



Village of Armada, Michigan

Master Plan | 2012

RESOLUTION
VILLAGE OF ARMADA
PLANNING COMMISSION
MASTER PLAN

This is to certify

That at a regular meeting of the Village of Armada planning Commission,
consisting of a quorum or more of the Municipal body duly called and held
Nov. 5, 2012

The following resolution was adopted:

BE IT RESOLVED

That the Planning Commission has reviewed and prepared all changes,
additions, and/or deletions pertaining to the Master Plan of 2000, and being
satisfied that the information contained is thorough and complete.

BE IT FURTHER RESOLVED

The newly proposed plan shall be recognized as the Village of Armada
Master Plan of 2012

ATTEST



Ben Delecke, Chairman



Chris Sledz, Secretary

Motion by: Sledz
Support by: Shoemaker

MOTION CARRIED ☒ YES ☐ NO

Village of Armada, Michigan

Master Plan | 2012



Prepared by McKenna Associates
November 5, 2012

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Table of Contents

01

Existing Land Use Profile

1.0	Introduction.....	14
1.1	Community Character.....	14
1.2	General Pattern of Land Uses.....	14
1.3	Existing Land Use Inventory.....	17

02

Environmental Profile

2.0	Introduction.....	24
2.1	Soil Characteristics.....	24
2.2	Hydrological Features.....	25
2.3	Woodlands.....	26

03

Regional Analysis

3.0	Regional Location.....	30
3.1	Regional Plan Review.....	32

04

Socioeconomic Profile

4.0	Introduction.....	34
4.1	Historic Population Trends.....	34
4.2	Age-Life Cycle.....	35
4.3	Population Projections.....	36
4.4	Educational Attainment.....	37
4.5	Race & Ethnicity.....	38
4.6	Household Characteristics.....	38
4.7	Household Trends.....	40
4.8	Income.....	40
4.9	Employment Trends.....	42

05

Housing Profile

5.0	Introduction.....	44
5.1	Number of Housing Units.....	44
5.2	Recent Residential Construction Activity.....	44
5.3	Tenure.....	45
5.4	Age of Housing Stock.....	46
5.5	Housing Values.....	46
5.6	Housing Affordability.....	47

06

Goals, Objectives and Policies

6.0	Introduction.....	50
6.1	Planning & Growth Management.....	50
6.2	Residential Development.....	51
6.3	Commercial & Office Development.....	52
6.4	Industrial Development.....	53
6.5	Community Facilities.....	54
6.6	Summary.....	56

07

Residential Areas Plans

7.0	Introduction.....	56
7.1	Existing Housing Stock.....	56
7.2	Housing Unit Projections.....	56
7.3	Existing Sewer/Water Usage & Ultimate Demand Conditions.....	57
7.4	Recommendations for Village Residential Areas.....	57

08

Community Facilities Plan

8.0	Introduction.....	60
8.1	Community Facilities.....	60

09

Commercial Areas Plan

9.0	Introduction.....	70
9.1	Central Business District Land Use.....	70
9.2	Retail Ring Analysis.....	71
9.3	Village Retail Assessment.....	72
9.4	Armada Downtown Plan.....	74
9.5	Recommendations.....	74

10

Industrial Areas Plan

10.0	Introduction	78
10.1	Industrial Base Analysis.....	78
10.2	Emerging Industrial Sectors.....	79
10.3	Industrial Areas Plan.....	80

11

Transportation Plan

11.0	Introduction.....	86
11.1	Hierarchy.....	86
11.2	Village Street Pattern.....	88
11.3	Local Transportation Issues.....	88
11.4	Recommended Transportation Improvement Techniques.....	90
11.5	Traffic Calming.....	91
11.6	Complete Streets.....	92
11.7	Recommended Capital Improvements.....	92
11.8	Implementation.....	96

12

Future Land Use Plan & Boundary Expansion Strategy

12.0	Introduction.....	98
12.1	Establishment of the urban Growth Area Boundaries.....	99
12.2	Future Land Use of Urban Growth Area.....	100
12.3	Revisions to the Urban Growth Boundaries.....	100

13

Economic Development Strategies

13.0	Introduction.....	104
13.1	Existing Conditions.....	104
13.2	Proposed Industrial Park.....	105
13.3	Plan of Development Process.....	105
13.4	Organization of Village Economic Development Efforts.....	108
13.5	Analysis of Institutional Options.....	110
13.6	Sources of Funding.....	111
13.7	Action Plan.....	113

14

Implementation Tool Kit

14.0	Introduction.....	116
14.1	Public Policy & Administrative Action.....	116
14.2	Land Use Controls.....	118
14.3	Financial Planning & Capital Improvements Program.....	119
14.4	Special Purpose Funding District/Authorities.....	120
14.5	State & Federal Programs.....	122
14.6	Financing Tools.....	123

List of Maps

0.1	Existing Land Use Map.....	20, 21
0.2	Soil Characteristics Map.....	27
0.3	Environmental Features Map.....	28
0.4	Community Facilities Map.....	68
0.5	Transportation Plan Map.....	87
0.6	Future Land Use Map.....	101

List of Figures

1.0	Macomb County.....	30
9.2	Retail Ring Analysis.....	72
11.1	Traffic County Data.....	88

List of Tables

1.1	Existing Land Acreage 1998.....	19
4.1	Population Trends, 2000 - 2010.....	34
4.2	Age Life Cycle Distribution.....	35
4.3	Population Projections.....	36
4.4	Educational Attainment, 2000 - 2010.....	37
4.5	Comparative Racial / Ethnic Composition.....	38
4.6	Comparative Household Characteristics.....	39
4.7	Household Characteristics, 2000 - 2010.....	39
4.8	Comparative Persons per Household, 2000 - 2010.....	40
4.9	Household and Per Capita Income, 2000 - 2010.....	41
4.10	Comparative Household Income, 2000 - 2010.....	41
4.11	Employment by Industry, 2010.....	42
5.1	Housing Unit Change.....	44
5.2	Residential Construction Activity, Armada Township.....	44
5.3	Housing Occupancy Characteristics, 2010.....	45
5.4	Age of Dwellings, 2010.....	46
5.5	Comparative Distribution of Housing Values, 2010.....	47
5.6.1	Housing Cost as a percent of Household Income for Owner-Occupied Units.....	48
5.6.2	Housing Cost as a percent of Household Income for Renter-Occupied Units.....	48
7.1	Demographic Projections.....	56
7.2	Projected Residential Expansion within Single-Family Planned Development (SFPD) Areas.....	58
8.1	Existing Community Facilities.....	67
9.1	Existing Land Use Distribution, Central Business District.....	70
9.2	Retail Ring Analysis.....	71
9.3	Total Retail Spending & Retail Space Needs.....	73
10.1	Key Features of the Old, New Economy.....	79
12.1	On-going Long-Term Financial Benefits to Expansion.....	98
12.2	Future Land Use Acreage by Land Use Type.....	100
13.1	Current Businesses, 2012.....	104

01 | Existing Land Use Profile

1.0 Introduction

This chapter profiles the community character and existing land use pattern for the Village of Armada planning area. Development patterns, architectural styles, natural features, and local culture influence community character, which is also impacted by how streets are laid out, signs are designed, and buildings are placed. The existing land use pattern is shaped, in large part by market forces, local regulation, and lifestyle preferences.

1.1 Community Character

The Village's historic development pattern includes seven (7) traditional design features¹ that contribute to the charming small-town character of the community, as follows:

1. A well-defined edge of town.
2. A main street lined with stores, on-street parking, and all other parking in back.
3. Short streets and short blocks in a basic grid pattern.
4. Commercial, residential, and public uses on the same streets.
5. Houses of different types and sizes on the same blocks.
6. Small setback of buildings from the street.
7. Accessory apartments behind homes and above shops.

The character of the Village's built-environment is a feature that has attracted many of its residents. Conserving this character will be important to maintaining the satisfaction of current residents, and the success of local business enterprises. Sustaining the quality of local building and property maintenance will be important to protecting property values.

The surrounding Township of Armada remains largely rural and agricultural in character, despite recent growth in new residential development and lot divisions. This well-defined small town/rural agricultural transition reinforces the perception of the Village as the focal point and activity center for the surrounding townships.

1.2 General Pattern of Land Uses

Land inside the Village of Armada follows a compact development pattern comprised primarily of well-ordered residential subdivisions, small-scale commercial/office buildings, conveniently located civic and recreation uses, and limited industrial operations.

Inside the Village are four (4) distinctive sub areas: the Central Business District, the surrounding residential neighborhoods, an industrial area and a public center. For study purposes, land one (1) mile outside the Village boundary is included in this analysis. It forms a fifth distinctive area that will be referred to as the rural fringe area. Collectively, these five (5) areas make up the Village Planning Area.

¹ Ewing, Reid, Best Development Practices, PLanners Press, Chicago, IL, 1996.

Central Business District

The center of the Village intersects at Main Street and Fulton Street. Extending one and a half blocks east, and a half block to the west of this point along Main Street is the Village Central Business District (CBD). The first block to the east is comprised primarily of ground level specialty stores, offices, and eating establishments. The upper level of many structures along this block support private residences.

The commonly attached buildings vary in elevation and front the sidewalk forming a traditional downtown friendly to the pedestrian shopper. On-street parking is provided with spaces angled at 45 degrees. Private access and parking is also provided in back of the buildings. Architectural detail is pronounced mainly along building edges and entrances. Many of the building facades have been improved through paint and brick restoration. These and other enhancement activities project a vital, positive image to the

casual observer. A mix of office, convenience commercial, and residential uses are found one-half block west of the Fulton Street and Main Street intersection.

The second half block to the east supports an office building, a gas station with convenience store, and the Armada Township offices. The Armada Village Municipal Office, Police Station and United States Post Office are located just north of this location on Burk Street, forming a political/public center.

In 2003, the Village Planning Commission adopted a Downtown Plan that included specific recommendations designed to enhance the downtown appearance and promote downtown businesses. In 2004, the Village Downtown Development Authority and Village Council adopted a new Development Plan/Tax Increment Financing Plan to implement a range of public improvements in the CBD.



Residential Neighborhoods

The housing stock in the Village of Armada is diverse in character and age. Properties within the Village are generally well maintained, with many older homes being improved and renovated. The Armada Meadows subdivision development just south of the Armada Fairgrounds has added more than one hundred new single-family homes to the Village. In addition, a small number of homes are being constructed inside established neighborhoods.

Park and recreation facilities are well integrated into existing Village residential neighborhoods. The Armada Village Memorial Park, occupying a corner lot northeast of the Fulton Street and Prospect Avenue intersection, stands as a local landmark and play area for small children. Parkland is also found two (2) blocks east behind the old elementary school. Dorothy Maas Park does exist but has no amenities.

Public Center

The public center can be characterized as containing a mix of public facilities that include the Armada Fairgrounds, schools, municipal buildings, and quasi-public uses. Its general area encompasses land in the northeast corner of the Village, an area just north of the Village in proximity to the North Avenue and Armada Center Road intersection.

The Armada Fairgrounds, a privately owned facility, occupies approximately 20 acres of land. The Fairgrounds is a prominent landmark in the Village that serves the surrounding region. It fosters a festive atmosphere during the summer that strengthens the local sense of community.

The Armada elementary, middle, and high schools form an educational complex that serves area residents. The recently constructed elementary school was designed to accommodate an increase in student capacity by approximately 29 percent. This project was prompted by an increasing number of school-aged children in the community.

The Armada Township Fire Department is located just west of the educational complex. The Armada Township Park occupies the rear of the property. It is used for active recreational purposes (soccer fields and ball diamonds).

Along North Avenue, just north of Armada Center Road are two quasi-public uses. On the east side is the Armada Senior Center and to the west is the American Veterans Post 93. Ball diamonds are also found on the American Veterans property.

Rural Fringe Area

The demand for large lot residential development has resulted in the increasing reduction of agricultural land in the rural fringe area. However, a large number of farmsteads and cultivated lands continue to exist, taking advantage of the productive soil. In fact, agricultural land represents the largest category of existing land use within the planning area boundary.

With respect to residential development, the majority has occurred along county section line roads. Recently constructed homes are typically sited on large lots with a deep setback from the road right-of-way. This type of residential development can be categorized as rural estates.

1.3 Existing Land Use Inventory

In 1998, a field survey was conducted to gather existing land use data. Each parcel of property in the Village of Armada and one mile outside its boundary was inspected and recorded on aerial composite photographs (provided by the Macomb County Department of Planning and Economic Development). The land use data was transferred from the field survey notes to a digital format. This information is displayed on a property line base map of the Village of Armada Planning Study Area.

2012 Update Notes

In 2012, the existing land use information was reviewed, with a determination that only minor changes had occurred within the current Village boundaries. The most significant is the build-out of the Armada Meadow Subdivision at the east side of the Village, south of Main Street.

The other significant change is the addition of a new 7,500 square foot medical/dental office building on the north side of Main Street west of the downtown area was completed 2005. The Village Rehabilitation & Care Community was constructed on the west end of Main Street and was added to the Fair Acres Care Community. The Armada Corners Building (corner of Burk and Main Street), also a new construction, was completed in 2011.

While some lots in the Township's rural fringe area have been converted from agricultural to residential uses, the overall pattern of existing land uses has not significantly changed from the 1998 data.

The following defines the land use classifications used to categorize existing land uses and describes the distribution of those uses. The Existing Land Use Map provides a graphical representation of this information. Table 1.1 summarizes the distribution of existing land use coverage for the Village of Armada.

The land use classification system used for this analysis is a derivative of the Michigan Land Cover/Use Classification System that was developed by the Michigan Department of Natural Resources for use in statewide current use inventories.

Single-Family Residential

This category includes detached and attached single-family residential dwellings. Areas designated single-family include associated maintained yards, as well as accessory structures such as garages.

Single-family residential uses represent the largest developed land use inside the Village of Armada Planning Area. Roughly one-third (33%) or approximately 156.8 acres of the land area inside the current Village boundaries is used for single-family housing.

Two-Family Residential

This classification includes all two-family dwelling units and any accessory structures, as well as the maintained yards. Two-family residential units occupy approximately 1.1 acres, or 0.2 percent of the land area inside the Village. This use is confined to the Village, within the existing residential neighborhoods.

Multiple-Family Residential

This land use category encompasses residential structures that house three or more dwelling units. Multiple-family residential units absorb approximately 8.4 acres of land, or 1.8 percent of the Village land area. This type of development is found on the west side of S. Fulton Street, and as second floor apartments in the Central Business District. Examples of this type of use are the Oakview Manor Apartments and Windmill Pointe Apartments.

Office

The office category includes business, medical, dental and other professional service offices, and related service establishments. This use occupies approximately 1.3 acres, or less than one percent (1%) of the Village land area. A new 2.04-acre medical/dental office development on the north side of W. Main Street adjacent to East Branch of the Coon Creek was completed in 2004. Financial and banking services, insurance offices, and dental offices are examples of office uses found inside the Village primarily within the CBD.



*No significant changes to land use were made in 2012.

Commercial

This category includes land occupied by retail and service facilities, including related off-street parking areas, that accommodate convenience shopping and service needs. Included in this category are food and drug stores, eating and drinking establishments, personal services such as barber shops. Other units include apparel stores, furniture and appliance stores, antiques, sporting equipment, general merchandise outlets, etc.

Commercial uses cover approximately 6.9 acres, or 1.5% percent of the Village's total land area. Included uses are found in the Village Plaza, located on the south side of W Main Street, just west of Fulton Street.

Existing Land Acreage 1998*

Table 1.1

Land Use Category	Village of Armada	
	Acres	Percent
Single-Family Residential	156.8	33.3%
Two-Family Residential	1.1	0.2%
Multiple-Family Residential	8.4	1.8%
Office	1.3	0.3%
Commercial	6.9	1.5%
Public, Quasi-Public, Schools and Institutional, Recreation and Parks	44.2	9.4%
Industrial	14.1	3%
Agriculture	0	0%
Rights-of-way, Open Space, Other	237.4	50.5%
Total	470.2	100.0%

Source: August 1998 field survey by Wade-Trim



Public, Quasi-Public, Institutional, Recreation, and Parks

This category includes all land devoted to public purposes such as municipal offices, police and fire departments, department of public works, sewage and water treatment facilities, libraries, etc.; structures or areas generally open to the public such as churches, meeting halls, auditoriums, and other comparable uses; lands used for educational and related purposes; and these land uses comprise approximately 44.2 acres, or 9.4 percent of the Village's total land area.

The United States Post Office, the Village of Armada Municipal Building, and Village of Armada Wastewater Treatment Plant are examples of public uses. Examples of quasi-public uses are the Congregational United Church of Christ, the Armada Lions Club, the Armada Fairgrounds, and the Armada Senior Center. The majority of land used for schools (51.8 acres) is found just outside the northeast corner of the current Village boundaries.

Map 0.1

Existing Land Use Map

Village of Armada, Macomb County, Michigan



Data Source: 1998 Field Survey by Wade Trim
Date: 06.28.12

- | | |
|-----------------------------|---------------------------|
| Village Boundary | Public |
| Single Family Residential | Quasi-Public |
| Two-Family Residential | Schools and Institutional |
| Multiple-Family Residential | Recreation and Parks |
| Office | Agricultural |
| Commercial | Vacant |
| Industrial | |

0 500 1,000
Feet



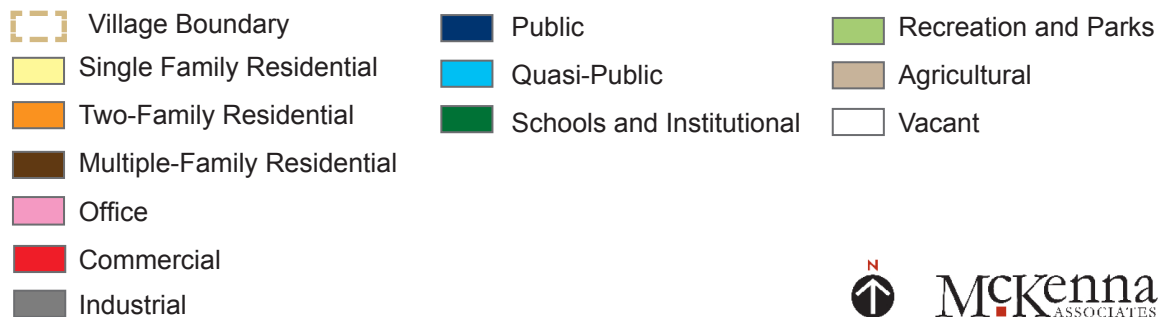
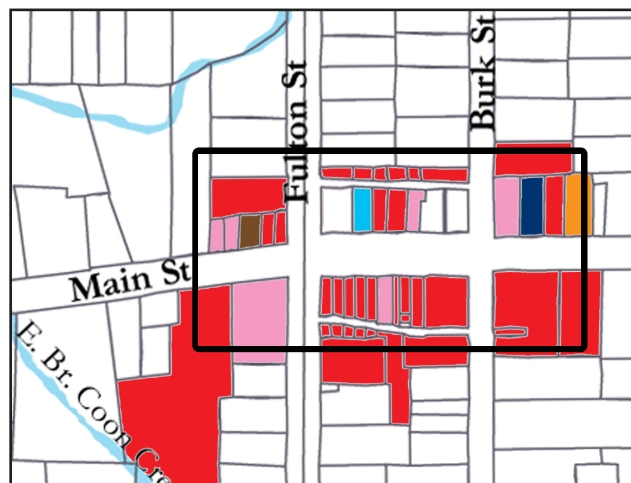
Existing Land Use | Downtown Corridor

Village of Armada, Macomb County, Michigan

Second Floor



First Floor



McKenna
ASSOCIATES

Data Source: 1998 Field Survey by Wade Trim Base map, Macomb County 2004

Date: 06.20.12

The Armada Village Memorial Park represents the primary recreation and park use inside the Village. It occupies approximately 1.0 acres of land. It is important to note that although recreation and park facilities do exist as a subordinate use on the old elementary school property, this property is classified according to its primary use. Recreation and parkland accounts for 17.3 acres inside the total planning area. Dorothy Maas Park does exist but has no amenities.

Industrial

The industrial land use category includes areas with or without buildings where raw or semi-finished materials are fabricated and lands used for storing raw materials for production. This category includes warehouses, processing facilities, and manufacturing facilities as well as non-manufacturing uses that are industrial in nature such as collision shops.

Industrial uses cover 23.3 acres of land in the total planning area. Approximately 14.1 acres, or 3.0 percent of the Village land area is used for industrial purposes. In the rural fringe area, approximately 9.2 acres of land, is occupied by industrial uses.

Agriculture

The agriculture category includes lands under cultivation, tree farms, orchards, and horse farms. Agriculture represents the largest land use category, accounting for 2,437.9 acres, or 57.6 percent of the total planning area. This land use is found outside the Village in the rural fringe area.

Rights-of-Way, Open Space, and Other

All dedicated rights-of-way (highways, roads, and major utility easements) are included in this category. Also included are lands lying fallow, woodlands, water bodies, and vacant land for which no specific use was identified. Land in this category account for 1,502.4 acres, or 31.9 percent of the total planning area.

02 | Environmental Profile

2.0 Introduction

This chapter profiles the environmental features of the Village of Armada Planning Area that may impact the location and intensity of future land uses. The natural features inventoried in this chapter are soils, hydrological features, and woodlands. From these inventories, those portions of the planning area most suitable for development will be identified, as well as those lands that should remain undeveloped to preserve existing agricultural or recreational uses or conserve wetlands, woodlands, or other natural features.

2.1 Soil Characteristics

There are two soil associations present in the Village of Armada Planning Area. The following briefly describes the general characteristics of each soil association as reported in the *Soil Survey of Macomb County*, prepared by the U.S. Soil Conservation Service (SCS).

The Conover-Parkhill-Locke soil association covers the vast majority of the Planning Study Area with the exception being a narrow band extending along Armada Ridge Road. This association is considered to be nearly level to gently sloping and somewhat poorly drained.

The Oakville-Boyer-Spinks soil association fills in the remaining portion along Armada Ridge Road. This association is considered to be nearly level to hilly, well-drained soils that have a moderately fine textured to moderately coarse textured throughout.

Prime Farmland and Hydric Soil

The characteristics of specific soil series within these associations define the capacity of the land to support certain types of uses. Soils most suitable for development purposes are well drained and not subject to a high water table. Adequate drainage is important to minimize storm water impacts and to ensure the efficient operation of septic drain fields. Adequate depth to the water table is necessary to prevent water contamination from septic systems. A high water table also may limit the construction of basements. Though civil engineering techniques can be employed to improve drainage and maintain adequate separation from the water table, such techniques are expensive to construct and maintain.

The Soil Characteristics Map shows soils that are considered to be hydric by the Soil Conservation Service. Hydric soils are primarily found outside the Village of Armada along Cemetery Creek and East Branch Coon Creek. They are also randomly found in large patches in the rural fringe area.

Soils also play an important role in the food supply system. The SCS has identified soils that are well or uniquely suited to crop production. When considering future land use decisions, it is important to consider the value of certain soils for agricultural purposes. Once a soil is developed or used for a non-agricultural purpose, it is permanently altered and its utility for agricultural production is greatly diminished, if not destroyed. Although the agricultural industry is in decline, development that threatens this non-renewable resource should be carefully considered.

Areas that are considered prime for agricultural use are depicted on the Soil Characteristics Map. Prime farmland is defined by the U.S. Department of Agriculture as *“land that has the best combination of physical and chemical characteristics for producing food, forage, fiber, and oil seed crops. It could be cropland, pasture, range, forest, or other land but it does not include urban or built-up land or water areas. The soil qualities, growing season, and moisture supply are those needed for well managed soil to produce sustained yields.”*¹

2.2 Hydrological Features

The Village of Armada Planning Area hydrological features include ponds, drainage courses, and wetlands. The location of these hydrological features is depicted on the Environmental Features Map.



Surface Drainage

The east branch of Coon Creek generally bisects the Village of Armada. From this creek flow Woodbeck and Jacobs Drains to the west. Flowing along the eastern edge of the Planning Area inside Richmond Township is Cemetery Creek. A small segment of the Armada and Ray Drain is also found outside the Village in the southwestern quarter of Section 26.

The Environmental Features Map shows floodway information identified by the Federal Emergency Management Agency for the Village of Armada. Floodways exist along and near East Branch Coon Creek and Woodbeck Drain.

The Soil Erosion and Sedimentation Control Act, (Public Act 347 of 1972 as amended), protects lakes and streams from sedimentation. The Act requires a permit for any new construction within 500 feet of a lake or stream or any major construction that will open up more than one (1) acre of land.

Wetlands

Wetlands are complex ecological systems that function in a number of beneficial ways. Wetlands reduce flood hazards by providing additional storm water storage. Wetlands that overlay groundwater recharge areas improve groundwater quality by filtering the water as it percolates through the soil. Wetlands located along a watercourse protect surface water quality by filtering surface water run-off. Finally, wetlands are highly productive ecosystems that provide an essential habitat to much of Michigan's fish and wildlife at sometime in their life cycle.

Wetlands are limited to a linear stretch found along East Branch of Coon Creek. The Environmental Features Map depicts the location of wetlands in the Village of Armada Planning Area based upon Michigan Resource Information System (MIRIS) data.

¹ Soil Conservation Service, Michigan 1991, Technical Guide Section II, Cropland Interpretations-3

The Goemaere-Anderson Wetland Protection Act, (Public Act 203 of 1979, as amended), was enacted to protect wetlands by restricting their use to certain activities (such as fishing, farming, among others) while permitting other activities only after permission and approval by the Michigan Department of Environmental Quality (MDEQ). Permits are approved based on a review of an environmental assessment filed by the petitioner and upon the finding that the activity is in the public interest. Under the Wetland Protection Act, the following wetlands are protected:

- Those that are contiguous to an inland lake, pond, river, stream or similar natural watercourses, or one of the Great Lakes; and,
- Those that are five (5) acres or larger in area and located in counties which contain a population of at least 100,000 people.

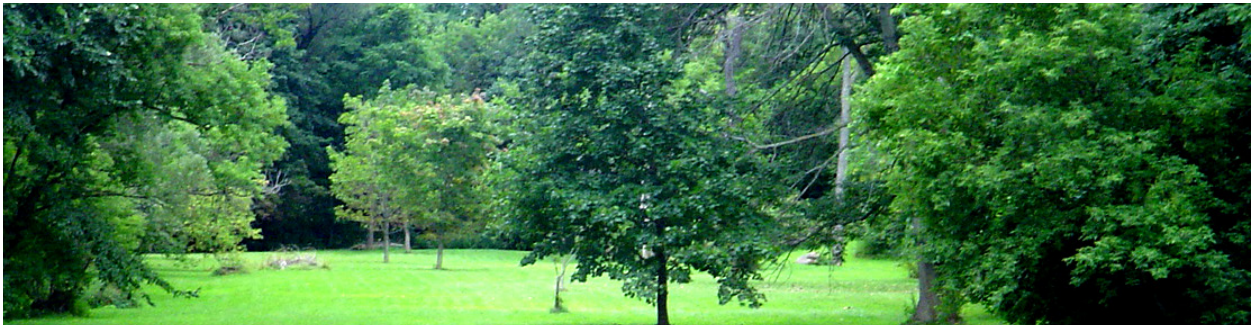
Development within wetland areas should be avoided. The filling of wetlands as part of development plans should also be avoided, or at least minimized. Ideally, structures should be set back from wetlands and a natural vegetative buffer strip maintained within the setback area.

2.3 Woodlands

Woodlands in the Village of Armada Planning Area were also mapped using MIRIS data. The Environmental Features Map depicts the location of woodlots. As depicted on the map, large tracts of woodland cover the rural fringe area. Additional woodlots are also found inside the southern portion of the Village.

Woodland areas are complex ecological systems and, consequently, provide multiple benefits to the environment and its wildlife and human inhabitants. Woodlands play a role in flood protection by slowing the flow of surface run-off to allow for greater storm water infiltration. Woodlands also reduce air pollutants by absorbing certain airborne pollutants. In addition to providing wildlife habitats, forest vegetation moderates the effects of winds and temperatures while stabilizing and enriching the soil. For human inhabitants, forested areas offer a visual and audio barrier that is considered aesthetically pleasing and offer unique opportunities for recreation and relaxation.

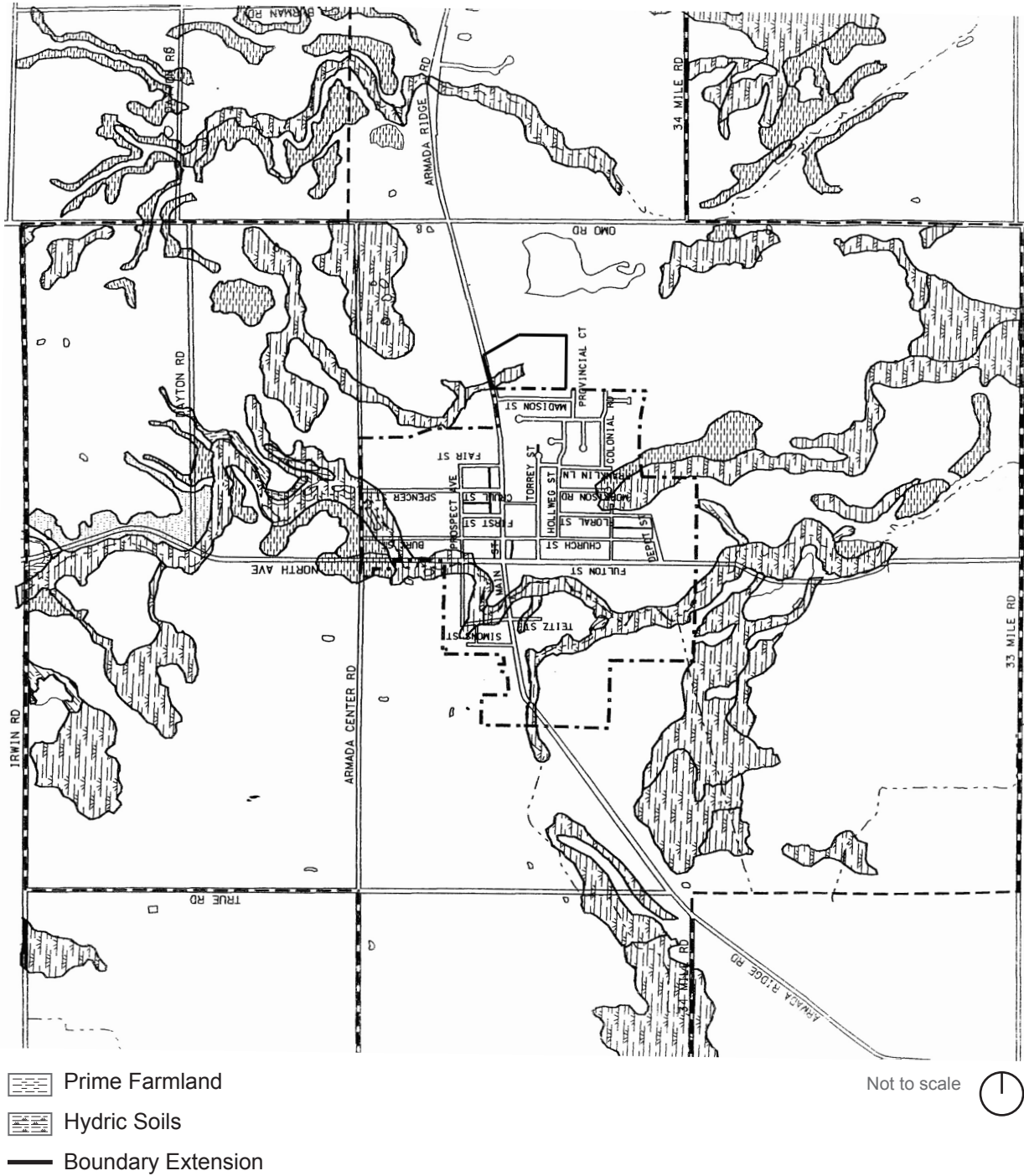
Woodland resources contribute greatly to the planning areas environmental quality. The conservation of woodlots will play a positive role in maintaining and enhancing the future environmental character of the community. Woodland areas should be conserved, as possible. Trees that are removed through development actions should be replaced. Of special concern is the fragmentation of woodland areas that tends to occur with parcel divisions in and adjacent to wooded areas.



Map 0.2

Soil Characteristics

Village of Armada, Macomb County, Michigan



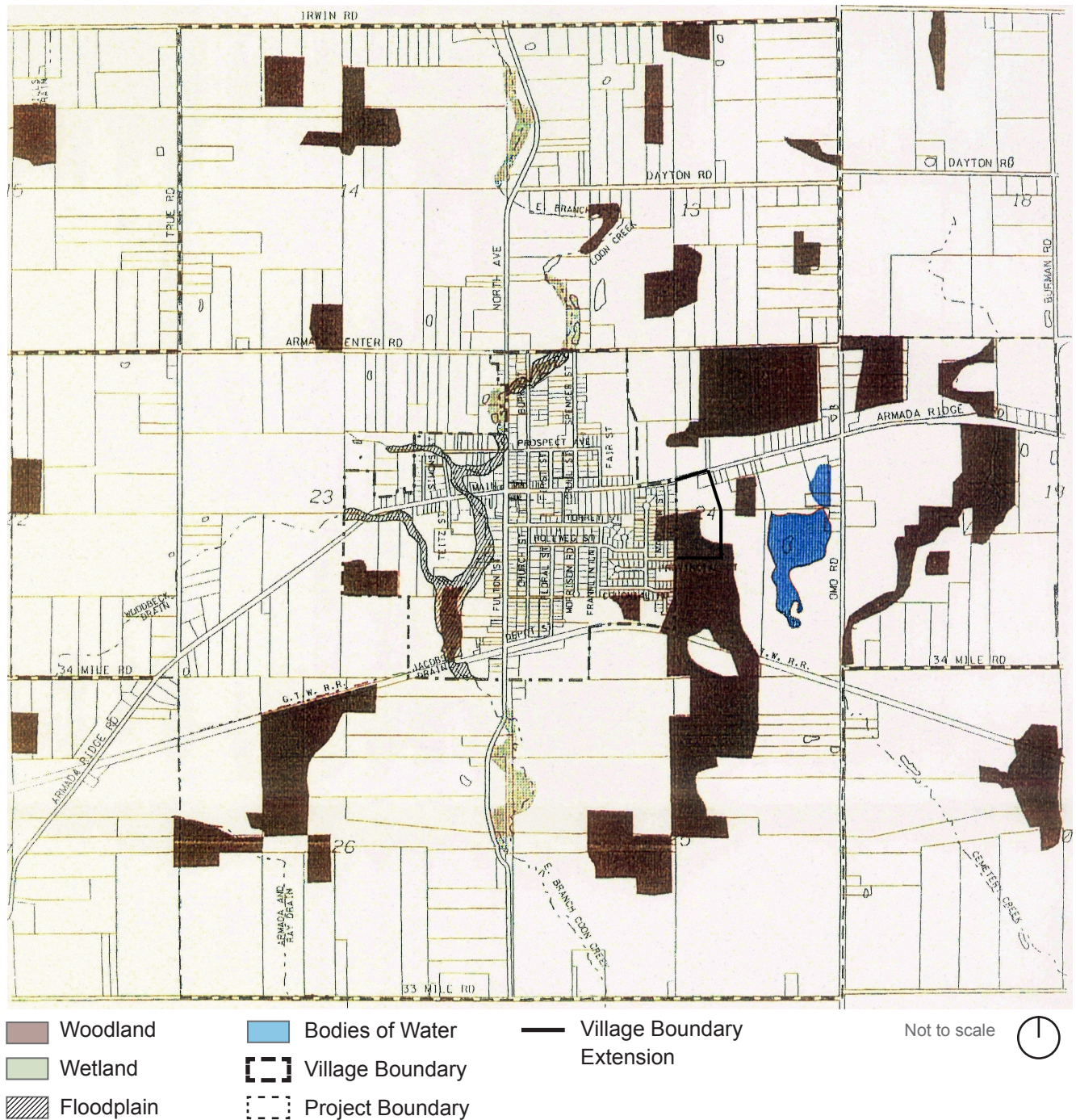
Compiled by: Wade-Trim

Source: Base map, Macomb County Department of Planning & Economic Development Composite Aerials.

Map 0.3

Environmental Features Map

Village of Armada, Macomb County, Michigan



Compiled by: Wade-Trim

Source: Base map, Macomb County Planning Department Composite Aerials

Date: 10.13.99

03 | Regional Analysis

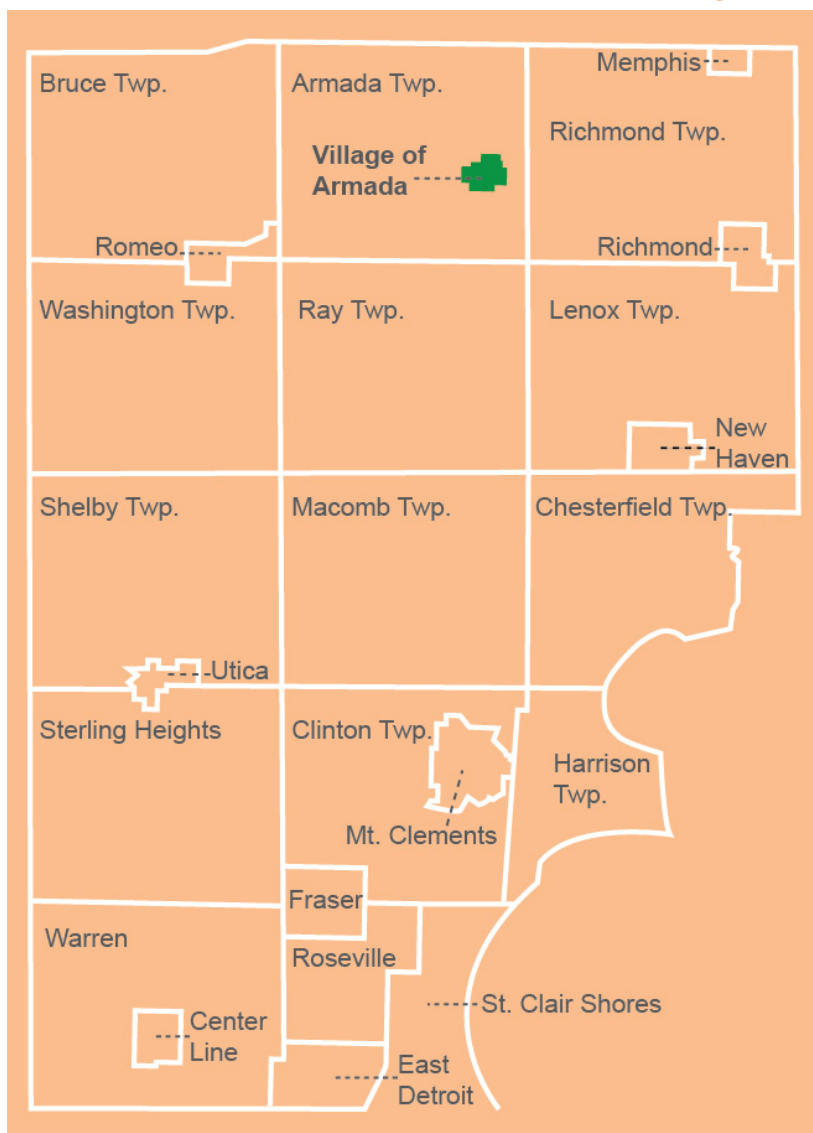
3.0 Regional Location

The Village of Armada is located in the north central portion of Macomb County, approximately 37 miles north of the City of Detroit, 17 miles northeast of the City of Pontiac, 15 miles west of the City of St. Clair, and 36 miles southeast of the City of Flint. Figure 1 shows the Village's relative location in Macomb County.

The Village of Armada is approximately six miles west of M-19, which leads to I-69 to the north, and I-94 to the south. Interstates 69 and 94 provide residents with direct access to the City of Detroit, City of Port Huron, and the City of Flint, as well as to communities on the west side of the state. The Village is approximately seven miles east of M-53, which also leads to I-69 to the north, and M-59 to the south. M-59 traverses through the City of Pontiac and intersects with Interstate 75, giving additional access to the Detroit metropolitan area.

Macomb County

Figure 1-0



3.1 Regional Plan Review

The adopted plans of surrounding communities and regional planning agencies may directly impact the future development of the Village of Armada. Therefore, it is important to recognize such plans and to evaluate their importance to the development of the Village Master Plan.

The Village of Armada is entirely surrounded by Armada Township, and is located in close proximity, approximately a half mile west, of Richmond Township. The following summarizes the Future Land Use plans for both Armada Township and Richmond Township.

Armada Township

Armada Township adopted an updated Master Plan in 2004, which was prepared with the assistance of planning consultants from Community Planning and Management, P.C. The updated Armada Township Master Plan designates most of the Township land area north and east of the Village for rural residential and single-family residential uses.

Three areas of land near the Village are designated for future commercial development:

1. **Armada Center Road** - A commercial corridor is planned along Fulton Street/North Avenue from the northern Village boundary north across Armada Center Road and extending up past the Achatz Handmade Pie Co. building to the parcel on the southeast corner of North Avenue and Dayton Road.
2. **North Avenue** - A second commercial corridor is planned along the road frontage of the parcels located on the west side of North Avenue, south of the Village boundary to the east-west utility corridor north of 33 Mile Road.
3. **32 Mile Road** - Commercial nodes are planned at most of the major road intersection along 32 Mile Road at the southern border of Armada Township, including the intersection of 32 Mile Road and North Avenue.

These areas represent an expansion of planned commercial land uses outside of the Village's downtown area from that designated on the previous Township Master Plan (1991). However, with the exception of the above mentioned areas, the Township Plan and policies express support for the preservation and improvement of the Armada Village Central Business District.

An area in the southwest portion of the Township adjacent to the Village of Romeo and in close proximity to the Romeo Ford Plant is planned to hold the majority of land designated for industrial development. The remaining future land use categories within the Township are public or quasi-public lands and utilities. Areas set aside for utilities include the gas storage fields in the southeast portion of the Township and the Detroit Edison Sub-Station along 32 Mile Road. Other public/quasi-public lands designated within the Township include the existing school sites, Township Park north of the Village, and Amvets Hall and baseball diamond.

Township Water/Sewer Services

The Township Master Plan anticipates the future provision of public water (a water line was completed from the DWSD main to a 16" outlet at Powell Road in 2011) and sanitary sewer services to the planned industrial area on Powell Road, along the 32 Mile Road corridor to North Avenue, and up the North Avenue corridor to the southern boundary of the Village. It is anticipated that large-scale extension of these public utility services beyond the existing Township industrial activity node on Powell Road at the southwest corner of the Township will substantially increase development pressures along the still rural 32 Mile Road corridor. This induced development may adversely impact Village plans for limited growth and preservation of rural character.

32 Mile Road Corridor Study

Development policies include retaining the Village of Armada central business district as the retail focal point in the area and evaluating future proposals for their impact on the Village. If commercial development is to occur in the Township, it should be located in close proximity to the Village or be clustered at intersection locations along 32 Mile Road. Future development policies for the corridor also call for the evaluation of new construction and its impact on the residential and agricultural character of the area and the impact on neighboring uses.

Richmond Township

Richmond Township borders Armada Township to the east. It is approximately one-half mile east of the Armada Village limits. The Richmond Township Future Land Use Map indicates that the majority of land bordering Armada Township along Omo Road is planned for agricultural and low density, single-family residential uses, with a small area of commercial development planned for the intersection of Armada Ridge and Omo Roads.

Southeast Michigan Council of Governments (SEMCOG)

SEMCOG is a regional planning partnership, accountable to member local governments in Southeast Michigan. Its primary missions are: 1) planning on issues that extend beyond individual government boundaries; and, 2) intergovernmental relations in cooperation with local government, as well as state and federal agencies. The SEMCOG partnership strengthens efficient and effective local government, supporting local planning through its technical, data and intergovernmental resources.¹ Members of SEMCOG include cities, villages, townships, counties, school districts, and community colleges within the seven-county area that includes Livingston, Monroe, Macomb, Oakland, St. Clair, Washtenaw, and Wayne. The Village of Armada is currently not a member of SEMCOG.

Continued growth in the communities surrounding the Village may impact future plans for the Village in terms of transportation, utilities, land use, and public facilities including schools. Improvements, widening, and construction of new roadways in the County will impact future development within the Village and the surrounding Armada Township by bringing urbanization closer to the Village boundaries. The proposed improvements to transportation may also make the Village more accessible, attracting additional development.

¹ Southeastern Michigan Council of Governments (SEMCOG) website; <http://www.semCog.org>.

04 | Socioeconomic Profile

4.0 Introduction

Demographic characteristics and trends from various sources have been analyzed as part of the master plan update process. The Village of Armada's population characteristics have been compared with those of neighboring communities and with County totals to gain insight and perspective concerning the Village's past, present and future.

In this section, a number of different aspects of the Village of Armada's residents have been analyzed, including: population estimates, household size, age and occupational characteristics. Data was collected from the Southeast Michigan Council of Governments (SEMCOG), the United States Census Bureau, Macomb County, and other sources.

4.1 Historic Population Trends

Understanding the historic changes in the Village and its residents provides an important base for understanding how the Village will evolve in the coming years. Demographic analysis is essential to determine what physical, social and economic changes may occur in the future. These projections will provide the basis for creating alternative and, ultimately, final land use recommendations which are in keeping with the demographic characteristics of the community and at the same time meeting the goals and objectives established by the Village.

Data on the population trends of the Village of Armada and its surrounding communities was collected and compared with that of Macomb County and the State of Michigan (Table 4.1).

For the period between 2000 and 2010, the rate of population growth of Macomb County surpassed that of the State by nearly 7.0 percent.

Population Trends, 2000 - 2010

Table 4.1

Place	2000	2010	Change 2000 - 2010	
			Number	Percent
Village of Armada	1,573	1,730	157	10.0%
Armada Twp. (w/o Village of Armada)	3,673	3,649	-24	-0.7%
Bruce Twp.	6,395	6,947	552	8.6%
Lenox Twp.	5,362	5,828	466	8.7%
Ray Twp.	3,740	3,739	-1	0.0%
Village of Romeo	3,721	3,596	-125	-3.4%
City of Richmond	4,896	5,733	837	17.1%
Richmond Twp.	3,416	3,665	249	7.3%
Washington Twp.	17,122	23,296	6,174	36.1%
Macomb County	788,149	840,978	52,829	6.7%
Michigan	9,938,823	9,883,640	-55,183	-0.5%

Sources: 2000 and 2010 US Census, General Population Characteristics, SEMCOG

Table 4.1 indicates the 2010 population of the Village as estimated by the Census Bureau is 1,730 people, an increase of 157 or 10.0 percent from the 2000 Census. This growth rate is higher than the majority of surrounding communities and is greater than the percentage of growth for Macomb County, which grew at a 6.7 percent between 2000 and 2010. Washington Township and the City of Richmond and recorded the highest rate of population growth (36.1 and 17.1 percent respectively) for the 10 -year period.

4.2 Age-Life Cycle

Table 4.2 indicates the age distribution of Village residents. Analysis of the Village's age distribution is used to anticipate future consumption of services such as educational facilities, medical facilities, housing, and public and private infrastructure. The age-life distribution is defined in six categories:

- Pre-school (0-4 years)
- School (5-19 years)
- Family Formation (20-44 years)
- Empty Nesters (45-64 years)
- Seniors (65+ years)

Age Life Cycle Distribution | Village of Armada

Table 4.2

Age Cycle	2000		2010		Change 2000 - 2010
	Number	Percentage	Number	Percentage	Number
Preschool 0-4 years	94	6.0%	91	5.0%	-3
School 5-17 years	365	23.0%	391	23.0%	26
Family Formation 18-34 years	347	22.0%	296	17.0%	-51
Empty Nest 35-64 years	596	38.0%	690	40.0%	94
Senior Citizens 65+ years	171	11.0%	262	15.0%	91
Total	1,573	100.0%	1,730	100.0%	157

Sources: 2000 and 2010 US Census, General Population Characteristics, SEMCOG

Based on the data collected, the age characteristics of the Village indicated that Armada Village is seeing a general aging trend. The largest age group decline was in the preschool 0-4 age group and the 18-34 family formation age group (-1.0 and -5.0 percent respectively). The fastest growing segment was the 65+ senior citizens segment with an increase of 157 persons or 4.0 percent.

There appears to be an out migration of the family formation age cohort that may possibly be explained by the migration to higher education facilities after high school graduation by the 18 to 25 year cohort, who is not returning to the Village.

The census information suggests that the Village is maturing. With an aging population, more services relating to mature residents will be needed and the demand for services relating to children and young families will not rise in corresponding proportion if the trends continue. The Village should consider future growth patterns of senior and elderly residents when planning the future demands of this population.

4.3 Population Projections

Population projections were collected from SEMCOG through 2035 for the Village of Armada, Armada Township, and Macomb County. Every five years, SEMCOG provides a series of population forecasts at the regional and local level. Table 4.3 indicates the SEMCOG population forecasts for the Village, Township, and County in ten and five-year intervals between 2000 and 2035. The table also includes county level projections generated by the Michigan Department of Transportation (MDOT) and the Michigan Department of Management and Budget (MDMB).

According to SEMCOG population forecasts, Armada Village will increase by 2.9 percent and the County by 14.3 percent, while Armada Township is projected to have the largest increase, growing by 31.7 percent through 2035. By virtue of the greater landmass in the Township than in the Village, it is understandable that the Township is able to support higher population gains than the Village.

Three (3) population projections were performed for comparative purposes. They are Constant County Share, Average Arithmetic Gain, and Average Rate Gain.

1. The Constant County Share projection applies the proportion of the Village population to the County in 2010 (0.2 percent) and applies that ratio against the County Average projections. According to this estimating method, the Village population should reach 1,838 by the end of the planning period.
2. The Average Arithmetic Gain projection uses the absolute change in the population of the Village of Armada between 2010 and 2035 and annualizes the gain. Table 4.1 shows that the change in population between 2010 and 2035 was a gain of 339 residents. This translates into an increase of 13.6 people per year, or 67 people every 5 years. Extending this rate forward, the Village is expected to reach 1,958 residents by 2035.

Population Projects

Table 4.3

Location	2000	2010	2020	2030	2035	Change 2000 - 2035	
						No.	Percent
Village of Armada							
U.S. Census and SEMCOG	1,573	1,730	1,611	1,596	1,620	47	2.9%
Constant County Share		1,672	1,745	1,802	1,838	166	9.03%
Average Arithmetic Gain		1,665	1,821	1,912	1,958	339	17.3%
Average Rate Gain		1,656	1,806	1,882	1,920	306	15.94%
Armada Township (w/o Village)							
SEMCOG	3,673	3,649	4,085	5,080	5,382	1,709	31.7%
Macomb County							
SEMCOG	788,149	840,978	872,882	901,152	919,287	131,138	14.3%

Sources: 2010 U.S. Census and SEMCOG 2035 Regional Development Forecast

3. The Average Rate Gain projection uses the percentage change in population of the Village of Armada between 2010 and 2035 to determine the rate of growth for the 25-year period. Table 4.1 shows that the percentage change in population during this time frame was 10.0 percent or 2.0 percent growth every 5 years. Applying this factor, the Village population is estimated to reach 1,920 by 2035.

Note: The population projections detailed in Table 4.3 are each based upon an analysis of recent trends, and a projection of those trends into the future. Some projections do not take into account the impact of very recent development activity and public infrastructure (water, sewer, roads) expansions that may induce new, more urban residential development in the study area.

Further, some projections do not reflect the effect of the Village's planned boundary expansion strategy, as detailed in Chapter 12. The intent of this strategy is to concentrate new residential development in close proximity to the Village, and to correspondingly reduce the extent of new residential development within the rural fringe area of Armada Township.

4.4 Educational Attainment

Educational Attainment | 2000 - 2010

Table 4.4

Level	Village of Armada		Macomb County		Southeast Michigan	
	Percent	Percent Change 2000 - 2010	Percent	Percent Change 2000 - 2010	Percent	Percent Change 2000 - 2010
Did Not Graduate High School	7.2%	-2.1%	12.4%	-4.6%	12.2%	-4.9%
High School Graduate	33.8%	-6.2%	32.0%	-0.08%	28.5%	0.2%
Some College, No Degree	30.3%	5.8%	24.8%	-0.00%	23.2%	-0.1%
Associate Degree	11.0%	1.9%	9.0%	1.2%	7.7%	1.1%
Bachelor's Degree	10.6%	-0.2%	14.2%	2.3%	17.0%	1.8%
Graduate or professional degree	7.1%	0.9%	7.6%	1.9%	11.5%	1.9%
Total	100.0%	-	100.0%	-	100.0%	-
Percent with High School Degree or Higher	92.8%	-0.1	87.6%	5.2%	87.8%	n/a
Percent with College Bachelor's Degree or Higher	17.7%	0.6%	21.8%	4.2%	28.5%	n/a

Source: 2010 5-Year ACS
Figures shown are for persons 25 years and over

In 2010, over 33.0 percent of the residents of the Village had graduated from high school, which is higher than the 32.0 percent for Macomb County and the 28.5 percent for Southwest Michigan. However, those who had a college degree, or more education, constituted 17.7 percent of the population, which is lower than the County's rate of 21.8 percent and the Southwest Michigan's rate of 28.5 percent.

The level of education of the population will have great importance in the future economic development of the Village. One of the primary factors in the location decisions of expanded and relocating firms is the quality and skills of the available workforce. Clearly the Village is comparable with the County in the terms of the percentage of resident with a college degree or higher. There are, of course, other factors that weigh in location decisions, but in terms of education, the Village of Armada is competitive.

4.5 Race and Ethnicity

One typically considers race and ethnicity in a master plan for two reasons. One is to identify any racial or ethnic groups that might be unduly impacted by community planning. The second reason is to identify any such groups for which special efforts are warranted to assure their participation and representation in the planning process. Table 4.5 provides a description of the racial/ethnic composition of Armada Village, Macomb County, and the State of Michigan in 2010. The Village racial/ethnic composition is predominately white, with a very small minority representation. The Village's ethnic composition is similar to that of the County. However, the percentages of the ethnic/racial composition in the Village and the County are not as diverse as State of Michigan figures. It does appear that there are no racial or ethnic groups that necessarily warrant special planning attention.

Comparative Racial / Ethnic Composition

Table 4.5

Race/ Ethnicity	Village of Armada		Macomb County		Michigan	
	Number	Percent	Number	Percentage	Number	Percentage
White	1,659	95.9%	705,693	83.9%	7,803,120	78.9%
Black	6	0.3%	72,053	8.6%	1,400,362	14.2%
Asian	2	0.1%	24,908	3.0%	238,199	2.4%
Multi- Racial	15	0.9%	15,907	1.9%	230,319	2.3%
Hispanic	45	2.6%	19,095	2.3%	69,185	0.7%
Other	3	0.2%	3,322	0.4%	147,029	1.5%
Total	1,730	100%	840,978	100%	9,883,640	100%

Sources: 2010 US Census, General Population Characteristics, SEMCOG

4.6 Household Characteristics

As used by the Census Bureau, and in this Plan, a household is the group of people who occupy a housing unit as their usual place of residence. Households come in a variety of sizes and shapes, such as married-couple families, female-headed families, or an individual householder. The other head of family could include a grandparent raising grandchildren, a male householder with young children, etc.

Table 4.6 indicates comparative household characteristics of Village of Armada, Armada Township, and Macomb County. The largest household group for the Village, Township, and the County is married couple families, followed by non-family households. The proportion of married couple families residing in the Village (55.7 percent) is higher than the County (49.7 percent) but lower than Armada Township (66.4 percent).

Comparative Household Characteristics | 2010

Table 4.6

Household Types	Village of Armada		Armada Township		Macomb County	
	Number	Percent	Number	Percent	Number	Percent
Married couple families	338	55.7%	919	66.4%	164,768	49.7%
Female-headed families	65	10.7%	73	7.3%	42,056	12.7%
Other head of family	22	3.6%	50	3.8%	15,525	4.7%
Non-family households	182	30.0%	245	22.5%	109,318	33.0%
Total	607	100.0%	1,287	100.0%	331,667	100.0%

Source: 2010 US Census, General Population Characteristics

Changes in the household characteristics for Village of Armada between 2000 and 2010 are reflected in Table 4.7. While the number of female-headed families and non-family households increased, married couple families and other head of families declined. Non-family households experienced the highest percentage growth (5.6 percent) of the four household categories in the Village.

Household Characteristics, Village of Armada 2000 - 2010

Table 4.7

Household Types	2000		2010	
	Number	Percent	Number	Percent
Married couple families	342	63.3%	338	55.7%
Female-headed families	43	8.0%	65	10.7%
Other head of family	23	4.3%	22	3.6%
Non-family households	132	24.4%	182	30.0%
Total	540	100.0%	607	100.0%

Sources: SEMCOG and 2010 US Census, General Population Characteristics

4.7 Household Trends

The number of households in the Village of Armada increased from 540 to 607 (12.4 percent). This rate is slightly greater than the 10.0 percent increase in population.

Nationally, the trend for many decades has been one of fewer and fewer people in the average household, and the Village of Armada has experienced this same trend. Table 4.8 shows the average household size in the Village of Armada, Armada Township, and Macomb County according to 2000 and 2010 U.S. Census data and the associated change in the number of households. The Village of Armada saw an increase of 67 households during the 2000's while at the same time experienced a decline in household size. This may be attributed to a growing trend of people marrying at a later age than a generation ago, postponing having children, and having fewer children when they do start a family. In comparison to the Village, Armada Township and Macomb County both saw a reduction in household size but experienced a smaller percentage in the number of households added.

Comparative Persons per Household | 2000 - 2010

Table 4.8

Place	2000		2010		Change in Households 2000 - 2010	
	No. of Households	Persons per HH	No. of Households	Persons per HH	Number	Percent
Village of Armada	540	2.81	607	2.73	67	12.4%
Armada Township w/o Village of Armada	1,175	3.01	1,287	2.82	112	9.5%
Macomb County	309,203	2.52	331,667	2.51	22464	7.3%

Sources: 2000 and 2010 US Census, General Population Characteristics, SEMCOG

4.8 Income

An important determinant of a community's viability and ability to support future commercial, residential and industrial growth is the income of its residents. Households are the basic consumer unit and supplier of labor to potential businesses. Median household income (that level of income at which half of all households earn more and half of all households earn less) is a broad measure of relative economic health of a community's populace. At the national level, recessions and inflation have combined to negatively impact upon the spending power of the dollars households bring home. In a very real sense, a dollar does not purchase as much as it once did.

Three measures of income (median household, median family and per capita) are illustrated in Table 4.9 for the Village and County comparing census data from 2000 and 2010.

In 2010, the Village of Armada had a median household income of \$64,773, a decrease of -19.8 percent over the preceding decade. In comparison, the County posted a -20.8 percent decrease during this period ending with a median household income of \$53,996.

Household and Per Capita Income | 2000 - 2010

Table 4.9

Income Category	Village of Armada			Macomb County		
	2000	2010	Percent Change	2000	2010	Percent Change
Median Household Income	\$69,917	\$64,773	-19.8%	\$52,102	\$53,996	-20.8%
Per Capita Income	\$22,446	\$24,098	-18.0%	\$24,446	\$26,524	-17.1%

Source: SEMCOG 2035 Forecast and 5-Year ACS 2010: Income measured in 2010 dollars

The per capita income statistic represents, as is implied, income per person. Individuals saw similar declines in income during the 2000's. Per capita incomes decreased -18.0 percent in the Village and by -17.1 percent at the County level.

Table 4.10 compares the household incomes of the Village of Armada and Macomb County. In the Village of Armada, the number of households within the lower income ranges decreased or stayed the same (except for those making less than \$10,000) and the number of households in the upper income ranges (\$35,000 and above, except for the range \$75,000 - \$99,999) experienced an increase. In comparison, Macomb County experienced a greater increase in households with incomes less than \$35,000 but still witnessed an increase in wages between \$75,000 and above.

Comparative Household Income | 2000 - 2010

Table 4.10

Income Ranges	Village of Armada 2000		Village of Armada 2010		Change 2000 - 2010	Macomb County 2000		Macomb County 2010		Change 2000 - 2010
	Number	Percent	Number	Percent		Number	Percent	Number	Percent	
<\$10,000	16	3.1%	29	4.6%	13	16,841	5.5%	17,920	5.4%	1,079
\$10 - \$14,999	25	4.8%	17	2.7%	-8	14,229	4.6%	15,824	4.8%	1,595
\$15 - \$24,999	33	6.3%	39	6.3%	6	31,627	10.2%	34,330	10.4%	2,703
\$25 - \$34,999	63	12.1%	62	9.9%	-1	35,120	11.4%	35,426	10.7%	306
\$35 - \$49,999	67	12.9%	91	14.6%	24	48,613	15.7%	49,154	14.9%	541
\$50 - \$74,999	107	20.6%	138	22.1%	31	70,908	22.9%	63,792	19.3%	-7,116
\$75 - \$99,999	116	22.3%	100	16.0%	-16	44,675	14.4%	48,880	14.8%	4,205
\$100,000+	93	17.9%	148	23.7%	55	47,489	15.3%	64,996	19.7%	17,507

Source: 2000 and 2010 US Census, General Population Characteristics

4.9 Employment Trends

Resident occupation gives a clear indication of the types of jobs in which people in the community are currently engaged. Based on the level of employment indicated on Table 4.11, the manufacturing and trade both wholesale and retail are substantially important to the local economy. The Education, Health, and the Social Services category is the second leading employment industry in the Village. These areas are similar to Macomb County employment trends. Overall, this indicates that the employment conditions of the Village are closely linked to the regional employment trends of the County.

Employment by Industry | 2010

Table 4.11

Industry	Village of Armada		Macomb County	
	Number	Percent	Number	Percent
Agriculture, Fishing, Forestry, & Mining	0	0.0%	873	0.2
Construction	60	8.0%	21,005	5.5%
Manufacturing	191	25.6%	78,867	20.5%
Trade (Wholesale & Retail)	152	20.4%	59,715	15.5%
Transportation, Warehousing, & Utilities	45	6.0%	13,148	3.4%
Information	6	0.8%	7,193	1.9%
Finance, Insurance, & Real Estate	18	2.4%	22,351	5.8%
Professional & Related Services	42	5.6%	37,915	9.8%
Education, Health, Social Services	154	20.6%	78,871	20.5%
Arts, Entertainment, & Recreation	15	2.0%	33,215	8.6%
Other services	25	3.4%	17,894	4.6%
Public Administration	38	5.1%	14,129	3.7%
Total	746	100.0	385,176	100.0

Sources: 2010 US Census, General Population Characteristics: Civilian employed population 16 years and over

05 | Housing Profile

5.0 Introduction

This section examines characteristics of the housing stock in Village of Armada by age, tenure, type, number of units, housing values, and other elements. Analysis of these characteristics is critical to understand the existing housing stock in the Village and to determine the future needs of housing for the area.

5.1 Number of Housing Units

Table 5.1 compares the number of housing units in Village of Armada, Armada Township, and Macomb County. Between 1990 and 2010, the number of Village housing units increased by 142 units (27.6 percent), while Armada Township grew by 48.8 percent.

Housing Unit Change

Table 5.1

Place	1990	2000	2010	Change 1990 – 2010	
	No.	No.	No.	No.	Percent
Village of Armada	514	558	656	142	27.6%
Armada Township w/o Village	899	1,203	1,338	439	48.8%
Macomb County	274,843	320,276	356,626	81,783	29.7%

Source: 1990, 2000 and 2010 Census, General Population Characteristics

5.2 Recent Residential Construction Activity

Table 5.2.1 depicts recent residential construction data according to building permit data reported by SEMCOG for the Village. Between 2000 and 2010, the construction of single-family homes in Village of Armada has increased the number of total housing units by 44 new units.

Residential Construction Activity | Village of Armada

Table 5.2.1

Type	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Single-Family	16	8	8	4	6	0	2	0	0	0	0	44
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Demolitions	3	0	1	0	0	0	0	0	1	0	0	5
Net Total	13	8	7	4	6	0	2	0	-1	0	0	39

Source: SEMCOG Building Permit Database (<http://www.semco.org/cgi-bin/data/buildper.cfm>)

The Township saw steady decline in the amount of housing constructed during the 2000's ending with 150 building permits being issued for single-family dwellings and zero permits given for multi-family residential units (see Table 5.2.2). During this period, 17 homes were demolished leaving an increased total of 133 units during the decade.

Residential Construction Activity | Armada Township

Table 5.2.2

Type	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Single-Family	24	22	16	14	27	26	13	4	2	0	2	150
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Demolitions	0	1	2	2	2	4	3	2	1	0	0	17
Net Total	24	21	14	12	25	22	10	2	1	0	2	133

Source: SEMCOG Building Permit Database (<http://www.semco.org/cgi-bin/data/buildper.cfm>)

5.3 Tenure

According to the US Census data, owner-occupied units in distribution tables by type and housing value include single-family units on less than 10 acres without a business or medical office on the property. Renter-occupied units in the distribution tables include renter-occupied and vacant-for-rent units.

Table 5.3 provides comparative housing occupancy characteristics of the Village and the County. The rate of ownership in the Village is nearly 72 percent and exceeds the County's rate level by 1.0 percent. Slightly above one-fifth (20.4 percent) of the housing units in the Village are renter-occupied units; this figure is slightly lower than the County level of 21.9 percent. Of the 656 total housing units in the Village, only 49 units (7.5 percent) are vacant.

Housing Occupancy Characteristics | 2010

Table 5.3

Category	Village of Armada		Macomb County	
	No.	Percent	No.	Percent
Owner-occupied units	473	72.1%	253,468	71.1%
Renter-occupied units	134	20.4%	78,199	21.9%
Vacant housing units	49	7.5%	24,959	7.0%
Total housing units	656	100.0%	356,626	100.0%
Total Occupied Housing Units	607	92.5%	331,667	93.0%

Source: 2010 Census, General Population Characteristics

5.4 Age of Housing Stock

Table 5.4 indicates the age of the housing stock in the Village by year of construction. In 2010, approximately 39 percent of the Village housing units were built in 1939 or earlier. Housing units built after 1970 account for approximately 43 percent of the housing stock. Generally, the economically useful age of residential structures is approximately 50 years. Despite the age of the housing stock, existing units are well maintained and have experienced little deterioration.

Age of Dwellings, Village of Armada | 2010

Table 5.4

Age	Number of Structures	Percent
2000-2010	42	5.9%
1990-1999	68	9.6%
1980-1989	91	12.9%
1970-1979	106	15.0%
1960-1969	32	4.5%
1940-1959	36	7.8%
1939 or earlier	277	39.2%
Total	707	100.0%

Source: 2010 US Census, General Population Characteristics

5.5 Housing Values

Table 5.5 compares housing values in the Village of Armada and Macomb County. In 2010, the median housing value for owner-occupied units in the Village of Armada was \$156,300 while the value in Macomb County was \$157,000. With a difference of only \$700, the median values of homes in the Village and the County appear to be similar. Data on median gross rent was also collected and compared between the Village and County. The figures for the Village and the County were \$664 and \$752 respectively. This indicates that the Village shares similar housing and rental value trends as the region.



Table 5.5 also indicates that greater than half of the owner-occupied homes in the Village (66.5 percent) have housing values which range between \$100,000 - \$199,999. About 15 percent of the owner-occupied homes have values between \$200,000-\$299,999. When compared to the County, the Village had a slightly higher percentage of homes within the value range of \$100,000 - \$149,999 and a much higher percentage of homes within the value range of \$150,000 - \$199,999. As a whole, more than four-fifths (81.8 percent) of the housing values of owner-occupied units in the Village were greater than \$100,000.

Comparative Distribution of Housing Values

Village of Armada and Macomb County | 2010

Table 5.5

Category	Village of Armada		Macomb County	
	No.	Percent	No.	Percent
Owner-occupied Housing Units	510	100%	261,291	100%
Less than \$50,000	43	8.4%	18,803	7.2%
\$50,000 - \$99,999	50	9.8%	37,472	14.3%
\$100,000 - \$149,999	129	25.3%	62,968	24.1%
\$150,000 - \$199,999	210	41.2%	66,951	25.6%
\$200,000 - \$299,999	78	15.3%	49,255	18.9%
\$300,000 - \$499,999	0	0.0%	20,843	8.0%
\$500,000 - \$999,999	0	0.0%	3,963	1.5%
\$1,000,000 or more	0	0.0%	1,036	0.4%
Median Housing Value	\$156,300		\$157,000	
Renter-occupied Housing Units	111		66,152	100%
Less than \$200	0	0.0%	1,352	2.0%
\$200 - \$299	0	0.0%	2,228	3.4%
\$300 - \$499	0	0.0%	5,681	8.6%
\$500 - \$749	71	64.0%	23,655	35.8%
\$750 - \$999	13	11.7%	18,824	28.5%
\$1,000 - \$1,499	23	20.7%	11,573	17.5%
\$1,500 or more	4	3.6%	2,839	4.3%
No rent paid	3	-	2,879	-
Median Monthly Rent	\$664		\$752	

Source: 2010 Census, General Population Characteristics

5.6 Housing Affordability

The U.S. Department of Housing Department (HUD) has developed a method to determine the affordability of housing in a community based on the cost as a percent of the total household income. Households that spend greater than of 30 percent of their total household income on housing costs are defined by HUD to be living in housing which is not affordable. Tables 5.6.1 and 5.6.2 illustrate the housing cost as a percent of household income for owner-occupied and renter-occupied units.

Housing Cost as a percent of Household Income for Owner-Occupied Units | Village of Armada 2010

Table 5.6.1

< 20 Percent		20.0 to 24.9 Percent		25.0 to 29.9 Percent		30.0 to 34.9 Percent		> 35 Percent		Total
No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	Per.
145	37.0%	72	18.4%	25	6.4%	48	12.2%	102	26.0%	100%

Source: 2010 Census, General Population Characteristics

Housing costs for owner-occupied units include mortgages, real estate taxes, insurance, general maintenance expenses, and utilities. In 2010, more than 35 percent of the owner-occupied units had monthly costs that represented less than 20 percent of the owner's total household income. Overall, approximately 61 percent of the owner-occupied households spent less than 30 percent of their total household income on housing costs. 38.2 percent of owner-occupied units had costs that exceeded 30 percent of the owner's total household income.

Housing Cost as a percent of Household Income for Renter-Occupied Units | Village of Armada 2010

Table 5.6.2

< 15 Percent		15.0 to 19.9 Percent		20.0 to 29.9 Percent		30.0 to 34.9 Percent		More than 35 Percent		Not computed		Total
No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	Per.
28	25.2%	25	22.5%	17	15.3%	4	3.6%	37	33.3%	3	0.1%	100%

Source: 2010 Census, General Population Characteristics

Of renter-occupied units in the Village, approximately 36 percent of households spent more than 30 percent of their total income on housing costs. Housing costs for these particular Village households are not affordable, which puts them at risk of incurring future economic hardship. This indicates the need for the availability of additional affordable rental units. Housing costs for renter-occupied units consists of rent, utilities, and any other incidental costs as insurance.



06 | Goals, Objectives & Policies

6.0 Introduction

These goals and their supporting objectives and policies form the backbone of the Village Master Plan. The Master Plan, which reflects these goals and seeks to ensure their inclusion in future planning activities, has been prepared in consideration of the following:

1. Four resolutions passed by the Council;
 - March 10, 2003, asserting Council's right to have final approval authority over the Village Master Plan.
 - June 28, 2004, supporting annexation as the preferred mechanism for the orderly and financially prudent economic growth of the Village.
 - July 12, 2004, adopting a Vision Statement for Future Growth and Planning.
 - November 8, 2004, establishing an Urban Growth Boundary/Designated Growth Area.
2. Armada Township's draft Master Plan update;
3. Joint development workshops with the Township;
4. Input from the public;
5. Data from the 2000 and 2010 U.S. Census; and
6. Supplemental data from the Southeast Michigan Council of Government (SEMCOG).

The goals serve as the purpose or intent statements of the Master Plan. Objectives outline the means for attaining the goals, and policies recommend specific tasks to guide action.

6.1 Planning and Growth Management

Goal: To guide, plan, and accommodate future growth and development in a manner that:

- Respects the Village's traditional and compact character,
- Respects the surrounding Township's rural atmosphere,
- Promotes an efficient and well ordered land use pattern,
- Economizes community facilities, and
- Is sensitive to environmental features.

Objectives:

- Accommodate future growth within the Village while maintaining its existing traditional and compact character.
- Consider expansion of the current Village boundaries and services to ensure the long-term financial feasibility of the Village.
- Minimize the potential adverse impact of new development by maintaining an appropriate scale and intensity of additional growth within and adjacent to the Village.
- Ensure that new land uses are compatible and in character with existing uses.
- Encourage the preservation of unique and/or historical features.
- Protect important natural features.
- Encourage the on-going maintenance of properties, buildings, and public facilities.
- Encourage the reuse of older buildings as an alternative to new construction.
- Promote cooperation with and between the Township and other area governmental units.

Policies:

1. Review the Master Plan, Implementation Plan, Zoning Ordinance, and Code of Ordinance Subdivision Regulations, with updates to objectives and policies as needed.
2. Amend the Village Zoning Ordinance to implement the recommendations made in this plan and changing needs.
3. Continue to encourage citizen participation and community involvement in all facets of Village life.

6.2 Residential Development

Goals: To maintain the current housing stock and to plan for new residences that will offer a variety of residential densities and styles to meet the needs of current and future residents; and to encourage the development of new residences in a style that is consistent with the character of the Village's existing housing stock and environmental context.

Objectives:

- Provide for a range of residential styles and densities to meet the needs of the Village's diverse population.
- Encourage the development of residential neighborhoods that are well integrated into the existing landscape and complement the small town character of existing neighborhoods.

Policies:

1. Residential land uses shall be planned for low, medium, and high-density residential classifications.
2. Require that the layout of new residential developments be logical extensions of existing neighborhoods. This shall apply to lot layout, road and sidewalk extensions, and open space plans.
3. Encourage the incorporation of existing vegetation and other natural features into the design of new residential developments.
4. Residential development shall provide adequate off-street parking, open space, and other infrastructure necessary for the development of quality residential neighborhoods.
5. Promote preservation and effective code enforcement to maintain residential areas.
6. Require new residential developments to incorporate a pedestrian sidewalk and interconnected road system that ultimately connects with abutting developments to keep the community walkable and connected.
7. Encourage a mixture of lot sizes, house sizes and architectural standards in keeping with the small town character of the Village.

6.3 Commercial and Office Development

Goals: To maintain the CBD as the commercial focus of the Village as well as the central place of commerce for the Township. To maintain the existing commercial base and encourage commercial development that satisfies local market needs and provides a positive contribution to the local tax base without compromising the Village's traditional and compact character. Lastly, to encourage development of professional and medical office space that satisfies local market needs.

Objectives:

- Provide reasonable opportunities and specific guidelines for the gradual and orderly expansion of the CBD to accommodate the future commercial needs of the Village and Township.
- Provide reasonable opportunities and specific guidelines for the development of professional and medical office space at appropriate locations within the Village.
- Encourage the Township to develop special commercial zoning districts in the Township that are complimentary instead of competitive with the CBD.
- Discourage strip commercial development from occurring along major thoroughfares outside the established Central Business District (CBD).
- Ensure that the architecture, landscaping, and signage associated with commercial establishments is compatible with the established character of the Village.

- Improve the overall aesthetics and encourage the maintenance and restoration of structures within the CBD.
- Maintain and continue to improve relations between business owners and the Village government, Armada Business Association and Downtown Development Authority.

Policies:

1. Provide area for commercial expansion by relocating the existing industrial uses in the CBD to another more appropriate location in the Village.
2. Commercial uses in structures formerly used as residences shall be encouraged to maintain the residential appearance of the structure and lot.
3. Develop appropriate design standards for commercial and office uses and incorporate them into regulations and review guidelines.
4. Review commercial architectural and landscape designs to ensure that such uses are carefully integrated into the Village landscape.
5. Regulate signs to minimize clutter, confusion, and aesthetic degradation while permitting reasonable opportunities for announcement of products and services.
6. Improve the paving, lighting, and marking of existing parking areas within the CBD and assess the need to provide additional parking.

6.4 Industrial Development

Goal: To encourage light manufacturing industries that provide a positive contribution to the local tax base and provide local jobs without compromising the established character of the Village.

Objective:

- Ensure that the architecture, landscaping, and signage associated with industrial establishments is compatible with the established character of the Village.

Policies:

1. Establish industrial incubator that provides shared service facilities to skilled trades.
2. Encourage industrial development that is primarily research-oriented, light, and environmentally clean.
3. Industrial uses that are located near existing residences shall not negatively impact those neighborhoods and shall be encouraged to provide landscaping and other elements to minimize any potential conflict between the uses.

4. Utilize the concept of a planned industrial park that emphasizes access control, building and site design, and controlled signage and lighting.
5. Provide area for industrial expansion by relocating the existing industrial uses in the CBD to another more appropriate location in the Village.

6.5 Community Facilities

Goal: To sustain a high level of quality and responsive service to Village taxpayers through sound operation and maintenance of demanded community facilities. Further, expand the range of services to support future population growth in a planned and efficient manner.

Objective:

- Provide for the efficient location of public facilities and delivery of public services.

Policies:

1. Require that adequate public infrastructure be in place prior to the initiation of any new residential, commercial, and/or industrial land development.
2. Work cooperatively with other public agencies to facilitate the improvement or construction of public facilities, such as roads, sidewalks, and utilities.
3. Road and sidewalk development plans shall be based upon the degree of improvement to traffic circulation and safety within the Village.
4. Require provisions for future sidewalk and road connections to adjacent property as it develops.
5. Promote a strong intergovernmental police and fire department.
6. Promote an effective and growing public school system.
7. Provide public areas based on a long-range general plan, short-range project plans, and capital improvements programming.

6.6 Summary

The goals, objectives and policies listed above provide the Village Planning Commission with a general roadmap for all future planning actions and activities. They should be considered to be in full effect upon adoption of the Master Plan by the Village Council and of primary consideration in all Planning Commission decisions and recommendations until modified, amended or superseded by specific resolution of the Council.

07 | Residential Areas Plan

7.0 Introduction

The Village of Armada is largely a residential community with supporting commercial and public uses at its center. The compact, spatial arrangement of its land uses encourages comfortable, pedestrian movement along the local streets and creates a distinct, small-town character to the community.

Residential uses within the Village account for approximately 166.3 acres. Of this total, 156.8 acres are occupied by single-family residences, 8.4 acres covered by multiple-family residential developments, and the balance of 1.1 acres being used for two-family dwellings.

7.1 Existing Housing Stock

From 2000 to 2010, the U.S. Census reported an increase of 67 housing units in the Village of Armada (Table 5.1). This brings the Year 2010 total to 656 housing units (including vacant units) inside the Village. Much of the recent residential construction activity is associated with the development of the Armada Meadows subdivision. Approximately forty percent (40%) of the Village housing stock was constructed before World War II, while recent construction (since 1980) represents approximately forty percent (40%) of the Village's housing stock.

7.2 Housing Unit Projections

Housing unit projections were performed to determine the extent of growth in the Village housing stock. These projections are based on three components:

- The projected future population of the Village
- The number of housing units needed to house the expected future population
- Estimated number of the existing structures which are expected to become substandard and replaced during the planning period

Data in Table 7.1 illustrates in greater detail how the population, persons per household, and projected housing needs of the Village were derived for the years between 2010 - 2035. Following the national decline in household, if all things remain constant, the Village of Armada will need less than 100 new housing units by 2035.

Demographic Projects | Village of Armada

Table 7.1

Category	2010	2020	2030	2035
Total Population	1,730	1,611	1,596	1,620
Households	607	671	678	677
Persons Per Household	2.73	N/A	N/A	N/A

Source: 2010 U.S. Census, SEMCOG, and Consultant calculations

7.3 Existing Sewer/Water Usage and Ultimate Demand Conditions

Public water and sewer services are available within the Village limits. The existing distribution system consists mainly of 6-, 8-, 10- and 12-inch water mains to support residential and commercial land uses. Most of the smaller water mains are located in the residential areas while the larger ones are located along the major thoroughfares. Twelve inch mains have been installed on South Fulton (2005), North Fulton (2009) and East Main (2005) and a new sanitary 8-inch on South Fulton (2005). The Village has plans to continually update the current systems.

In general, the volume of water has steadily increased as new housing developments have increased in the Village area. Approximately 607 households are serviced with water and sewer services. In 2006 current wastewater and sewer flows operate at one-quarter of total capacity with two-thirds available to service future development. With the upgrades to the existing water lines and well capacity, the Village water services are adequate to meet the current demand and up to an additional 100 units.



7.4 Recommendations for Village Residential Areas

The Village of Armada and proposed annexation areas are generally subdivided into five (5) residential sectors for planning purposes. These include the Village itself, plus planned future boundary expansion areas in each of the four (4) quadrants abutting the Village [northwest (NW), northeast (NE), southeast (SE), and southwest (SW)] (see Future Land Use Map).

Existing Village Neighborhoods

Residential uses within the current Village boundaries include a variety of housing types, including detached single-family dwellings, duplexes, multiple-family apartment buildings, and accessory apartments. The current Village Zoning Ordinance (adopted in 2002), consolidated the Village's Single-Family Residential Districts into one (1) new R-1 District. The R-1 District allows for a variety of housing options, including traditional detached single-family dwellings, plus accessory apartments and two-family (duplex) dwellings by special approval.

The Village should concentrate on encouraging continuing upgrades and renovations to its historic housing stock, while preserving the traditional small town character of these existing neighborhoods.

Planned Neighborhoods

The Village wishes to encourage a mixture of lot sizes, house sizes and architectural standards in order to preserve the small town character of the Village.

The NW, NE, SE, and SW Single Family Planned Development areas are primarily intended for detached and attached single-family dwellings constructed at a residential density equal to the R-1 (Single-Family Residential) District standard of approximately four (4) units per acre. However, this Plan encourages the application of the Planned Development (PD) option to new residential developments in these four quadrants, which would permit the development of a range of housing types within an overall PD development plan.



Table 7.2 depicts the amount of land planned for single-family neighborhood development within these four quadrants, and the amount of land available to support additional homes. Applying a development density of 4 dwelling units per acre, the planned single-family residential areas have a maximum capacity to support approximately 2,400 additional residents. Here, residential expansion is in the form of apartments and other independent senior living facilities and the Village Rehabilitation Center.

Projected Residential Expansion within Single-Family Planned Development (SFPD) Areas

Table 7.2

SFPD Area	Gross Land Area	Right-of-Way and Utilities (20%)	Estimated Open Space/ Unbuildable Area (20%)	Net Land Area	Development Density (5 du/net ac.)	Potential New Population (2.8 pph)
NW	98.6	19.7	19.7	59.2	296	829
NE	76.0	15.2	15.2 (+ 19.6-school)	26.0	130	364
SE	109.2	21.8	21.8	65.6	328	918
SW	33.2	6.7	6.7	20.0	100	280
Total	317.	63.4	63.4	170.8	854	2,391

08 | Community Facilities Plan

8.0 Introduction

The functional operation of any community involves the effective use of public facilities and provision of municipal services. A thorough understanding of community's public facilities and services is essential in determining future land use-planning decisions. These decisions consider the impact of future residential, commercial, industrial, and public improvement developments for a community.

This chapter includes a general description of public facilities and services in the Village as well as an assessment of current and future needs of these facilities and services.

8.1 Community Facilities

There are several community facilities that are operated by the Village. These facilities include the Village Hall, Police Station, Wastewater Treatment Plant, Water Treatment Plant and Department of Public Works Yard. The Armada Fire Station is located in and operated by the Township. The local post office is operated by the United States Postal service.

Village Hall

The Village Hall is located at 74274 Burk Street. It serves as the site of all Village administrative activities and the headquarters of the Village Police Department. The Village Hall is a one-story structure divided into areas for office/administrative activities and meeting room. Internal building space for administrative operations is minimal, and the parking for employees and citizens is inadequate and is not well configured. Although no major expansion or construction activity is planned for the Village Hall, internal floor space for administrative activities and existing parking capacity are issues that will require future attention as the administrative activities and responsibilities increase. The Village may consider purchasing the Township Hall as an alternative to its existing facility.

Police Services

The Armada Village Police Department is co-located with the Village Municipal Offices on Burk Street. Police activity for the community falls within four principal categories: 1) assaultive crimes, 2) non-assaultive crimes and investigations, 3) service calls and public assistance, and 4) traffic enforcement. Service calls and public assistance and traffic enforcement currently accounts for the majority of the activity. Police coverage in the Village is based on a 24-hour/7 day schedule. A full-time Chief, two full-time officers and 5 part-time officers support this level of coverage.

Facilities for Police operations are small and compact but adequate for current operations. There is no immediate need for additional police staff given current activity levels, however, administrative burdens may make an additional full-time officer desirable allowing the Chief to attend to those increasing administrative demands. The need for additional police staff would most likely result from an increase in the Village population.

An increase in population could happen if the Village increases its size through Annexation or other growth mechanisms. SEMCOG data indicates Armada Township will continue to grow. An increase in police staff may also be required if the Village is asked to provide tailored police support for the Township. In either case, an increase in manning beyond current numbers should prompt a review of the ability of current facilities, equipment, and patrol cars to adequately support Police operations. Expanded Police facilities or a move to a new location may be required. Finally, population increases in the Armada Area as a whole may make consolidation of police services under one controlling authority at the Township level (similar to the Township Fire Department) or regional level (regionalization) attractive.

Fire Services

The Fire Station is located at 23175 Armada Center Road in Armada Township, just north of the Village. The station contains two offices, training/meeting room, and bathrooms for men and women. There are three apparatus bays that contain three engines, two ambulances, one water tanker, one rescue truck, one brush/squad and an ice rescue trailer. Currently, the department is planning on expanding the fire station with additional apparatus bays and both sleeping and living quarters. The fire department has one (1) full-time Fire Chief and forty (40) volunteer firefighters.

In 2010, the fire department went full time advanced life support. At that time three (3) paramedics were hired to cover the 24-hour shifts, supplemented with emergency medical technicians to cover the 24-hour shifts. A year later, 2 more paramedics were hired full time and an additional ambulance was converted to an ALS truck for a total of three (3). An ambulance station housing three (3) ambulances was built in 2008 through community development block grants, including sleeping quarters, dispatch and living room. The fire department, through the Chief, is studying ways to improve fire responses and insurance rates through improved ISO rating in the Village and Township.

The fire department has future plans to construct a second station at Romeo Plank Road and 33 Mile Road. This station will reduce the response time to the west side of the Township where industrial buildings are located on Powell Road and future residential housing is currently being discussed. The location of this fire station corresponds with the main growth areas of the Township.

Department of Public Works

The Department of Public Works (DPW) has one facility that serves as an office and a garage for service vehicles. It is approximately 6,400 square feet and has two vehicle bays. Services provided by the Department include water and sewer maintenance, public vehicle maintenance, street maintenance, and buildings/grounds/parks maintenance. In addition, three water wells are operated by the Department to service Village residents. Four employees are responsible for handling the above-mentioned services, and are considered to be adequate to meet the current service needs.

Equipment needs include a vactor and jet machine.

Office, garage, storage, and work area space is very limited in the current facility, and needs to be expanded by approximately 3,500 square feet to accommodate the space needs of the Department. It is recommended that a new 10,000 square foot structure be built.

Water and Sewer Systems

There are approximately 656 household units that receive water and sewer services from the Village water and sewer systems. Average water usage is 180 gallons per day per household.

Sewer System

The Sewer Department has one sub-contractor to manage plant-related activities of the wastewater treatment services. These services are provided by the sludge storage tanks (786 square feet), preliminary treatment plant (1,271 square feet) and the control building (8,758 square feet). These facilities manage infiltration and water in-flow activities to various land uses in the Village. The wastewater flows generate, on average, 100,000 to 150,000 flows (gallons per day). The facilities have been designed to handle a maximum of 600,000 flows. Presently, the system operates at one-quarter of its capacity. Additionally, the Colonial Drive Lift Station was upgraded in 2000. Lift station improvements include the removal of existing equipment, a new control panel foundation and furnished and installed electric power and controls.

Water System

The water system consists of three wells, a water tower, and an arsenic removal plant. The current DEQ-approved pumping capacities of the wells are as follows:

Well Number	Capacity (gals/min.)
6	335
7	550
8	135 (completed in 2010)

The average water usage rate of all users is approximately 100 gallons per minute (gpm), with a peak demand of 200 gpm. A major DEQ requirement is that 'firm capacity' must at least meet the peak daily demand, and consideration should be given to adding capacity when the peak demand reaches 70% of firm capacity. Firm capacity is calculated by deleting the capacity of the highest producing well, and summing the capacities of all the remaining wells. Well no. 7 would be dropped, therefore, providing a firm capacity of 470 gpm. Since the peak demand is 200 gpm, which is 43% of the firm capacity, the Village water system is well within the guidelines, and could support over 100 additional residential users.



Library

The Armada Free Public Library is located at 79930 Church Road. The Library is in the center of the Village, one block from the main street of the Village. The main library is located in an addition to the Carnegie Library. The Carnegie Library was built in 1915, and the addition was completed in 1984. The Carnegie Library is used for historical and genealogical research and meetings.

The Library has a staff of one full-time certified librarian and seven (7) part time staff members. The collection contains 27,000 books, magazines, puppets, videos, DVDs, and audio book on tape and CD. In addition to the materials, the Library offers many databases and Internet access to the World Wide Web. The Library is open 52 hours a week. As a member of the Suburban Library Cooperative, the Library provides access to the collections of the other libraries in Macomb County.

The main library is cabled for high-speed Internet access. Five computers are available for public use. The computers are replaced every three years on a rotating basis. Monies from the State library allotment are made available for these upgrades.

The Library is supported by a millage on township property. At the current time, the Library is at its maximum capacity for room and personnel. As Armada Township and the Village grow, the operating funds from the Township millage should also grow. The additional revenue from this growth would allow the Library to add more personnel and expand more day-to-day operations to the Carnegie Building.



School Facilities

The Armada Area Schools District serves the residents of the Village of Armada and is one of the best assets of the community. As indicated in the Community Facilities Map, there is one elementary facility containing two schools (Early Elementary School grades Pre-K to 2 and Later Elementary containing grades 3 to 5), one (1) Middle School and one (1) High School. The Elementary School building is located south of Armada Center Road and has 850 students. The Middle School is adjacent to the west and has 550 students. The High School is located across from the Elementary School and has 670 students.

The former Elementary School facility is being used for School District administrative operations and to house the school district's regional math/science academy (180+ students).

Previously, the new Elementary School facility (built in 1999) was the only school, which required new construction due to projected enrollment growth. Although the middle school and high school were built in the mid-1950s and 1977 respectively, student enrollment at these facilities did not indicate a need for replacement or expansion until recently.

Increased student enrollment indicates that the Middle School and High School structures will eventually need to be expanded to support future growth.

Parks and Recreation Facilities

Park and recreation facilities are created primarily for the use of residents in a community. Residents need such facilities where they may engage in various types of recreational activities. Neighborhood recreation facilities ideally include items such as ball diamonds, basketball courts, swings, slides, walking and/or biking paths, and other play apparatus.

The recreation inventory identifies recreational facilities and determines any deficiencies of these facilities using recreation-planning standards. The Village was inventoried to determine the availability of both village-owned and public and private school recreational uses and facilities. Table 8.1 details the existing facilities within the Armada Planning Area.

State Recreation Classifications and Standards:

The Michigan Department of Natural Resources (MDNR) references the National Recreation and Park Association's (NRPA) recommended classification system for local and regional recreation open space. This system, which serves as a guide to planning parks with respect to the population served by the facility, includes three classifications:

- A mini-park is an area of specialized facilities that serve a concentration or limited population or specific group, such as toddlers or senior citizens. It has a service area of less than 1/4 mile in radius, with a desirable size of one (1) acre or less. The standard for development is 1/4 to 1/2 acre per 1,000 population, while desirable site characteristics include locations within close proximity to apartment complexes, townhouse developments, or housing for the elderly.¹
- A neighborhood park/playground is an area for intense recreational activities, such as field games, court games, crafts, playground apparatus area, skating, picnicking, wading pools, etc. It has a service area of 1/4 to 1/2 mile in radius to serve a population up to 5,000 persons. The desirable size for a neighborhood park/playground is at least 5 acres, with a standard of one (1) to two (2) acres per 1,000 population. Desirable site characteristics include suitability for intense development, easy accessibility to neighborhood population, and geographically centered with safe walking and bike access. Such neighborhood park/playground may be developed as a school-park facility.²
- A community park is an area of diverse environmental quality, which may include areas suited for intense recreational facilities (such as athletic complexes and large swimming pools) or may be an area of natural quality for outdoor recreation (such as walking, viewing, sitting, and picnicking) or depending on site suitability and community needs, may be any combination of the above. It has a service area of several neighborhoods within a one-half (1/2) to three (3) mile radius. The desirable size for a community park is at least twenty-five acres, with a standard of five (5) to eight (8) acres per 1,000 population.
- Desirable site characteristics include natural features (such as bodies of water) and areas suited for intense development, which are easily accessible to the neighborhoods served.³

¹ Michigan Department of Natural Resources, Budget & Program Support Division, Recreation Grants Section, Community Recreation Planning, Guidelines for Preparing a Community Recreation Plan, November 1996, p. A-5.

² Ibid.

³ Ibid.

Recreation Facilities Assessment:

The Village of Armada public park system consists of a mini-park (Village Memorial), and a neighborhood park (at the former elementary school site). It should be noted that a mini-park is also planned for development with phase 3 of the Armada Meadows subdivision project. Quasi-public recreation facilities are also found at Our Savior Lutheran Church and School and the Armada Fairgrounds. The Macomb Orchard Trail was completed, including paving, in 2011. Village residents are also served by the Armada Township Park recreation facilities associated with the Armada High School, both classified as community parks. In addition, residents may also take advantage of ball fields found in the eastern portion of the rural fringe area in Richmond Township.

Based on NRPA standards, the Village should have at least one (1) mini-park, one (1) neighborhood park, and one (1) community park. The Village has one (1) existing park that would classify as a mini-park, and one neighborhood park. Village Memorial contains children's playground equipment and several picnic tables. Because of variable access, this does not include recreation facilities associated with Our Savior Lutheran Church and the Armada Fairgrounds. The former Armada Elementary School site serves in part as a neighborhood park. It contains a small baseball diamond.

It is projected that the Village population will reach 1,620 by 2035 (see Table 4.3, Population Projections). Using recreation planning standards, the Village can support two (2) mini-parks, two neighborhood parks, and one community park. When these standards are compared against the recreation facility inventory, a gap exists in one (1) neighborhood park. It is recommended that the Village seek five (5) to ten (10) acres of land south of Main Street to serve existing neighborhoods and the planned expansion area. Further, it is recommended that this park be connected to the planned greenway corridor along the abandoned G.T.W. railroad tracks and Coon Creek.



Existing Community Facilities

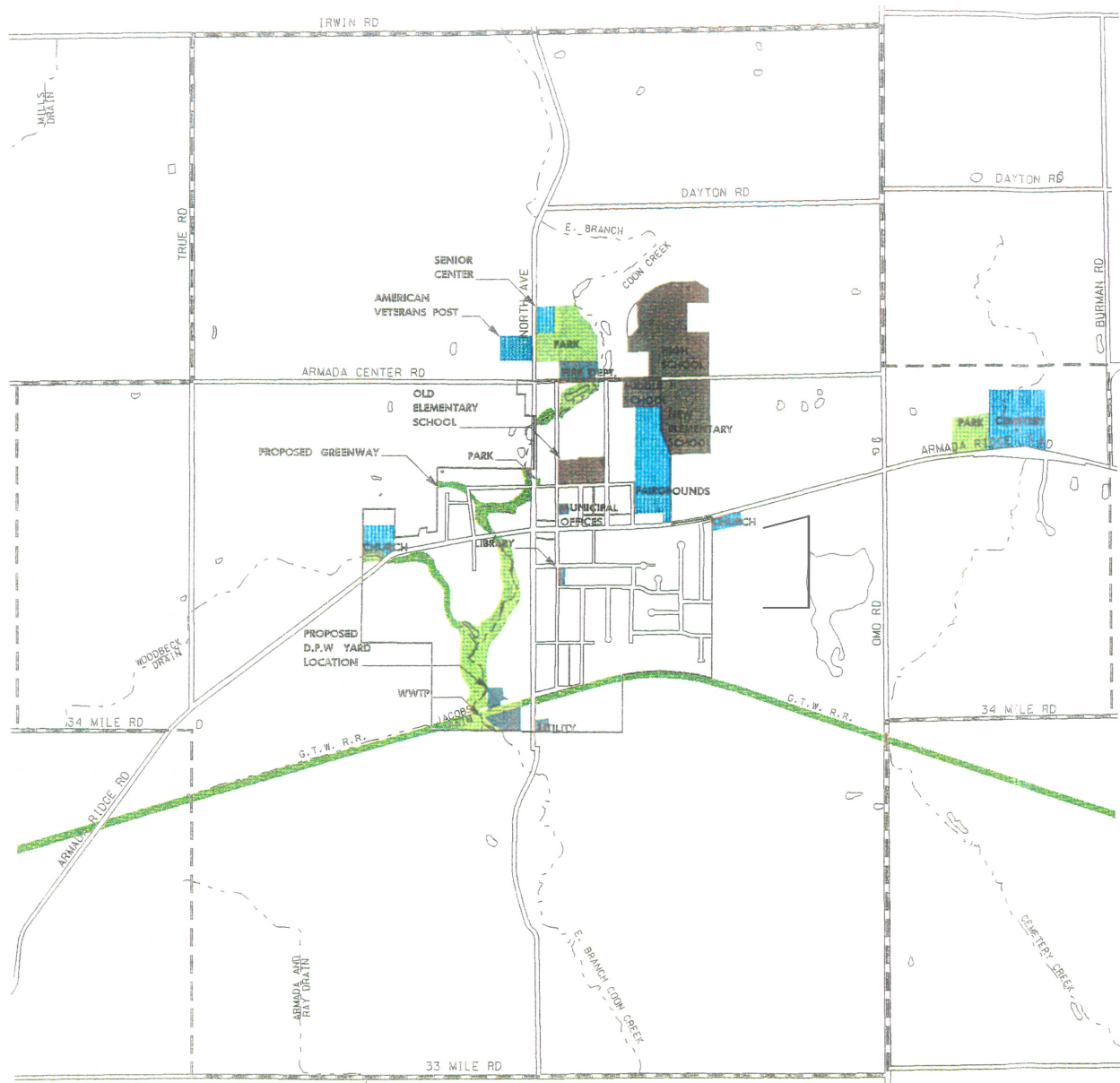
Table 8.1

Recreation Name	Agency	General			Outdoor Facilities											Indoor Facilities	
		Parking	Restrooms	Concession Building	Baseball / Softball Field	Basketball Court	Tennis Court	Picnic Shelter / Pavilion	Picnic Tables	Playground Equipment	Soccer Field	Paved Recreation Trail	Stadium with Track	Football Field	Sand Volleyball Court	Senior Citizen Center	Gymnasium
Our Saviour Lutheran Church and School	Quasi-Public					1					1						
Armada High School (Dr. Krause Athletic Field)	Public				3	2	6							1			2
Armada Township Park	Public				2			1									
Armada Middle School	Public					1											2
Armada Elementary School	Public					1											1
Armada Village Memorial Park	Public					1		1									
Macomb Orchard Trail	Public																

Map 0.4

Communities Facilities Map

Village of Armada, Macomb County, Michigan



- Public
- Quasi-Public
- Schools and Institutional

- Recreation and Parks
- Village Boundary

Not to scale

Compiled by: Wade-Trim
Source: Base map, Macomb County Planning Department Composite Aerials
Date: 06.28.12

09 | Commercial Areas Plan

9.0 Introduction

Commercial land uses provide a community with places to work and shop for goods and services. If there is insufficient space available for retail and services in a community, then, assuming that the demand for such businesses exists, the business will be forced to locate elsewhere. Conversely, if too much land is reserved for business use (as opposed to residential, open space, recreation and public uses) relative to the demand for such development, then land value may be artificially depressed. There should also be ample parking in the downtown to accommodate the needs of the community.

The Village of Armada is a traditional market center for the north central area of Macomb County. This area is growing in population, creating opportunities for business development. The Village's Central Business District is virtually fully developed, with few vacant buildings or lots and little to no room for expansion. In the Central Business District (CBD), recent building façade improvements, architectural detail and traditional building placement (close to street and sidewalk with little or no setback) combine to create a pedestrian friendly, small town feel to the downtown. The compact, spatial arrangement of its land uses encourage comfortable, pedestrian movement along the local streets and establishes a distinct, small town community character.

9.1 Central Business District Land Use

Within the Village, commercial and office land uses represents approximately 8.2 acres of the developed land area. These commercial land uses are comprised of office, convenience, comparison and general commercial land uses. In the Central Business District, there are approximately 248,293 square feet (5.17 acres) of gross developed land uses. This includes parking and setbacks and excludes the space provided by upper stories. This land area is further detailed in Table 9.1.

Existing Land Use Distribution | Central Business District

Table 9.1

Land Use Category	Square Feet	Acres	Percent
Single-Family Residential	27,007	0.62	12.0%
Two-Family Residential	5,663	0.13	2.5%
Multiple-Family Residential	3,485	0.08	1.6%
Office	26,572	0.61	11.8%
Commercial	101,931	2.34	45.3%
Public	6,098	0.14	2.7%
Quasi-Public	3,485	0.08	1.6%
Industrial	74,052	1.17	22.5%
Total	248,293	5.17	100.0%

Compiled by Wade-Trim, 1999

Out of the total (first floor) land area, the greatest amount of space is used for commercial, industrial and office purposes followed by residential uses.

Among the 57 individual uses in the Central Business District, 30 are retail/service or office, 4 are utilities or public buildings, 5 are vacant and 17 are residential units. Out of the 30 retail and service uses, there are 6 eating and drinking establishments, 5 personal service businesses (i.e. grooming and dance school), 5 medical offices, 3 financial service offices (banks and insurance) and 15 general retail stores (grocery, hardware, pharmacy, gift shops, etc.). Lacking are offices for attorneys, accountants, business services, and professional services.

In addition to the land use distribution displayed in Table 9.1, the second floor of the downtown buildings account for 10 more residential units and one commercial floor. According to the field survey, there are four vacant second floor spaces. It is important to note that the limits of the Central Business District study area do not include the full land area used by the Korte's Village Plaza (10,500 square feet) and the Fifth Third Bank Office (3,750 square feet).



9.2 Retail Ring Analysis

To analyze a community's shopping area demand and supply it may be helpful to conduct a retail ring analysis. Data corresponding to the one (1), three (3), and five (5) mile radius rings, originating at the approximate intersection of Fulton Street and Main Street, were collected and analyzed.

Table 9.2 shows the projected population within each ring. Projections for 2040 were derived using shift/share analysis and SEMCOG 2040 projections.

Retail Ring Analysis

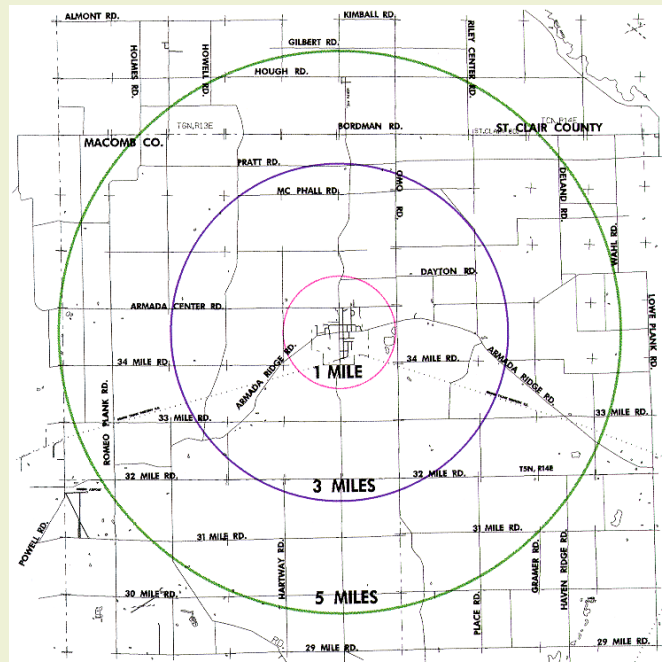
Table 9.2

Ring Radius	2012		2040	
	Population	Households	Population	Households
1-Mile	1,997	693	2,484	890
3-Mile	4,258	1,486	5,274	1,877
5-Mile	9,106	3,184	11,181	3,965

Sources: 2010 U.S. Census; ESRI Consultant calculations, SEMCOG

Figure 9-2 illustrates the extent of each of the three retail rings analyzed.

- The one (1) mile ring includes the Village and a rural fringe area.
- The three (3) mile radius ring reaches 32 Mile to the south and Pratt Road to the north. CBD businesses have the potential to serve residents in the Village, and Armada and Richmond Townships.
- The five (5) mile ring extends out to 30 Mile Road to the south and Gilbert Road in St. Clair County to the north.



Retail Ring

Figure 9-2

A ten (10) mile ring (not depicted in Figure 9-2) would include much of the northern half of Macomb County, as well as the southern Township in St. Clair and Lapeer Counties. Located generally within a ten (10) mile ring radius are the municipalities of Memphis, Richmond and Romeo. Given the nature of shopping venues (regional and hypercenter) servicing this size of market area, as well as the presence of many existing shopping venues of this type within or close to, the 10-mile ring, further analysis of this ring size was not conducted.

9.3 Village Retail Assessment

The Village of Armada has just over three acres of gross commercial land use in the CBD and a total of 30.6 gross acres of commercial land use throughout the Village and Master Plan study area. The commercial acreage in the densely developed CBD is probably very close to the gross leasable area (GLA).¹

To calculate the GLA in the CBD, the total commercial land area is reduced by 20 percent to yield 2.6 acres. The remainder of commercial land area can be reduced by a greater margin. We estimate that reducing the total remaining commercial land area of 27.4 acres by 30 percent yields net GLA of 19.2 acres of GLA in the remainder of the Village.

The Village CBD, while smaller than the typical, planned community center, is probably most accurately characterized as a community shopping center with a strong mix of neighborhood shopping center opportunities that serve local needs. This is due to the anchors present within the CBD as well as the mix of small, specialty retail and service businesses. Anchors in the CBD include the grocery, pharmacy and hardware stores, and also the U.S. Post Office, and the Township and Village halls.

¹ A real estate term for the total area of retail space under lease.

Retail Space Needs:

To calculate the potential retail space needs in the Village, the existing supply of commercial land area is compared to projected demand for retail space as reflected by projected households. Retail sales per household are conservatively estimated to not increase (as measured in 2012 dollars). These calculations are summarized in the Table 9.3.

This analysis assumes that households near the Village center are more likely to shop there than those farther away. For the purpose of the analysis, the Village center absorbs 70% of the retail demand from households within 1 mile, 50% from households between 1 and 3 miles away, and 30% from households 3-5 miles away. Table 9.3 shows demand for approximately 15 acres of commercially zoned land at the present time, with an increase to almost 19 acres by 2040.



Downtown Development Authority

One recommendation in the 2000 Master Plan is to form a Downtown Development Authority (DDA). This was implemented in 2003, with boundaries established to meet the projected commercial need of approximately 19 gross acres indicated in Table 9.3. This area is shown on the Future Land Use Map.

Total Retail Spending & Retail Space Needs

Table 9.3

Radius:	2012			2040		
	<1 Mile	1-3 Miles	3-5 Miles	<1 Mile	1-3 Miles	3-5 Miles
Households	693	1,486	3,184	890	1,877	3,965
Retail Sales/ Households (2012 dollars)						
	\$30,127	\$30,787	\$30,682	\$30,127	\$30,787	\$30,682
Total Retail Sales	\$20,878,587	\$26,622,374	\$51,943,512	\$26,813,769	\$33,164,459	\$63,866,931
Village Share	\$14,614,010	\$13,311,187	\$15,583,054	\$18,769,638	\$16,582,230	\$19,160,079
Retail Space (sq. ft.)	73,075	66,555	77,915	93,848	82,911	95,800
Net Acres	1.7	1.5	1.8	2.2	1.9	2.2
Gross Acres (3:1 Ratio)	5.1	4.5	5.4	6.6	5.7	6.6
Total Acreage	15.0 acres			18.9 acres		

Source: McKenna Associates calculations using data from SEMCOG, EasiDemographics, Woods & Poole Economics, Dollars & Cents of Shopping Centers

9.4 Armada Downtown Plan

The Armada Downtown Plan, adopted in 2003, includes a series of implementation steps for downtown improvements, focused on the following topic areas:

- Basic infrastructure improvements, including road re-paving, drainage improvements and utility upgrades.
- Streetscape and urban design improvements, including improved pedestrian access and amenities, increased parking opportunities and enhancements, and new streetlighting and other decorative elements (brick pavers, landscaping and entry features).
- Long range planning and regulatory modifications, including updating zoning regulations and standards.
- Expansion of the downtown commercial area to support future community needs, including future re-use of existing industrial/warehouse buildings for commercial uses.

This Downtown Plan was adopted as a part of the Armada Master Plan, and is included here by reference. Phase I of the Downtown Plan is complete.

9.5 Recommendations

As noted earlier, there are approximately 10,000 square feet of industrial area within the CBD that extends beyond the borders of the immediate CBD. In addition to the intrusion effect that industrial uses have upon retail and service business clusters, they also intrude upon the neighborhood and community shopping area character of the CBD.

Conversely, the presence of residential land uses within the CBD is an asset that should be encouraged to develop. The presence of people living in the downtown setting literally adds life to the district throughout the day and night.

Business Incubator

The predominant pattern of business development in the Village's downtown area has been through growth of existing businesses, and creation of new local start-up businesses. The Village has provided one means of encouraging new start-up businesses through the "home occupation" provisions of the Zoning Ordinance. Home occupations allow new businesses to become established within the business owner's primary residence at a relatively small scale, without the high overhead of a separate location. Achatz Pie is a great example of this.

Carefully designed and managed business incubators can create jobs, improve the tax base, and strengthen and diversify the local economy. Business incubators are commonly owned and managed by non-profit organizations (like a Chamber of Commerce or local business association) or by local economic development organizations (like the Village DDA).

A business incubator in the Village should include the following characteristics:

- Established within an existing building at a location within or adjacent to the downtown area;
- Located convenient to existing support services and complementary businesses;
- Flexible space options, from individual offices to small suites and open bay warehouse/laboratory/distribution space;
- Shared secretarial/office management services, including receptionist, voice mail, conference room, and access to computers, fax machines and general office equipment; and
- Access to on-site or off-site technical assistance services, such as small business development consultants, financial assistance, and other business development resources.

More information about business incubators is available from the National Business Incubation Association (<http://www.nbia.org>).



Redevelopment Opportunities

Future commercial development within the CBD will likely require the redevelopment of existing properties. A mixed use approach for new land uses in redevelopment areas should be considered to provide an economic incentive for such redevelopment (i.e., leasing or selling dual use areas is inherently more economical). A mixture of neighborhood and specialty commercial uses, professional offices, and residential uses should be encouraged.

Opportunities for the redevelopment of industrial land uses should be explored. These opportunities may not develop in the short term unless the Village takes a pro-active, collaborative approach with the owners and/or operators of the industrial uses.

The development and redevelopment of the upper stories of commercial building in the CBD should be encouraged. Such spaces are more attractive to office and residential uses than to retail uses (due primarily to accessibility).

Coordinated Marketing Opportunities

There are a number of current activities, both within the Village and in the Township, which could be used to promote the CBD. Seasonal events such as the Armada Fair, the Armada Flea Market, fall orchard activities, and Holly Days already draw large numbers of people to the area. Reviving Applefest with its parade or developing a similar, community-based weekend event should also be considered. Such events, if properly promoted, can be effectively used to increase visitors to the Village on a regular basis and bring new customers to local businesses. With some deliberate and coordinated planning, events like these can have a positive and lasting impact on the CBD.

The Village should also take immediate steps to capitalize on other opportunities within Village limits to showcase itself and draw customers to the CBD. For example, completion of the Rails to Trails Pathway (Macomb Orchard Trail) has brought walkers and bikers past the South Village limits. Signage and a marked path to the CBD will bring them to the downtown businesses. Further, development of the Village Memorial Park, such as the erection of the pavilion and the addition of benches and tables, has allowed it to become a venue for outdoor concerts or open-air art and craft shows. These events could also serve to bring visitors to the area and customers into the CBD.

Village Officers should encourage restoration of the now disbanded civic and trade association or actively support development of a similar entity to sponsor Village activities and promote the CBD. To this effect, the Armada Business Association has been formed with 40 Armada business members.

Public Infrastructure Improvements

In 2004 and 2005, South Fulton was reconstructed including new water, sanitary and storm sewers and road paving, an arsenic treatment plant was also added, a new water main was installed on West Main. In 2006, the downtown street lighting was replaced with new lighting. In 2007, the central business block was totally redone, including sidewalks and new street. 2009 saw the removal and replacement of pavement in the older part of the southeastern residential section. 2010 saw North Fulton also get new water and sewer lines and new pavement.

10 | Industrial Areas Plan

10.0 Introduction

The quantity of developed industrial land a community will need in the future is dependent upon its current employment base, infrastructure capacity, local political philosophy, placemaking and local amenities, as well as the myriad of other factors industries consider when choosing a location for a new facility.

This chapter assesses the current supply and location of industrial land within the Village and discusses emerging industrial sectors that are highly desirable to attract. Further, recommendations and a conceptual plan are made on the type and location of industrial development that should occur based upon local objectives and need.



10.1 Industrial Base Analysis

Industry within the Village of Armada is generally concentrated in three (3) areas:

1. Along the Macomb Orchard Trail east and west of Fulton Street/North Avenue, including the Armada Grain property.
2. The Church Street block immediately south of E. Main Street.
3. The eastern side of the southern end of Tietz Street.

The predominant type of industry within these areas is small-scale production, repair and assembly shops. Combined, these uses occupy approximately 19.4 acres of land area. Developable industrial land within the Village is limited to property south of Depot Street, east of Fulton Street, and Tietz Street. Excluding existing development, it amounts to approximately 10 acres of unimproved land. Vacant property exists to the south of the water and east of the sewer treatment plant.

Generally, there are no industrial areas to be developed, except on the Armada Grain property, without expanding the industrial area. The exception to this is Orchard Construction has room for one small building.

10.2 Emerging Industrial Sectors

The Village of Armada has interest in developing new industrial sectors that will compliment the existing economic base. Macomb County and Southeast Michigan in general have identified new emerging economic growth sectors concentrated within the fields of manufacturing, information technology and healthcare. Forecasted emerging sectors include:

- Computer design
- Engineering
- Advanced manufacturing
- Alternative energy
- Technical consulting
- Bio-technology and life-sciences
- Homeland security and defense
- Medical, healthcare and social assistance¹

Given the technical advances and global context of the economy, traditional models for cultivating this sector have drastically changed. Similar to many Midwestern communities, the Village of Armada is undergoing a transformation in order to sufficiently compete in this new economy. The table below lists several key features of the old economy and how this has changed over the past several decades into key features of the new economy.

Key Features of the Old | New Economy

Table 10.1

Key Features of the Old Economy	Key Features of the New Economy
A high-quality physical environment was a luxury, which stood in the way of attracting cost-conscious businesses.	Physical and cultural amenities are key in attracting knowledge workers.
Success = fixed competitive advantage in some resource or skill. The labor force was skills dependent.	Success = organizations and individuals with the ability to learn and adapt.
Industrial sector (manufacturing) focus.	Sector diversity is desired, and clustering of related sectors is targeted.
Fossil fuel dependent manufacturing.	Communications dependent, but energy smart.
People followed jobs.	Talented, well-educated people choose location first, then look for or create a job.
Location matters (especially relative to transportation and raw materials).	Quality places with a high quality of life matter more.
Dirty, ugly and a poor-quality environment were common outcomes that did not prevent growth.	Clean, green environment and proximity to open space and quality recreational opportunities are critical.

Source: The Economies of Place: The Value of Building Communities around People. Michigan Municipal League: 2011.

¹ Macomb County Michigan, Targeted Industries Report. July 2006.

In addition to these regionally emerging industrial sectors, the agri-business sector has a significant growth potential in Armada. Agriculture is the second largest industry in Michigan. With 475 farms in Macomb County covering more than 60,000 acres across – 17% of the county's total area - agriculture has a significant impact on the local economy. Armada is uniquely positioned to capitalize on this sector being home to the Armada Grain. The Armada Grain continues to expand and can be used as a catalyst to attract similar or complimentary uses to the Village.

Future industrial use areas in the Village should be designed to facilitate agribusiness and the knowledge base and technological sectors. Additional options for the Village of Armada include offering an industrial incubator for trade and providing space for small shops that can be leased or purchased.

Since businesses choose where they want their facilities to be located, emphasizing amenities of the Village will aid in drawing in new clients. This can be done through placemaking, as it showcases the competitive advantages the Village of Armada has to offer as a desirable place to locate industry.

When seeking a location a potential industrial site, “manufacturing companies, globally, are paying attention to:

- Proximity to institutions of higher learning
- Customized training programs
- Availability of incentives; and
- Keeping workers up to speed with the latest technologies.”²

10.3 Industrial Areas Plan

The overall placemaking concept is predicated on removing incompatible industrial uses from the downtown corridor and making the area a more vibrant town center. At the same time, relocating the existing industrial facilities to the industrial park creates a place for nonconforming uses.

Given the Village's desire to promote small-scale intensive industry (those which consume less land and employ a higher number of employees per acre than intermediate extensive and extensive industries) at a concentrated location, it is recommended that the Village consider developing a small-scale industrial/business park on the south side of the Village (near the Armada Grain Company property).

The following renderings are part of conceptual plan on the industrial park might evolve. This will provide sufficient land to encourage relocation of existing industrial operations from the downtown area, while also providing sufficient area for future growth. Additionally, this plan allows for the preservation of the surrounding neighborhoods, the downtown corridor, and recreation areas and creates more road connectivity.

² Macomb County Michigan, Targeted Industries Report. July 2006.

Option A



Option A: To construct a road off of Fulton Street, south of Depot Street between the Edison substation parcel and the neighboring Armada Township parcel line, running east and forming a cul-de-sac in the very southeastern parcel. There are seven (7) lots for future industrial development.

Option B



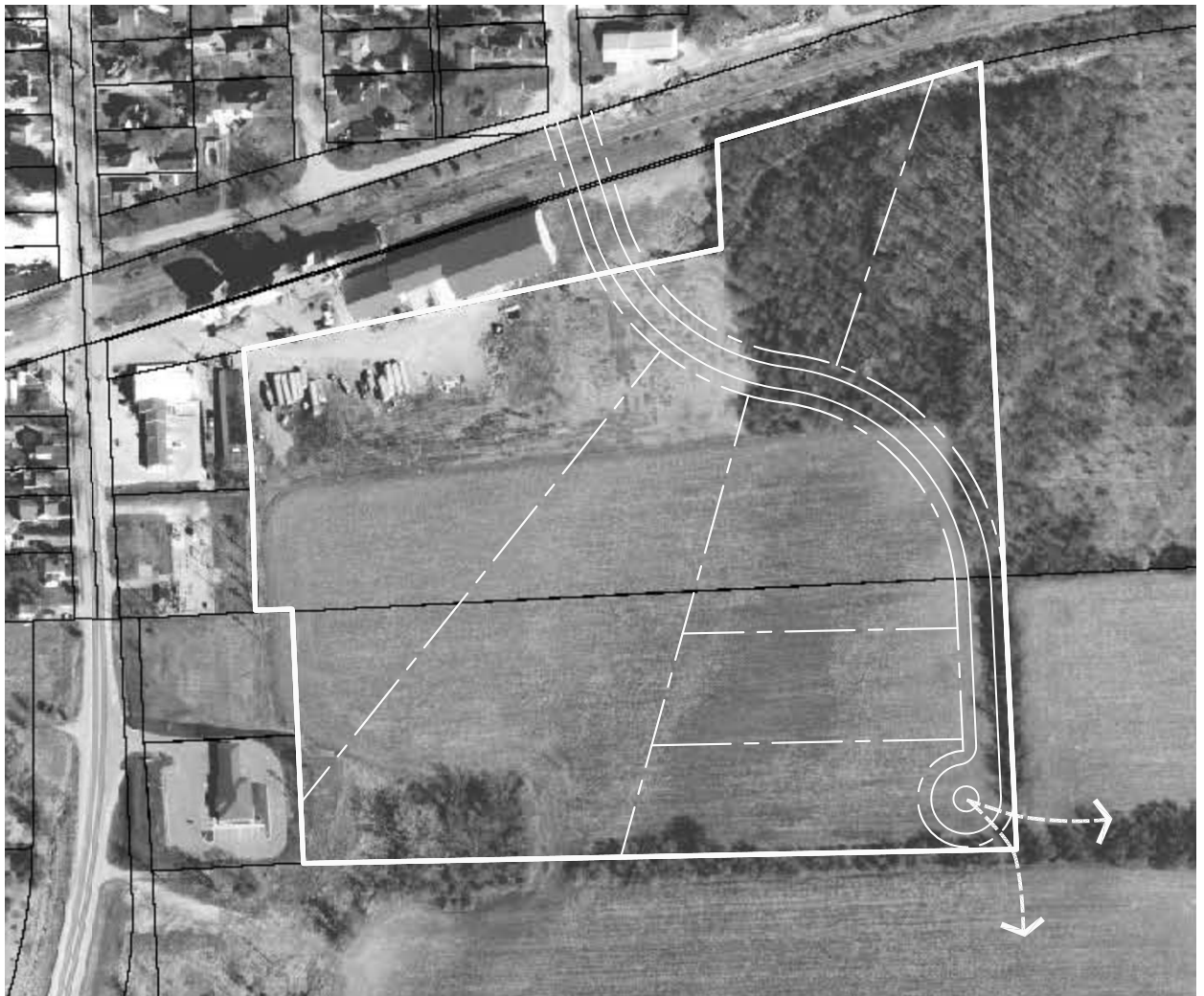
Option B: To move Delecke Welding's building with the road coming off of Fulton Street and running east (this will require some Edison guide wires being moved). The road forms a cul-de-sac in the very eastern parcel and there are nine (9) lots for future industrial development.

Option C



Option C: This road runs south (roughly 200, 250 ft.) from Depot Street, right west of the arsenic removal plant and then winds east, ending in a cul-de-sac in the very southeastern parcel. There are nine (9) lots for future industrial development.

Option D



Option D: Begins the same as Option C on Depot Street, running south for 200, 250 feet, then heading due east and straddling the edge of the property's line south until it reaches a cul-de-sac in the very southeastern parcel. There are seven (7) lots for future industrial development.

11 | Transportation Plan

11.0 Introduction

This chapter examines the existing transportation system within the planning area according to function and flow and provides recommendations for improving circulation and accommodating future development. Ideally, the extension and improvement of public streets should precede the demands incurred by increased development. A synchronous relationship should develop between transportation improvements and changes in land use.

11.1 Hierarchy

Streets within the Village of Armada can be classified according to a three level functional hierarchy of service. The hierarchy is described as follows:

Local (minor) Streets

Local streets are primarily designed to provide access to immediately adjacent properties. Through movement may be possible, but is not encouraged by operational controls; it may be impossible in the case of cul-de-sacs. Part of the street width is usually allocated to vehicle parking without restrictions, although special snow emergency parking prohibitions may be necessary. Each abutting property may have a driveway connection to the street.

Examples of local streets are Floral Street, Simons Street, Franklin Lane, and Lathrop Street.

Collector Streets

Collector streets are primarily designed to provide access to abutting land parcels, and also enable moderate quantities of traffic to move expeditiously between local streets and the major network.

Torrey and Hollweg Streets have begun to emerge as collector streets as a result of development activity in the southeast portion of the Village. Spencer Street and Prospect Avenue also serve in this capacity.

Major Streets

Major streets are primarily designed for the efficient movement of through traffic at speeds as high as can be reasonably allowed in view of safety considerations and the amount of access being provided. Capacity is obtained by provision of wide street cross sections and high capacity controls at intersections, or by elimination of intersections by grade separation. Speed results from provision of good horizontal and vertical alignments and removal of potential safety hazards, especially access friction.

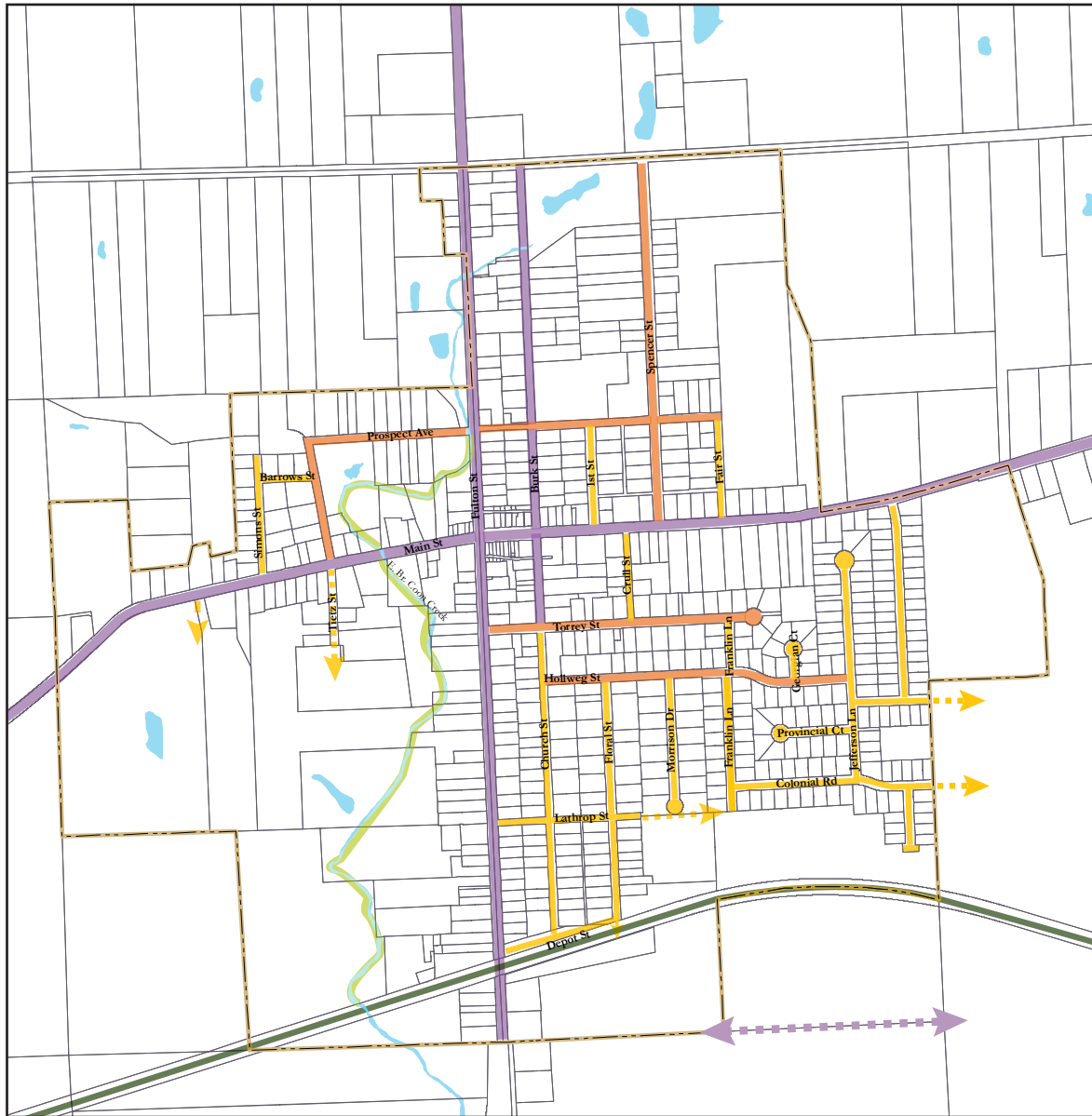
Fulton, Main, and Burk Streets are examples of major streets.

The transportation Plan Map 0.5 displays local, collector and major streets inside the planning area.

Map 0.5

Transportation Plan Map

Village of Armada, Macomb County, Michigan



- | | | |
|---------------------------|----------------------------|------------------|
| Existing Major Street | Proposed Major Street | Current Greenway |
| Existing Collector Street | Proposed Local Street | Bodies of Water |
| Existing Local Street | Proposed Greenway Corridor | Village Boundary |

0 500 1,000
Feet



Source: Base map, Macomb County 2004
Date: 06.20.12

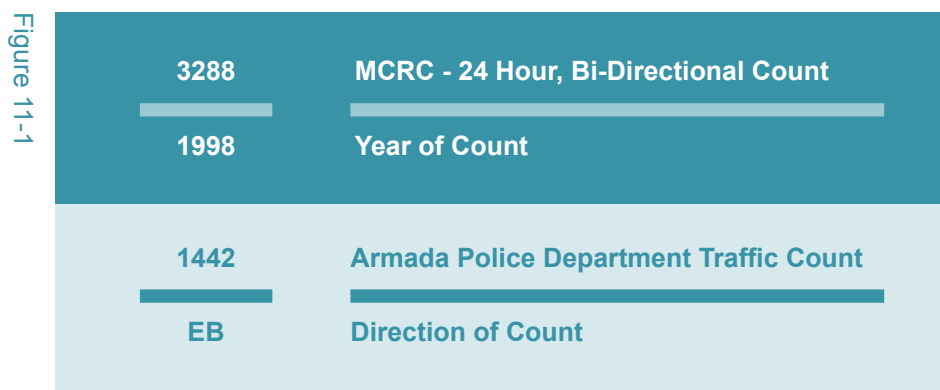
11.2 Village Street Pattern

The Village of Armada has developed within a partial grid of rectangular streets networking through compact neighborhoods consistent with neotraditional design objectives.

According to design objectives, the optimal size of a neighborhood is 1/4 to 1/3 of a mile from center to its edge, a distance equal to a five to ten minute walk at an easy pace. Its limited area gathers the population within walking distance of many of its daily needs. Further, streets are designed to accommodate the needs of all modes of transportation. Moreover, a neighborhood consists of a interconnected network of small thoroughfares with smaller blocks to provide multiple routes. This pattern keeps through traffic off local streets.

Inside the Village, Main and Fulton Streets form the supporting axis from which internal local streets stem. South Fulton Street, a two lane paved road with gravel shoulders and North Fulton Street, a paved road with curbs and gutters, generates the heaviest amount of through traffic within the Village. Its intersection with Main Street marks the downtown or Village center and is a point of congestion during peak travel times.

All streets within the Village fall under local jurisdiction. Figure 11-1 depict traffic count data obtained from the Road Commission of Macomb County and local police department.



11.3 Local Transportation Issues

Maintaining and improving the greater Armada community's network of streets and roads will continue to be an issue of concern for the Village and Township. An evaluation of transportation issues in the Village of Armada was conducted by functional area as a basis for recommending capital improvements.

Road Quality

During 2002, Rowe, Inc. completed an analysis of the condition of all the roads in the Village (the "Street Smart" study). The study divided the Village roads into a number of segments, and identified both the condition and type of improvements required for each segment. The cost of this work was estimated to be \$2,000,000. The entire length of Fulton Street has been repaved and the last section was completed in 2010.

Truck Traffic

The Village and Township should work together with Macomb County to identify and establish a suitable alternative route for such vehicles, and to resolve any future transportation-related issues.

Residential Neighborhood Areas

The southeast quadrant of the Village generates the greatest amount of local traffic and is the most intensively developed residential region in the Village. As such, this area requires the greatest amount of attention in planning for the safe and efficient movement of vehicles.

Armada Meadows subdivision was recently developed in the southeast corner of the Village. Torrey Street provides the only direct connection to this development from Fulton Street. Rather than entering the subdivisions from Main Street to the north via Madison Street, drivers are electing to “cut through” neighborhoods from Fulton Street to the west to avoid the congestion along Main Street in the CBD. Consequently, Torrey and Hollweg Streets are carrying through traffic that they are not designed to handle. Moreover, they are inappropriately serving as minor collector streets rather than their intended function; carrying local traffic. This may create unsafe travel conditions for residents along these routes.

Commercial/Downtown Area

According to the Village Police records, most traffic accidents within the Village occur along Main Street, between Fulton and Burk Streets inside the CBD. Most are minor “fender benders,” and the Village has one of the lowest accident rates in the County. This segment of the street contains on-street, 45 degree angled parking, with one travel lane for each direction. The turning movements created by vehicles parked on street interfere with through traffic and create chaos during busy times. Vehicles parked on-street obscure visibility for cars turning onto Main Street from Burk Street.

The Armada Downtown Plan adopted in 2003 recommends streetscape design changes for this intersection, which are intended to improve traffic and pedestrian safety. The Village DDA Development Plan adopted in 2004 incorporates many of the Downtown Plan’s recommendations into the phased public improvement projects scheduled for this portion of the DDA District. Main Street in the central business district streetscape project was completed in 2007.

A second issue of concern inside commercial areas is inadequate truck maneuvering space and loading/unloading space. Access/egress of truck traffic in the Village, especially “big rigs”, is made difficult by the narrow and restrictive road network, especially in the CBD. The CBD cannot accommodate the large turning radius required by the trucks and lack of loading/unloading space often results in traffic back-ups and potentially unsafe conditions. Impending road and street infrastructure improvements have reduced some problems for large trucks.

Industrial Areas

Presently, there is no dominant industrial area within the Village. The focus for industrial expansion, however, is placed upon an area southeast of the Fulton Street and Depot Street intersection. The development area is currently owned by Armada Grain and is partially unimproved. Internal access must be provided that is designed to handle year-round truck traffic without impeding traffic movement on Fulton Street.

11.4 Recommended Transportation Improvement Techniques

Two techniques widely used are recommended to effectively manage the development and operation of the local transportation system. The first deals with access management. An expansion of commercial development along Main Street may create a need to apply the recommended practices outlined below by the Michigan Department of Transportation. The second technique relates to traffic calming. This may emerge as a critical issue in neighborhoods unless adequate measures and improvements are made.

Access Management

Access management is defined as “a process that provides or manages access to land development while simultaneously preserving the flow of traffic on the surrounding road system in terms of safety, capacity, and speed.”¹ The goal of access management is to achieve a safe and efficient flow of traffic along a roadway, while preserving reasonable access to abutting properties.

Six basic principles are outlined in the *Improving Driveway & Access Management* in Michigan handbook, prepared for the Michigan Department of Transportation, to achieve the benefits of access management. They are:

1. *Limit the number of conflict points:* When the number of potential conflict points between turning vehicles increases, so do the opportunities for traffic crashes. Intersections typically have the most points of potential conflict.
2. *Separate conflict points:* Traffic conflicts can be reduced by separating conflict points. Effective ways include establishing minimum distances between intersections and driveways and establishing corner clearance standards that separate driveways from critical approach areas of intersections.
3. *Locate traffic signals to facilitate traffic movement:* When a major road has poorly spaced and uncoordinated signals, traffic safety, road capacity and traffic speed can be severely hampered. Distances of one-half mile or more between signals are desirable.

¹ Michigan Department of Transportation, *Improving Driveway & Access Management in Michigan*

4. *Maintain a hierarchy of roadways by function:* Access management standards consistent with roadway function protect investments in existing roads, businesses and residential areas. When a road combines high traffic volumes with too many conflict points, roadway function and quality decline, along with the ability to safely access abutting properties.
5. *Limit direct access on higher speed roads:* Access on higher speed roads should be limited to only signalized intersections or other public streets along the road.

The above access management principles should be incorporated in the development review of major projects.

11.5 Traffic Calming

Traffic calming is a holistic, integrated traffic planning approach based on common sense, which seeks to maximize mobility while creating a more livable place by reducing the undesirable side effects of that mobility.² Within the Village of Armada, cut through neighborhood traffic has been identified as an area of concern.

The following are road design methods used to slow traffic taken from the Traffic Calming publication by the Citizens Advocating Responsible Transportation (CART):

- *Narrow Traffic Lanes:* Wide lanes encourage greater speed.
- *Interrupted Sight Lines:* If motorists can see a long way into the distance, their speed increases. The interruption of sight lines with changes in the roads direction, roundabouts, “neck-downs” or breaking the road into smaller visual units with paved strips across the road causes the driver to slow down. It also means they widen their vision field becoming more aware of pedestrians and cyclists.
- *Changes in Road Surface:* Paved or cobblestone strips across a road cause a slight vibration in the car which causes the driver to slow down.
- *Paved Speed Tables:* A speed table is a slightly raised section in the road. It varies from a speed bump in that it must be wide enough for both sets of wheels to be on the table at once. They can be placed at pedestrian crossings or whole intersections at the same level as footpaths.
- *Neck-downs:* Landscaped islands intrude into the roadway to form a narrow “gate” through which the driver must pass.

The above techniques are encouraged to be employed to calm traffic in neighborhoods and in the downtown area to improve safety and promote pedestrian activity.

² Citizens Advocating Responsible Transportation (CART), *Traffic Calming*, 1993.

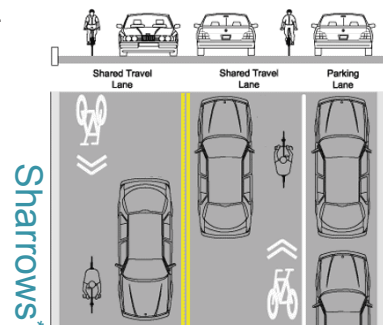
11.6 Complete Streets

A complete streets policy provides pedestrians of all ages and abilities and cyclists with opportunities for safe travel and great access within their community. Environmentally, complete streets encourage the use of native vegetation for improved water quality and management. Additionally, complete streets allows for greater use of the streets for physical activity and active transportation. The following are three guiding principles for defining a complete streets policy:

1. Develop connectivity of the street network to increase accessibility for uses and provide routes to the many community focal points, including home, school, work, recreation and commercial destinations.
2. Promote safe travel for users, especially in regards to children, the disabled and senior citizens.
3. Encourage alternative methods to storm water collection (known as low impact development) including rainwater gardens, cross slopes, curb profiles and pervious pavement.

In order to provide greater walkability and access for the residents of Armada and improve environmental conditions, the following recommendations should be considered by the Village and incorporated into future capital improvements:

- Sidewalks installed on all major and collector streets, compliant with ADA regulations.
- Sharrows (street markers used to indicate areas within public roadways may be used by bicyclists) are an effective way of accommodating cyclists. This would help accommodate the bicyclists traveling from the Village to the Macomb Orchard Trail.
- Install bike racks within the commercial district.
- Use decorative pavers, or striping, for dedicated crosswalks, including ramps.
- Introduce seating, trash receptacles, and landscaping elements at intersections to signal drivers to watch out for pedestrian crossing.
- Develop cross slopes and curbs to influence the movement of rainwater to vegetated areas where it is absorbed and filtered. Many indigenous species and low maintenance plants work best in rain gardens and require minimal upkeep.



11.7 Recommended Capital Improvements

The overarching goal in planning for improvements to the Village transportation system is to foster continuity in the existing tightly knit grid street pattern while retaining the intimate hamlet charm of the neighborhoods. This will aid in diffusing automobile traffic and shortening walking distances. Further, this pattern helps to keep through traffic off local streets. Slowing the automobile and increasing pedestrian activity encourage the casual meetings that form the bonds of community. Future extensions of major and local streets are depicted on Map 0.5.

* Source: <http://www.ci.irving.tx.us/begreen/Bike%20sharrows%20lanes.asp>

Road Quality

An important step in implementing the recommendations of the “Street Smart” study was completed in 2011. The Village’s next planned project is the updating and resurfacing of East Main in 2014.

In addition to completing the remainder of the required improvements, it is necessary to determine the annual cost of keeping the Village roads in satisfactory condition on an on-going, long-term basis. A plan can then be developed for generating the revenues needed to support this. It is recommended that such a study and plan be undertaken and implemented.

Commercial/Downtown Area

Providing an area for off-street parking may relieve the congestion and chaos created by the high frequency of turning movements on Main Street. This can be done by expanding parking available to the rear of buildings or by improving and expanding existing public lots. Also, additional land should be acquired to accommodate future parking needs, the most desirable located in the northeast quadrant of downtown.

Poor internal circulation and deficient loading/unloading space were identified as issues relating to the Village Plaza shopping area. Existing loading/unloading areas should be encouraged to be relocated to the rear of the store, if possible, to reduce interference between truck and automobile traffic. As a temporary measure, existing loading/unloading should be restricted to non-peak hours. Delivery access may be developed from Fulton and Main Streets to the rear of the property to help alleviate this problem.

Macomb-Orchard Trail and Greenway Development

A greenway is defined as linear open space established along either a natural corridor such as a riverfront, stream valley or ridgeline, or over land along a railroad right-of-way converted to recreational use, a canal, a scenic road or other route.³ All greenways share the objective of providing access to a variety of amenities and experiences.

The abandoned Grand Trunk Western (GTW) railroad provides a tremendous opportunity for a regional pathway/greenway corridor. This system provides pedestrian connections to the Village of Romeo and the City of Richmond. Accomplishing this required a multi-jurisdictional effort that was accomplished through shared responsibility. In the Village of Armada’s Parks and Recreation Master Plan, there is shown an opportunity to connect this trail to the Village’s neighborhoods and downtown area through extensions of public sidewalks and provision of dedicated bicycle lanes along Village streets. The last section of the trail was paved in 2011.

³ Little, Charles E., *Greenways for America*, The John Hopkins University Press, Baltimore MD, 1990.

Macomb -
Orchard Trail
Entrance



Source: <http://www.macombcounty.mi.gov/mpcd/E-Macomb/September%202010/Sept10%20-%20FA%20-%20Mich%20Rehab.html>

Pavilion / Rest Station



Source: <http://www.flickr.com/photos/dcxdan/1952714487/>

Bike Rack / Public Art



Source: <http://www.orchardtrail.org/>

Trail Entrance



Source: http://michigan1001dailyphoto.blogspot.com/2010_04_01_archive.html

Trailhead Kiosk Example



Source: <http://8z.com/articles/grand-re-opening-coalition-and-meadowmark-trailhead>

A trailhead is to be incorporated along the Macomb-Orchard Trail in the Village by 2012 or 2013. The trailhead could be located at the intersection of the trail and Fulton Street. Such a trailhead should incorporate parking (twenty spaces would be adequate) and a respite station with benches and bike racks (also doubling as cross-country ski racks during the winter). Additionally, there should be information kiosks, with one sign featuring a map of the Village's local businesses, schools, churches and government offices. Another sign will be a "Welcome to the Armada Trailhead Parking" and staging area for the Macomb Orchard Trail.

Expansion of an Interconnected Street Network

All future development around the fringes of the Village should include extension of existing Village streets, with provisions for new collector streets where deemed necessary to minimize through traffic on neighborhood streets.

For example, the continued planned expansion of the southeast quadrant of the Village for residential and industrial development will create additional traffic demands that must be met by providing an alternative through route from Fulton Street to the east. The previous Master Plan proposed an eastward extension of Depot Street to serve as a collector street to provide:

1. Access to underdeveloped land south and east of the Village; and
2. A safer through connection to the housing units in the Armada Meadows subdivision.

This is no longer an option due to the location of the recently constructed arsenic removal plant. The need still exists, however, and another solution must be provided.

The Transportation Plan (Map 0.5) depicts an extension of Lathrop Street eastward from Floral Street to Franklin Street and a slight extension of Floral Street to the south. It is recommended that the Village assess the feasibility of using Lathrop Street as a collector street, and determine the requirements for the trail crossing.

Industrial Areas

This Master Plan includes specific recommendations for development of a new industrial/business park on the south side of the Village. It is envisioned that the industrial area will consist of a small-scale production, a skilled trades park, repair and assembly shop setting with limited truck traffic. It is anticipated that most traffic in and out of the planned industrial area will be contractor and service vehicle related. Development of the industrial/business park should include phased development of a new access street to serve the park's users. By concentrating industrial activity in the southern portion of the Village, the amount of truck and employee traffic moving through the downtown area and residential neighborhoods will be substantially reduced.

11.8 Implementation

The implementation of identified improvement projects should be done to improve traffic circulation and induce the preferred pattern private development in planned areas. This requires a short-range capital improvements plan to be prepared in light of current development trends. Further, traffic impact studies should be reviewed on a case-by-case basis as development proposals are accepted.

Programming

The above recommendations for improvements should be considered for incorporation into a six-year capital improvements plan linked to the municipal budget. This should be done in accordance with Section 9 of the Municipal Planning Act (P.A. 285, 1931), which states that:

“For the purpose of furthering the desirable future development of the municipality under the master plan, the city planning commission, after the commission shall have adopted a master plan, shall prepare coordinated and comprehensive programs of public structures and improvements. The commission shall annually prepare such a program for the ensuing six years, which program shall show those public structures and improvements, in the general order of their priority, which in the commission’s judgment will be needed or desirable and can be undertaken within a 6-year period. This has been taken over by the Village Council.”

Outside project funding for road improvements should be sought when windows of opportunity open up to the Village. For example, economic development funds should be procured from State and Federal agencies for the access loop in the planned industrial area. In addition, grant funds should be applied for in developing the greenway network.

Development Review

A traffic impact study should be an essential part of the development review process to assist developers and public agencies in making land use decisions, such as annexations, subdivisions, rezonings, special land uses, and other development reviews, where the proposal may have a significant negative impact on traffic and transportation operations. Ultimately, traffic impact studies could be used to help evaluate if the scale of development is appropriate for a particular site and what improvements may be necessary, on and off the site, to provide safe and efficient access and traffic flow.⁴

⁴ McKenna Associates, Inc, The WBDC Group, *Evaluating Traffic Impact Studies*, 1994.

12 | Future Land Use Plan + Boundary Expansion Strategy

12.0 Introduction

Permanent expansion of the current Village boundaries is required to ensure the long-term financial viability of the Village. This is supported by the Council Resolutions included in Appendix C. The primary goals are to reduce property taxes and to provide water and sewer services at an affordable rate for Village citizens. Although some improvement can and will continue to be achieved through cost-cutting measures, the distribution of fixed costs over a wider user base is an essential mechanism for achieving these goals.

An extensive financial analysis by the Long-Range Financial Planning Committee has demonstrated that a significant reduction in property taxes and water and sewer rates cannot be achieved over the long-term by expansion of residential properties alone, and that those financial benefits will need to be enhanced by the accompanying expansion of commercial and perhaps industrial activities within the Village. The analysis was developed by analyzing each revenue and expense line item in the financial accounting system to determine the incremental effect of adding an input number of residential, commercial and industrial units over a period of time. The analysis demonstrates that the following on-going long-term benefits can be achieved with an expansion of 550 residential units, as illustrated in Table 12.1.

On-going Long-Term Financial Benefits of Expansion

Table 12.1

	Current Millage	Projected Millage	Potential Reduction
General Fund	9.5697	6.500	32%
Total Street Funds	3.8277	3.000	22%

Utility Rates	Current Rate	Projected Rate	Potential Rate
Water	8.090	5.000	38%
Sewer	6.470	4.500	30%

Note: Based on 550 Units; no commercial; average Price = \$175,000; 15 year development period and at 2004 prices.

The expansion strategy presented in this document is based on the designation of an “urban growth boundary,” which is a concept for managing sprawl and restricting the spread of development into the surrounding rural areas. Under this concept, annexation would be permitted only within the boundaries, and only when and if requested by property owners within a specified time period (typically 20 to 30 years). Such a boundary, established and agreed upon jointly by the Village and the Township, would define a specific area around the Village within which high-density residential development is to be contained. Establishment of such a boundary accomplishes two purposes:

1. It supports the long-term financial goals of the Village by providing a specific, mutually agreed upon and limited area within which the Village can grow.
2. It supports the Township plans for promoting farmland and open space preservation and reducing sprawl by confining high-density residential development to a restricted area where the required infrastructure is already available or readily expandable.

12.1 Establishment of the Urban Growth Area Boundaries

The current area occupied by the Village is 489 acres; less than 1 square mile. There are approximately 656 residential units (single- and multiple-family) contained within 186 acres, resulting in an overall residential density of 3.5 units per acre. Undeveloped land suitable for residential development has the capability of sustaining an additional 50 units, for a total of 706 residential units at build-out. The long-term financial analysis demonstrates that the minimum size of the Village required to ensure long-term financial viability is approximately double the current size of the Village (3,200 persons residing in 1,120 units). At this level, the Village anticipates a property tax reduction of 29%, a water reduction of 38%, and a sewer rate reduction of 30% are achievable and sustainable over the long-term, without further growth. This cannot be accomplished in the long run without an industrial expansion also.

The current Village boundaries are capable of supporting 706 units at build-out (656 existing 50 in undeveloped areas), which means that the absolute minimum area to be annexed must support an additional 416 units. At a planned density of 3.0 units per buildable acre, this would require 139 acres of developable land for residential uses. However, the planned area within the urban growth boundary should be significantly larger, for the following reasons:

1. Some property owners will not choose to be annexed;
2. Others will choose to develop their property at much lower densities;
3. Non-residential uses will take up some additional area;
4. An industrial area will also be included; and
5. Portions of some of the annexed areas are not suitable for development.

Based on the assumption that approximately 50% of the total annexed areas will be available for high-density residential development at 3.0 units/acre, it is recommended that approximately 300 acres be included in the annexable area. A plan to achieve that goal is shown in the Future Land Use Map, and summarized in Table 12.2 below.

Based upon the planned expansion strategy, the anticipated future size of the Village would be 793 acres, or approximately 1.24 square miles.

In addition, the following guidelines are recommended:

1. A proportional Downtown Commercial Boundary should be established to accommodate the additional commercial demand as the need develops.
2. The additional commercial space needed for expansion of the downtown business should be obtained primarily from relocation of the existing industrial businesses to an industrial park at the south end of the Village (See Chapter 13).

Commercial development within the annexed areas would be strictly limited to small neighborhood commercial activities that are primarily intended to serve the needs of the residents of the immediate surrounding residential areas.

Future Land Use Acreage by Land Use Type

Table 12.2

Land Use Category	Acreage	Percent of Total
Single Family Residential/ Neighborhood	570	71.9%
Multiple Family Residential	12	1.5%
Downtown District	25	3.2%
Light Industrial	26	3.3%
Public Semi Public	62	7.8%
Greenway Corridor	70	8.8%
Road rights-of-way	28	3.5%
TOTAL	793	100%

Compiled by Wade-Trim

12.2 Future Land Use of Urban Growth Area

Most of the individual annexable areas within the urban growth boundary are planned primarily for single-family residential, and should be zoned as R-1 (Single-Family Residential) District at the time of annexation. Apartments, offices, commercial and industrial uses are also permitted, when appropriate or as part of a Planned Unit Development which permits mixed uses. Expansion of the existing downtown commercial activities, with space being provided by relocation of the existing industrial businesses in the downtown area to the industrial area at the south end of the Village is a key element of the plan.

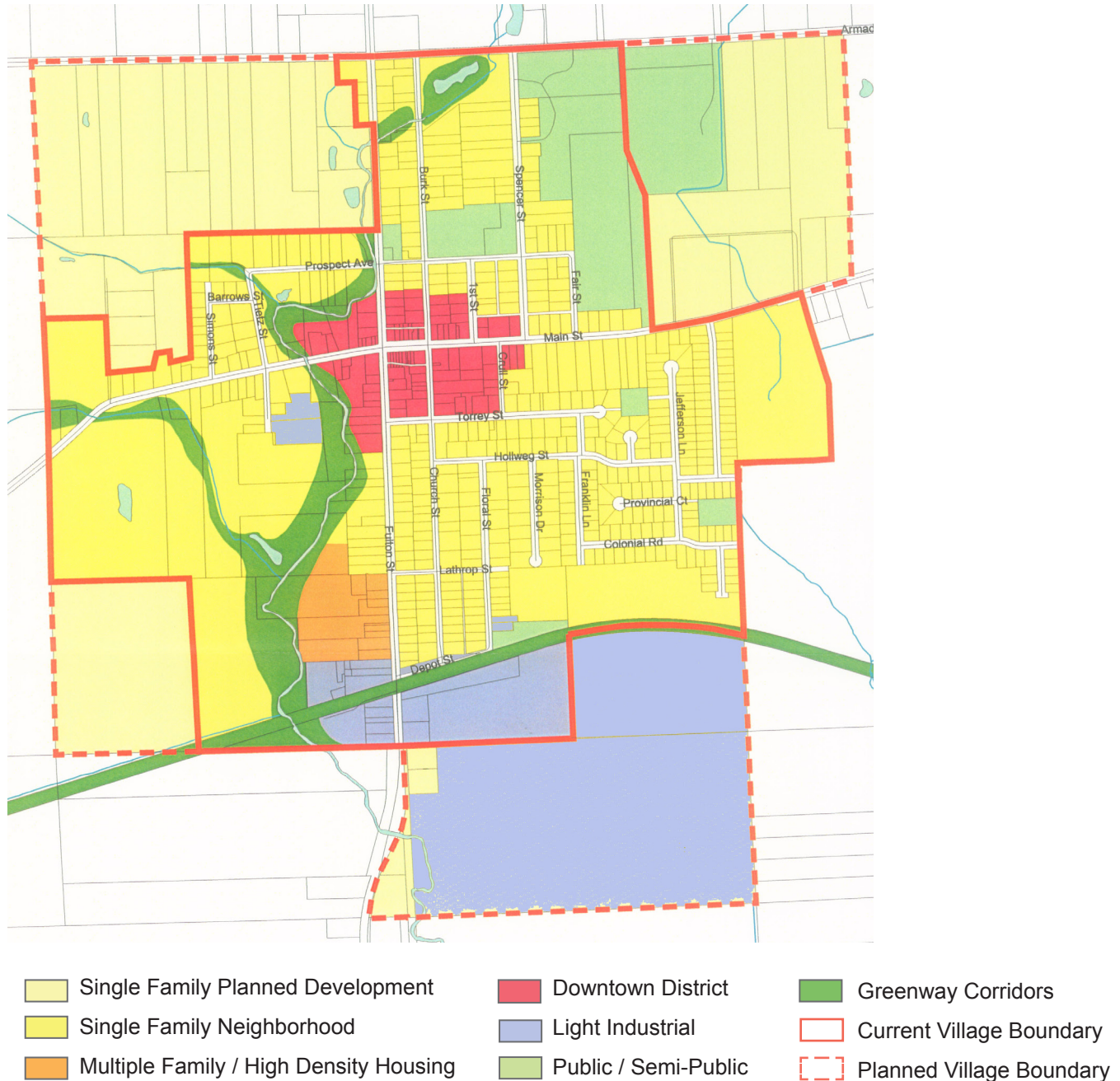
12.3 Revisions to the Urban Growth Boundaries

It is recognized that the exact location of the areas to be annexed needs to have some degree of flexibility. Since development of the proposed areas shown on the map may not proceed as expected for a variety of reasons, other areas adjacent to the Village that might seek annexation should be considered as alternates. When and if such a situation arises, revision of the boundaries may be considered.

Map 0.6

Future Land Use Map

Village of Armada, Macomb County, Michigan



McKenna
ASSOCIATES

Base Map Source: Macomb County, 4/04
Data Source: Village of Armada
Date: 12.27.04

13 | Economic Development Strategies

13.0 Introduction

The Industrial Development section of the Goals and Objectives chapter established the following goal:

To encourage light manufacturing industries that provide a positive contribution to the local tax base and provide local jobs without compromising the established character of the Village.

The intended means to implement this goal, and the supporting objectives and policies, is to develop an industrial park and relocate existing industrial businesses from the Village center. This section of the Master Plan describes the process for developing an industrial park and describes the methods available to the Village to plan, finance, and develop an industrial park.

13.1 Existing Conditions

One of the Village's existing industrial area is located south of Main Street, on the east and west sides of Church Street, as depicted on the Industrial Park Relocation Map. The current businesses operating in the industrial area are listed in Table 1.

Although the industrial businesses have long been a part of the Village's downtown area, relocating the existing industrial businesses would be beneficial for the following reasons:

Current Businesses | 2012

Table 13.1

Name of Business	Bldg. Size (sq. ft.)
Park II	15,375
Park I	19,875
Paterek Mold	3,750
Vacant	2,264
Total Square Footage	41,264

Source: Village of Armada

- 1. Industrial expansion and growth.** Each of the existing industrially zoned lots in the Village center is fully built out. There is no room to expand any of the buildings. Thus, the existing businesses are prohibited from expanding in their current location. Relocating the businesses to a new industrial park will allow each the room to expand their operations as their business grows. The new proposed park is partly in the Village now and partly in the annexation area.
- 2. Commercial development.** As the downtown business district grows, fueled by new housing in the downtown's trade area, there is little room for retail businesses to expand. The existing industrial area is located in the Village's core commercial area. The area left vacant when industrial businesses relocate to the proposed industrial park will allow for growth and expansion of the Village's retail district.
- 3. Ameliorating land use conflicts.** Residences bound the existing industrial area to the east, south, and west. There is little in the way of landscaping, soundproofing, and lighting controls, to provide a transition and buffer between the industrial uses and the adjacent residences. Redeveloping the existing industrial areas for retail businesses will provide an opportunity to implement landscaping and other measures to enhance the quality of downtown residences.

13.2 Proposed Industrial Park

The area proposed for an industrial park is comprised of approximately 26 acres of land located on the east side of Fulton Street, between the Village's southern boundary and the south side of the former railroad right-of-way. The area is zoned industrial, and is depicted on the Industrial Park Relocation Map.

The area proposed for the industrial park is undeveloped and under unified ownership. There is additional land adjacent to the south of the proposed industrial park, lying outside of the Village boundary. It is proposed approximately 26 acres of this additional land be made part of the proposed industrial park.

The problem with this plan is that there is no access to this site. There are four (4) possible ways to construct an access roadway.

Option A: To construct a road off of Fulton Street, south of Depot Street between the Edison substation parcel and the neighboring township parcel line, running east and forming a cul-de-sac in the very southeastern parcel. There are seven (7) lots for future industrial development.

Option B: To move Delecke Welding's building with the road coming off of Fulton Street and running east (this will require some Edison guide wires being moved). The road forms a cul-de-sac in the very eastern parcel and there are nine (9) lots for future industrial development.

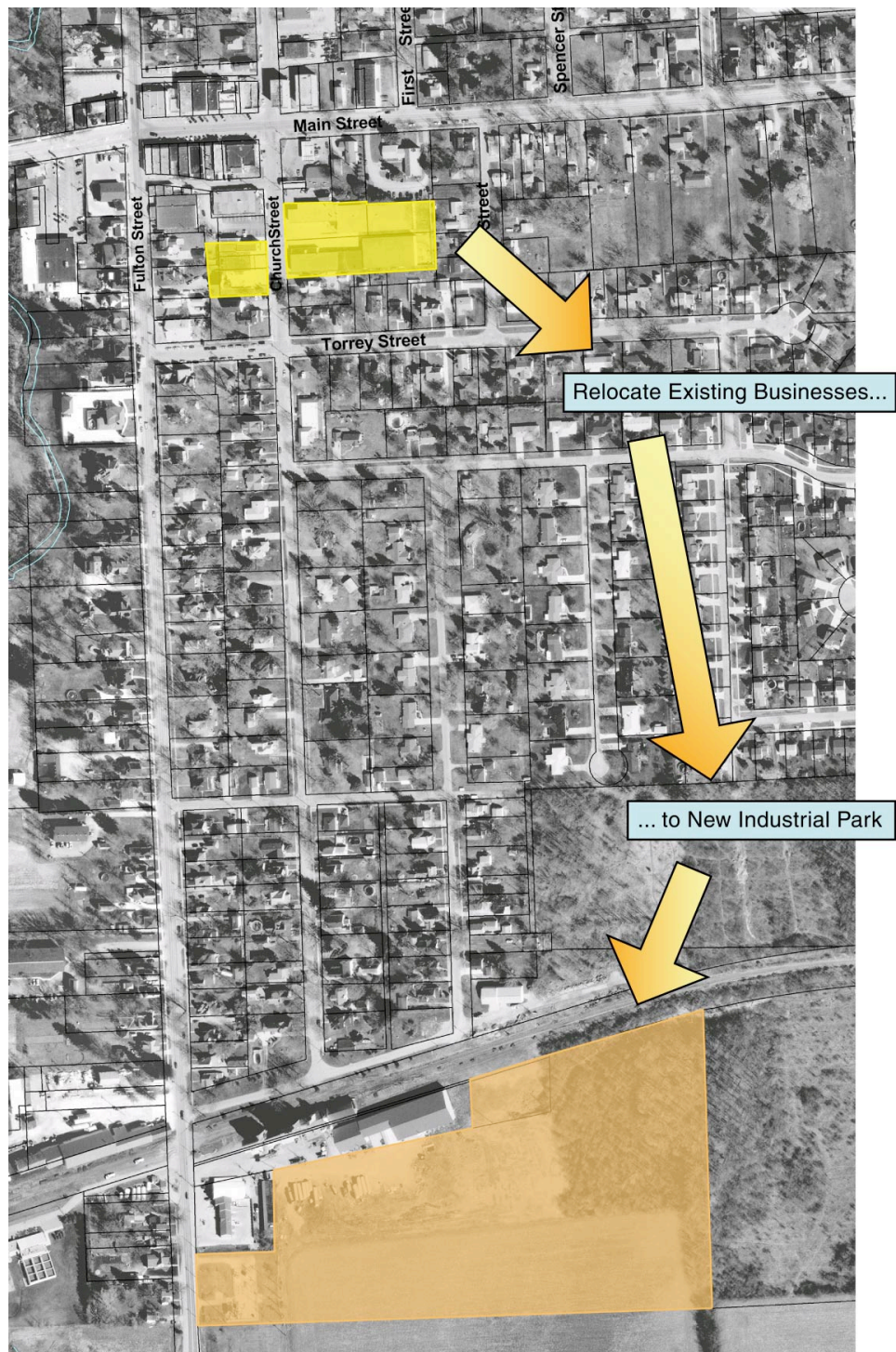
Option C: This road runs south (roughly 200, 250 ft.) from Depot Street, right west of the arsenic removal plant and then winds east, ending in a cul-de-sac in the very southeastern parcel. There are nine (9) lots for future industrial development.

Option D: Begins the same as Option C on Depot Street, running south for 200, 250 feet, then heading due east and following the edge of the property's line south until it reaches a cul-de-sac in the very southeastern parcel. There are seven (7) lots for future industrial development.

13.3 Plan of Development Process

A plan of development process for the proposed development would include the following basic activities:

1. **Acquire the land.** The land upon which the industrial park will be developed must be made available for the development. There are three options for this task:
 - a. *Public Acquisition.* The typical industrial park development occurs on land owned by the municipal government, or by a quasi-public agency, such as an Economic Development Corporation, or a Local Development Finance Authority. Options for the institutional structure are discussed later in this chapter.
 - b. *Private Ownership.* Although less common, the industrial park could be developed under private ownership. Under private ownership (presumably, although not necessarily with the current land owner) the landowner would develop and market the proposed industrial park. However, the private landowner might require a higher cost for land sales to new businesses to compensate for holding costs and risks, thereby decreasing the attractiveness of the industrial park to new businesses. Also, the Village would be limited in the levels and types of incentives that it could offer potential new businesses.



Industrial Park Relocation

Village of Armada, Michigan

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LANDSCAPE ARCHITECTURE
7-23-04

c. *Public-Private Partnership.* Under a public-private partnership, the Village could enter into a contract with the landowner to jointly share in the costs to develop and market the proposed industrial park. With a partnership, the Village would not incur the upfront cost to acquire the land. The Village would be eligible for more grants and incentives with a partnership than are available with private ownership, but fewer than are available to publicly owned industrial parks.

2. **Develop the site.** Once the site has been secured for the industrial park, the next step is to develop the site. Site development typically includes the following improvements:

- Clearing and grubbing
- Grading and site preparation
- Road construction
- Installation of water and sewer infrastructure
- Installation of utilities and telecommunications infrastructure
- Landscaping

The site need not be developed completely. However, it is advisable to at least provide a road and utilities to a portion of the site. Vacant land for industrial development is ubiquitous. Developed industrial sites that can be built upon immediately are less in supply and more in demand.

Paying for the development costs, even for a part of the site, will depend on the type of ownership. There are various programs to assist in financing the development costs for industrial parks. Financing programs are discussed later in this chapter.

3. **Relocate current businesses in the existing industrial area.** There are a number of public benefits derived from relocating the current businesses in the existing industrial area to the proposed industrial park. However, there are significant costs involved. Construction of a new 20,000 sq. ft. manufacturing facility might cost approximately \$1.2 million. Thus, relocating the current businesses will entail substantial costs, and success in relocating these businesses will require some means of funding those costs.

Many circumstances might interest a business in relocating. However, given the small number of businesses involved, the Village should enter into a dialog with the current businesses to gauge their interests in relocating. Their levels of interests will be the key determinants of the types of funding and financing required.

4. **Market the site for additional industrial businesses.** Even if all of the current businesses in the existing industrial area were to relocate to the proposed industrial park, and even if each of these businesses moved into a building twice as large as presently occupied, the proposed industrial park will include a large vacant area. As derived below, the industrial park would have sufficient land area to accommodate 96,528 sq. ft. of industrial building floor space for the existing businesses, and an additional 110,382 sq. ft. of industrial building floor space.

Site Area	37 acres
Common area (roads, stormwater facilities, landscaping, etc. Assumed to be 10% of total area)	3 acre
Land area for industrial buildings	29 acres
Industrial building density (FAR ¹)	25% FAR
Total floor area of industrial buildings	315,810 sq. ft.
Floor area of buildings for existing business (assumes that each business doubles in size)	82,528 sq. ft.
Remaining building floor area to be marketed	233,282 sq. ft.

Once the industrial park is developed, there would be a significant amount of land left vacant. The final step in the development process is to market these sites to potential new businesses. Marketing industrial sites can be accomplished through listing with real estate brokers, through established economic development programs (local and Macomb County), and through Village staff, depending on the institutional structure.

13.4 Organization of Village Economic Development Efforts

Michigan law provides several institutional structures through which industrial parks and economic development projects may be implemented. Typically, a municipality itself would not own and develop an industrial park: the legal processes through which a municipality can sell land are prohibitively cumbersome and time-consuming. In addition to the ability to convey property more easily for economic development purposes, the alternative institutional structures also have the ability to employ various financing mechanisms to support economic development projects.

For the proposed industrial park, two of these institutional structures are appropriate and available to the Village, economic development corporations and local development finance authority. Brief descriptions of these two options are provided below.

1. Economic Development Corporation. Local governments are authorized to create economic development corporations under the Economic Development Corporations Act, 1974 P.A. 338; M.C.L. 125.1601 et. seq.

This Act was based on legislative findings that public sector assistance is necessary in the land acquisition process to assist private sector interests with industrial economic development efforts. PA 338 of 1974 allowed local units of government to establish development corporations to assist private developers with industrial development projects.

¹ Floor Area Ratio - the ratio of gross building floor area to land area.

The Act extends tax-exempt status to all municipally-owned property acquired under it. While the General Property Tax Act extends tax-exempt status to such property held for a “public purpose,” tax-exempt status does typically not extend to property not expressly held as such.

In addition to extending tax-exempt status to properties acquired by Economic Development Corporations, EDC’s may also issue tax-exempt bonds for development projects, allowing a lower interest rate to finance development.

The Economic Development Corporations Act confers many of the powers of the Urban Redevelopment Act of 1941 (1941 P.A. 250; M.C.L. 125.901 et seq.) to an economic development corporation established by a local unit.

While this Act has been overshadowed by the use of more popular tax increment finance districts, the importance of forming an economic development corporation for property acquisition was underscored in 1992 when the City of Mt. Pleasant purchased 250 acres of land and annexed it, with an ultimate intent of converting the property to some form of mixed, public use. Due to a misunderstanding of the intent of the Act, the city chose not to form an economic development corporation, or a building authority, and mistakenly assumed that the property would enjoy tax-exempt status under the General Property Tax Act, which extends tax-exempt status to city-owned property held for “public purpose.”

2. Local Development Finance Authority. Certain local governments are authorized to establish local development finance authorities under the Local Development Finance Act, 1986 PA 281, 2000 PA 248; M.C.L. 125.2151.

Local Development Finance Authorities allow local units of government in Michigan to establish a development authority for the purpose of targeted development by industry type. Until 2000, LDFAs were essentially tax increment finance districts for manufacturing, agricultural, or high technology businesses (though high-tech businesses no longer qualified after 1992). Recent expansions of the LDFA Act included high-tech processes as a targeted industry type eligible for tax increment financing and LDFA benefits. The recent expansions also allowed for expanded tax capture for LDFA districts, and for the creation of a limited number of state-subsidized Certified Technology Parks, also known as “SmartZones,” conceptually defined as public-private high-technology nodes.

Local Development Finance Authorities are eligible for tax increment finance plans, allowing for the capture and retention of all property tax revenue increments beyond an established base year. Certified Technology Parks, enabled by the LDFA Act, may be financed by joint municipal tax increment finance districts, the first instance under Michigan law allowing for multi-jurisdictional tax finance districts.

LDFAs may be established in cities, villages, or urban townships. LDFA designation is limited to business activities that involve:

- Manufacturing
- Agricultural Processing
- High-Technology Activities
- Energy Production
- Business Incubators

13.5 Analysis of Institutional Options

Both of the institutional structures described in Section 13.4 above have advantages and disadvantages, as follows:

1. Economic Development Corporation. The advantages of an economic development corporation are:

- Property owned by an economic development corporation is tax exempt.
- An economic development corporation may finance economic development projects with low-cost industrial revenue bonds.
- An economic development corporation may be governed by the Planning Commission, thus a new organization is not required.

At the outset, the industrial park developer will own a large portion of the proposed industrial park land area, maybe even all of it. The tax-exempt status conferred to land owned by an economic development corporation warrants the use of this entity, at least for the purchase and ownership of the land within the proposed industrial park.

2. Local Development Finance Authority. The advantage of a local development finance authority are:

- If an end-user is identified, development activities can be financed through tax-increment-financing.
- The area included in the local development finance authority's district may be eligible for State designation as a certified technology park, and may be governed by a joint local development finance authority.

The use of a local development finance authority is appropriate when there is an end-user identified. With an end-user's commitment to a certain level of investment, tax increment financing becomes a feasible source of development funding; without a private sector commitment tax increment financing is not feasible. Thus, the use of a local development finance authority and tax increment financing will depend on one or more of the current businesses in the existing industrial area willingness to relocate and invest in a new facility in the proposed industrial park.

13.6 Sources of Funding

Developing the proposed industrial park will entail costs for:

- Land acquisition
- Site development
- Relocation of one or more industrial businesses
- Marketing the industrial park
- Operations and maintenance

Numerous federal, state and local programs are available to the Village to fund and finance the costs to develop the proposed industrial park. A brief description of appropriate programs follows.

1. Economic Development Planning Grants. MEDC offers grants for costs associated with planning for economic development projects, including design and site planning. A local funding match of at least 10 percent of the proposed project costs.

2. Economic Development Infrastructure Grants. The Village is eligible to apply, through Macomb County, for Community Development Block Grants funds for economic development infrastructure grants. This is a competitive grant program to assist local units of government with costs associated with public infrastructure improvements necessary to attract state-targeted businesses, generally limited to value-added industries. The industrial park development costs associated with relocating current business from the existing industrial area of the Village would probably not be eligible for funding through this grant program. However, to the degree that the remaining land in the industrial park is to be developed for target industries, the development costs could be eligible.

3. Economic Development Road Projects. The Michigan Department of Transportation provides grants to improve the highway network and to improve access to target industries for immediate, non-speculative projects that will create or retain jobs in the following industries:

- Agriculture or food processing
- Tourism
- Forestry
- High technology research
- Manufacturing
- Mining
- Office centers of 50,000 square feet or more in size

This program can fund the construction costs of road improvements and internal industrial park roads. However, the funding is dependent on the degree to which the project will immediately create or retain jobs. A minimum 20 percent match is required.

4. Brownfield Redevelopment Financing and Tax Credits. The Village may establish a Brownfield Redevelopment Authority to help fund the costs of baseline environmental assessments, remediation activities, and additional response activities for any property that contains environmental contamination meeting state designated qualifications.

Such an Authority can use tax increment financing to fund the costs of environmental clean up, and brownfield property owners may be eligible for SBT credits. Such financing might be appropriate in the existing industrial area in the Village if there is indeed environmental contamination. However, the funding potential is complicated if there is an existing liable party.

5. Industrial Development Revenue Bonds. The Industrial Development Revenue Bond program offers a relatively low-cost method of financing for industrial projects that would not otherwise receive favorable finance terms in private markets. The Village may issue industrial revenue development bonds and use the proceeds to purchase or develop industrial land, buildings, and equipment, and lease these to industrial businesses, using the rental income to repay the revenue bonds.

Industrial revenue bonds provide a lower-cost finance option for land acquisition, brick and mortar construction, and equipment. Such bonds are issued under color of economic development as a public purpose, making them eligible for tax-exempt bond financing at a lower rate of interest.

6. Tax Increment Financing. The Village can fund the proposed industrial park development and operation with tax increment financing under several authorities:

1. The Village could expand the DDA boundaries to include the proposed industrial park and then adopt a development plan and tax increment financing plan for that area. However, this option would require the DDA to include a large area of residential uses within its expanded boundaries.
2. As described previously, the Village can establish a Brownfield Redevelopment Authority if there are issues of environmental contamination.
3. Finally, the Village can establish a Local Development Finance Authority to undertake the development and operation of the proposed industrial park.

Under these schemes the Village can issue tax increment bonds to fund the development costs. The incremental tax revenues are then used to repay the bonds. However, all of these require that there be private sector investment in land, buildings, and machinery to generate tax increment revenues.

13.7 Action Plan

The following action plan is recommended to develop the proposed industrial park.

1. **Establish a Steering Committee.** The Village should establish a small steering committee to undertake the initial steps in the development process.
2. **Solicit Input from Current Businesses.** The steering committee should meet with the current industrial businesses to solicit their input on the proposed industrial park, to provide information on the various funding and financing program, and to gauge the interest of the current businesses in relocating to the proposed industrial park. The remaining steps in the action plan assume that at least one business is interested in relocating to the proposed industrial park.
3. **Solicit Input from Property Owner.** The steering committee should meet with the owner of the land proposed for the industrial park to gauge willingness to sell the land for industrial development. The remaining steps in the action plan assume that the property owner is a willing seller.
4. **Obtain a Planning Grant.** The Village should apply to MEDC for an economic development planning grant to fund the costs of planning for the industrial park.
5. **Establish an Economic Development Corporation.** The steering committee should formulate and present to the Village Council articles of incorporation for an economic development corporation (EDC).
6. **Obtain Funding and Acquire Land.** The EDC should develop a funding and financing plan to achieve the industrial park development. The EDC and the Village should apply for land acquisition grants from the Macomb County CDBG Program and other potential funding sources.
7. **Establish a Local Development Finance Authority.** Assuming that one or more current businesses are interested in relocating to the industrial park, the Village should establish a Local Development Finance Authority (LDFA) to utilize tax increment financing.
8. **Adopt a Development Plan and Tax Increment Financing Plan.** The LDFA should propose and the Village should adopt a development plan and a tax increment financing plan (TIF) for the industrial park. The adoption should occur after the EDC's ownership of the industrial park land is shown on the most recent equalized assessment roll. The commitment of current businesses interested in relocating should be obtained during the preparation of the development and TIF plans or soon after adoption.
9. **Obtain Funding and Develop the Industrial Park.** The EDC and the Village should apply for grants to develop the industrial park as soon as feasible. The remaining funding should be obtained through LDFA issued revenue bonds, depending on the overall plan for the industrial park.
10. **Facilitate Relocation of Current Businesses.** EDC industrial revenue bonds and other financing programs should be used to facilitate the relocation of current businesses to the developed industrial park.
11. **Operate the Industrial Park.** Over the long term the Village, through the EDC and/or the LDFA, should maintain and operate the industrial park as well as participate in its marketing. The LDFA's development and TIF plan should allocate some incremental tax revenues to pay for some or all of the operating, maintenance, and marketing costs.

14 | Implementation Tool Kit

14.0 Introduction

The implementation program is an integral component of the Village's Master Plan. The strategies and activities described in this final chapter are tools for putting the Plan's recommendations into practice. To implement the goals and objectives provided in this plan and to achieve the preferred future land use plan, it will be necessary for the leadership of Armada to be forward thinking and committed. It will also be necessary for the residents of the community to understand and actively support the Village's Master Plan. The following strategies may be used as individual efforts or combined with others to achieve the desired results. The key is to define those strategies and activities that will best implement the Master Plan and to then proceed with those strategies and activities.

14.1 Public Policy and Administrative Action

1. Public information and education. To effectively implement the Master Plan, the Planning Commission and the Village Council must educate the citizens of the community on both the goals, and the regulatory and incentive measures that are needed to implement the plan and realize the goals. That is, the spirit of the Master Plan must be communicated not only in terms of the "what" story, but also the "how" and "why". An informed and involved citizenry can then offer support and assistance in working toward the community they desire to have in the future.

An example of needed public information is in educating the public with regard to the importance of promoting community and economic development in order to expand the tax base and bring in additional revenues to support the provision of public services and facilities. Through such efforts, the public is far more likely to initiate and support programs that promote economic development in the Village.

The following information outlines examples of programs that can be undertaken to help inform the public about important land use goals and implementation techniques:

- Create a condensed version of the future land use plan, highlighting the goals of the plan.
- Provide informational brochures on various topics important to the city.
- Incorporate programs in the school system concerning land use issues.
- Hold regular informational sessions conducted by the Planning Commission and Village Council.
- Utilize the media, including newspaper and cable TV, to reach out to citizens on land use issues.

2. Continued cooperation between local units of government. The Village should continue cooperating with the Township to promote a proper system of development. The Village and area communities should regularly communicate and share thoughts on matters that maximize benefits for their citizens. In addition to coordinating planning and development, cooperation in the provision of public services among jurisdictions can be an effective means to reduce costs.

3. Intergovernmental cooperative agreements. Property owners outside of the Village may request to be annexed into the Village for a variety of reasons, especially to gain access to sewage treatment. The Village should adopt a policy for such requests, reflecting infrastructure capacity.

- Public Act 7 of 1967, as amended (Urban Cooperation Act) provides a process whereby the Village and the Township can develop an intergovernmental agreement for an urban growth boundary, extension of public utilities, shared public services, tax revenue sharing, preservation of open space and active agricultural lands, and other areas of joint concern.
- Public Act 425 of 1984, as amended (Intergovernmental Conditional Transfer of Property by Contract) provides a process whereby the Village and the Township can negotiate individual land transfers between the jurisdictions. Using P.A. 425 as a tool in annexation requests can improve relations between the two jurisdictions.

4. Continuous planning. Community planning is a dynamic process that does not end with the completion of the Master Plan. Urban areas experience continual change. Planning involves identifying and responding to change by the Village Council and Planning Commission. In order to sustain the planning process and generate positive results, maintain momentum, and respond to change, the Master Plan should be reviewed and updated on a regular basis. Public Act 265 of 2001 requires the Village to review its Master Plan at least every five years and coordinate the review with neighboring communities.

In addition, detailed plans for specific areas and issues such a pedestrian pathway plan, and a downtown redevelopment plan are intended outgrowths of the Master Plan. Thus implementing the Master Plan will require additional planning projects over the next five years.

5. Fiscal impact analysis. Fiscal impact analysis provides a projection of direct, current, public costs and revenues associated with a proposed development. It describes and quantifies public costs (police, fire, public works, transportation, and educational facilities) that are incurred by the development, as well as the revenues generated from property taxes, user charges, intergovernmental transfers, and other fees. When significant projects are proposed, the Village should require the developer to provide a study of the fiscal implications of the proposed project.

6. Establishing priorities. The Master Plan contains many recommendations. There is insufficient staff or volunteer support to implement all of the recommendations in a carefully planned, deliberate manner. Consequently, a process for establishing priorities must be established as soon as the Master Plan is adopted. Participants involved in setting priorities should include Village staff, the Planning Commission, and other officials who should be involved in implementation of the Plan. As a matter of policy, Master Plan priorities should be reviewed on a periodic basis to evaluate progress and re-evaluate priorities.

7. Annual work plan. This Plan establishes an extensive program of projects and activities. To effectively implement this program, the Village Council and the Village Planning Commission should hold an annual joint meeting. At this meeting the two bodies can review past progress on Master Plan activities, evaluate and prioritize remaining activities, and agree upon a work plan for the year. Ideally, the work plan will address several of the objectives established in this Plan, so that over the next five years a majority of the objectives will have been implemented. At the annual meeting, the Council and the Commission may decide to add or remove objectives from the work plan, in response to changes in circumstances.

14.2 Land Use Controls

One of the most influential strategies that can be used to implement a Master Plan is the system of regulatory measures established by the community to guide future development and land use. These regulations include the zoning ordinance, land division controls, and development standards. However, simply creating and using such regulations is not sufficient to actually implement the Master Plan. The ordinances must contain specific procedures and techniques that are created to achieve the objectives and eventually the goals of the future land use plan.

The future land use categories in the Master Plan provide the foundation for evaluating future zoning requests. Zoning actions that are inconsistent with the future land use map usually receive unfavorable review by the courts, if challenged. The Master Plan should always be the first source of information and policy guidance in the evaluation of zoning change requests and new development proposals.

All ordinances currently in place should be critically evaluated by the Village to determine if they effectively implement the objectives of the Master Plan in their related areas. The following sections in particular should be evaluated to ensure they achieve the desired objectives of the individual land use categories:

- The permitted land uses and uses permitted after special or conditional approval of the zoning ordinance.
- Definitions of both land uses and regulated elements.
- Site plan review procedures (to ensure adequate information is submitted).
- Regulations and requirements concerning landscaping, parking, and signage within the zoning ordinance.

The following is a brief discussion of the regulations and standards that the Village employs to guide future development and land use.

1. Subdivision regulations. The Village's Subdivision Regulations outline the procedures and standards used in exercising the Village's authority to review and approve proposed subdivisions, pursuant to the Land Division (Michigan Public Act 288 of 1967, as amended). Subdivision control ordinances typically require the appropriate design of lots and blocks, subdivision access, and such necessary internal improvements as streets, drainage, and water and sewer facilities. Requiring developers to install all required infrastructure and improvements, and by requiring a minimum level of quality, the Village can lessen the ultimate costs to the public resulting from new developments.

2. Condominium regulations. During the recent past, site condominium developments have become a popular alternative to subdivisions as a way of developing land, in part due to changes in the State's condominium regulation. The popularity of this type of ownership continues to grow. The Village should expect site condominium proposals, and encourage their use when appropriate.

3. Zoning regulations. Zoning is the primary regulatory tool used by the Village to implement the Master Plan as established in the Michigan Zoning Enabling Act (Public Act 110 of 2006). Strict enforcement of zoning regulations and standards will allow the Village to develop and redevelop in a coordinated manner, one site at a time.

4. Rezoning to implement the master plan. The land use classifications on the Future Land Use Map, provide the basis for evaluating future rezoning requests. Zoning actions that are consistent with the Future Land Use Map usually receive favorable judicial review if challenged. The Master Plan should always be the first source of information and policy guidance in the evaluation of zoning change requests and new development proposals.

The future land use plan describes several instances in which the Planning Commission should, or may wish to consider, amending the zoning district classification of several properties, once the Master Plan is adopted. In addition, the Zoning Ordinance should be the first ordinance that the Village reviews and amends, if appropriate, to assure that it can and will effectively implement the Master Plan.

5. Planned development. Planned development involves the use of special zoning requirements and review procedures that provide design and regulatory flexibility, so as to encourage innovation in land use planning and design. Planned developments generally achieve a higher quality of development than might otherwise be possible. Applied judiciously, they are an effective zoning technique to achieve development in accordance with the goals and objectives of the Master Plan and the vision of the community.

Planned development can be used to encourage innovative development designed to fit the historic character and development pattern of the Village within the proposed expansion areas around the Village's perimeter.

6. Overlay zoning. Overlay zoning allows the Village to impose a new set of regulations on a special area within an existing zoning district. In an area where an overlay zoning is established, the property is placed simultaneously in the two zones, and the property may be developed only under the applicable conditions and requirements of both zones. Overlay zoning has been used in other communities to address special conditions and features, such as historic areas, wetlands, and environmentally sensitive areas, without disrupting the underlying zoning plan.

14.3 Financial Planning and Capital Improvements Program

To identify funding needs for public services and facilities and to identify revenue resources and needs, the Village should prepare, and annually update, a five-year financial plan. Such a plan uses past revenue and expenditures to project the Village's cash flow over the following five-year period. As the financial plan is updated each year, the Village can receive an early indication of funding holes and investment opportunities.

Based on the financial plan, the Village can evaluate, prioritize, and structure financing of public improvement projects, through the preparation and annual updating of a capital improvement program. Such a program provides a basis for systematic review of proposed improvements related to the Master Plan and creates an opportunity to coordinate timing, location and financing of those projects. To that end, three objectives can be achieved:

- Financial analysis can minimize the impact of improvement projects on the local revenue stream;
- Project scheduling can give an advanced picture of future need and development activities; and
- The Planning Commission can demonstrate its coordinating role in serving other elements of local government in formulating project recommendations.

Generally, the capital improvement process includes the following steps:

- Inventory potential projects within the Village, including preliminary cost estimation and initial prioritization.
- Evaluate proposed projects and funding sources.
- Conduct financial analysis of the proposed projects in terms of costs and benefits.
- Formally approve and fund the capital improvement budget.

Because capital improvement programming is a fundamental policy, the Village Council must establish spending levels and designate projects for implementation during the budget process. The role of the Planning Commission is primarily to coordinate material submitted by others and to work with financial officials in assembling facts for decision by the Council.

Financial planning and capital programming should be viewed as more than just an administrative task and could be used throughout the Village for many improvements. The Village's current financial condition may make the creation of a capital improvements program seem futile. However, without a forward view toward sound fiscal planning and project implementation, the Village will not coordinate its community development investments. It is often frustrating to attempt to match limited revenues with expanding expenditure requirements. By creating and documenting a capital "wish list", funding opportunities can be explored and available funds matched to the stated needs of the Village in a strategic manner.

14.4 Special Purpose Funding District / Authorities

Certain recommendations in the Master Plan can be accomplished using a targeted approach through creation of special districts or authorities allowed under State of Michigan law. The following may be applicable:

1. Brownfield Redevelopment Authority (BRA). Michigan Public Act 381 of 1996, as amended, allows for the creation of one or more Brownfield Redevelopment Authorities (BRA) to identify, plan, and provide funding for reuse of brownfield properties.

BRAs create and implement redevelopment financing plans, that can identify eligible environmental activities for the site, plan for tax increment financing capturing state and local property taxes, and/or assistance to the property owner for Single Business Tax Credits. Tax increment financing allows BRAs to capture property taxes from the increased value as a result of development to pay for the activities needed for the development, and to establish a local site remediation fund.

Captured taxes could include all additional state and local property taxes, (in some cases including taxes levied for school operating purposes), which result from an increase in value of eligible property over a base year, (the year the property was added to the brownfield plan). Captured property taxes can be used to cover the costs of a variety of eligible activities, including baseline environmental assessments, due care activities, and additional cleanup activities.

The BRA may also issue revenue and tax increment financing bonds and notes to finance eligible activities and then capture taxes from the eligible property to pay off the obligations. The authority may also establish local site remediation revolving fund and place excess captured taxes from properties at which eligible activities are conducted into the local fund.

2. Local Development Financing Authority (LDFA). Michigan Public Act 281 of 1986, as amended, provides for the establishment of a local development finance authority (LDFA) to undertake economic development activities to promote manufacturing of goods or materials, agricultural processing, or high technology activity. A typical LDFA project might involve construction of roads and utilities deemed necessary for a specific manufacturing or high technology development project. LDFA activities are most frequently financed through tax increment financing or through issuance of revenue bonds that are retired using tax increment revenue.

3. Downtown Development Authority (DDA). Michigan Public Act 197 of 1975, as amended, allows for the creation of a Downtown Development Authority (DDA). A DDA is a non-profit development corporation within a defined business district. The DDA exists for the purpose of promoting a desirable environment for businesses and residents and implementing economic revitalization projects. Projects can be implemented by the DDA through a variety of financing techniques, including bond issues, tax increment financing, and public and private contributions. The official DDA plan can be updated to include new projects and expand current activities according to procedures in the Act.

One key advantage to establishing a DDA is that it will have a dedicated revenue stream that can be used to leverage State and Federal grants, such as SAFETEA-LU (formerly TEA-21), that require local matching funds. Another advantage is the DDAs are a well-established practice in Michigan with proven track records. The role of the Village's DDA in implementing the recommendations of this Master Plan may include:

- Assisting with the redevelopment of industrial sites in the downtown area for new commercial, office, and service uses;
- Purchasing and renovating existing buildings;
- Establishing and managing a joint marketing program for downtown businesses;
- Streetscape, parking lot, and other public improvements;
- Purchasing and redeveloping vacant downtown lots; and
- Other economic development related activities.

4. Neighborhood Area Improvements Act. Michigan Public Act 208 of 1949, as amended, authorizes municipalities to designate neighborhood areas for the purpose of planning and carrying out local public improvements for the prevention of blight in such areas. The Act calls for preparation of neighborhood betterment plans by the Planning Commission. The Act also provides methods of financing improvements within the neighborhood, including special assessment districts and issuance of neighborhood improvement bonds. This act might prove useful in funding community development and redevelopment activities in the older areas of the Village.

14.5 State and Federal Programs

The following is a list of selected programs and funding sources currently available from various state and federal agencies:

1. Neighborhood Preservation Program (NPP). The State of Michigan's Neighborhood Preservation Program is a targeted strategy available throughout the state to communities and nonprofits that are working to strengthen their neighborhoods and improve the quality of life for residents. Communities and nonprofits may apply to designate a neighborhood of local strategic importance by showing how NPP funding will achieve results that address the housing and infrastructure needs of the target area. The NPP supports affordable housing efforts in the targeted neighborhood through:

- Low-interest rate mortgage loans through the Michigan State Housing Development Authority (MSHDA) Single Family Program.
- Mortgage financing for rental developments of 12-30 units.
- Public improvements.
- Demolition.
- Beautification.
- Marketing.

2. HUD Section 202/8. This is a federally sponsored program of the U.S. Housing and Urban Development Department (HUD) that provides mortgage financing and rent subsidies for the construction and maintenance of elderly housing. Only non-profit, private organizations (such as churches, unions, fraternal and other non-profit organizations) are eligible sponsors, but local governments usually cooperate in the assembly of land, applications, public improvements and supportive actions. Such projects are tax-exempt, but the State rebates an equivalent amount to local tax jurisdictions.

3. USDA Rural Development opportunities. U.S. Department of Agriculture offers numerous loan and grant funding programs to promote economic development in rural areas, including northern Macomb County. These include:

- Financial programs supporting development of water and sewer systems, housing, health clinics, emergency service facilities and electric and telephone service;
- Economic development loans and grants to non-profit organizations and businesses through banks and community-managed lending pools; and
- Technical assistance and information to help agricultural and other cooperatives get started and improve the effectiveness of their member services.
- Funding to develop land and construct buildings, plants, equipment, access streets and roads, parking areas, and service extensions.

14.6 Financing Tools

Successful implementation of the Master Plan will depend on the ability of the Village to secure necessary financing. Grant and redevelopment incentive programs are available from time-to-time, vary in requirements and available funding, and often have eligibility requirements. Besides the general fund, the following sources of revenue are generally available to the Village at the time of the writing of this Master Plan:

1. Dedicated millage. Special millages can be voted upon to be used to generate revenue for a specific purpose.

2. Special assessments. Special assessments are compulsory contributions collected from the owners of property benefited by specific public improvements, such as paving and drainage improvements, to defray the costs of such improvements. Special assessments are apportioned according to the assumed benefits to the property affected. It is an excellent way to allow for the payment of a wanted or required improvement over time by making annual bond repayments.

3. Bond programs. Bonds are one of the principal sources of financing used by communities to pay for capital improvements. General obligation bonds are issued for specific community projects and are paid off by the general public with property tax revenues. Revenue bonds are issued for construction of projects that generate revenue. The bonds are then retired using income generated by the project (for example, water and sewer service charges).

4. Michigan Municipal Bond Authority (MMBA). This program created under Act 227 of 1985, as amended, offers municipalities the opportunity to take advantage of the State's improved credit rating. Because the MMBA is authorized to issue bonds to make loans to Michigan municipalities through the purchase of municipal obligations, the Authority allows municipalities to borrow funds for their capital and operating needs without going to the expense or trouble of entering the bond market on their own. Many small communities are at a disadvantage when issuing debt in the bond market because they frequently have no bond ratings and potential investors know little about their finances or economy. In addition, some communities tend to borrow infrequently, in small amounts. Because such debt issues are not particularly attractive to the financial markets, borrowing costs for such communities can be high.

The Authority sells tax-exempt bonds in the national municipal bond market. Proceeds from the sale are used to make loans to eligible Michigan communities by purchasing their bonds. In essence, the MMBA “bundles” smaller local debt issues into a larger, more attractive bond issue and then offers it to the national market. By consolidating numerous local bond issues, local units will save on printing costs, rating agency fees, and credit enhancements. As participating communities make principal and interest payments to the Authority to repay their debt, the Authority uses these payments to repay the Authority’s bond.

5. Tax increment financing. Tax increment financing is authorized by the Brownfield Redevelopment Act, Downtown Development Authority Act and the Local Development Finance Authority Act. When a tax increment finance district is established, the state equalized value of all properties in the district is recorded. Every year thereafter, the property tax revenue generated by any increase in the total state equalized value is captured by the BRA, DDA, or LDFA. Often revenue bonds are issued to meet the large cost of the improvements, and the annual collection of tax increment revenues is used to repay the bonds

6. Michigan Natural Resources Trust Fund (MNRTF). Michigan Natural Resources Trust Fund (MNRTF) grants are available for land acquisition and park development. Established criteria for the grant includes protection and use of significant natural resources, use of inland waters and project need.

7. Land and Water Conservation Fund (LWCF). Grant opportunities are available from the LWCF for the development of lands and facilities for outdoor recreation. Criteria for this fund include the need for proposal, the capability of the applicant to complete the project, and the site and project quality.

8. The Community Foundation of Southeastern Michigan. The Community Foundation of Southeastern Michigan was developed to create opportunities for collaboration and shared environmental awareness and appreciation by the residents of the seven counties of Southeast Michigan: including Monroe, Washtenaw, Wayne, Livingston, Oakland, Macomb and St. Clair counties. The Initiative is a five-year program that funds the creation of biking and hiking paths, conservation corridors and habitats among and between communities. The program provides Public Education and Outreach, Capacity Building Programs and two types of grants. Predevelopment Grants and Land Grants.

9. Transportation Enhancement Grants **Transportation** Enhancement grants are available for improvements to the Village’s transportation system, including motorized and non-motorized systems. This federal program provides funding for all types of transportation-related projects, and has been used throughout Michigan by communities to further a range of improvements.

10. Industrial property tax abatement. Property tax incentives are available through Michigan Public Act 381 of 1996, as amended, to eligible businesses to renovate or expand aging manufacturing plants or to build new plants. They can reduce property taxes (real and personal) for up to 12 years. For an obsolete plant or machinery that is being replaced or restored this results in a 100% exemption from the property tax on the value of the improvement. For a new plant, the local unit of government is able to reduce the local millage by half, and the Michigan Economic Development Corporation is able to abate the 6-mill statewide education tax.

11. Private sources. Private sources for grants also exist. Foundations and utility companies are a common source for private grants for municipal projects. These grants are usually for special stated purposes and are limited to eligible applicants in specific geographic areas.

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