
<b>Preserving Agriculture</b>	
Continue participating in the Purchase of Development Rights (PDR) program and actively promote the purchase of farmland rights.	
Promote the State of Michigan’s Generally Accepted Agricultural Management Practices (GAAMPs).	
Promote enrollment in the Michigan Farmland Preservation Program.	
<b>Environment and Open Space</b>	
Work within the context of the Clinton River Watershed Sub-groups to educate residents of the benefits of environmental preservation.	
Collaborate with the Macomb County Public Works Office to minimize channelizing and clear cutting and preserve county drains and recognized streams and rivers in their natural state.	
<b>Community Facilities</b>	
Pursue recreation grants through the State of Michigan, foundations, and other private entities for the continued development of parks on current township property.	

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## Zoning Plan

The Zoning Plan shows how the township’s long-range land use plan will be implemented through changes to the Zoning Ordinance and map. The table at right shows how the land uses of the Future Land Use map generally align with the township’s existing zoning districts. Several new districts will be needed over the long-term. The text below outlines and prioritizes Zoning Ordinance amendments.

Land Use	Zoning District
Rural Residential	AG
Single Family	R-1
Flexible Residential	R-1/RM/no equivalent
Commercial	B-1
Industrial	M-1
Mixed Use	No equivalent
Flexible Development	R-1 + RM + B-1
Public	No equivalent
Utility	No equivalent

### Establishment of New Zoning Districts

The Future Land Use map establishes several new land use classifications. However, many of these classifications cannot be appropriately implemented as new zoning districts until the provision of water and sewer. Therefore, prior to the arrival of water and sewer service, two stages of work must be completed:

1. Development and adoption of standards for each new zoning district. Standards should be based on the framework elements set forth in this plan.
2. Development of an administrative procedure for rezoning in concert with extension of utilities. Such a procedure should establish clear standards for when such a rezoning will take place.

### Design Guidelines and Standards

Using the framework elements in this plan as a starting point, the township should develop and adopt design guidelines and standards for future commercial, mixed use, and industrial development that reflect the community’s rural heritage. Further, the updated industrial development standards discussed in this plan should be adopted into the Zoning Ordinance.

### The Environment and Open Space

Develop further provisions for the preservation of environmental features and open spaces.

### Manufactured Housing

The criteria for locating manufactured housing outlined in this plan should be incorporated into Article XI Land Lease Development of the Zoning Ordinance.

### Administration and Enforcement

Strengthen application requirements for site plans, including establishing a Development Impact Statement requirement for rezonings and large developments.



# APPENDIX

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## **RESOLUTION OF ADOPTION**

### **Armada Township Master Plan Update By Armada Township Planning Commission**

**WHEREAS**, the Armada Township Planning Commission may adopt a Master Plan for the physical development of the Township, as empowered by the Michigan Planning Enabling Act of 2008, and

**WHEREAS**, the Township Board created the Planning Commission for the purposes stated in the Michigan Planning Enabling Act of 2008, and

**WHEREAS**, Armada Township has retained a professional planning and transportation consultant to assist the Planning Commission with the technical studies necessary to make the Master Plan Update for Armada Township, and

**WHEREAS**, the Armada Township Planning Commission has held a public hearing on its proposed Master Plan Update on November 7, 2015 at the Armada Township Hall,

**NOW THEREFORE BE IT RESOLVED** that the Armada Township Planning Commission hereby adopts this Master Plan Update for Armada Township, along with the text, maps, charts, graphs, and other descriptive materials contained in the Plan.

Motion by Abercrombie. Supported by DeCock.

**AYES:** Finlay, Wieske, DeCock, Kehrig, LeMieux, and Abercrombie

**NAYS:** None

**ABSENT:** Jabara

**RESOLUTION DECLARED ADOPTED THIS 8<sup>th</sup> DAY OF January 2015.**

---

**D.J. Kehrig, Chairperson**

**RESOLUTION OF ADOPTION**

**Armada Township Master Plan Update**

**By Armada Township Board**

**WHEREAS**, the Armada Township Board may adopt a Master Plan for the physical development of the Township, as empowered by the Michigan Planning Enabling Act of 2008, and

**WHEREAS**, the Armada Township Board created the Planning Commission for the purposes stated in the Michigan Planning Enabling Act of 2008, and

**WHEREAS**, Armada Township has retained a professional planning and transportation consultant to assist the Planning Commission with the technical studies necessary to update the Master Plan for Armada Township, and

**WHEREAS**, the Armada Planning Commission has held a public hearing on its proposed Master Plan Update on January 7, 2015 at the Armada Township Hall, and

**WHEREAS**, the Planning Commission has adopted the Master Plan Update on January 7, 2015 at the Armada Township Hall and transmitted the Plan to the Township Board for its approval,

**NOW THEREFORE BE IT RESOLVED** that the Armada Township Board hereby adopts this Master Plan Update for Armada Township, along with the text, maps, charts, graphs, and other descriptive materials contained in the Plan.

Motion by \_\_\_\_\_. Supported by \_\_\_\_\_.

**AYES:**

**NAYS:**

**ABSENT:**

**RESOLUTION DECLARED ADOPTED THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2015.**

---

Mary K. Swiacki, Township Clerk

## AFFIDAVIT OF PUBLICATION

48 West Huron Street • Pontiac, MI 48342

Armada Township  
Box 578

Armada, MI 48005  
Attention:

STATE OF MICHIGAN,  
COUNTY OF OAKLAND

*Debbie Phillips*

The undersigned Debbie Phillips, being duly sworn the he/she is the principal clerk of Armada Times, Voice Target, voicenews.com, published in the English language for the dissemination of local or transmitted news and intelligence of a general character, which are dully qualified newspapers, and the annexed hereto is a copy of certain order, notice, publication or advertisement of:

**NOTICE OF PUBLIC HEARING**  
**ARMADA TOWNSHIP MASTER PLAN UPDATE**  
Notice is hereby given that the Armada Township Planning Commission will hold a public hearing at 7:00 p.m. on January 7, 2015, at the Armada Township Hall, located at 23121 East Main Street, Armada, Michigan 48005. The purpose of the hearing is to receive public comments on the proposed Armada Township Master Plan Update, and amendment to the Township's Master Plan.  
The Master Plan Update includes text, illustrations and maps that describe the Planning Commission's proposal for the long-range future development of the community. The Master Plan amendment has been prepared under the authority vested in the Planning Commission by the Michigan Planning Enabling Act, Michigan Public Act 33 of 2008.  
A Master Plan is a long-range policy plan for land use that helps guide Township officials when making land use and development decisions. The Master Plan is not a zoning map and does not change the zoning of individual properties.  
A complete draft of the proposed Master Plan Update may be inspected prior to the hearing at the Township Hall. The draft Plan can also be viewed online at:  
<http://www.clearzoning.com/clearzoning-clients/armada-township/>  
Written comments may be sent to the Township prior to the hearing at 23121 East Main Street, P. O. Box 578, Armada, Michigan 48005. Oral comments will be taken during the public hearing.  
This notice is published pursuant to the requirements of Michigan Public Act 33 of 2008.  
Publish 12-17-2014

### Armada Township

#### Published in the following edition(s):

Voice Target	12/17/14
voicenews.com	12/17/14
Armada Times	12/17/14



Sworn to the subscribed before me this 17<sup>th</sup> December 2014

*Tina M. Crown*

Notary Public, State of Michigan  
Acting in County of Oakland

#### Advertisement Information

Client Id: 646821

Ad Id: 460797

PO: Master Plan Meet 1/7 Sales Person: 200305

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Publish December 17, 2014

