MASTER PLAN

williamstown township, ingham county, Michigan &









Williamstown Township Ingham County, Michigan Master Plan

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ACKNOWLEDGEMENTS

This Master Plan could not have been prepared without the cooperation and efforts of the Township Board, Planning Commission, and staff, including the following individuals:

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VISION, GOALS, AND POLICIES

VISION STATEMENT

Williamstown Township strives to preserve the rural qualities that are central to its image and identity, provide conditions suitable for the continued operation of a variety of agricultural uses, and provide an appealing residential environment.

The Township endeavors to retain its wealth of natural features, farmlands, and open spaces, while allowing limited well-planned, low density residential commercial, research/technology, and mixed use_development.

The Township seeks to direct conventional residential development generally to the south of Sherwood Road and around the City of Williamston, and commercial development to the City of Williamston, where more urban services are available.

Along Grand River Avenue, the Township strives to achieve advanced mixed use development that employs the most current methods of achieving sustainable building and site design.

The Township strives to plan for and provide parks and other services, consistent with the needs generated by the population growth.

Williamstown Township recognizes the importance of regional cooperation and therefore strives to act in harmony with the Urban Services Boundary and Regional Growth Initiative.

The Township seeks to provide non-motorized transportation opportunities for its citizens. Toward that end, the Township supports the complete streets concept, recognizing that roads and road rights-of-way should be designed to accommodate pedestrians and bicyclists, as well as motor vehicles.

GENERAL PLANNING AND DEVELOPMENT GOALS

- 1. **Balance of Land Uses**: Provide for a balance and variety of land uses to meet residents' needs in locations that will not negatively impact existing and future residential areas or the overall rural character of the Township.
- 2. **Promote Efficient and Sustainable Growth:** Define an urban services district within the Township to encourage dynamic, pedestrian-friendly community improvement.
 - Objectives
 - a. Enact land use policies that emphasize compact infill development.
 - b. Maximize the use of existing infrastructure through development or redevelopment in the urban services district.

- c. Investigate incentives to encourage development or redevelopment within the urban services district.
- 3. **Regionalism:** Seek collaborative relationships with surrounding communities by participating in the Regional Growth Initiative.
- 4. **Master Physical Planning**: Maintain complementary land use relationships that promote a harmonious, attractive community; preserve natural resources and the rural character; promote a sound tax base; and provide for manageable traffic conditions.
- 5. **Preservation of Natural Features**: Make preservation of wetlands, woodlands, open spaces, and farmland a prevailing objective in all future development.
- 6. **Preservation of Cultural and Historic Resources.** Significant cultural and historic resources, such as historic buildings, sites, roads, and natural features, including landmark_trees should be preserved intact. New development must be designed with respect to these resources.
- 7. **Roads and Transportation**: In cooperation with the Ingham County Road Commission and Michigan Department of Transportation, develop an orderly program for improvement, and maintenance, of the road system in order to meet traffic demands, provide safe movement of traffic, and provide proper access to all properties in the Township. Plan road system improvements with the goal of protecting the rural character of the community while providing a safe means of non-motorized transportation. Coordinate road improvements with surrounding townships and the City of Williamston. Promote the development and use of the public transit system.
- 8. **Property Maintenance**: Encourage owners to maintain their properties, and work toward removal of blighted structures.
- 9. **Fiscal Stability**: Promote the development of a financially secure community that can continue to provide all necessary services (municipal, educational, etc.) to its residents and businesses in an efficient manner.
- 10. **Urban Design**: Promote development that is consistent with the urban design concepts described in the Master Plan, especially in the Green Zone along Grand River Avenue.
- 11. Planning Innovation: Encourage innovation in land use planning where innovation would:
 - more effectively implement the goals set forth in the Master Plan,
 - further the goals of achieving sustainable building and site design,
 - achieve a higher quality of development than would be possible under conventional regulations,
 - result in better use of the land in accordance with its intrinsic character (for example, preservation of rural open space),
 - result in development that is compatible with surrounding uses, and

• produce recognizable and substantial benefits for the community that would not otherwise be achieve.

Innovation should not be a means to increase the intensity of development or to simply develop land in a manner that otherwise would not be permitted.

- 12. **Implementation**: Adopt and/or amend policies and regulations necessary to implement the Master Plan. Toward this end, prepare a natural resources inventory and plan, and adopt appropriate amendments to the Zoning Ordinance and adopt environmental regulations, such as energy efficient design guidelines, to guide the development of the Township.
- 13. **Mapping Tools**: Upgrade the quality of planning tools, particularly maps of land use, natural resources, and other pertinent features, while making use of geographic information systems (GIS) and other computer applications.

RESIDENTIAL AND AGRICULTURAL DEVELOPMENT POLICIES

- 1. **Density**: By and large the Township should be developed as an agricultural and low density single family residential community. Generally, maintain agricultural use of land in the northern two-thirds of the Township, and direct new single family development generally to the southern one-third of the Township.
- 2. **Complement Development in the City of Williamston:** It is the intent of this plan to promote low density development in the Township, providing incentives for new, higher density development to occur in the City of Williamston.
- Availability of Public Services: Permit residential development where needed public facilities are available. Consider the costs of both construction and maintenance of capital improvements necessary to serve proposed developments.
- 4. **Potable Water and Wastewater Treatment**: Base the density and location of residential development in part on the adequacy of the potable water supply and wastewater treatment systems.
- 5. **Land Use Compatibility**: Strive to achieve a land use pattern that separates residential areas from incompatible land uses or require ample buffer zones to alleviate incompatibility.
- 6. **Preservation of Natural Features**: Design new residential developments to be compatible with the underlying natural features of the site. Encourage rural open space planning where it would retain the rural character of the land.
- 7. **Amenities for Housing**: Locate single family housing and multiple family housing in proximity to Grand River Avenue and near the City of Williamston, where adequate public and private services are available.
- 8. **Capital Improvements in Residential Neighborhoods**: Continue to work with residents and County agencies to identify and implement needed capital improvements in residential areas, such as drainage and road improvements.

- 9. **Housing Alternatives**: Work toward providing a sufficient supply of affordable housing alternatives in the Township or nearby communities to meet the needs of all population segments, including the elderly.
- 10. **Farmland Preservation**: Encourage continued agricultural activity. When reviewing development plans, explore alternative layouts to minimize loss of farmland and conflict with nearby farming operations. Promote rural open space zoning, Transfer of Development Rights (TDR) and other programs to preserve farmland. Discourage piece-by-piece splitting up of farmlands into smaller, less productive parcels.
- 11. **Residential Open Space:** Promote the inclusion of preserved open space in new residential development.
- 12. **Coordinate Road Patterns**: Require road connections between adjoining residential developments, and coordinate road patterns to prevent cut through traffic in residential neighborhoods.
- 13. **Complete Streets:** Adopt a complete streets policy to encourage design of the road system to accommodate non-motorized as well as motorized transportation.

COMMERCIAL (RETAIL AND OFFICE) DEVELOPMENT POLICIES

- 1. **Future Allocation of Commercial Land**: Base the future allocation of commercial land in Williamstown Township on residents' needs for shopping and office facilities.
- 2. Commercial District Development: Permit commercial development along Grand River Avenue only, in the vicinity of Zimmer Road, in the Mixed Use Overlay area on the east side of the City of Williamston, and in the Green Zone West of the City of Williamston, so as to prevent undesirable strip development. Mixed use development along Grand River Avenue will allow for better utilization of parcels in this area, permitting the parcels to take advantage of frontage on Grand River as well as scenic Red Cedar River views.
- 3. **Design**: Encourage the design of commercial uses to reflect thorough and careful analysis of the site and to improve aesthetics, consistent with the urban design concepts set forth in the Master Plan.
 - a. Encourage architecture that is clean and uncluttered, provide that the buildings have "character." Implementation of traditional design concepts is encouraged.
 - b. Prohibit large or garish signs.
 - c. Require loading, and storage areas to be located behind buildings.
 - Require parking areas to be landscaped to provide visual relief to large paved areas.
 - e. Emphasize pedestrian access on every site.

- 4. **Linkages between Commercial Developments**: Encourage construction of service drives or access easements and pedestrian/bicycle linkages between adjoining developments for the purposes of traffic safety and reduction in conflict between vehicular and pedestrian traffic.
- 5. **Screening and Transitions**: Contain the impacts from commercial uses within the commercial district itself. Require commercial developments to be screened from adjoining residential areas. Where feasible, plan for transitional uses between commercial uses and adjoining residential uses.
- 6. **Green Building Certification:** Encourage all new construction to meet the criteria for green building certification through the U. S. Green Building Council's LEED (Leadership in Energy and Environmental Design) certification system.
- 7. **Code Enforcement in Commercial Areas**: Monitor and enforce building and maintenance codes in commercial areas. Encourage owners of deteriorated buildings, signs, landscaping, and parking areas to be renovated or repaired on a timely basis. Monitor changes in business use to be certain that new uses are in compliance with Township building and zoning codes.
- 8. **Relationship to the Williamston Commercial District**: Commercial development in the Township should not be encouraged at the expense of the Williamston commercial district. The community's retail and service needs can best be served through the coordinated growth and development of the Township's and City's commercial districts.
- **9. Mixed Use Development:** Encourage mixed use development on Grand River Avenue, east of the City of Williamston, consistent with the developed character of Grand River Avenue in the City of Williamston.

INDUSTRIAL DEVELOPMENT POLICIES

- Industrial Development Strategy: Strive for balance between the economic benefits of
 industrial development and the amount and type of industry that is compatible with the
 Township's environmental objectives and overall future development pattern. Do not sacrifice
 other land use goals to build an intensive industrial base.
- 2. **Allocation of Industrial Land**: Confine industrial development to the current boundaries (generally south of Grand River Avenue, south of Williamston) on the Grand River Avenue corridor near the City of Williamston, where there is adequate road access and availability of public water and sanitary sewer services.
- 3. **Environmental Capability**: Monitor the type of industrial development to be certain it is in keeping with the Township's overriding goals for preservation of the environment and resources base. Light manufacturing that produces low levels of waste, noise, traffic, air and water pollution, and other undesirable impacts would be best suited to Williamstown Township.
- 4. **Availability of Public Services**: Permit future industrial development only in accordance with the ability to provide required utilities and public services, including adequate roads, police and fire protection, and general municipal administrative and regulatory services. Consider the ongoing cost of providing such services as well as the cost related to initial construction.

- 5. **Industrial Design Standards**: Review the design and layout of industrial development proposals to encourage high quality design.
- 6. **Aesthetics**: Strive to upgrade the aesthetics of industrial development in Williamstown Township. Sites should be well-landscaped and storage areas, loading areas, and trash disposal areas should be screened from view.
- 7. **Industrial Regulatory Enforcement**: Strictly enforce codes and regulations applicable to industrial areas, particularly for industries that use or store hazardous or toxic chemicals.

GREEN ZONE MIXED USE DEVELOPMENT POLICIES

- Overall Strategy: Promote advanced development that employs the most current methods of achieving sustainable building and site design. Promote complementary mixed land use relationships, with emphasis on research and technology and residential uses. Implement cutting edge standards of development, such as the U. S. Green Building Council's LEED (Leadership in Energy and Environmental Design) standards.
- 2. **Environmental Capability:** Allow development if there is a safe way to address sanitary sewage and provide potable water without doing harm to the environment. Work with developers to identify solutions to these issues if the development concepts they present are consistent with the Green Zone policies and zoning standards.
- 3. Availability of Public Services: Permit future mixed use development in the Green Zone commensurate with public agencies' ability to provide required services and facilities, such as adequate roads, police and fire protection, and general municipal administrative services. Consider the ongoing cost of providing such services as well as the cost related to initial construction.
- 4. **Design Standards:** Implement the Green Zone Project Design Requirements in the Zoning Ordinance with the goals of achieving high standards of design, both aesthetically and functionally.
- 5. **Compatibility with Agriculture:** Where existing agriculture is located adjacent to a proposed Green Zone development, seek a design for the Green Zone development that will allow it to peacefully co-exist with the agriculture.
- 6. **Non-motorized Transportation:** Implement plans for non-motorized transportation in the Green Zone. On a regional scale, seek links to the Heart of Michigan Trails and the Meridian Township trail system with development of a trail along the Red Cedar River and an off-road trail along Grand River Avenue.

ENVIRONMENTAL POLICIES

1. **Protection of Natural Features**: Wise use of natural resources and preservation of wooded areas, groundwater recharge areas, roadside trees, wetlands, scenic views, farmlands, the Red Cedar River, and wildlife and bird habitats are planning priorities that serve as the basis for all

- other planning and development goals and policies. The Township must strive to protect from development the features that give the community its appealing rural character, including woodlands and woodlots, wetlands, rolling terrain and rural vistas.
- 2. **Pollution Control**: Take all reasonable steps to prevent surface and ground water pollution, contamination of the soils, air pollution, light pollution and noise pollution. Toward this end, prepare a natural resources inventory and plan and adopt up-to-date performance and environmental standards and diligently implement them throughout the Township.
- 3. **Intergovernmental Cooperation:** Continue to cooperate with federal, state, and county agencies for the purposes of enforcing environmental regulations that are under the jurisdiction of outside agencies, such as wetlands and soil erosion control regulations.
- 4. **Flood Plain**: Discourage development in areas that are known to be in the 100-year flood plain. In accordance with the Subdivision Control Ordinance, prevent platted lots within the 100-year flood plain.
- 5. **Energy Conserving Land Use**: Promote energy-conservation in the location, design, and construction of subdivisions and buildings. Promote compact, mixed use development as a way to achieve energy conservation.
- 7. **Retrofit Buildings:** Use the Township Hall as a retrofit model to create other energy efficient buildings in the Township.
- 8. **Community Facilities:** Promote energy conservation in public buildings. Perform energy audits of all public buildings to identify energy loss and potential energy savings.
- 9. **Transportation:** Promote energy conservation through multimodal transportation systems, including public transportation, bicycle paths, and pedestrian ways, as alternatives to vehicular transportation.

TRANSPORTATION POLICIES

- 1. **Road and Street Classifications**: Maintenance of a rural road network, consisting of an interconnected system of local and collector roads, thoroughfares, and arterial roads, is a primary objective of transportation planning in Williamstown Township.
- 2. **Coordination with Other Units of Government:** Coordinate with surrounding townships, the City of Williamston, the Ingham County Road Commission, and the Michigan Department of Transportation on development of the road system.
- 3. **Upgrade the Existing Road System**: Upgrading the existing roads takes precedence over new road construction as a means of increasing capacity and improving traffic safety.
- 4. **Need for New Roads**: Work toward construction of new roads only where there is a documented need for the purposes of traffic safety, to alleviate traffic congestion, or to facilitate new development in the Green Zone. Locate and design new roads to minimize impact on significant natural features and to reduce the loss of rural open space land.

- 5. **Land Use/Transportation Relationships**: Strive toward a balanced relationship between the Township's transportation system and overall land use pattern. Analyze new development proposals to determine the amount of traffic that will be generated and how the increased traffic will affect the transportation system.
- 6. **Land Use/Transportation Friction**: Alleviate the friction between land use and traffic through careful planning and scrutiny of development proposals. Encourage the use of service drives or access easements to provide access to adjoining properties in commercial and industrial districts, and to limit the number of driveways onto main roads.
- 7. **Road Aesthetics**: Roads should be visually pleasing to motorists, pedestrians, and persons who view the roads from adjoining land. Preservation of rural character should be a primary consideration in any road construction project. Require ample landscaping along the frontage of all roads. Encourage commercial uses to maintain their driveway approaches.
- 8. **Pedestrian/Bicycle Transportation**: Develop pedestrian/bicycle safety paths that link residential areas with schools, recreation areas, commercial districts, and other attractions, pursuant to the Township's Trails and Greenways Master Plan.
- 9. **Natural Beauty Roads:** Work with the Ingham County Road Commission to achieve Natural Beauty Road designation to prevent the loss of natural features due to road construction projects.

RECREATION FACILITIES POLICIES

- 1. **Coordination with Other Agencies**: Continue to cooperate with other public and private organizations, such as the City of Williamston, Williamston School District and Meridian Township, in providing recreation services and facilities.
- 2. **New Park Development**: As the Township develops, and the Williamstown Township Community Park gets built out, acquire additional land for future recreation park development.
- 3. **Riverfront Access**: Secure riverfront access for a trail through acquisition or easements.
- 4. **Trail Development**: Join with the adjoining communities to develop a multi-jurisdictional trail system, like the Van Atta trail system in Meridian Township and the Heart of Michigan Trail System.
- 5. **Environmental Compatibility**: Preserve distinctive natural features on park sites wherever possible, and design parks so they contribute to the aesthetic quality and rural character of the Township.
- 6. **Funding for Parks and Recreation**: Base the development of recreation facilities and programs on sound fiscal policy. Consider and implement various methods of funding and/or cost-reduction, including the use of volunteers, state and federal grant programs, user fees, fund-raising committees, and other methods.

- 7. **Recreation Areas within Residential Developments**: Use the site plan review and Planned Development review process to encourage the preservation of common open land areas and significant natural features as an integral part of new residential development.
- 8. **Recreation Facilities Evaluation:** Periodically survey residents to determine their leisure needs and interests, and to acquire information to adjust the recreation programs to meet the changing needs of residents.

COMMUNITY FACILITIES POLICIES

- 1. **Municipal Services**: Provide quality municipal services to satisfy the needs of the Township's residents and businesses, commensurate with the Township's financial and administrative resources.
- 2. **Maintain Essential Public Services:** Ensure that future growth is consistent with the Township's present or planned capacity for sewage treatment, public water, and other utilities.
 - <u>Objective</u>
 Direct growth into an urban services district to ensure efficient and fiscally responsible use of public services.
- 3. **Public Safety**: Provide the facilities necessary for high quality police and fire protection. Work with the Northeast Ingham Emergency Service Authority (NIESA) to reevaluate fire facilities on a regular basis as new development occurs to determine if modifications or additions to facilities are needed to serve the new development.
- 4. **Capital Improvements Program**: Prepare a six-year capital improvements program, as required by Michigan Public Act 33 of 2008, as amended, to plan for the expenditure of capital funds in an orderly manner, consistent with available funding.
- 5. **Historic and Cultural Resources**: Promote identification and preservation of buildings and sites that have historic or cultural significance, and encourage the preservation of these resources when new development is proposed.

POPULATION ANALYSIS

GENERAL DEMOGRAPHIC TRENDS

From a regional perspective, Williamstown Township is one of several rural townships surrounding the Lansing/East Lansing urban core. Current Census data indicate that approximately eighty percent of the county's population is concentrated in Lansing, East Lansing, and the three townships adjacent to the urban center.

Even though Williamstown Township is still considered "rural" based on overall population density, the Township experienced a rapid rate of growth in the decades following 1950. This was largely a result of in-migration of non-farm households (see Table 1). Until the 1990s, most of the population growth was accommodated through the completion of lot splits that made new home sites available in the rural parts of the Township. Since the beginning of the 1990s, however, most of the population growth has occurred in new subdivision developments.

In order to accurately assess Williamstown Township's place in the region, demographic data was compiled for Williamstown Township, Meridian Charter Township, the City of Williamston, and the Tri-County Region as a whole.

Population

Between 2000 and 2010, the population of Williamstown Township increased by 144 residents to 4,978 residents (a 3.0% increase during the period) (see Table 1 and Table 1a). Compared with surrounding communities and the region over the same period, Williamstown Township experienced a lower rate of population growth than the City of Williamston and the Tri-County Region, but a higher rate of population growth than Meridian Township.

Based on the 2010 Census population count, Williamstown Township accounts for 1.0% of the total population of the region and accounted for 0.8% of the overall population growth for the region during the period from 2000 to 2010. Williamstown Township is growing at a slower rate than the region as a whole, in contrast to the growth trends seen in the 1990s.

TABLE 1
TOTAL POPULATION
WILLIAMSTOWN TOWNSHIP (1950-2010)

Year	Population	Numerical Change	Percent Change
1950	1,175		
1960	1,963	+788	+67.1%
1970	2,847	+884	+45.0%
1980	3,972	+1,125	+39.5%
1990	4,285	+313	+7.9%
2000	4,834	+549	+12.8%
2010	4,978	+144	+3.0%

Source: Bureau of the Census, U.S. Department of Commerce

TABLE 1A REGIONAL GROWTH (2000-2010)

2000	2010	Numerical Change (2000 – 2010)	Percent Change (2000 - 2010)
1,834	4,978	+144	3.0%
39,116	39,688	+572	1.5%
3,441	3,854	+413	12.0%
3	,834 9,116	,834 4,978 9,116 39,688	Change (2000 – 2010) ,834 4,978 +144 9,116 39,688 +572

Source: Bureau of the Census, U.S. Department of Commerce

From a historical perspective, Table 1 indicates that population growth in the Township has slowed since 1980. Between 1950 and 1980 the population of the Township increased by 238% over the 30-year period. The rate of growth has since slowed, with a 7.9% increase during the 1980s and a 12.7% increase during the 1990s. By contrast, Meridian Township experienced a high rate of growth during the 1980s (24%), but growth has since slowed. Williamstown Township's population grew at twice the rate of Meridian Township's in the 2000s.

Even though Williamstown Township has recorded high rates of population growth over the last five decades, the total number of residents added was small when compared to the more urbanized neighboring communities. Numerically, the largest ten-year increase in population was recorded in the 1970s, with the addition of 1,125 residents. Only 313 residents were added in the 1980s, 549 residents were added in the 1990s and 144 residents were added in the 2000s. In comparison, Meridian Township added almost 5,000 residents in the 1970s, almost 6,700 in the 1980s, 3,472 in the 1990s and 413 in the 2000s. With a 2010 population of 4,978 demographers would still consider Williamstown Township a low-density rural or semi-rural community.

Housing Units and Household Size

Consistent with national and global trends, broad changes in household composition have been recorded in Williamstown Township. Of greatest significance is the reduction in average household size. In 1980, 1990, 2000 and 2010 the average household size in the Township was 3.27, 2.93, 2.85 and 2.66 persons per household, respectively (Table 3).

The decrease in household size is related in part to the age structure data presented later in this chapter, the overall aging of the population, and changes in life-stage development for married couples. As the proportion of residents in the upper age brackets increases, the proportion of one and two-person "empty-nester" households also increases. The decrease in household size can also be attributed in part to the trend among younger married couples to delay or avoid having children or to have smaller families and single parent households.

The type of housing recently constructed in the Township also affects household size. There are few subdivisions with affordable housing for young families, and large lot single family development typically appeals to more mature families that are more financially secure.

The decrease in household size has had a substantial impact on total population. If not for the in-migration of residents due to new construction, Williamstown Township would have experienced a population decrease of about 328 persons between 2000 and 2010. However, 13.0% increase in housing units was needed to produce a 3.0% increase in population.

In terms of the number of housing units constructed, Williamstown Township experienced a higher rate of housing unit growth than Meridian Township and the region as a whole during the 2000s, but a lower rate of growth than the City of Williamston.

TABLE 2 HOUSING UNITS (2000-2010)

	Housing Units 2000	Housing Units 2010	Numerical Change 2000-2010	Percent Change 2000-2010
Williamstown Township	1,726	1,950	+224	13.0%
Meridian Township	17,101	18,569	+1,468	8.6%
City of Williamston	1,533	1,789	+256	16.7%
Tri-County region	181,804	199,026	+17,222	9.4%

Source: Bureau of the Census, U.S. Department of Commerce

TABLE 3
HOUSEHOLD SIZE (2000-2010)

	Household Size 2000	Household Size 2010
Williamstown Township	2.85	2.66
Meridian Township	2.36	2.26
City of Williamston	2.33	2.40
Tri-County region	2.48	2.42

Source: Bureau of the Census, U.S. Department of Commerce

The following preliminary observations can be made, based upon review of the above data:

- While Williamstown Township retains a rural character, demographic and spatial data indicate
 that it is located on the leading edge of development and is within easy commuting distance to
 adjacent employment centers. Most of the residents of the Township commute out of the
 community to work elsewhere in the greater Lansing region every day.
- The 2010 Census showed that the levels of in-migration within the Township and surrounding communities in the 2000s indicate real growth in population over that time period.
- Housing units constructed grew at a higher rate than the population in Williamstown Township,
 Meridian Township, the City of Williamston and in the region from 2000 to 2010. This indicates
 that the population growth in the Township, surrounding communities and in the region was
 likely the result of people moving into the communities from more urbanized areas of the region
 and from other regions entirely.

POPULATION CHARACTERISTICS

Age Structure

Williamstown Township has a relatively high median age, compared to Meridian Township and the state as a whole. Population statistics reveal a steady increase in median age of population. In 1980, the Census recorded a median age of 30.5 years. This increased to 35.6 by 1990, 40.9 by 2000, and to 47.2 in 2010. In comparison, the 2000 and 2010 median age for residents of Meridian Township was 35.4 years, and 38.2 years, respectively. In the State of Michigan the median age was 35.5 years in 2000 and 38.9 years in 2010. The high median age can be attributed to a number of factors: low turnover of housing, low in-migration of young families, aging of existing population and the exodus of younger adults as they move out to start their careers.

Even though Williamstown Township has a higher median age than Meridian Township, the 2010 Census indicated that Williamstown Township had a higher proportion of residents age 19 and younger. In 2010, 25.7 percent of the population in Williamstown Township was under the age of 19, whereas in Meridian Township the number was 23.1 percent. Within the surrounding communities, the City of Williamston has the highest proportion of residents age 19 and under, at 30.3%. Williamstown Township has a higher proportion of residents over the age of 65 at 15.1% (see Table 4). In comparison, Meridian Township has 13.3% and the City of Williamston has 11.7% of their population over the age of 65.

TABLE 4
AGE STRUCTURE (2010)

	Williamsto Township	own	Meridian Township	City of Williamston	Tri-County Region
	Number	Percent	Percent	Percent	Percent
Under 5 years:	166	3.3%	4.6%	8.6%	5.8%
5 to 19 years:	1,113	22.4%	18.5%	21.7%	21.0%
20 to 34 years:	522	10.5%	23.8%	18.8%	23.8%
35 to 44 years:	521	10.4%	10.9%	15.1%	11.7%
45 to 64 years:	1,911	38.4%	29%	24.0%	25.9%
65 and over:	745	15.1%	13.3%	11.7%	11.7%
TOTAL:	4,978	100%	100%	100%	100%

Source: Bureau of the Census, U.S. Department of Commerce

Based upon the above age structure, the following observations are significant:

- A higher proportion of Williamstown Township residents are 45 years of age and older when compared to Meridian Township, the City of Williamston, and the region as a whole.
- The proportion of residents between the ages of 20-34 is much lower in Williamstown Township
 than in surrounding communities or the region as a whole, indicating that younger residents
 leave the Township during early adulthood and their family-forming years. One potential
 reason for this is that the existing housing stock may not be accessible to young singles or
 younger families.

The proportion of residents between the ages of 45 and 64 is much higher in Williamstown
Township than in surrounding communities, indicating that the housing stock and large lot
development pattern in the Township likely attract older residents with more financial
resources. These types of households are more likely to be "empty-nester" households with
grown children.

Racial Composition

The population of Williamstown Township is homogenous with respect to racial composition. In 1980, 98.3 percent of the population was white. The 1990 Census indicated that 98.2 percent of the population was white, the 2000 census indicated that 98.5 percent of the population was white and the 2010 census indicated that 96.1 percent of the population was white.

Education and Employment

Williamstown Township's residents are well-educated according to Census statistics. 49.8% of the residents over the age of 25 have attained a Bachelor's degree or higher, and 95.8% have a high school education (see Table 5). Table 5 also indicates that the residents of Williamstown Township are significantly better educated than the residents of the region as a whole. Only 25% of Michiganders over the age of 25 have attained a Bachelor's degree or higher.

TABLE 5
EDUCATIONAL ATTAINMENT; HIGHEST LEVEL REACHED*
(2006-2010 ACS 5-Year Estimate)

	Williamstown Township	Meridian Township	City of Williamston	Tri-County Region
High School:	13.9%	11.9%	22.9%	26.6%
Some college, no degree:	19.1%	14.6%	21.7%	24.7%
Associate degree:	12.9%	6.1%	9.9%	8.9%
Bachelor's degree:	25.5%	31.4%	22.3%	18.7%
Graduate or professional degree:	24.4%	32.6%	19.4%	12.5%
High School graduate or higher:	95.8%	96.6%	96.2%	91.5%
Bachelor's Degree or higher:	49.8%	64.0%	41.7%	31.3%

^{*}Population over 25 years of age

Source: Bureau of the Census, U. S. Department Commerce

ACS – American Community Survey

Residents' occupations naturally reflect their educational attainment. Williamstown Township has a highly skilled labor force, consisting of primarily managerial, professional, technical, sales, and administrative support positions (see Table 6). The employment statistics indicate that most employed residents of the Township commute into the Lansing/East Lansing area for work.

It is interesting to note that, even though agriculture is still an important facet of the local economy, few Township residents (0.20 percent) are engaged in this profession.

¹ The American Community Survey is an ongoing statistical survey by the U.S. Census Bureau. It regularly gathers information previously contained only in the long form of the decennial census.

TABLE 6
COMPOSITION OF THE LABOR FORCE*
(2006-2010 ACS 5 Year Estimate)

	Williamstown Township	Meridian Township	City of Williamston	Tri-County Region
Management, professional, and related occupations:	51.3%	59.0%	47.9%	37.1%
Sales and office:	23.3%	21.7%	26.0%	25.8%
Production, transportation, and material moving:	7.1%	5.1%	7.5%	12.6%
Natural resources, construction, and maintenance:	5.8%	2.9%	5.7%	6.5%
Service:	12.5%	11.2%	12.9%	18.0%

^{*}Civilian Population 16 years and older

Source: Bureau of the Census, U. S. Department Commerce

ACS - American Community Survey

Income

As would be expected based on the education and employment data cited above, households in Williamstown Township generally enjoy a relatively high standard of living. Table 7 summarizes median household income data from 1999 and 2006-10. Recently, the U.S. Census changed the way that it collects income data, so the data represent a spread of incomes from 2006 to 2010. The 1999 median incomes have been adjusted into 2010 dollars to permit an analysis of real income change over the specified time period.

Compared to surrounding communities and the region as a whole Williamstown Township had the highest median income during the 2006-2010 period at \$94,387 (see Table 7). This is roughly \$30,000 higher than Meridian Township and over \$44,000 higher than the region as a whole. It is of note that median household income during the 2000s decreased in Williamstown Township, Meridian Township, and the region as a whole. Only in Williamston did income increase during the 2000s.

TABLE 7
REAL MEDIAN HOUSEHOLD INCOME 1999 to 2006-10
WILLIAMSTOWN TOWNSHIP and REGION

	1999*	2006-10**	Percent change 1999-2010
Williamstown Township	\$104,418	\$94,387	-9.6%
Meridian Township	\$72,253	\$63,930	-11.5%
City of Williamston	\$51,997	\$61,840	18.9%
Tri-County Region	\$58,167	\$50,392	-13.3%

^{* 1999} figures adjusted for inflation to 2010 equivalent dollars

Source, Bureau of the Census, U.S. Department of Commerce

CPI Inflation Calculator, Bureau of Labor Statistics, U.S. Department of Labor

^{**(2006-2010} ACS 5 Year Estimates)

FUTURE POPULATION GROWTH

Future population growth will be determined chiefly by four sets of variables:

- 1. **Physical Parameters.** Several physical variables will affect future population growth in Williamstown Township, including the amount of vacant land available for residential development, land use restrictions placed on such land, the capacity of the soils to accommodate septic systems or the use of engineered septic systems, and the type of housing that is constructed in the future.
- 2. **Regional Growth.** The economic health of the region is the most significant external variable that will affect population growth.
- 3. **Characteristics of the Existing Population.** Characteristics of the population, such as age structure, propensity to move, and propensity for families to have children will affect population growth in Williamstown Township.
- 4. **Preferences of Residents.** Existing and prospective residents' preferences in terms of a living environment will have an impact on population growth. The type and affordability of housing, characteristics of the environment, and availability of public facilities and services affect people's desire to live in a community.

Each of these sets of variables are discussed in detail in the following sections:

Physical Parameters

Vacant land on which new housing units can be constructed is a key variable that determines the absolute maximum population of the Township. A 1991 existing land use survey revealed that 5,050 acres of vacant, potentially developable land existed in the Township. In addition, there were 12,553 acres of land used for agricultural purposes.

In 1991, there were about 16,100 acres of land in the Township zoned for residential or agricultural uses.

Based on the density standards set forth in the Zoning Ordinance, a maximum of approximately 5,500 housing units could be built in the Township. Using an average of 2.66 persons per household from the 2010 Census, the maximum population of Williamstown Township if all vacant and agricultural lands are eventually developed is calculated to be about 14,630 persons. This estimate does not take into account several other variables that will affect population growth, including the following:

• Zoning Regulations. Most vacant and agricultural lands in the Township are currently zoned to permit low density development. Minimum parcel size ranges from 20,000 square feet to 40 acres. In developing rural communities adjacent to an urban center, rezoning requests to permit higher density development are not uncommon, particularly as increasing land values encourage the development of agricultural land. Rezoning of agricultural and vacant lands to accommodate higher density development would increase the maximum population potential of the Township. It is, however, improbable that rezoning to permit lower density development will occur on a widespread basis in the future.

- Other Land Use Regulations. Other land use regulations, particularly lot split regulations, will affect the development potential and subsequent population growth of the Township. Past land use regulations resulted in single family development occurring along the main roads in the Township, leaving the interior of most sections undeveloped. More recent development is characterized more by subdivision development.
- Septic Systems, Availability of Water. Except for parcels adjacent to the City of Williamston, most of the Township has no access to public water or sanitary sewer facilities. According to the Soil Survey for Williamstown Township, soils in most of the Township have severe limitations with respect to septic system use, however, engineered septic systems may permit development of land with severe limitations for a traditional septic system. Engineered systems are gaining acceptance a the State and County levels, and will impact the demand for development in the Township.

In the past, a key determinant in establishing land use regulations and permitted development densities was the minimum site area needed to be reasonably certain that there is sufficient land area for operation of a traditional septic system in an environmentally safe manner. The suitability of the land to support septic systems must still be a consideration in establishing land use regulations and permitted densities, however, the impact of engineered systems must also be considered.

- Wetlands, Woodlands, Farmlands. Wetlands, woodlands, and farmlands, to the extent that they are protected by local, state, or federal regulations, will affect development and population growth. Michigan Department of Environmental Quality maps reveal that large portions of the Township, particularly along the drainage courses, are covered by wetlands.
- <u>Type of Housing Constructed.</u> Large lot single family detached housing is predominant in Williamstown Township. However, there are existing zoning classifications that permit other types of development, usually at a higher density, including conventional subdivision development at a density of about two units per acre, multiple family development, and manufactured housing development. The development potential of the Township will be affected by decisions to permit development of a greater variety of housing types in the community.

Regional Growth

The regional economy is largely beyond the control of the Township and its individual residents, but it has a tremendous impact on population growth. It was noted previously that most Township residents work in the Lansing/East Lansing urban center. It is likely that the availability of employment in the Lansing/East Lansing area makes it possible for many residents to choose to live in Williamstown Township. Without the presence of the employment center to the west, it is unlikely that Williamstown Township would have experienced the growth it has over the past four decades.

Studies have shown that cycles in the economy is one of the key determinants of population change in Michigan, because of the effect of the economy on migration patterns. A lackluster economy results in a reduction in the number of families that purchase new homes or relocate. Thus, economic vitality of state government, Michigan State University, healthcare services, General Motors, and other large regional employers has a direct impact population growth in Williamstown Township and other communities in the region. The Facility for Rare Isotope Beams (FRIB), which is under construction at MSU, will bring hundreds of employees into the area, and could affect population growth in the Township.

Characteristics of the Population

The earlier review of population data revealed that the number of mature households is increasing. The increase in more mature households portends smaller household size, which is an important consideration with regard to future population growth. A fractional increase or decrease in household size can make a difference of hundreds in total population.

As noted previously, household size continues to decrease, declining to an average household size of 2.66 in 2010. During the 2000s, housing units grew a little over 4 times faster than the population. The result is that more land is being consumed to accommodate a smaller proportion of residents.

Residents' Preferences and Perceptions

Variables related to people's preferences in terms of housing and the environment in which they live will affect population growth. Residents have been drawn to Williamstown Township by a variety of features, including the availability of nearby employment, the character of the community, and the unspoiled natural environment.

The ability of the Township to maintain these qualities will affect growth in population. As more people move into the Township, portions of the natural environment are developed and the remaining natural areas are subject to greater use. A point could eventually be reached where additional development will not only diminish the Township's natural features, but also alter the perceived desirability of the environment and community in general.

Public facility improvements will also affect the desirability of the community. Research in other semi-rural communities in Michigan revealed that newcomers often are accustomed to the amenities of urban living, such as paved roads, water and sewer services, parks and playgrounds, garbage pick-up, and other services. Typically, the demand for these services gradually increases as the proportion of new residents increases. The ability of the Township to meet these demands may affect the stability of the population, since residents who find their demands for public services unmet are more likely to move out of the community.

POPULATION PROJECTIONS

The information on the previous pages reveals a number of parameters that could affect population growth in future years. The two most important parameters are likely to be regional growth patterns and local land use policies and regulations. Regional growth patterns will determine if there will be a demand for housing in Williamstown Township. Local land use policies and regulations will determine how much of the demand will be accommodated within the Township.

Forecasts of population growth are typically prepared based on the assumption that previous trends and land use policies will continue. The Tri-County Regional Planning Commission (TCRPC) prepares projections as a part of the transportation planning process. The TCRPC's projections indicate the population of the Township will increase modestly, reaching 5,651 by 2045 (see Table 8).

TABLE 8
POPULATION PROJECTIONS
WILLIAMSTOWN TOWNSHIP (2010-2045)

Year	Population Projections
2010	5,140 (4,978 actual)
2015	5,070
2020	5,189
2025	5,319
2030	5,415
2035	5,497
2040	5,576
2045	5,651

Sources: U.S. Department of Commerce, Bureau of the Census 2010-2045 - Tri-County Regional Planning Commission

SUMMARY AND CONCLUSIONS

- 1. Williamstown Township had a lower population growth rate than the region as a whole for the 2000-2010 period. Compared to previous decades, the Township's growth rate is slowing down considerably.
- 2. Williamstown Township had higher growth rate for housing units than the region as a whole for the 2000-2010 period.
- 3. The Township has a higher median age than populations in Meridian Township, the City of Williamston, and the region as a whole. The 0-5 age cohort in Williamstown Township is smaller than the region and surrounding communities, indicating that there are fewer families with young children.
- 4. Williamstown Township has a much larger proportion of its population in the 45-64 age group than the region and surrounding communities. This will likely lead to increased demand for services in the future. The demand for housing styles that appeal to seniors and empty-nester households will likely increase in the area.
- 5. The residents of Williamstown Township are generally better educated and have higher incomes than the residents of surrounding communities, the region and the state as a whole.
- 6. Population projections indicate there will be modest population growth in the Township over the next three decades.

HOUSING ANALYSIS

This section of the Master Plan analyzes the Township's housing stock and development trends. The purpose of this chapter is to provide an understanding of the local housing market and to project future housing demand to guide the formulation of the Future Land Use Plan.

This chapter provides an in-depth analysis using detailed housing data, relying extensively on Township Assessment records, as well as information from the Census Bureau, Tri-County Regional Planning Commission, and elsewhere. Specifically, this chapter analyzes the following housing characteristics:

- Type of Housing
- Age of Housing
- Size of Housing
- Value of Housing
- New Housing Construction

TYPE OF HOUSING

Over 97 percent of the 1,950 housing units in Williamstown Township are conventional single family detached units. The housing unit mix, according to the 2010 U. S. Census, is shown in Table 9. In addition, building permit data indicate that during the period of 2000 to 2010, over 100 single family detached housing units were constructed in Williamstown Township. Less than three percent of all units are multiple family.

Table 9
HOUSING UNITS PER STRUCTURE (2010)

Units in Structure	Percent of Structures
1 Unit (Detached)	97.3%
1 Unit (Attached)	2.0%
2-4 units	0.5%
5 or more units	0.2%
Mobile Homes	0.0%*

^{*} Although the U.S. Census reports no mobile homes in the Township, there are approximately 29 units equal to 1.5% of all units.

Source: Bureau of the Census, U.S. Department of Commerce

Table 10 summarizes key home ownership statistics. The 2010 U.S. Census indicated that 95.6 percent of all housing units in the Township are occupied, and that 92.4 percent of all occupied housing units are owner-occupied.

Table 10
HOUSING CHARACTERISTICS (2010)

Housing Unit	Statistics	
Total units:	1,950	
Owner-Occupied:	88.3%	
Renter-Occupied:	7.3%	
Vacant/Year-Round:	3.6%	
Vacant Seasonal:	0.8%	

Source: Bureau of the Census, U.S. Department of Commerce

HOUSING CONSTRUCTION BY DECADE

Table 11 summarizes the age of housing for Williamstown Township, nearby communities, and the region as a whole. Williamstown Township experienced greater housing growth in terms of the number of units constructed during the 1990's than at any other period since World War II other than the 1970's Housing growth in the Township slowed during the 2000's, but the drop was not as significant as in some other communities, such as Meridian Township. Overall, Ingham County gained 6,225 housing units between 2000 and 2010 – an 8.3% increase. The most significant observation that can be made about housing growth in the past decade is that there has been a trend toward building on single family lots in subdivisions in the southerly part of the Township, rather than on random lots throughout the Township (see Map 1). This more compact development pattern reduces the impact of housing growth on the Township's rural-like environment.

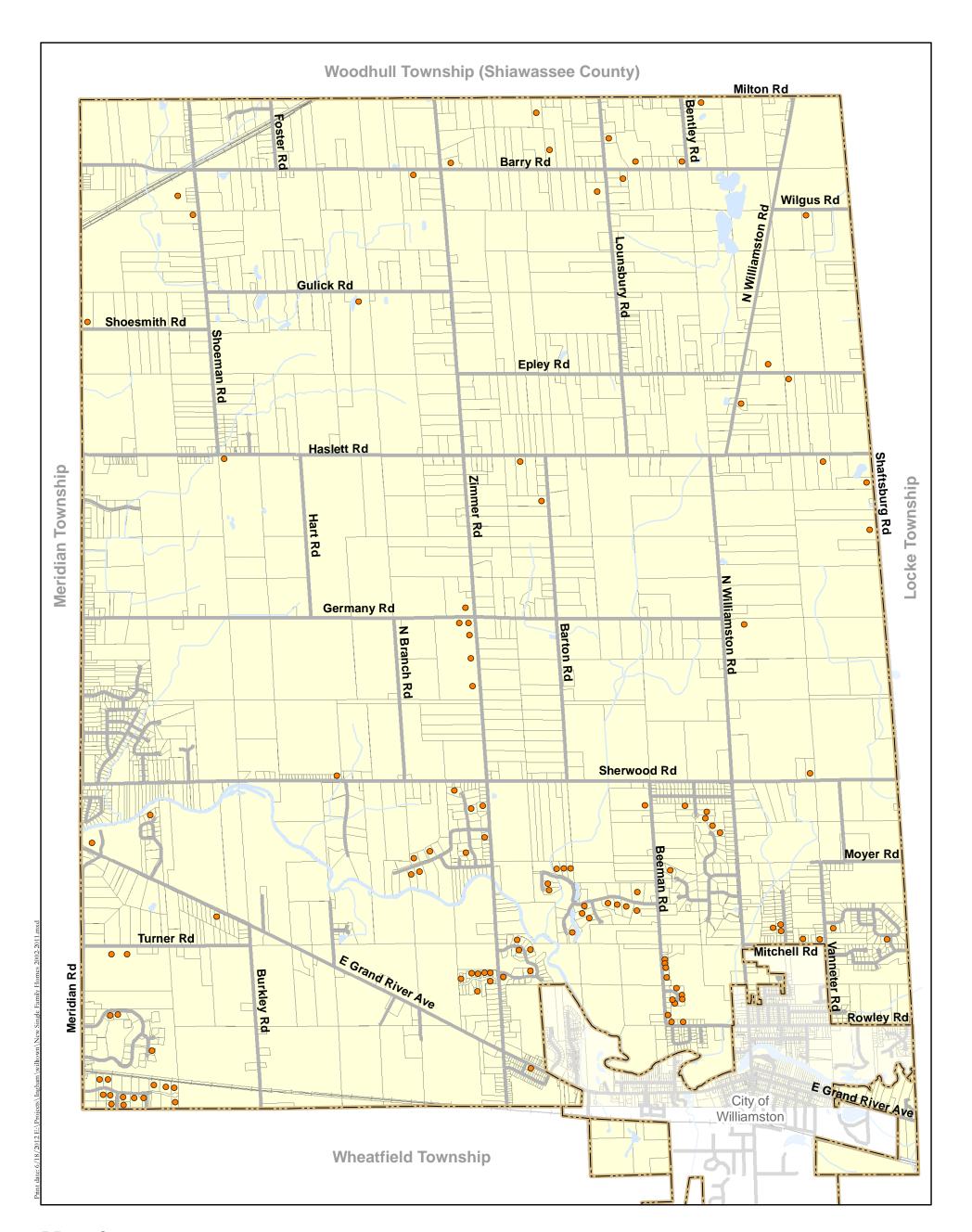
Table 11
HOUSING CONSTRUCTION BY DECADE

	Williamstown Township		City of Williamston		Meridian Township	
	Number	Percent	Number	Percent	Number	Percent
2000-2010	218	11.1%	261	14.5%	1,449	7.9%
1990-2000	347	17.7%	248	13.8%	3,212	17.3%
1980-1989	172	8.8%	136	7.6%	3,917	21.1%
1970-1979	474	24.3%	243	13.5%	4,343	23.3%
1960-1969	301	15.4%	137	7.6%	2,504	13.4%
1940-1959	234	12.0%	331	18.5%	2,516	13.5%
Before 1939	198	10.1%	438	24.4%	609	3.3%
	1,950	100%	1,789	100%	18,569	100%

Source: Bureau of the Census, U.S. Department of Commerce

VALUE OF HOUSING

Homeowners value governmental efforts to maintain property values throughout the community because the homeowners investment in housing is usually their largest single investment. Local governments value homeowner efforts to maintain property values because local government revenues are generated primarily through property taxes.



Map 1 New Single Family Homes 2002-2011

Williamstown Township, Ingham County, Michigan



Table 12 lists the median home values reported in the 2000 and 2010 census for Williamstown Township, surrounding communities, and the region as a whole. Table 12 indicates that real property value increases in Williamstown Township were on higher than in neighboring communities and the region as a whole. The data show that Williamstown was not as affected by the housing crisis that began in 2008 as other communities.

Table 12
MEDIAN OWNER-OCCUPIED HOME VALUE (1990-2000)

	2000 Value	2010 Value	% Change 2000-2010	
		Value	2000-2010	
Williamstown Township	\$152,400	\$245,300	60.9%	
Meridian Township	\$165,600	\$209,200	26.3%	
City of Williamston	\$114,600	\$150,500	31.3%	
Tri-County Region	\$106,700	\$148,300	38.9%	

^{* 1990} values were adjusted to equivalent 2000 dollars based on CPI change from 1990-2000 Source: Bureau of the Census, U.S. Department of Commerce

The median home value data from the Census is valuable, however, it does not distinguish between the different types of housing available in the Township. While Williamstown Township is a predominantly rural community with a significant portion of the total land area being used for agriculture or large-lot single family development (lot area over 10 acres), a majority of the housing growth over the past 20 years has occurred in subdivisions. Prior to 1990, most of the housing growth in the Township occurred as a result of lot splits along major section or half-section line roads. Therefore, there are varied communities with different styles of housing and different development patterns within the Township as a whole.

In order to compare relative housing values within the Township, an analysis of the average value of housing in terms of age, location inside or outside of a subdivision, and value per acre of lot area was completed. Active agricultural parcels and non-agricultural vacant parcels of land were not included in the analysis. The following Tables 13 and 14 indicate the average home value in the Township is significantly higher than the median home value reported in the 2000 census (\$261,604 vs. \$152,700). This difference is explained by 1) the use of Township Assessor's data, which is generally more accurate than the self-reported home values in the census, 2) the census reports the median home value and the following tables report the average home value, and 3) the Assessor's data is current as of February 2005 while the census data was collected in 2000. Data were not available to update the analysis in 2012.

The following tables present the results of that analysis.

Table 13
AVERAGE HOUSING VALUE by AGE (2005)

Age	Average Value
0-10 Years:	\$371,426
11-20 Years:	\$245,916
21-30 Years:	\$219,996
31-40 Years:	\$190,039
41-50 Years:	\$198,054
Over 50 Years:	<u>\$207,136</u>
TOTAL:	\$261,604

Source: McKenna Associates, Inc 2005; data provided by Township Assessor

Table 13 indicates that the newest housing in the Township was also the most valuable. The average value of housing progressively decreased for each age category until the 41-50 and 50+ groupings.

Table 14
AVERAGE HOUSING VALUE by TYPE OF DEVELOPMENT (2005)

Type of Development	Average Value	Average Lot Area	Average Value/Acre ⁵
Planned Development/Open Space Subdivision ¹ :	\$544,472	1.51 acres	\$359,949
Conventional Small-Lot Subdivision ^{2:}	\$201,771	N/A	N/A^3
Conventional Large-Lot Subdivision ^{4:}	\$401,350	2.89 acres	\$138,969
Acreage Parcel - 0-4.99 acres:	\$200,272	2.63 acres	\$76,254
Acreage Parcel - 5-9.99 acres:	\$272,237	8.20 acres	\$33,180
Acreage Parcel - 10-19.99 acres:	\$283,305	10.31 acres	\$27,491
Acreage Parcel, 20+ acres:	\$410,530	43.82 acres	\$9,369

Source: McKenna Associates, Inc. 2005; data provided by Township Assessor

- 1. Includes Pine Knoll, Steeplechase, Ban Gan Aka, and Williamstown Estates
- 2. Includes Quinlan, Maple, Pebblebrook, Harvey, Hideaway, and Woodview (R-1 and R-1S subdivisions)
- 3. Average lot area data unavailable for small-lot subdivisions
- 4. Includes Pheasant, Oakleaf, Cherry Valle, and Larkin's Countryside Acres (RR and RE subdivisions)
- 5. Includes only parcels with a single family residence

The data in Table 14 indicate that residents were willing to pay a premium for housing in Planned Developments and Open Space Subdivisions, which had the highest average housing value of any development type in the Township. When considered in terms of average housing value per acre, open space developments had an average housing value of \$359,949 per acre of lot area, which was over 2.5 times the average value per acre in the next highest category (large lot subdivisions). Finally, housing located on acreage parcels was, on average, less expensive than housing in an open space development or in a conventional large lot subdivision. This may be in part due to the fact that housing in open space or conventional subdivisions is generally newer.

HOUSING AFFORDABILITY

Williamstown Township's housing stock consists of predominantly single family housing on conventional lots -- the most expensive type of housing available. Therefore, housing opportunities are limited for certain segments of the population in Williamstown Township.

Affordability of housing in Williamstown Township can be quantified. The U.S. Department of Housing and Urban Development considers housing affordable if housing payments are equal to or less than 30% of a person or household's gross monthly earnings. Based on this figure, the maximum price for a home to be affordable based on the median household income for Williamstown Township, and the income necessary to purchase the average home in Williamstown Township were calculated. In order to make the calculations, a down payment of \$5,000 was assumed, estimated property taxes and home insurance were included in the home payment, and high (6.0%), median (5.0%), and low (4.0%) mortgage rates were considered. Historically low interest rates have made housing in Williamstown much more affordable.

The median household income for Williamstown Township was \$94,387 in the 2010 U.S. Census. This equates to a monthly gross income of \$7,865. Therefore, the maximum affordable housing payment for the median household in Williamstown Township is \$2,359. Based on an estimated property tax rate of 3% and a monthly home insurance payment of \$70, the median household in Williamstown Township can afford a maximum \$370,000 home based on a conservative interest rate estimate, a maximum \$410,000 home based on moderate interest rate estimate, and a maximum \$470,000 home based on an aggressive interest rate estimate.

The median home value in Williamstown Township according to the 2010 Census was \$245,300. Based on a high interest rate estimate, a gross yearly household income of \$63,200 is required for the median home in Williamstown Township to be affordable, a gross yearly household income of \$58,240 is required based on a medium interest rate estimate, and a gross yearly household income of \$52,440 is required based on an low interest rate estimate.

The above estimates indicate that the median home in Williamstown Township is affordable for the average resident of the Township. However, the median home would be a financial stretch for the median resident of the Tri-County region as a whole, who has an inflation adjusted income of \$50,392. Additionally, certain market segments such as young families and single person households (young and old) might struggle to afford housing in Williamstown Township. Further, single people and seniors could struggle with the physical and financial task of maintaining much of the housing in the Township. The Planning Commission recognizes the need to provide housing for other segments of the population that wish to locate or remain in Williamstown Township, such as the elderly, young singles and first-time home buyers, provided that such housing can be accommodated within the existing planned public service framework.

SUMMARY OF RESIDENTIAL DEVELOPMENT CONSIDERATIONS

The Population and Housing Analysis revealed the following considerations pertinent to residential development in Williamstown Township.

Sustainability

With the depletion of natural resources (such as oil and tillable soils) and the increase in global warming due to burning of fossil fuels, increased attention in recent years had been focused on the sustainability of development patterns. A sustainable development would concentrate housing in compact form near the City, where businesses, schools and services are nearby. Prior to these concerns being at the forefront of discussion, Williamstown Township did not have a very sustainable housing development pattern. Growth occurred as a result of random lot splits, consuming acres of agricultural land. In the past two decades, a more compact development pattern has been predominant, with the development of subdivisions, offering housing opportunities close to the City of Williamston, where goods and services are available. Most residential development in the past decade has taken place in these subdivision. An advantage of the subdivision alternative is that it may slow the conversion of agricultural land to housing. Williamstown Township has a long way to go before it can claim to be ideally environmentally sustainable, though, because of the numerous housing units still being built in outlying areas. It is significant that the Tri-County Regional Planning Commission recently completed the Tri-County Urban Service Management Study, which proposes a regional "Urban Services Boundary" to control unsustainable sprawl in the Lansing metropolitan area. Williamstown Township falls entirely outside of the boundary.

Transportation System

The Population Analysis revealed that most of Williamstown Township's labor force works in the Lansing/East Lansing area. Most commercial services are also located outside of the community. Because of this, Williamstown Township is an automobile-oriented community. Consequently, development of the residential sector should be closely tied to the capacity and development of the road system. Under ideal circumstances, residential areas should be located in proximity to major roads with easy connections to freeways or State highways to serve commuters. Commuter bus service to Meridian Mall, with connections to destinations in Lansing and East Lansing, is available in the City of Williamston and at the Williamstown Township Community Park and is an option for many Township residents.

Capacity of the Soils to Support Septic Systems

In the past, the appropriate density of development was very closely related to sewage disposal and water quality concerns. Conventional individual on-site septic systems required a larger parcel of land for an adequate disposal field, compared to a subdivision lot served by sanitary sewers. The type of soil and subsoil affected the amount of area needed and the possibility of polluting nearby surface water or wells. According to the Soils Survey, soils over almost the entire Township have moderate or severe limitations with regard to use of septic systems. A lack of public water or sewer is one of the reasons Williamstown was not included in the TCRPC's urban services boundary.

However, private engineered septic systems (such as mound systems) located on a parcel and designed to serve one residence have gained acceptance at the State and County level. These engineered individual on-site septic systems permit development on parcels that previously would not have been buildable due to unsuitable soil conditions. The use of engineered septic systems means that soil suitability should be less of a factor in determining the appropriate density of development in the Township than in the past.

Community septic or sewage disposal systems (privately owned public sewerage systems) are another option to serve potential residential development. These systems are privately owned and designed to serve the residents of a subdivision or other limited grouping of parcels. These systems may also permit the development of previously undevelopable land, as the treatment facility can be located in the most appropriate location on the parcel or grouping of parcels.

The MDEQ now retains exclusive jurisdiction over permits to construct sewerage systems. In the past, the MDEQ required municipalities to agree to accept responsibility for the maintenance of a privately owned sewerage system before it was permitted. However, municipalities are no longer required to agree to accept maintenance responsibility for a privately owned public sewerage system.

Water Quality

Another consideration related to water quality is the presence of groundwater recharge areas and wetlands. According to Ingham County Health Department maps, land along the Red Cedar River and Coon Creek is a groundwater recharge area. The Michigan Resource Information System (MIRIS) maps indicate wetlands are scattered throughout the Township, but the greatest concentrations are located along the Red Cedar River and Coon Creek. In the interest of protecting the supply of high quality groundwater for all residents, development should be restricted in all groundwater recharge and wetlands areas.

The presence of uncapped wells is also a potential source of ground water contamination. Uncapped wells are not uncommon on abandoned properties, such as abandoned farmsteads.

Natural Features

Williamstown Township is blessed with irreplaceable natural features which existing residents have indicated they would like to protect. These features include:

- Gently rolling topography throughout the Township, with steeper slopes along the Red Cedar River and Coon Creek. Topography influences the type and cost of development, controls the direction and rate of water runoff, adds variety to the landscape, and affects the type of vegetation and wildlife.
- Floodplains which accommodate the overflow of rivers and streams after heavy rainfall or snow melt.
- Prime farmlands which cover almost the entire Township, except generally along the Red Cedar River and Coon Creek drainage basins.
- Wetlands, water recharge areas, and woodlands, which are scattered throughout the Township, but are concentrated most heavily near the Red Cedar River and Coon Creek.

Aside from the state and federal regulatory protection afforded to certain natural features, some communities make special efforts to prevent unusual or valuable natural features from being developed, recognizing that they serve both an aesthetic and functional purpose. For example, floodplains, wetlands, and woodlands are often reserved for recreational amenities and common open space rather than for residential development. Township officials have concluded that preservation of these natural features should be a goal of this Master Plan and subsequent ordinances.

There is another important consideration with respect to natural resources: access. Conventional single family development artificially segments resources into individual lots, thereby minimizing access to the broader public. Other types of development, such as open space or cluster development, can facilitate protection of and access to natural resources.

Public Services

Experience has shown that as a rural or semi-rural community develops, demands for public services and facilities increases. This demand is created in part because newcomers from more urban areas are simply used to a more complete range of public services. The demand for public services is sometimes also created out of a need to address requirements imposed by state or federal law. Finally, public service needs change as the community makes the transition from a self-reliant rural community to a more suburban community.

Sense of "Community"

People can live in the same municipality without having a sense that they are a member of a community composed of people with similar interests and a common identity. Much has been written over the years about this nebulous concept called "community". Many researchers have concluded that conventional single family suburban development, which is so heavily oriented toward the automobile, does not facilitate a sense of community. A more compact form of development that facilitates pedestrian movement and face-to-face interaction fosters a sense of community.

CONCLUSIONS

In the last 10 - 20 years, most residential development has generally been one dimensional: large lot single family detached homes either in conventional subdivisions or open space subdivisions.

Housing is highly valued, but is generally affordable to the population of the Township. However, some segments of the population would struggle to own or take care of housing in Williamstown Township. Further, the pattern of development is not always considered desirable or practical for young adults, single person households, and seniors. Nevertheless, public opinion supports continuing the same pattern of development.

The pattern of development over the last two decades has favored new homes in subdivisions rather than on large lots along major section line roads. The new pattern is more sustainable, fiscally and environmentally.

A lack of public water and sewer will limit the development potential of the Township in coming years. This has been acknowledged by the TCRPC, which did not include Williamstown Township in its proposed urban services boundary for the greater Lansing area.

On the other hand, the Health Department and State's approval of engineered septic systems has the potential to fuel random lot splits, which would contribute to residential sprawl throughout the community.

EXISTING LAND USE

GENERAL OVERVIEW

The general patterns of land use in Williamstown Township have been molded by several variables, including the predominance of agriculture, the location of major transportation corridors, patterns of land division, proximity to the City of Williamston and the Lansing/East Lansing metropolitan area, school district boundaries, and the location of certain natural features, such as wetlands, woodlands, soils, and drainage courses.

From the time of its organization as a Township, agriculture has been the predominant land us in Williamstown Township. However, as rural residential growth has continued in recent decades, agriculture is gradually being replaced as the dominant land use in the Township.

The most intensive growth, consisting of residential subdivision and nonresidential development, has been concentrated generally in the southern third of the Township. Aside from this development, the Township has the character of a rural agricultural community that is slowly being converted into a semi-rural residential community.

The Importance of Existing Land Use: Inventorying the Existing Land Uses of a community is an important element of the Master Plan process. Determining what uses currently exist within the Township – and where – informs the process of planning for future land uses. Additionally, updating the Existing Land Use Inventory demonstrates the changes that the community has undergone during the period between Master Plan updates.

Development in Proximity to Other Urban Centers: Development of the southern and western parts of the Township has been influenced by proximity to Williamston and the urbanized communities to the west. Residential and commercial growth in these parts of the Township benefit from access to public utilities (along Grand River Avenue near Williamston) and proximity to the amenities of the more developed adjoining communities.

Residents of the subdivisions in the southern part of the Township have the benefits of a rural lifestyle without all the inconveniences of being located long distances from shopping and services. Similarly, residents on the west side of the Township benefit from proximity to the employment opportunities, services, and schools in the Lansing/East Lansing area.

The desire to have a rural lifestyle but minimize the inconveniences of living far away from the amenities and services of a metropolitan area will probably continue to affect settlement patterns in the future.

Transportation Corridors: Development patterns have also been shaped by the location of major transportation corridors. Because most residents of the Township rely on the Lansing/East Lansing area for employment, shopping, medical services, and other needs, accessibility to the regional transportation network has, and will continue to be an important development consideration. A glance at the Existing Land Use Map (Map 2) reveals that much of the development has occurred along Haslett, Zimmer, and Meridian Roads, as well as Grand River Avenue.

Transportation corridors have also affected the scattered single family development patterns that have been prevalent in recent years. Most large lot development has occurred along paved primary roads, such as Sherwood, Barton, Haslett, Lounsbury, and other roads.

Patterns of Land Division: During the past two or three decades, lot splits have had a greater impact on the character of development than any other factor. As a consequence, three distinct single family development patterns/lifestyles are now predominant in the Township:

- Single family farm households, which are gradually being replaced by other types of development.
- Conventional single family subdivision development, which has occurred on a limited scale, primarily in the southern part of the Township.
- Large-lot single family "country estates," which are most often built on lots that have been split off of larger parcels which were previously used for agriculture.

EXISTING LAND USE

In May 2012, McKenna Associates updated the Existing Land Use Map (Map 2) using Township building permit data, which showed where new housing was constructed, in May, 2012. This section presents the results of the existing land use analysis.

TABLE 15
GENERALIZED EXISTING LAND USE (2012)

	<u> </u>	
	Acres	Percent
Residential	10,097	54.1%
Commercial & Office	122	0.7%
Industrial	113	0.6%
Agricultural	6,207	33.2%
Public/Semi-Public	364	1.9%
Residential Open Space	331	1.8%
Open Lands	1,447	7.7%
Total	18,681	100.0%

Land Use Classifications

- Agricultural and Open Land. In recent years, the pace of large lot residential development has slowed, due in part to heightened awareness of the need to maintain an appropriate balance between further development and retaining the rural/agricultural character of the Township. The downturn in the economy probably also affected this type of development. Agricultural lands are large parcels of land where commercial agricultural operations are still occurring.
- Residential. Residential land uses are primarily characterized by single-family residential land uses. The residential land use category includes acreage parcels, subdivision parcels, and manufactured home parks. Agricultural land uses may still occur on acreage residential parcels, however, the agricultural uses are secondary to the primary use of the land for single

family residential. Therefore, it must be understood that the existing land use map somewhat overstates the residential character of the Township and understates the agricultural or open land character.

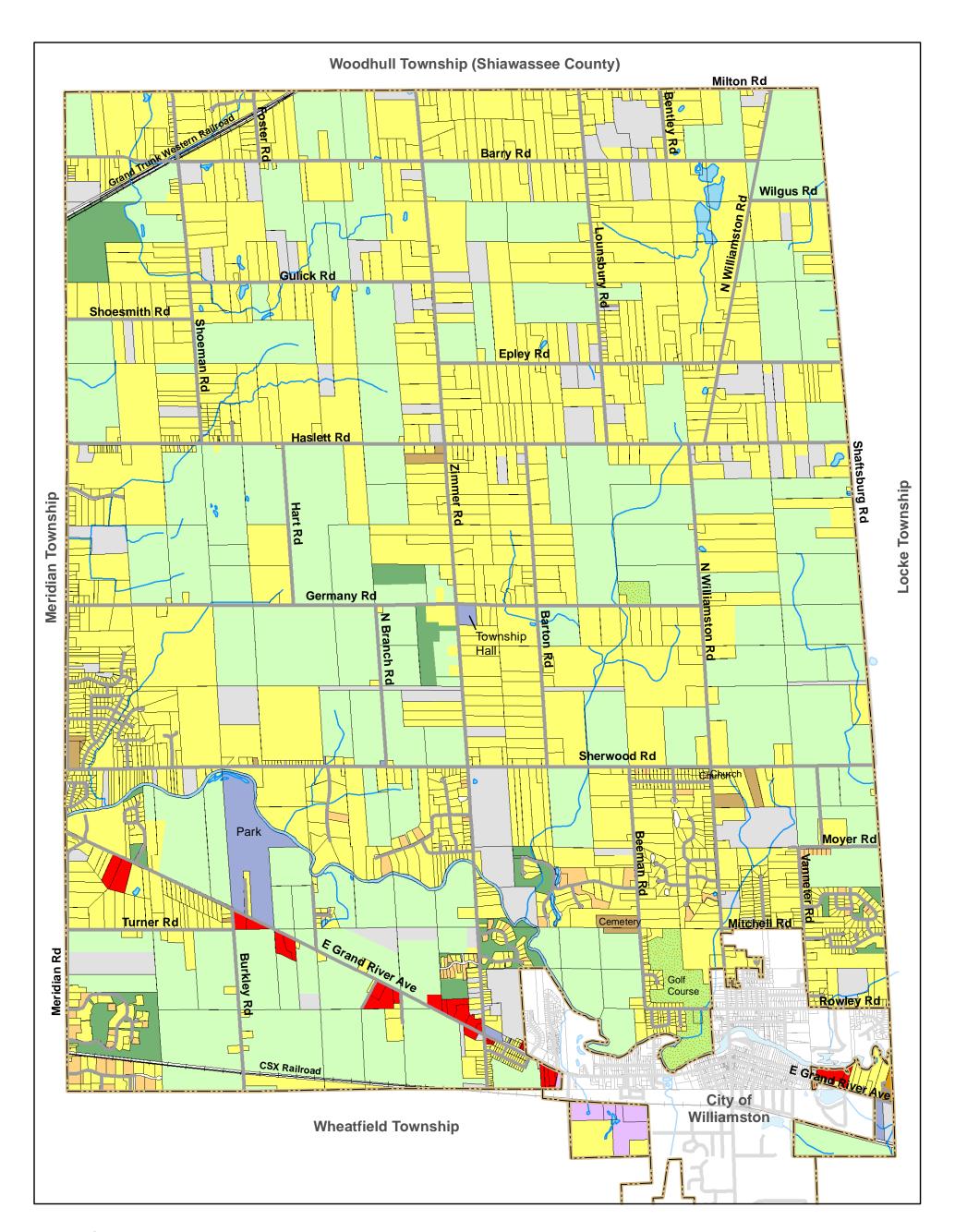
Over the past 5-7 years, the amount of residential development in the Township has increased, albeit at a slow pace. Single family homes were built on 99 additional acres of land in Williamstown Township between 2005 and 2012. Most of the new residential development took place in subdivisions near the City of Williamston, but new houses were also built along major corridors such as Zimmer Road.

- Residential Open Space. Residential open space lands are permanently protected open spaces. These lands are typically found in open space subdivisions or Planned Developments.
- Open Lands. Open lands are not being actively farmed or used for residential purposes. As of 2012, open lands account for approximately 1,447 acres, or 7.7% of the total land area in the Township. This is an increase of 234 acres. Some of this increase may result from formerly agricultural lands no longer being used for agricultural purposes.
- Commercial and Industrial Land Use. Commercial and office uses occupy about 122 acres, and industrial uses occupy approximately 113 acres of land. Together, commercial, office, and industrial uses account for less than 1.5% of the total land area in the Township. This amount has not changed since 2005.
 - Most non-residential development is located along Grand River Avenue, west of the City of Williamston, in an area served by public sewers. There are no readily discernable patterns along Grand River Avenue. Industrial service, office, and some retail uses are located along the corridor, but distinct "commercial," office and "industrial" districts cannot be easily delineated.
- <u>Public and Semi-Public Uses</u>. Public and semi-public uses occupy about 364 acres, or 1.9% of the total land area of the Township. Public and semi-public uses consist of governmental buildings (such as the Township Hall), churches, cemeteries, schools, and parks.

LAND USE ISSUES

This analysis has uncovered a number of land uses which affect the quality of life, function and attractiveness of the community.

• Random Single Family Residential Growth. While much of the residential development in recent years has been in subdivisions in the southern third of the Township, a significant amount of new, high quality residential development is occurring on large "acreage" parcels scattered throughout the Township rather than within planned subdivisions. This pattern of growth allows residents to experience a comfortable rural lifestyle, unencumbered by the urban characteristics of a subdivision. However, over the long term, this pattern of residential land use could lead to large scale loss of agricultural land, inefficient use of lands located to the rear of the frontage parcels, and difficulty in providing public services in a cost-effective manner.

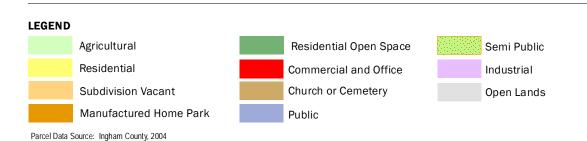


Map 2 Existing Land Use

Data Source: Williamstown Tax Assessor, 2004

Williamstown Township, Ingham County, Michigan





April 22, 2013

In recent years, most of the housing growth has been within subdivisions. However, development of large-lot residential parcels along the major thoroughfares has not ceased. The locations of new subdivisions should be carefully planned to ensure the efficient provision of public services.

- Land Use/Transportation Relationships. Most residents of the Township work and shop in other communities. Consequently, it is essential that there be a balanced relationship between the transportation system and overall land use pattern. Special attention must be focused on linkages to the broader regional network. Congestion could occur if residential development is permitted to occur without adequate collector roads to carry traffic to and from the thoroughfares and highways into Lansing and East Lansing. Grand River Avenue and Haslett Road are the two most commonly used routes to access the amenities of the larger communities to Williamstown's west. This transportation pattern should be taken under consideration in all Future Land Use decisions.
- Protection of Natural Features and the Rural Character. People move to Williamstown Township because of its natural features and rural character. As more and more people move into the Township, though, the natural features are altered and rural character is slowly diminished. The challenge is to seek a proper balance between new development and preservation of the existing rural character. The GD-Green Zone Planned Development District that was recently established along Grand River Avenue is a major step toward this goal.
- **Relationship to the City of Williamston**: In some respects, the City and Township have formed a symbiotic relationship. For example:
 - With the limited amount of commercial development in the Township, Township
 residents shop in the City. Consequently, even though the City's population has stayed
 level, City retailers have expanded to accommodate the growing Township market.
 Because the Township has not encouraged commercial development in recent years,
 this trend has grown even more pronounced.
 - The Township has avoided the necessity of developing certain public services, such as sewers and a library, relying instead on facilities constructed by the City. In return, the City benefits from the fees paid by the Township for use of such facilities.
 - The development and economic well-being of both the Township and City depend on important policy decisions that lie ahead related to the mutually beneficial relationship which has evolved between the City and Township.
- Protection of Agricultural Lands. One of the most important decisions that a rural community
 must make is whether it is pursuing the preservation of rural character and open space, or the
 preservation of agriculture. The retention of rural character, if it involves non-farm residential
 development and fragmentation of agricultural lands, may not preserve agriculture. Rural
 open space does, however, provide a good buffer between areas of good agriculture and more
 developed areas.

If agricultural preservation is the goal, other land uses (residential or otherwise) should not be allowed to infiltrate large contiguous blocks of agricultural land. Such development makes the land less attractive to future agriculture, particularly as farms consolidate. Fragmented lots of farmland are more difficult to farm, because of loss of efficiency and other concerns, such as increased traffic from residential development. Communities that maintain significant blocks of contiguous farmland will be in position to take advantage of future developments in agriculture, such as biotechnology-ready crops, vitamin-enhanced crops, and industrial crops such as nutra-ceuticals, cellulose, fuel, lubricants, and plastics. These crops will require small but unfragmented lots, under intensive management with high yield.

Williamstown Township has a considerable amount of agricultural land worthy of being preserved. While it is felt that the opportunity for farmland preservation has passed in many communities, it still makes sense for Williamstown Township to preserve its agricultural lands. Williamstown's rural infrastructure (suppliers, rail access, etc.) makes it suitable for continued agricultural production.

As it becomes more difficult for farmers to succeed economically through traditional farming methods, they have begun to manage larger and larger parcels of land to capitalize on economies of scale. Although the average age of farmers is increasing, there is still an influx of young farmers. While they represent only a small proportion of farmers today, they are the ones most often operating the large, consolidated farms.

One result of this trend has been a decrease in the amount of land used for agricultural purposes and an increase in the amount of non-agricultural open space. Land once used for agriculture is now allowed to lie fallow by large-scale farming operations and/or developers waiting for the economy to improve.

- **Development Pressure from the West.** In 1992, when Williamstown Township adopted its Master Plan, Meridian Township was putting into place an urban services boundary to control the pace and direction of growth. There was concern that such controls might cause development to leapfrog into Williamstown Township. Now Meridian Township has repealed its urban service boundary so the concern focuses on the potential for higher density development along Williamstown's western border. However, the development pressure still remains, especially as the City of Williamston becomes more and more popular as a bedroom community for the Lansing/East Lansing area.
- **Economic Trends.** Like many other communities, Williamstown Township has been impacted by the international financial crisis that began in 2008. However, there are positive economic trends as of 2012. The local economy has shown signs of recovery, and the installation of the Facility for Rare Isotope Beams at Michigan State University is anticipated to have significant spinoff impacts. The Township could see increased demand for new residential development and is likely to be targeted as a site for research operations locating near the new facility. The new GD-Green Zone Planned Development District anticipates this trend by permitting research and technology office uses along Grand River Avenue (provided that they comply with open space preservation standards).
- **Aging Population.** Williamstown Township has long been a community where people who are in the prime of their careers move to enjoy the natural beauty while still living within commuting distance to major job centers. This results in an older population. As the population ages,

residents demand additional services, and some return to communities closer to urban centers. This trend could change the development pattern in the Township.

• Quality School District. Many residents of the City of Williamston and Williamstown Township decided to move to the community because of the quality of the Williamston Community School District. Having good schools will allow the Township to attract younger families.

NATURAL FEATURES

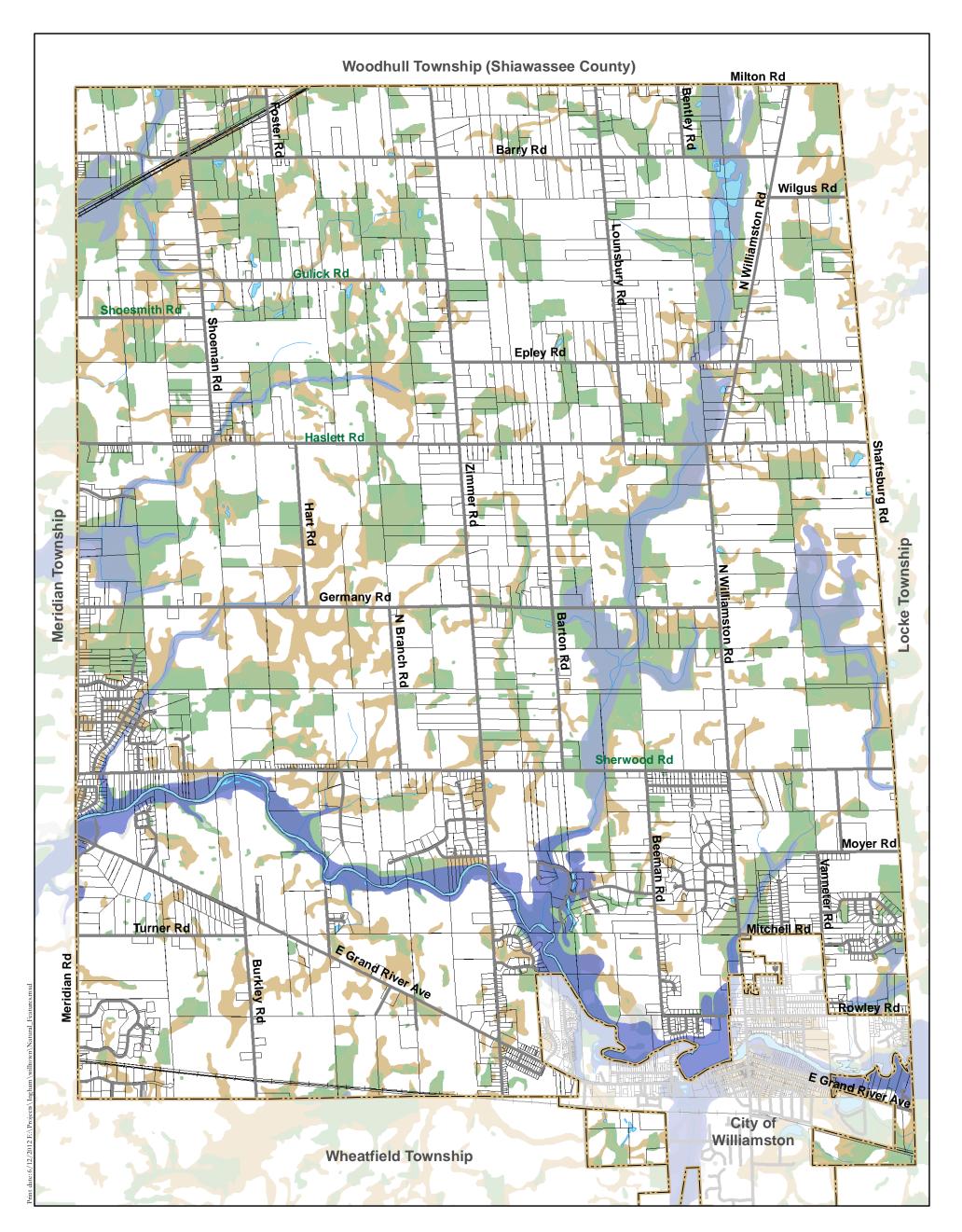
Wetlands, woodlands, soils, drainage courses, and other natural features have also affected development patterns. Soils have affected development because almost the entire Township relies on septic systems for treatment of wastewater. The Soils Survey for Williamstown Township indicates that soils in almost the entire Township have moderate or severe limitations with respect to septic system use.

The Soils Survey should be used as a general guide, since even parcels that are identified as having serious limitations there may be pockets of soils that can accommodate septic systems. Nevertheless, the soils information reveals that extension of the public sanitary sewer system may be necessary if the Township wishes to permit development of the type envisioned by the Green Zone Planned Development District along Grand River Avenue.

Wetlands and woodlands present an interesting dichotomy in developing rural communities. Wetlands and woodlands are some of the most prominent "rural" features that residents appreciate most, so building sites that have these features are sought after. However, sites that have these features are often regulated by state wetlands laws and frequently are not even developable. Even if they can be developed, the very act of development often leads to destruction or significant alteration of the rural characteristics of the site. The Natural Features Map reveals large sections of the Township, particularly along streams, creeks, and other drainageways, where limited development can occur because of the presence of wetlands.

Agricultural land is also an important natural feature which has affected development patterns. According to the Soil Conservation Service, large portions of the township have been classified as being "prime farmland" or "unique farmland." Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, forage, fiber, and oilseed crops. Unique farmland is land other than prime farmland that is used for the production of specific high value food and fiber crops.

The Natural Resources Conservation Service identified large areas occupied by "additional farmlands of local importance." These lands tend to be located along the drainage courses, such as the Coon Creek. These lands are nearly prime and are capable of economically producing high yields when treated and managed according to modern farming methods.



Map 3 Natural Features

Williamstown Township, Ingham County, Michigan



FEET 0

Wetland Associations

1 - Wetlands as identified on NWI and MIRIS maps

2 - Soil areas which include wetland soils

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

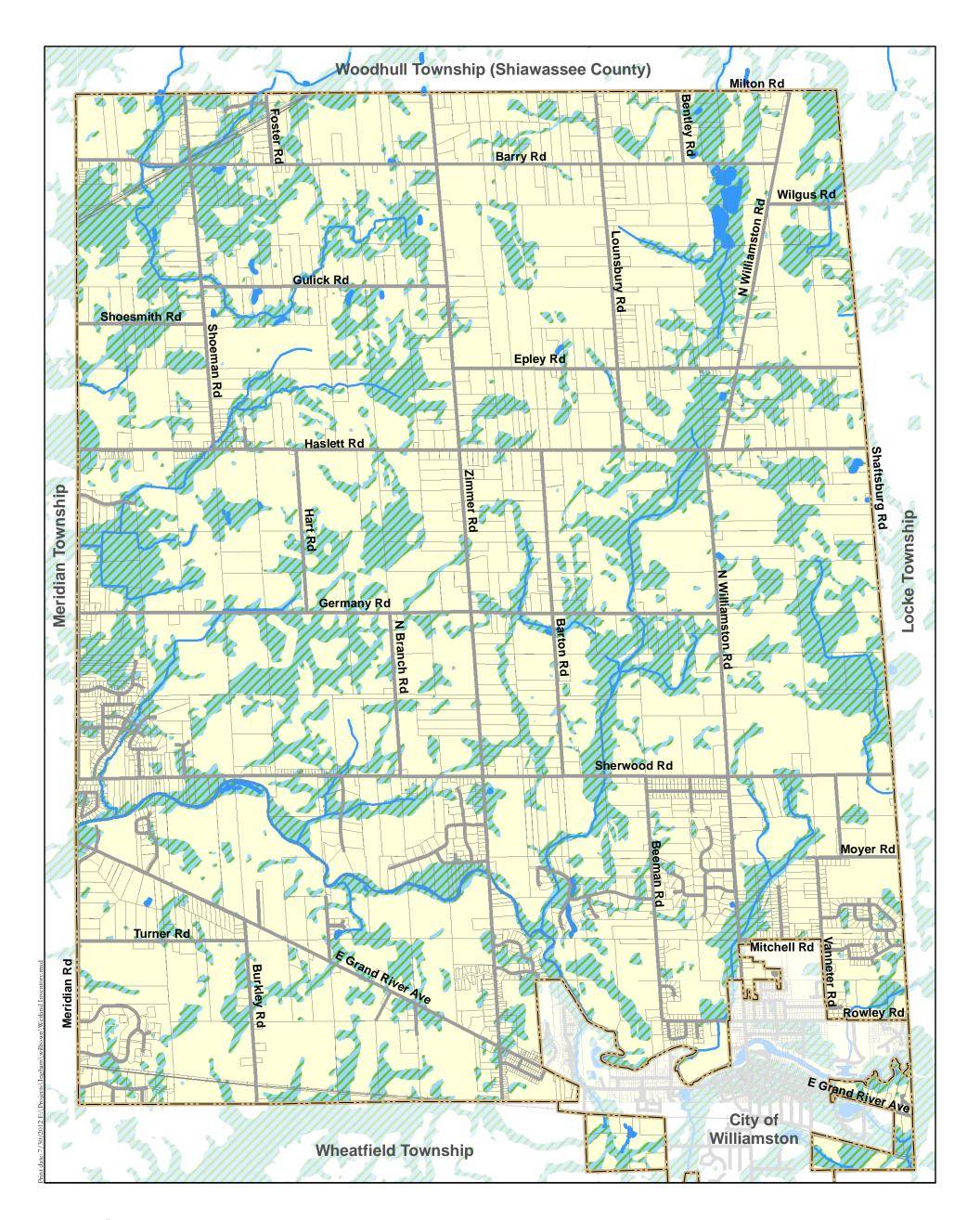
500-year Flood Plain

April 22, 2013

2,000

4,000

Parcel Data Source: Ingham County, 2004 Data Source: Michigan Department of Natural Resources



Map 4 National Wetland Inventory

Williamstown Township, Ingham County, Michigan





Map 5 Water Table Contours

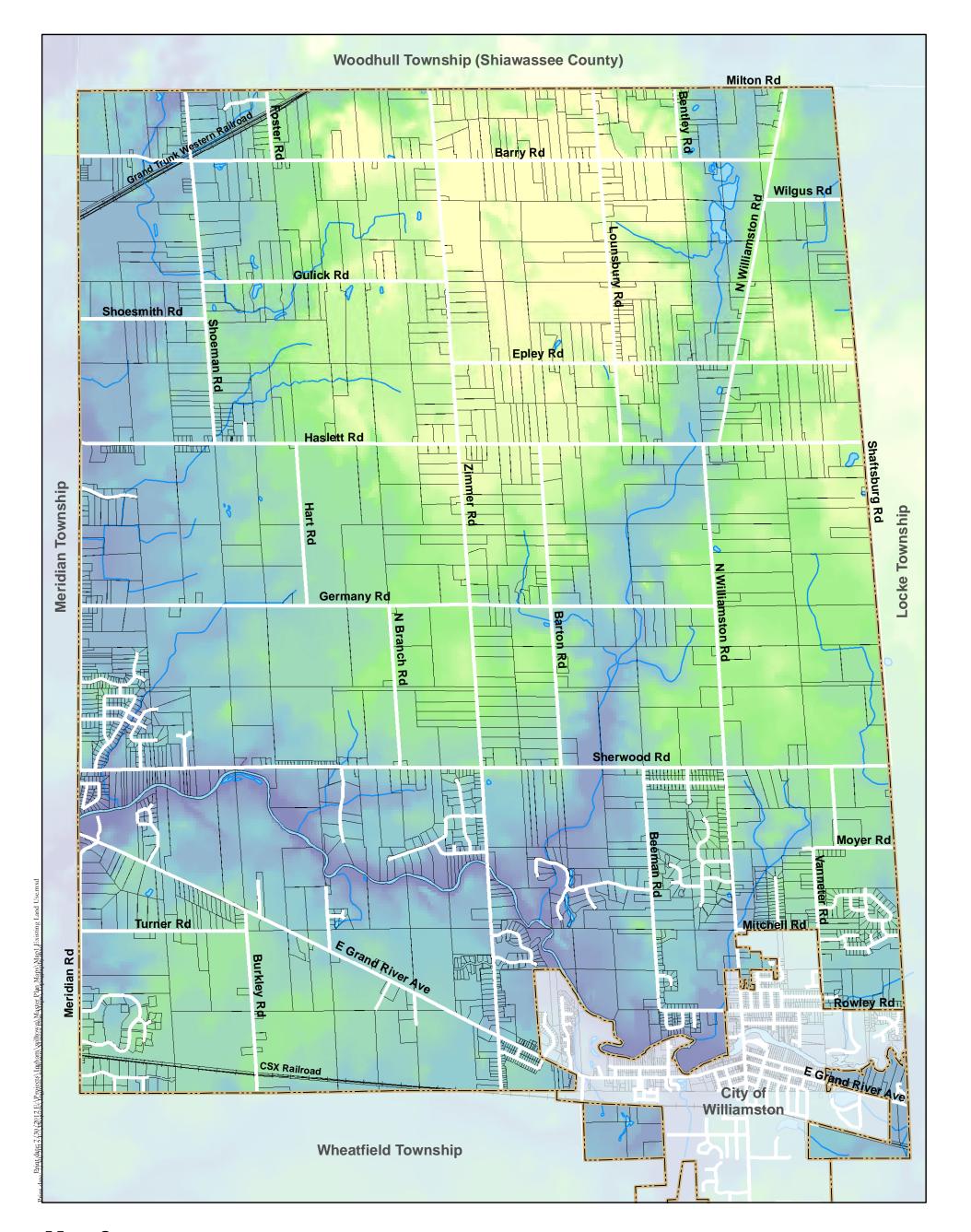
Williamstown Township, Ingham County, Michigan



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April 22, 2013

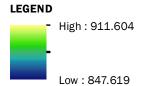
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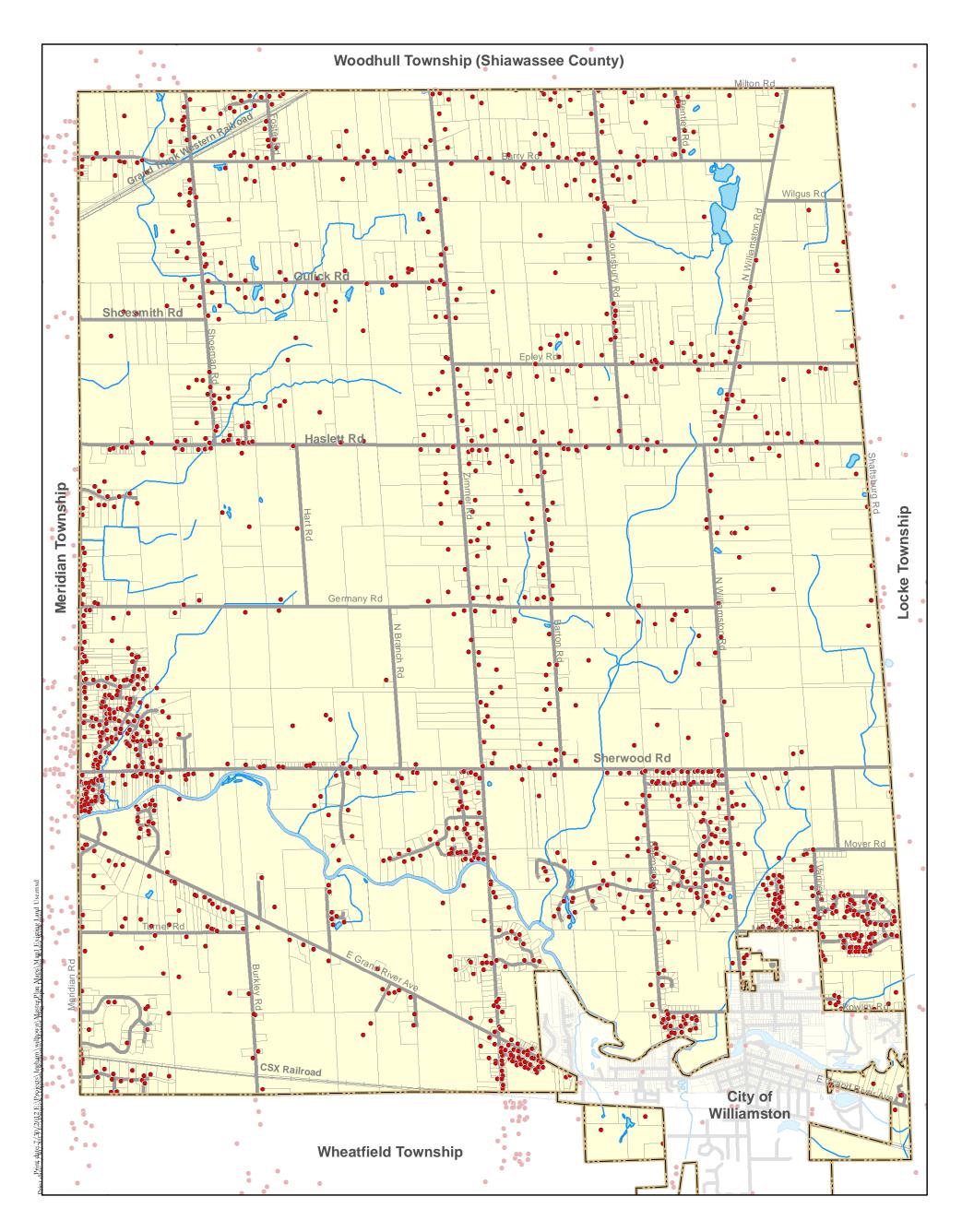
Map 6 Topography

Williamstown Township, Ingham County, Michigan





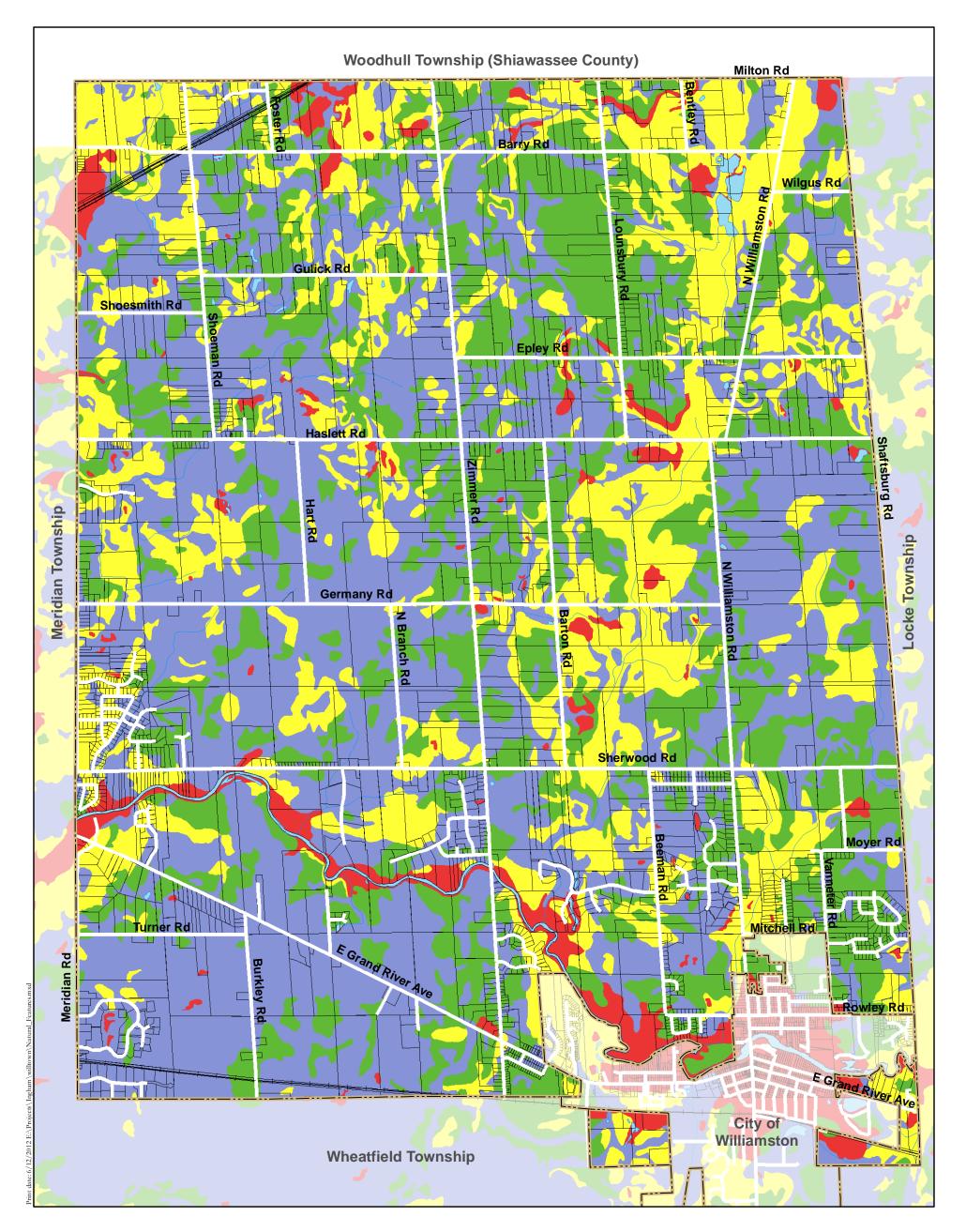
April 22, 2013



Map 7 **Drinking Water Wells**

Williamstown Township, Ingham County, Michigan



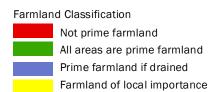


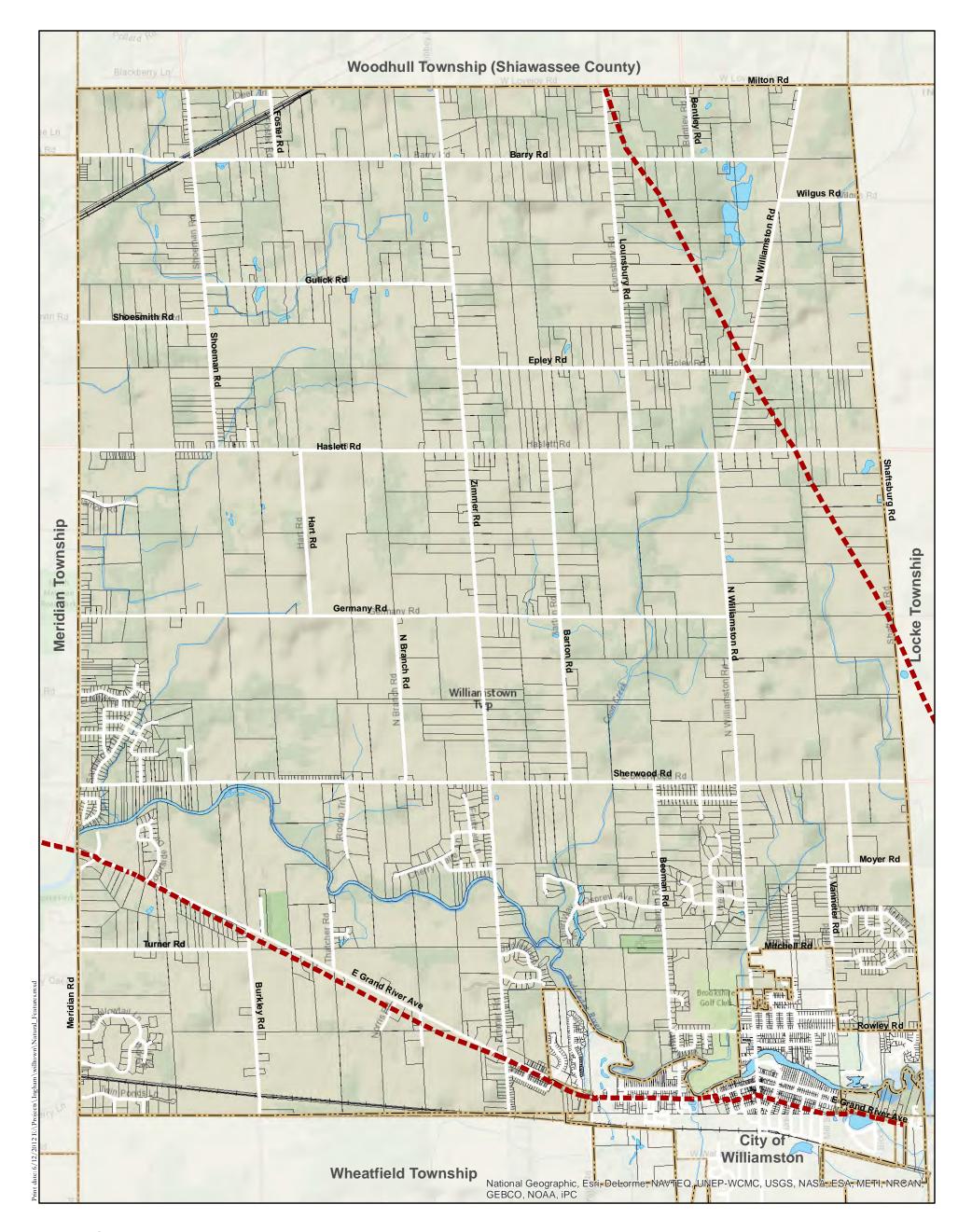
Map 8 Farmland Classifications

Williamstown Township, Ingham County, Michigan



FEET 0 2,000 4,000





Map 9 Pipeline Locations

Williamstown Township, Ingham County, Michigan



April 22, 2013

ECONOMIC ANALYSIS

REGIONAL SETTING

Williamstown Township is an economic part of the Lansing Metropolitan Labor Market Area. Lansing was selected as the state capital by legislators in the mid-19th century by drawing a line between the City of Flint and the City of Kalamazoo and another line between Detroit and Grand Rapids. The intersection became the state's capital, placing Lansing at the geographic center between the major metropolitan areas of the State of Michigan. It remains the economic and geographic center of the region which is made up of the tri-counties of Clinton, Eaton, and Ingham.

The hand drawn intersecting lines of the last century have now been hardened literally in concrete with the construction of I-96, I-69 and US-23, providing the region with easy access to each of the largest metropolitan areas in the state. US-27 merges with I-75 near Grayling, providing access to the north. The area is served by three rail lines, Canadian National Railway, CSX and the Jackson & Lansing Railroad. The Capital City Airport primarily provides access to major airline hubs in Detroit, Chicago, Washington, D.C., Minneapolis and Orlando for travel to the rest of the world. The region has become an attractive location for sales and marketing representatives who must service the entire state.

Williamstown Township is a rural suburban community. Although agriculture historically is the predominant land use, the Township is also an attractive residential community for people working in Lansing and East Lansing.

MAJOR EMPLOYERS

Figure 5.1 indicates the relative importance of three economic sectors in the Lansing region as compared to the state as a whole. Service producing industries are the largest sector in both cases, representing 68.6% of non-farm workers in the state and 61.8% of workers in the Lansing region; the government sector represents 14.8% of employees at the state level and 27.4% in the Lansing region; finally, the goods producing sector employs 16.6% of employees at the state level and 10.8% of employees in the Lansing region.

Services include the relatively high paying segments of health care and business services, as well as the significantly lower paying retail segment. In general, the service sector creates relatively lower paying jobs. Goods producing industries include manufacturing and fabrication operations, and government includes local, state, and federal government jobs.

61.8% 68.6% 100.0% 80.0% Percentage State of Michigan 60.0% Lansing Region 40.0% 16.6% 10.8% 14.8% 27.4% 20.0% 0.0% Goods Services Government producing Sector

FIGURE 1
NON-FARM EMPLOYMENT BY ECONOMIC SECTOR (June 2012)

Source: June 2012 Michigan Department of Technology, Management & Budget, Office of Labor Market Information

Table 16 shows the impact of the continued transition in the regional economy toward a service-oriented, knowledge based economy. In 2005, General Motors was the no. 2 employer in the region, with approximately 11,000 employees. By 2011, General Motors had fallen to fourth with two-thirds fewer employees. The State of Michigan retained its lead as the top employer in the region, with 14,355 employees. Education and medical institutions dominate the rest of the top ten employers.

TABLE 16
MAJOR EMPLOYERS IN LANSING METROPOLITAN AREA (2011)

Employer	Product	Employees (2011)	Percentage of Total Region Employment (2011)	Employees (2005)
State of Michigan	Government	14,355	6.5%	14,041
Michigan State University	Higher Education	11,218	5.1%	10,000
Sparrow Health System	Medical	7,400	3.4%	8,000
General Motors	Automobiles	3,688	1.7%	11,000
Lansing Community College	Higher Education	3,180	1.4%	2,200
McLaren - Greater Lansing Hospital	Medical	2,500	1.1%	2,450
Lansing School District	Education	2,106	1.0%	3,500
Meijer, Inc.	Retail	2,000	0.9%	2,175
Auto Owners Insurance	Insurance	1,500	0.7%	Not Ranked
Peckham, Inc.	Job Training	1,400	0.6%	Not Ranked

Source: Mid-Michigan Regional Demographics, Tri-County Regional Planning Commission, 2011

Table 17 presents employment projections for major sub-sectors of the Lansing economy. The projection indicates that most sectors are expected to hold steady or experience growth, with the exception of production industries. The following sectors are projected to increase by 10% or more over the 2008 – 2018 period: computer & mathematical, arts & design, entertainment /sports /media, and personal care & service sectors. Health care growth is expected to be concentrated in outpatient

and ancillary services that provide direct care to the area's residents, particularly as the population ages. From a land use standpoint, it is important to note that the growth segments are generally considered office uses, not retail or industrial users.

TABLE 17
OCCUPATIONAL EMPLOYMENT FORECAST (2008 - 2018)
LANSING METROPOLITAN REGION

	Employment		Change	
Occupation	2008	2018	Number	Percent
Total, All Occupations	239,700	253,145	13,445	5.60%
Healthcare Support	5,040	6,410	1,370	27.20%
Healthcare Practitioners/Technical	12,505	14,480	1,975	15.80%
Personal Care & Service	6,620	7,560	940	14.20%
Arts/Design/Entertain/Sports/Media	4,100	4,555	455	11.10%
Computer & Mathematical	6,295	6,950	655	10.40%
Education/Training/Library	21,920	24,000	2,080	9.50%
Community & Social Services	4,360	4,770	410	9.40%
Business & Financial Operations	14,980	16,325	1,345	9.00%
Legal	1,975	2,135	160	8.10%
Food Preparation & Serving	17,125	18,440	1,315	7.70%
Protective Service	3,710	3,965	255	6.90%
Life, Physical, & Social Services	2,920	3,110	190	6.50%
Installation, Maintenance, & Repair	7,380	7,700	320	4.30%
Building/Grounds Cleaning/Maintenance	7,860	8,185	325	4.10%
Sales and Related Occupations	22,775	23,670	895	3.90%
Architectural & Engineering	3,660	3,780	120	3.30%
Construction & Extraction	8,275	8,545	270	3.30%
Office & Administrative Support	42,235	43,560	1,325	3.10%
Management	13,480	13,860	380	2.80%
Transportation & Material Moving	13,040	13,180	140	1.10%
Farming, Fishing, & Forestry Occupations	825	825	0	0.00%
Production	18,620	17,140	-1,480	-7.90%

Source: Michigan Department of Technology, Management & Budget, Office of Labor Market Information, Accessed August 2012

OFFICE DEVELOPMENT IN THE GREATER LANSING AREA

The changing economy is moving away from industrial employment and more toward services as the primary employer. Except in the retail sector, most of the new service jobs require an office environment. Even the industrial sector is evolving in the way it does business. Less than 60 percent of the employees of most industrial firms are involved directly in production. Over 40 percent are now in white collar support functions, such as computer programming, accounting, sales, scheduling, and so on.

The Michigan Department of Technology, Management and Budget annually projects employment increases in various occupations in each region of the state. Table 18 is a list of occupations that primarily work in an office environment and their projected annual average growth rate for the period from 2008-2018. The table reveals that in the Lansing region, the main employment generators over the next several years are expected to be in office and administrative support, education, healthcare, and business and finance.

TABLE 18
PROJECTED ANNUAL GROWTH OF OFFICE OCCUPATIONS
LANSING REGION (2008 - 2018)

Occupation	Annual Growth (Employees)
Total, All Occupations	1,241
Management	55
Business & Financial Operations	135
Computer & Mathematical	72
Architectural & Engineering	15
Life, Physical, & Social	22
Community & Social Services	41
Legal	17
Education/Training/Library	208
Healthcare Practitioners/Technical	197
Healthcare Support	137
Sales and Related Occupations	96
Office & Administrative Support	246

Source: Michigan Department of Technology,

Management & Budget, Office of Labor Market Information, As Adapted, Accessed August 2012

Regional Office Demand

Table 18 indicates that office-based employment in the region will add an estimated 1,241 jobs per year. The average office user requires approximately 200 square feet per person, so it is estimated that the annual additional demand for office space in the region will be approximately 248,200 square feet per year. Over a twenty year period, the total demand for new office space in the Lansing region could be up to 4.96 million square feet.

The health care field is projected to require an added 334 persons per year to care for our aging population. Most of these jobs are in outpatient and ancillary services rather than in-patient hospital service. The demand for medical office space in the region, especially the growth corridors, will be approximately 66,800 square feet per year. Much of this space will be constructed to serve residential areas better. The average out-patient medical office has become larger, reflecting the transition from the single doctor office to multi-purpose medical clinics. Physicians now cluster into managed care units with convenient ancillary services and in many cases readily accessible specialists.

Office Development Trends

MarketView, a publication of CBRE | Martin, compiles statistics on the office market in the Greater Lansing area. For the purpose of its analysis, the market is divided into five submarkets: the CBD, East,

North, South, and West. The East submarket, which would include future office development in Williamstown Township, encompasses land south of I-69 and east of US-127.

MarketView also segments office space into Class A, Class B, and Class C space. Characteristics of these classes are as follows:

- Class A Space. Prominent buildings with excellent location, high level of amenities, high quality tenants and high quality finish, which are well maintained and professionally managed. Class A buildings are usually new, but can be older buildings that are competitive with new buildings.
- Class B Space. Buildings that have a good location, professional management, and fairly high quality construction and tenancy. Class B buildings may show slight functional or economic obsolescence.
- **Class C Space.** Older buildings that have functional or economic obsolescence and lower quality tenancy.

Table 19 indicates the overall vacancy rate for the Greater Lansing Area was 18.0% in the fourth quarter of 2011, although two submarkets, the CBD and the East submarket experienced positive absorption. Absorption in the Greater Lansing area office market was a positive 345,348 square feet during the last two quarters of 2011. This figure overstates the strength of market, since the majority of the absorption (330,000 square feet) was related to one user, Accident Fund, coming on line. Disregarding the Accident Fund square footage, only 15,348 square feet of previously vacant space was absorbed during the last two quarters of 2011, demonstrating that the market has little strength.

Market strength varies depending on class of space. Class A space, which represents over 42% of the market, is strong, with an average vacancy of 6.5% in the second quarter of 2011. Class B space, which represents 53% of the market, has an average vacancy rate of 24.7%. Nearly half of the Class C space is vacant.

TABLE 19
LANSING REGION OFFICE MARKET KEY STATISTICS (2011)

Submarket	Rentable Area	Vacancy Rate	Absorption (last 6 months)
CBD	3,496,890 s.f.	12.5%	+355,537 s.f. (+10.2%)
East	3,973,773 s.f.	17.9%	+33,968 s.f. (+0.9%)
North	154,379 s.f.	28.0%	-13,320 s.f. (-8.6%)
South	1,224,993 s.f.	26.1%	-15,479 s.f. (-1.3%)
West	1,010,009 s.f.	26.3%	-15,358 s.f. (-1.5%)
Overall Market	9,860,044 s.f.	18.0%	+345,348 s.f. (+3.5%)

Source: CBRE Greater Lansing Office MarketView, 2011

The following observations are relevant:

- 1. The Greater Lansing area contains 9,860,044 square feet of office space. The East submarket is now the largest submarket. Two submarkets, the CBD and the East submarket account for 76% of the total office market.
- 2. Should office expansion occur, Williamstown Township is well positioned to capture some of the growth, if it has the resources (such as public water and sanitary sewer) to support such development.
- 3. Most office users desire Class A space. When office development occurs, the Township must push for high quality space, rather than settle for Class B or Class C space. In the long run, this effort will pay off in terms of fewer vacancies.
- 4. At this point in time, office development will most likely be related to providers of professional services, such as medical services, veterinary services, and so forth.

Office Location Criteria

The following criteria are often used to determine appropriate office locations:

- 1. Suburban offices tend to be built close to the residences of the decision makers. Where the offices are being used for back office operations using lower cost clerical labor the offices may be built in communities having the labor supply.
- Offices are used to meet with potential customers and clients. Therefore, firms look for a "good address" and attractive surroundings that reflect the firm's high quality services or product.
 Well-designed office complexes establish the attractive environment office users require to be conducive to their business.
- 3. Business executives prefer their offices to be located near other offices so they have ready access to support services, customers and the company of professional peers. This is one of the great strengths of downtowns. The offices become an economic magnet for the creation of added jobs.
- 4. Business executives like their offices to be located in an attractive environment on major thoroughfares with easy access to interstate highways.
- 5. Offices that are within a quarter mile of a transit stop are beneficial when employing workers that are unable to afford private transportation or prefer to not drive to and from a workplace everyday. Locations along transit corridors can also attract "green" conscious employers.
- 6. Office sites with reliable electric service and natural gas supply are preferred given requirements to heat larger office complexes in the winter and cool in the summer. Computer servers and energy intensive research equipment need electric service 24/7.

7. Office sites require high speed "broadband" internet service to communicate with employees, customers and vendors. While a suburban or exurban location may offer internet access via a wireless communications tower, the bandwidth is designed for residential or small business uses that are not internet intensive. Hardwired broadband access is required for large office complexes and research institutions.

Land Requirements for Offices

For the purposes of computing land requirements for suburban offices, the following standards are used:

Average building height: 1.5 stories Land required for each parking space: 300 sq. ft.

Required parking for general office use: 4 spaces/1,000 sq. ft. of floor area

Required parking for medical office: 7.5 spaces/1,000 sq. ft.

Additional land for internal roads, etc.: 15% of total Additional land for setbacks, open space: 33% of total.

Based on the above standards, for every 10,000 square feet of floor area, 31,812 square feet of land are required. In suburban locations, however, the land to building ratio is generally closer to 5 to 1, because of the need to accommodate septic systems, storm water detention/retention, etc.

Telecommuting

The land requirements for office uses may eventually be reduced by telecommuting workers.

Telecommuting is a work arrangement in which employees do not commute by vehicle to a central place of work. Instead, telecommuters work from home or use mobile technology to work from other locations. Telecommuters who move from one location to another are sometimes called "nomad workers" or "web commuters."

The essence of telecommuting is moving the work to the worker, rather than moving the worker to the workplace. Telecommuting is made possible by the availability of broadband connections and widespread computer use.

In 2007, it was estimated that 52 million U.S. workers (about 40% of the working population) could work from home at least part of the time. However, in 2008, only 2.8 million employees, slightly more than 2% of the U.S. employee workforce (not including the self-employed), considered their home their primary place of business. Clearly, there is a long way to go before telecommuting receives widespread acceptance.

Mixed Use Development

Mixed-use development is the use of a building, set of buildings or neighborhood for more than one purpose, usually combining office, retail and residential uses. Traditionally, planning since the 1920s worked to separate uses, thereby requiring setbacks and separation buffers between "incompatible" uses, such as commercial from residential, and industrial from commercial and residential. Since the 1980s, planners have increasingly changed their point of view on this strict separation of uses and have found that by mixing uses, communities are better able to efficiently use space, can create socially vibrant spaces, and can support walkable and transit friendly neighborhoods. Mixed use development would be appropriate along Grand River Avenue in the Green Zone and east of the City of Williamston.

Williamstown Township Office Demand

The best location for offices in Williamstown Township is on Grand River Avenue near the City of Williamston. The key to any significant office development in Williamstown Township will be based on the availability of water and sewer facilities. Other considerations that will affect office development include:

- 1. The historical competitive edge in the eastern Lansing metropolitan area over all other communities, except downtown Lansing.
- 2. The higher costs, lack of significant land availability and a higher degree of difficulty of obtaining land in Lansing and East Lansing.
- 3. The existing high concentration of managers and other white collar workers in Meridian Township and Williamstown Township.
- 4. The potential availability of attractive sites.
- 5. The availability of water and sewer service along a portion of Grand River Avenue.
- 6. Spinoff development from the Facility for Rare Isotope Beams (FRIB), which is under construction at Michigan State University. The FRIB is a new national user facility for nuclear science, funded by the U.S. Department of Energy Office of Science.

Based on analysis of these considerations, Williamston and Williamstown Township have the potential for being able to attract additional office space over the next twenty years. To meet this demand, the two communities will require to have developable land zoned for office use.

INDUSTRIAL DEVELOPMENT

The Lansing region is part of the Midwest manufacturing belt. Manufacturing currently represents approximately 10.8 percent of the region's employment; however, manufacturing jobs in the region and the state have been in decline over the past decade. It is expected that by 2018, manufacturing will represent just 6.8 percent of the region's employment. Manufacturing jobs as a percentage of all employment are expected to decline, and the total number of manufacturing jobs is expected to decrease 7.9 percent by 2018.

An important development in the manufacturing market is the closure of the historic General Motors Lansing Car assembly plant and the 2006 opening of the Lansing Delta Township Assembly. The Delhi Township / Lansing plant assembles Chevrolet, Buick and GMC models, and the adjacent Lansing Regional Stamping, a metal-stamping facility where parts are created for cars made at Lansing Delta Township. These two facilities employ roughly 4,000 persons and could create potential opportunity for additional spin-off development of Tier I and II suppliers locate near the new General Motors plant.

Over the past decade, industrial activity in Ingham County has primarily been located along I-96 and US-27. Ingham County has assisted several communities in setting up Local Development Finance Authorities to help develop industrial parks. Seven communities along I-96 have agreed to concentrate their industrial development north of I-96 and south of the CSX Railroad. Although no hard numbers are

available, the county estimates that there are hundreds of acres of industrially zoned land available. However, little of it is currently provided with sewers. Williamston has established a Tax Increment Finance Authority to develop its industrial park and other industrially zoned land to attract new industry.

Much of the new industrial activity is expected to occur as a result of spin-offs of work being performed by Michigan State University and its satellite businesses such as Neogen. Modern industrial and "high-tech" firms require public water, which is available along the US-27 corridor and Williamston.

In summary, manufacturing and other types of industry will remain an important part of the region's economy. While there will be new industrial construction, it will not be at the same level as construction in the service sector. Modern industries, especially those in the "high-tech" fields, will require public water and public sewer. Notwithstanding the limited potential for industrial development in the region, Williamstown Township could be viewed as an attractive location for new industry because of the availability of large sites that are relatively lower in cost than sites in Lansing, East Lansing, or other more developed communities.

An important concern is whether industrial development would make the best use of land in Williamstown Township. Industrial development would threaten land use goals adopted by the Township concerning protection of the environment and permitting development commensurate with the Township's ability to provide needed public facilities and services. Consequently, it would generally be more appropriate to direct new industrial development to lands that have been set aside for industrial development in adjoining communities.

Some manufacturers, though, are beginning to recognize that factors such as component prices, employee wages, employee skills and transportation costs, on which manufacturers based their offshore manufacturing and supply decisions, have changed. Cost savings from overseas production have decreased and manufacturing within the United States is becoming more competitive. Changes in production technology, energy consumption, industrial design and the desire to manufacture close to home have the potential to change public opinion regarding the desirability of manufacturing facilities.

RETAIL DEVELOPMENT

Types of Retail Development

Strip retail development occurs when individual retail stores or small clusters of retail stores are located along a road or highway. Strip retail development is considered a poor method of providing retail services to a community. Each store must have its own entrance, so autos must make multiple stops to permit comparison shopping. Traffic control is difficult and vehicle crashes are more prevalent. The signage is often obtrusive, cluttered, and unattractive. Individual specialized buildings become obsolete and comprehensive reinvestment is more difficult.

Traditionally, retail development has occurred in retail centers comprised of one or more buildings that share a common parking area. The clustering was intended to permit joint promotion, single consumer stops for multiple store shopping, fewer curb cuts thereby permitting easier traffic control and multiple tenants thereby generating greater market value to encourage reinvestment. Shopping centers can be "strip style" or "mall style" (stores face each other with streets for pedestrians only, either in an open air or an enclosed temperature controlled environment). Shopping centers are further classified as neighborhood centers, community centers, regional centers, and super-regional centers. The 1990's and early 2000's saw a surge in the construction of big box stores. A description of each type of center is outlined in the Table 20.

TABLE 20
SHOPPING CENTER CHARACTERISTICS

Center Type	Leading Tenant	Typical GLA (sq. ft.)	GLA Range (sq. ft.)	Minimum Site Area (acres)	Minimum Population to Support
Neighborhood	Supermarket &/or drugstore	50,000	30,000 - 100,000	3 - 10	3,000 - 40,000
Community	Discount department store or supermarket	150,000	100,000 - 450,000	10 - 30	40,000 - 150,000
Regional	One or more department stores of 50,000+ sq. ft.	450,000	300,000 - 900,000	10 - 60	150,000+
Super Regional	3 or more department stores, extensive variety of retail	900,000	500,000 - 2,000,000	15 - 100+	300,000+

GLA = Gross Leasable Area

Source: Dollars & Cents of Shopping Centers: 2002

The traditional development paradigm for retail development has been the single-use strip shopping center anchored by a big box or department store. However, fewer and fewer shopping centers following this pattern are being constructed as creative, mixed-use developments combining retail uses with office and/or residential uses gain popularity and market acceptance. Mixed use developments, when designed and located appropriately, can create a "sense of place." A sense of place creates a feeling of strong identity and character that is deeply felt by local inhabitants and visitors. The natural landscape surrounding the development, the manmade development itself and the people that participate in the place all impact its sense and feeling. The sense of place can be strongly enhanced when artists, musicians, writers, historians and planners portray the place in art or music or through modes of regulation aimed at protecting, preserving and enhancing a place. Williamstown Township, Meridian Township, and East Lansing have all adopted new mixed-use ordinances to permit such development.

Lifestyles & Demographics

Lifestyles and demographics are in a constant state of flux as generational succession and other factors influence how we live, work, shop, and recreate. Median household size in the Tri-County Region has been in constant decline over the past three decades from approximately 3.4 persons per household in 1970 to 2.42 persons per household in 2010. As median household sizes decline, the number of new households required to result in a population increase rises. As household size decreases, more households must be formed to maintain a steady population. The following trends will affect household formation and population growth in the Township:

- ✓ Higher divorce rates have increased the number of households while reducing the number of people per household.
- ✓ Young people are marrying later in life;
- ✓ The workforce will continue to age along with Baby Boomers;
- ✓ Young couples are having fewer children per family unit;
- ✓ With changes in nutrition and medical advances, people are living longer (the largest growing age group consists of people over 65 years) thereby creating more empty nester households;
- ✓ Women are having children later in life. One third of all women do not have their first child until they are over 30 years old;

Therefore, although the population may remain steady, the growth of households indicates an expansion in the funds available for discretionary retail purchases. The average number of people per household is continuing to decline but at a slower rate.

The market area for a particular shopping center is generally described by the amount of time required to reach it and the location of competitive centers¹. Generally, the larger the center the greater the draw. As a rule of thumb, a neighborhood center draws from a 5-10 minute travel radius, a community center from 10-20 minute travel radius, and a regional center from a 10-30 minute travel radius. The distances and time people are willing to travel are reduced when there are competitive centers nearby, and are enlarged in more rural areas where competitive centers are located far apart.

Retail Market Potential

A retail market potential analysis was conducted in order to determine the amount of retail development that can be supported by the existing and projected population of the Township. The market analysis describes the potential spending, or the market potential, of households in the Township based on disposable income.

For these reasons, the market potential analysis functions as an indication of the amount of commercial development the market potential of the residents of the Township can support, and is not intended to describe the exact amount of commercial development that is or would be appropriate within Williamstown Township.

Disposable income is the basis upon which the buying power of the residents of the Township was calculated. For the purpose of this study, disposable income is that portion of household income available after subtracting taxes, housing costs, health care costs, and savings. Alternately stated, disposable income is that portion of household income available for purchasing retail goods. Disposable income was calculated based on consumer spending patterns for the Lansing metropolitan area as reported by the Bureau of Labor Statistics. These spending patterns indicate that approximately 40% of gross household income is spent on retail goods. During the 2006-2010 period, the mean household income in the Township was \$107,295, so disposable income was approximately \$42,918 per household.

Next, the Township's estimated disposable income was allocated into various retail categories based on the percentage of a household's disposable income that can be expected to be spent in each category based on the year 2000 Bureau of Labor Statistics Consumer Expenditure Survey. The retail categories have been separated into neighborhood, community, and regional commercial uses.

Finally, the supportable square footage for each type of retail development was calculated by dividing the annual sales by the median annual sales per square foot for each type of retail. Median annual sales per square foot for various types of retail uses are reported in the Urban Land Institute's *Dollars & Cents of Shopping Centers: 2004.* The results are summarized in Table 21.

¹ The retail has developed a measurement industry of the attractive power of one shopping center in competition with another, called Reilly's Law of Retail Gravitation. The law essentially states that two retail centers competing for retail trade will attract such trade in direct proportion to the immediate population and in inverse proportion to the square of the distance.

TABLE 21
MARKET DEMAND FOR RETAIL SPACE (2005)

	Sales % 1	Sales	Sales/Sq. Ft. ²	Supportable Space (Sq. Ft.)
Neighborhood Commercial				
Food	6.1%	\$3,303,330	\$321.15	10,286
Food Service	4.9%	\$2,653,495	\$212.63	12,479
Automotive	15.4%	\$8,339,557	\$161.00	51,798
Drugs	4.6%	\$2,491,036	\$305.46	8,155
Other Retail	8.1%	\$4,386,390	\$182.30	24,061
		NEIGHBORHOOD CO	MMERCIAL TOTAL:	106,780
Community Commercial				
Food	6.1%	\$3,303,330	\$303.49	10,844
Food Service	2.4%	\$1,299,671	\$256.34	5,070
Apparel	4.0%	\$2,166,118	\$185.18	11,697
Drugs	4.6%	\$2,491,036	\$319.29	7,802
Entertainment	4.3%	\$2,328,578	\$57.08	40,795
Other Retail	11.0%	\$5,956,826	\$201.20	29,606
		COMMUNITY CO	COMMUNITY COMMERCIAL TOTAL:	
Regional Commercial				
Food Service	2.4%	\$1,299,671	\$370.22	3,511
Furniture	3.4%	\$1,841,201	\$260.59	7,066
Appliances	3.4%	\$1,841,201	\$314.21	5,860
Entertainment	4.3%	\$2,328,577	\$78.74	29,573
Apparel	4.0%	\$2,166,118	\$267.32	8,103
Other Retail	11.0%	\$5,956,826	\$303.47	19,629
		REGIONAL CO	REGIONAL COMMERCIAL TOTAL:	

1. Source: Bureau of Labor Statistics

2. Source: Dollars & Cents of Shopping Centers: 2002, Urban Land Institute

Table 21 summarizes the demand in square feet for each type of commercial use, however, the supportable space figure from Table 21 reflects only the size of the building. A number of other activities and improvements must be included on a commercial site in addition to the building itself. Such improvements include landscaping, parking areas, loading areas, pedestrian circulation areas, and storm water detention. Therefore, the demand for leasable floor area figure from Table 21 must be converted into a figure that represents the demand for commercial *acreage* in order to obtain a usable figure for land use planning purposes.

As a rule of thumb, buildings typically cover about 20% of the total site area in suburban commercial centers such as the ones generally found in Williamstown Township and neighboring communities. It has been discussed throughout the plan that it is in the best interest of the Township to limit community and regional retail uses given close proximity to other established retail centers, such as Williamston and Meridian Mall in Meridian Township. The estimated retail demand in acres based on the Township's current market potential is summarized in Table 22.

TABLE 22
RETAIL NEED EXPRESSED IN ACRES (2005)

Type of Retail	Acres
Neighborhood	12.3
Community	Not Supportable
Regional	Not Supportable
TOTAL:	12.3

It must be noted that this market potential analysis is not an exact determination of the amount of retail development that is appropriate in the Township. Where residents actually spend their money depends on a number of factors including, but not limited to, the types of retail opportunities available within the Township and neighboring communities, accessibility, proximity to competitive retail facilities, and the relative age of commercial centers. One recent factor affecting physical retail has been e-commerce. Whereas typical customers were left with the only option being to visit a physical store, make a purchase, and take it home the same day, many shoppers are now able to visit an online retailer from home, make a purchase, and wait as little as one day to receive their goods. Online retailing has the potential to transfer retail land uses from commercial land uses (brick and mortar storefronts and shopping centers) to industrial uses (warehouses and industrial parks) as more consumers make purchases from online retailers.

For market purposes, Williamstown Township is located in the eastern suburbs of the greater Lansing region. According to current market data, the eastern suburbs contain approximately 5,000,000 square feet of retail space, which represents approximately 40% of all retail space in the Lansing region. Approximately 440,000 square feet of retail space is vacant in the eastern suburbs, a figure sufficient to accommodate all of the retail market demand of the residents of the Township. It is therefore likely that any new retail development in the Township would come at the expense of existing retail centers elsewhere, leading to vacancies and an overall decline in the viability of existing centers.

In summary, household projections do not warrant any significant increase in retail activity in Williamstown Township given the proximity of downtown Williamston, established shopping centers in Meridian Township and increasingly popular e-commerce. The community would be better served by strengthening the existing downtown in Williamston to keep it as a viable commercial core for the City and Township than by planning for new retail development in the Township.

AGRICULTURE²

Agricultural production within the Tri-County area plays a large part in the region's economy, with 38.5% of the land within Ingham County devoted to agricultural production, comprising 186,206 acres. In 2007, annual sales of the largest commodities were \$34 million from grains, oilseeds, dry beans, and dry peas; \$16.9 million from milk and dairy products; \$5.5 million from nurseries, greenhouses, floriculture facilities and sod farms; and, \$3.4 million from cattle and calves.

² Sources: Tri-County Agriculture: Status, Conditions and Economic Impacts, MSU Land Policy Institute, 2011; The Economic Impact of Farmland Loss: Implications of Low Density Urban Sprawl, MSU Land Policy Institute, 2007

In 2007, there were 947 farms in Ingham County. The average farm size was 197 acres and the average sales per farm was \$74,166. For every 10 acres of land converted from non-agricultural use, there is an expected decrease of \$3,765 in annual agricultural sales.

According to a 2012 existing land use survey, 33.2% of the land in Williamstown Township, or 6,207 acres, is used for agriculture. Unfortunately, rural residential development typically results from the conversion of productive farmland and agricultural economic opportunities. Based on the figures presented in the previous paragraph, if Township farms are similar to average Ingham County farms, then Township farms are capable of generating \$2,336,794 in sales per year.

There are trends that could help preserve agricultural lands. Smaller household sizes, rising energy costs and renewed interest in established neighborhoods in built-up communities are influencing decisions to purchase or construct homes in rural areas. Crop commodity prices can persuade landowners from selling their land to corporate or individual non-agricultural developers. Global commodity prices for corn and cattle are increasing as global demand for food stuffs, ethanol, cattle and dairy products, affecting land values.

INFORMATION TECHNOLOGY

Advances in broadband and information technology over the past three decades represent the most transforming economic development trend. Until the 1990's, economic development and community development reflected the nature of manufactured goods - all were rooted in physical places. Manufactured goods, compared to the weightlessness of information, are difficult and expensive to move. Collaboration and cooperation across regions and political boundaries was hard to do and hardly seemed necessary.

However, advances in information technology means that communities are no longer competing with neighboring towns and counties for jobs, they are competing with other countries. Virtually all businesses, large and small, are now competing in a global marketplace in which goods and services have no weight and are not tied to a particular place. This has been termed the global knowledge economy. While many jobs are no longer tied to a particular place in the new knowledge economy, new opportunities for local businesses and residents to tap into the global marketplace have been created. Even more importantly, access to broadband enables small businesses to flourish in the global economy. This is particularly important because, according to the U.S. Small Business Administration, small business creates between two-thirds and three-quarters of the net new jobs in the U.S. economy, and employs half the workers in the country. The provision of easily accessible broadband technology to small businesses is an important component of economic development.

In addition to permitting local businesses to compete more effectively and making the Township a more attractive place for new business to locate, access to broadband will improve quality of life for Township residents. If current trends continue, it is likely that voice, radio, and other information mediums will shift to an internet-based transport system, increasing the demand for residential broadband access and it is likely that higher transfer speeds and access to larger bandwidth capabilities will become necessary as more and more information will be transmitted across the globe and into homes.

The Township is served by high-speed internet and VoIP telephony service via a privately owned and erected tower on the township property. The service is High-Speed Wireless Broadband Internet, comparable to cable or DSL. Residential access to broadband will enables residents of the Township to work out of their homes in addition to accessing entertainment, social media, and internet-based consumer products. Users can receive up to 2Mbps download speeds and 512Kbps upload speeds.

The Williamstown Tower was designed to add and enhance coverage to the north of the Dansville Network and to the northwest of the Fowlerville Network.

Other simple to implement steps that will further the deployment of broadband infrastructure include:

- Require Cat5e/Cat 6 compliant structured wiring in every commercial and residential building.
- Require developers of new subdivisions to install telecommunications duct and set aside very small plots for service providers to place their equipment. The telecommunications ducts are turned over to the community or public entity in the same way as roads and other public infrastructure.
- When installing or replacing streetlights or utility poles, use poles with built in mounting brackets for wireless access points. The poles may be leased out to private sector companies that wish to deploy wireless services.

ELECTRIC VEHICLES

Electric vehicles, or EVs, are vehicles powered by electric motors or traction motors for propulsion. Three main types of electric vehicles exist, those that are directly powered from an external power station, those that are powered by stored electricity originally from an external power source, and those that are powered by an on-board electrical generator, such as an internal combustion engine (a hybrid electric vehicle) or a hydrogen fuel cell. Since the mid-2000s, the production of electric cars has experienced a renaissance due to advances in battery and power management technologies, and concerns about increasingly volatile oil prices, the desire to use "homegrown" American energy, and the desire to reduce greenhouse gas emissions.

As of 2012, some cities, counties and states across the country have begun developing ordinances, standards, or infrastructure requirements that provide EV drivers the ability to charge their vehicles at home, work, or while shopping.

Within Mid-Michigan, the City of Lansing is a member of Plug In Ready Michigan, A coalition of governmental units, utility providers, advocacy organizations and private companies within the automobile sector that are developing a framework to develop a plan for a statewide increase in EV use.

Williamstown Township would be wise to monitor progress made through Plug In Ready Michigan and adopt EV related ordinances as the demand for EV use within the Township requires government assistance in order to provide reliable and accessible infrastructure standards, such as through the zoning ordinance.

GRAND RIVER AVENUE CORRIDOR PLAN

INTRODUCTION

The most lasting and perhaps only impression most people will have of the Township will be acquired while traveling along Grand River Avenue. As the "front door" of the Township, the Grand River Avenue corridor conveys the quality of the Township's planning efforts more than any other part of the Township. In particular, a strong planning effort is required to prevent the typical development pattern that is observed in other communities along Grand River Avenue: mile after mile of nondescript strip development.

Given the importance of this issue, the Township conducted an in-depth study of the Grand River Avenue corridor in 1992 and updated the study in 2000 and 2005 as part of the master planning process. In 2011, the Township adopted the "Grand River Green Zone Planned Development District" to guide diverse mixed-use development along a portion of Grand River. The Grand River Corridor is defined as the area bounded by Meridian Township, the CSX Railroad, the City of Williamston, and the Red Cedar River (see Map 10).

GRAND RIVER AVENUE DESIGN CONCEPT

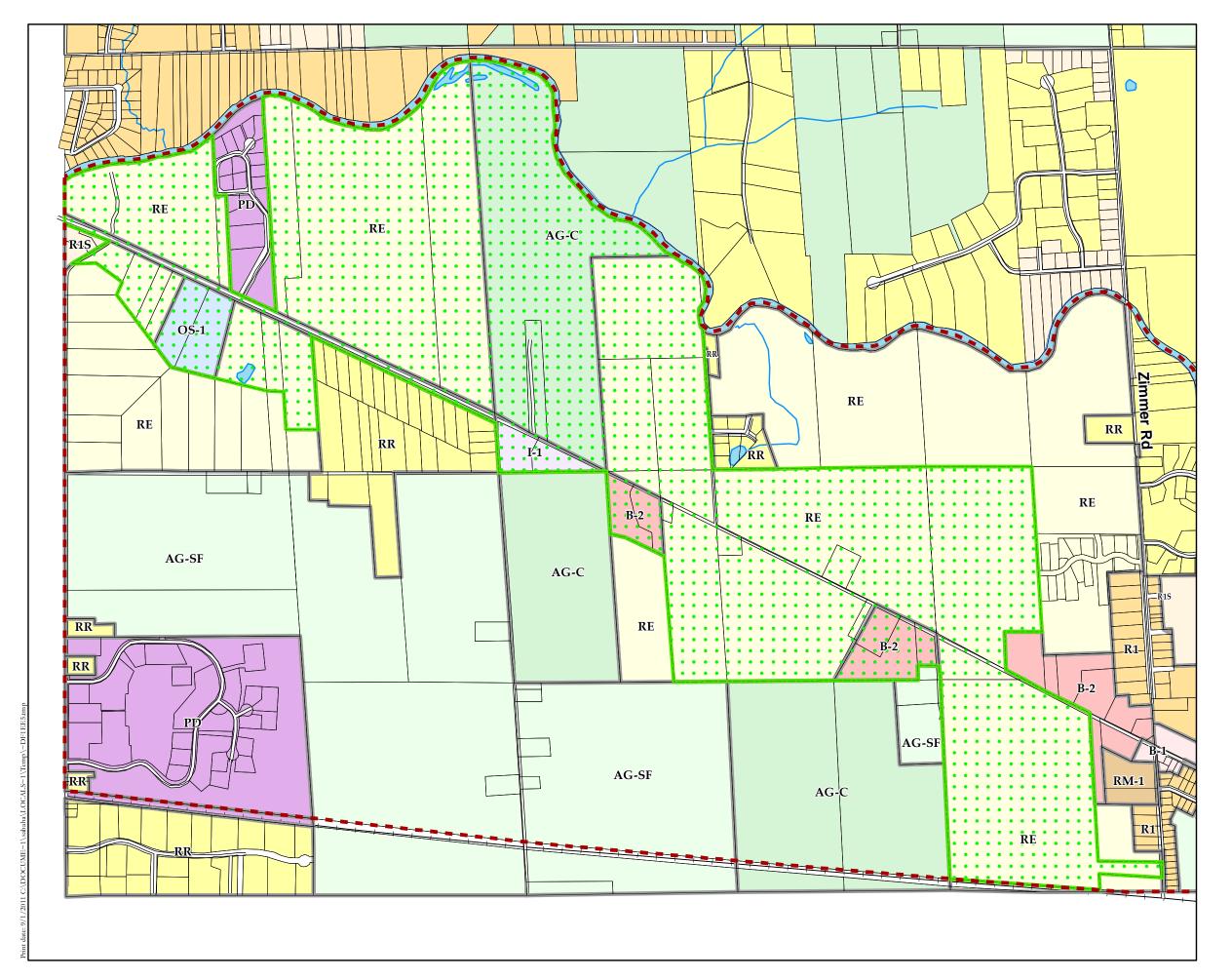
Historically, land along Grand River Avenue, from approximately Zimmer Road to Meridian Road, has been used predominantly for agriculture. Often, when agricultural uses cease, the land transitions to rural open space. This transition process provides opportunities for development.

In anticipation that Grand River Avenue might one day experience the transition just described, the Planning Commission decided to plan for that day by creating the Green Zone Planned Development District and by preparing this chapter of the Master Plan.

The Green Zone and this chapter of the Master Plan strive to convey three principal ideas:

- 1. Development along Grand River Avenue should be compact, mixed use, and pedestrian oriented.
- 2. The regulations in the Green Zone and the guidelines in the Master Plan are intended to result in a highly sustainable development district, capitalizing on regional growth.
- 3. The Green Zone and the Master Plan are intended to create realistic development potential for property owners, which may elevate property values.

Typically, a design concept would take the form of a Future Land Use Map, where appropriate land uses are identified for every parcel in the district. It is the nature of the Green Zone, however, that several land uses will be permitted together throughout the district, based on the concept that a mixture of uses results in a more complex, interesting, and multidimensional community. Uses permitted by right in the Green Zone include:



Map 10 Green Zone Planned Development District Boundaries

Williamstown Township, Ingham County, Michigan

June 3, 2013







- Research and development
- Colleges and universities
- All types of residential uses and accessory uses thereto
- Parks, cultural institutions
- Farming
- Commercial use under 5,000 sq. ft. in floor area

Implementation of the Grand River Avenue Design Concept, therefore, involves chiefly application of the Green Zone Planned Development district regulations. Emphasis should be placed on achieving development that conserves natural areas through compact design; preserves and uses native vegetation in landscaping; uses permeable paving to reduce storm water runoff; minimizes site disturbances during clearing and grading; incorporates narrower driving lanes; integrates bio-retention swales in parking lots; and takes other actions to achieve a more sustainable development.

GRAND RIVER MIXED USED OVERLAY DISTRICT

East of the City of Williamston, uses along Grand River Avenue consist predominantly of a mixture of single family, retail, and industrial. The Township saw the potential to upgrade this segment of Grand River by promoting the development of a pedestrian oriented, mixed-use district in which a variety of complementary retail, commercial, office, civic, and residential uses are permitted. The primary tool the Township put in place to accomplish this type of development is a Mixed Use Overlay District.

The Mixed Use Overlay District contains development standards dealing with orientation of building entrances, facade design, lighting, parking, front building setback and landscaping, signs, sidewalks and sidewalk displays, courtyards and plazas and other standards. By following the standards, over time the corridor will be transformed into a neo-traditional, pedestrian-friendly, mixed use environment. The development standards are intendend to result in a coherent overall pattern of development, which the corridor lacks presently.

CORRIDOR STUDY

As noted, the Green Zone and Mixed Overlay District came about after comprehensive corridor studies that consisted of three elements:

- 1. **Inventory** -- A detailed inventory of existing conditions, including existing land use, environmental conditions, traffic patterns and conditions, growth trends, market trends, and community image.
- 2. **Opportunity Assessment** -- An assessment of functional and aesthetic aspects of the corridor, focusing on methods of preserving and enhancing existing conditions in the corridor.
- 3. **Corridor Land Use Plan** -- The future land use plan for the Grand River Corridor area.

INVENTORY

The Grand River Avenue Corridor inventory includes a review of existing land uses, traffic circulation patterns, functional and visual features, and market conditions.

Existing Land Use

The existing land use analysis reveals that frontage on the Grand River corridor is dominated by agriculture or open space land uses, with scattered single-family residential, commercial and industrial uses (see Grand River Corridor Existing Land Use Map 11). Higher density residential development and non-residential uses are concentrated mostly in the sanitary sewer service area located between the western boundary of the City of Williamston and Zimmer Road. Scattered single family and non-residential uses exist elsewhere along the corridor. Table 23 summarizes existing land use in the corridor by acres.

Agricultural and open lands dominate the Grand River Corridor area, representing 64.1% of the total land area. Residential land uses are the next largest category, representing 20.5% of the total land area. It is important to note that 5% of the total land area is located in residential open space preserves in the Steeplechase, WindyBrook, Pine Knoll, and Baan Gan Aka subdivisions and is protected from further development.

Table 23
EXISTING LAND USE
GRAND RIVER AVENUE CORRIDOR (September 2012)

Land Use	Acres	Percent
Agricultural	1,498.5	57.8%
Commercial and Office	96.7	3.7%
Industrial	2.4	0.1%
Open Lands	162.8	6.3%
Residential	533.7	20.5%
Residential Open Space	131.2	5.0%
Subdivision Vacant	27.9	1.1%
Church or Cemetery	1.6	0.1%
Government	139.2	5.4%
TOTAL	2,594.1	100.0%

Source: McKenna Associates, 2012

Circulation Analysis

24-hour traffic volume data is available along Grand River Avenue in Williamstown Township east of Zimmer Road and between Zimmer and Meridian roads (see **Transportation Analysis**). The average daily traffic along Grand River Avenue east of Zimmer Road was 10,901 in 2005 and 9,515 in 2011. Traffic volume on Grand River Avenue between Zimmer and Meridian Roads was 10,080 in 2005 and 8,725 in 2011.

Based on a functional classification of roads, Grand River Avenue is considered a principal arterial road. Several minor arterial roads, such as Zimmer Road, Meridian Road, and Putnam Road connect with Grand River Avenue to provide access to other parts of the Township and City. In essence, these north-south roads feed traffic to and distribute traffic from Grand River Avenue.

The connection at Meridian Road appears to be used by traffic heading to or from the Lansing/East Lansing area. The Zimmer Road connection appears to be used by traffic heading into the City or heading toward I-96. Because of this split in the traffic, the segments east of Zimmer and west of Meridian carry much more traffic than the segment between Zimmer and Meridian Roads.

Environmental and Visual Conditions

The Existing Land Use chapter displayed Farmland Classification Ratings for the entire Township, including land adjoining Grand River Avenue. Most of the land between Grand River Avenue and the Red Cedar River, between Meridian Road and Zimmer Road, is a mix of "prime farmland" and "prime farmland if drained." South of Grand River Avenue, the land is mostly designated "prime farmland if drained". Thus, continued agricultural use is a feasible option along Grand River Avenue, if soil conditions are the only considerations.

Land along Grand River Avenue is often thought of as being generally flat, but, in fact, significant topographic differences do exist. As one might expect, some of the lowest elevations are along the Red Cedar River, where elevations approach 860. In contrast, on the south side of Grand River Avenue, in the vicinity of Burkley Road, there is a knoll that approaches elevations 911.

According to the Wetlands Inventory, scattered wetlands throughout the corridor could impede non-agricultural development. The greatest concentration of wetlands is east of Thatcher Road on the north side of Grand River Avenue, and west of Burkley Road, south of Turner Road.

In terms of visual and functional characteristics, the focal point of activity along Grand River Avenue is downtown Williamstown. As a result of building improvements and streetscape enhancements, downtown Williamston casts a positive image, benefiting both the City and the Township.

East and west of the City's downtown core, mixed use districts exist along Grand River Avenue. The mixed use area in the Township, east of the City, needs new investment to upgrade the existing uses or to bring in new development.

Moving west of the core, a mixed use pattern exists, but more development appears to be underway. This area could be characterized as "urban fringe". In addition to retail and office uses, there are a few industrial uses that influence the character of this area.

A nonresidential node exists at the intersection of Zimmer Road and Grand River Avenue. The Post Office is one of the prime generators of activity in this location. Moving westward, this node serves as the doorway to the Green Zone, which is predominantly agricultural at the present time. There are a few non-residential uses in the Green Zone area that can be described as "rural commercial" uses. In terms of design, function and use, these nonresidential uses do not form a cohesive district. Instead, they exist independent of each other along the corridor. Buildings and sites are generally well-maintained; however, if the entire corridor was developed according to standards exhibited by existing businesses the corridor would not look very different from the strip development that is detested in other communities along the Grand River corridor.

One of the most important conclusions to be drawn from the environmental and visual analysis is that frontage along Grand River Avenue in the Township is still predominately open space or agriculture. Thus, the opportunity still exists to shape development so that the corridor matches the Township's vision for a Green Zone. Within the City the opportunity exists to maintain the traditional, small town character that appeals to residents and visitors alike.

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¹ Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of chemical and physical characteristics, for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but is not urban or built-up land or water areas.

Planning Issues

The following is a summary of planning issues that will impact the development of the Grand River Avenue Corridor area:

Population Projections

By the year 2040 the population of the township is projected to be approximately 5,576 persons. If all of the land currently zoned for residential or agricultural was developed at the maximum density, the population of the township would be about 19,618.

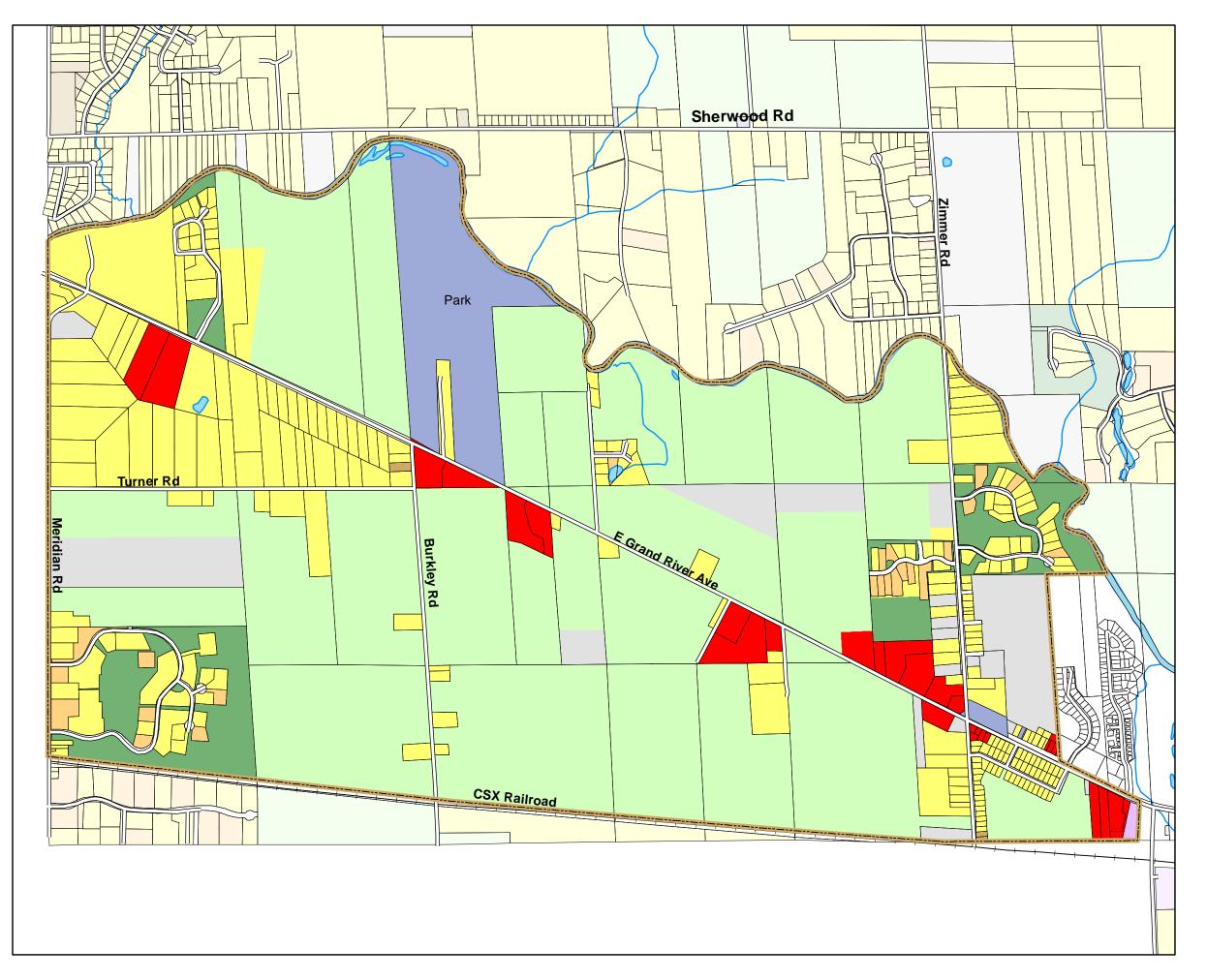
Market Analysis

Retail. Sufficient retail uses exist in the Township and neighboring communities to serve the current population of the Township, and the slow recovery from the recession combined with the projected increase in households does not warrant any significant increase in retail activity in the next several years.

Office. Although the slow recovery from the recession has hampered economic growth, the Township still has the potential to attract new office development over the next 20 years. Williamstown Township should take advantage of its geographic proximity of research activity at Michigan State University, such as the Facility for Rare Isotope Beams (FRIB) facility, currently under construction at MSU, to attract spinoff of high-tech office development.

Industrial. The potential for industrial development exists in the Williamstown Township area, although direct freeway access is often sought by industries.

Research, Technology, and Corporate Office. The potential for research, technology, and corporate office development exists along Grand River Avenue – especially given the township's proximity Michigan State University and new research facilities such as the FRIB, which is expected to create numerous new high-tech jobs and spin-off labs and businesses. These types of uses typically wish to project a high-quality image, and incorporate green design elements. The Grand River corridor is well suited for these types of uses.

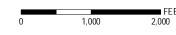


Map 11 Grand River Corridor Existing Land Use

Williamstown Township, Ingham County, Michigan

April 22, 2013









• Public Opinion

Public opinion surveys have consistently revealed that residents wish to maintain the rural character of the community. Residents' greatest concerns relate to over-development, unregulated strip development, and loss of natural areas and agricultural lands. The most recent community survey was conducted in August of 2012.

54 percent of respondents felt that the Grand River corridor should reflect the rural nature of the Township (a decrease from 67 percent in 2005).

54 percent indicated that commercial development should be located near Grand River Avenue and Zimmer Road (a decrease from 61 percent in 2005).

Opinion was widely varied in regards to whether scattered commercial development should be encouraged along the Grand River corridor with 41 percent in favor (14 percent strongly in favor), 25 percent stating no preference, and 34 percent opposed (19 percent strongly opposed).

Opinion was equally varied in regards to whether new multiple-family residential development should be permitted in the vicinity of Grand River Avenue and Zimmer Road with 37 percent in favor (9 percent strongly in favor), 26 percent stating no preference, and 37 percent opposed (19 percent strongly opposed).

Utilities

The only portion of Williamstown Township that is served by a public water system is a half mile segment along Grand River Avenue east of the City of Williamston, plus a few businesses immediately west of the city. Public sanitary sewer lines extend about a mile east and west of the City along Grand River Avenue. Utility services are provided by the City of Williamston. No more capacity in the sewer and water systems has been allocated to the Township.

Road System

Most Township residents live north of the Red Cedar River. Development for them along Grand River Avenue is not directly accessible except at Zimmer, Meridian, and Williamston/Putnam Roads. This consideration relates to the public opinion that commercial facilities should be located in areas that are convenient to serve the residents of the community.

Another issue related to the road system involves the intersection of Zimmer Road at Grand River Avenue. This intersection is scheduled for major improvements in 2013, including signalization. Residents consider these improvements essential because of the hazardous nature of the intersection.

In the interest of promoting more environmentally sensitive actions on the part of its residents, the Township encourages the use of public transportation. The Township worked with CATA to establish routes along Grand River Avenue to serve commuters to Lansing and East Lansing. The Township also installed a bus shelter at the Community Park to facilitate use of the public transportation system.

The Township's effort to provide alternate means of transportation is reflected in its Trails and Greenways Plan. The plan proposes a network of pathways throughout the Township, and of importance for this Chapter of the Master Plan, along Grand River and the Red Cedar River, from Meridian Road to Zimmer Road.

Relationship to the City of Williamston

A thriving center of activity in the City of Williamston is an asset to the Township. Because of the limited market for commercial and office facilities in the region, Williamston's economic health will be maintained only if development of competing commercial facilities in the Township is kept to a minimum.

Natural Features

One of largest expanses of uninterrupted prime farmland in Williamstown Township is located in the southwest corner, north and south of Grand River Avenue. This is an important consideration in light of the community's goal to preserve valuable agricultural lands.

Existing Land Use

Most non-residential development along Grand River Avenue is located within a half mile of the city limits; however, some commercial and industrial development has occurred on a random basis between Zimmer and Meridian Roads. Scattered non-residential development provides a footing for uncontrolled strip development.

Housing Variety

Williamstown Township's housing stock consists of predominantly single family housing on large lots – the most expensive type of housing available. Consequently, the needs of certain population segments are not being met. If the township chooses to meet the needs of other population segments by allowing higher density housing, access to public utilities and other services will be important.

OPPORTUNITY ASSESSMENT

Based upon the results of the community survey and ongoing planning efforts, the Planning Commission identified a number of existing features and desired elements that should be preserved, enhanced, or developed in the Grand River Corridor. Those features and elements are summarized as follows:

Open Space Preservation

The preservation of existing agricultural and undeveloped land in the Grand River Corridor is the paramount concern of the Planning Commission. The following actions promote the preservation of rural character:

- Dwelling units should not be placed in open fields fronting directly on thoroughfares.
- Ideally, dwelling units should be located adjacent to tree lines and on the edges of wooded areas.
- Structures should not be placed on ridge lines.

- Buildings should be set back from Grand River Avenue to provide a substantial viewshed, as set forth in the Green Zone Planned Development District. The viewshed should be planted with native and other plants in an informal setting.
- A minimum setback from the Red Cedar River should be consistently maintained, as set forth in the Green Zone Planned Development District.
- Trees on ridges should not be removed.
- Existing tree lines and stone rows should be preserved.
- Existing farm structures, such as silos and barns, should be preserved.
- Trees between the dwelling units and road should be preserved.
- Conversion of open fields to lawns should be discouraged.
- Disturbances for construction of roads, dwelling units, and other improvements should be kept to a minimum.
- Natural vegetation should be preserved where possible.

The rural character attracts many residents to Williamstown Township, but conventional zoning regulations do not promote preservation of the rural character. Rather, conventional zoning promotes mass grading and tree removal for subdivisions, destruction of existing farm buildings and other rural features to maximize density, full exposure of dwelling units and structures from the road, destruction of wildlife habitat (except where protected by wetlands laws), and creation of suburban type development.

Open space development is one alternative to conventional zoning. The open space concept provides for grouping new homes onto part of the parcel so that the remainder can be preserved as open space. Implementation of the open space concept on a particular parcel should begin with identification of significant natural and rural features, such as woodlands, meadows, scenic vistas, farmlands, and wetlands. Areas of sites most suitable for septic systems should also be identified. After these features are identified, the open space development should be designed to preserve the natural features in perpetuity, to take advantage of the most suitable soils, and to accomplish the other rural preservation objectives cited above. If properly implemented, the open space concept provides for preservation of the maximum amount of open space, with residential development concentrated on the smallest feasible amount of land area. The four chief benefits of open space development are:

- Units may be concentrated on the most buildable portion of the site, preserving natural drainage systems, open space, farmlands, rural character, and environmentally sensitive areas.
- Development is more economical: only the portion of the site being developed needs to be cleared, and streets and utility lines are shorter.
- Maintenance costs are reduced because infrastructure is more compact.
- Grouping the dwelling units reduces impervious surfaces, thereby reducing storm water runoff.

Open space development is not intended to be a means of increasing the density of development. In its most simple form, open space development allows development at the same density as permitted under conventional zoning.

The Green Zone Planned Development District would permit open space development subject to the regulations in that District.

Grand River Avenue Viewshed

A viewshed is defined as the area visible from a certain location. In the context of this plan, the Grand River Avenue viewshed refers to the area visible to passing motorists on Grand River Avenue. The viewshed is an important concept because what is located close to the road defines the character and "feel" of that road for motorists. Factors such as setbacks, buildings, natural vegetation, open spaces, and other improvements such as parking lots, streetscape improvements, and landscaping determine the aesthetic quality of the viewshed.

As the most heavily traveled road in the Township, the appearance of the Grand River Avenue viewshed is instrumental in creating a community image for Williamstown Township. Grand River Avenue has an open and rural feel in Williamstown Township, which stands in stark contrast to the strip commercial style development found along the road in neighboring communities. The preservation of this rural and open feel along the road is an important consideration in preserving Williamstown's rural feel.

In order to retain the rural, open character currently found along Grand River Avenue, buildings should be set back a minimum of 350 feet from the road right-of-way. The viewshed be landscaped with native plants to maintain a rural feel. Formal landscaping schemes with regularly-spaced trees, hedges, and other planned elements are inappropriate in such a context. Landscaping should consist of species native to Ingham County. Evergreen trees should consist of no more than 25% of all trees planted. Landscape plantings should include enough large trees to provide immediate impact at planting, but smaller trees should also be incorporated to provide reforestation over time.

Environmental Design

Sustainable, green development is encouraged in the Grand River corridor. As such, compliance with Leadership in Energy and Environmental Design (LEED) standards is encouraged. In 2009 the United States Green Building Council (USGBC) adopted a rating system of LEED standards for Neighborhood Development (LEED-ND).

The stated goal of the LEED standards is to encourage developers and communities to reduce land consumption, reduce automobile dependence, promote pedestrian activity, improve air quality, decrease polluted storm water runoff, and build more livable, sustainable, enduring communities for people of all income levels.

LEED rating systems evaluate buildings and developments for compliance with a set of criteria. A development's performance is rated against the criteria by means of a scoring system, and a development can achieve, in ascending order, certified, silver, gold, or platinum status. The LEED rating system includes a few prerequisites and many optional credits. A development must meet all of the prerequisites and achieve a certain score in order to become certified, while compliance with more of the optional credits will increase the development's score and earn silver, gold, or platinum LEED certification.

Not all of the draft LEED-ND standards are applicable to Williamstown Township and the Grand River corridor; however, the Planning Commission has used the standards as a basis for developing criteria that may be used to evaluate development in the Grand River corridor.

Non Single-Family Residential Land Uses

Affordable housing, senior housing, and other alternative forms of residential development, as well as businesses involved in technology, research, and development, and other types of knowledge generating activities should be encouraged in appropriate locations in the Grand River Corridor.

Development Amenities and Design Standards

Non-motorized off-road pathways should be provided in conjunction with any new development along Grand River Avenue, consistent with the Trails and Greenways Plan. These non-motorized pathways should be paved with asphalt and have a minimum width of ten feet. It is intended that these pathways replace traditional sidewalks along Grand River, and will provide recreational opportunities for pedestrians and cyclists along Grand River Avenue. These connections should also link single-family residential developments with the Williamstown Township Community Park, enhancing the utility of existing recreational facilities. New development with frontage on the Red Cedar River should provide an eight-foot wide unpaved path and recorded path easement along the river. Finally, concrete sidewalks, six feet in width, should be provided on all interior roads.

Community Entranceway Features should be provided at Grand River Avenue and Meridian Road and on Grand River Avenue at the City of Williamston/Williamstown Township boundary. These features should include decorative community identification signs.

COMMUNITY AND RECREATION FACILITIES

INTRODUCTION

The responsibility for providing public services to the residents of Williamstown Township is shared by several public entities, including the Township government itself, various Ingham County departments, various state offices, the Williamston, Okemos, Haslett and Perry school districts and other agencies.

Over the years, the public service base in the Township has expanded in response to growth. Needs have changed because of the gradual transition from a predominantly agrarian community to a semi-rural residential community. Future growth and residents' desires for improved quality of life may create additional future public facility needs.

Key determinants of future need for public services are total population and number of households. The Population Analysis projects that the population of the Township will be approximately 5,319 by the year 2025. Based on a household size of 2.66 persons from the 2010 Census, the Township will have approximately 2,000 household.

This chapter of the Master Plan uses these population and household projections to analyze community facility and recreation needs that are provided in part or in full by the Township.

TOWNSHIP ADMINISTRATIVE SERVICES

The existing Township administration building, located on a 10-acre site at 4990 N. Zimmer Road, was put into use in 1974. The administrative offices housed in the Township Hall include the Supervisor/Assessor, Clerk, Treasurer, Planning, and general administration. The Township Hall also contains storage space for all of the Township records, including site plans, print files, elections equipment, and so forth.

FIRE PROTECTION SERVICES

Williamstown Township, the City of Williamston, Wheatfield Township, Locke Township, Leroy Township, and the Village of Webberville cooperate in the operation of a single fire protection service for all six communities. The Northeast Ingham Emergency Services Authority (NIESA) oversees the volunteer fire protection service.

LIBRARY SERVICES

Williamstown Township is served by one of the 11 branches of the Capitol Area District Library system located in the City of Williamston. The building which houses the library, located at 201 School Street, is owned and maintained by the City, and the County provides staff and materials. The Williamston Community Library Foundation is currently investigating options to acquire more floor space, including the possibility of constructing a new building.

PUBLIC UTILITIES

The only portion of Williamstown Township that is served by a public water and sewer system is the property located within the boundaries of the 425 Agreement enacted between the City of Williamston and Williamstown Township on June 12, 2000.

Both the public water and sanitary sewer systems are owned and operated by the City of Williamston.

The decision whether to seek additional public water or sewer capacity depends on the intensity of development desired in the Township. Intensive development in the absence of public utilities creates the potential for public safety and environmental problems. From a public safety perspective, a public water supply is desirable for fire protection services whenever a high-hazard or high-value use is developed. For example, a public water system would be desirable if large scale industrial development, schools, or high-density residential development occurred in the Township.

From an environmental perspective, a public sanitary sewer system is desirable instead of septic systems whenever medium or high-density residential or intensive non-residential development is anticipated. Too often communities are forced to install public sewers to address an immediate groundwater pollution problem that was created many years earlier when intensive development was permitted on soils that had limited suitability for septic systems.

HISTORIC AND CULTURAL RESOURCES

Historic and cultural resources are those places that are created by and reflect upon the people who have lived in the Township. These resources have tremendous value to the community as they connect today's Township residents with their predecessors, and serve as timeless landmarks that help provide a common identity for the community. Historic and cultural resources are a non-renewable community resource that, if lost, cannot be recovered. Therefore, their continuing preservation is an important goal of this Plan.

Branch School. The Branch School, located at the northeast corner of North Branch Road and Sherwood Road, is a historic schoolhouse constructed in the late 1850's or early 1860's. The school may have been used as a hiding place for slaves traveling the Underground Railroad in the years leading up to the Civil War. One of Williamstown Township's founding fathers, Love Williams, taught French at the school. Williamstown Township currently owns the school.

Summit Cemetery. Summit cemetery, located on Beeman Road south of Sherwood Road, includes burial sites for many of the pioneer families who settled Williamstown Township and the City of Williamston. The cemetery is owned and maintained by the Township. A long-term plan for the cemetery was recently completed.

Foote Cemetery. The tombstones in Foote Cemetery display the names of several residents of the Townships from the 1800's to the mid 1900's. A number of family plots can be found here, including the plot for the Foote family (10 graves), Capen family (6 graves), and Otis family (4 graves). Foote Cemetery is located on E. Sherwood Road.

RECREATION FACILITIES

The Williamstown Township Parks and Recreation Master Plan sets forth the Township goals, objectives, and places for parks and recreation facilities and services. The Parks and Recreation Plan was adopted in 2007 and must be updated for the Township to remain eligible for state recreation grants.

Existing Facilities. Table 26 summarizes the current status of existing public recreation facilities used by Township residents. The table reveals that in terms of total acreage and range of facilities, the Township government is one of several providers of recreation facilities. Other providers include principally the school district and City of Williamston.

The Township owns two recreation facilities, the Township Hall site and the 130-acre community park on Grand River Avenue. In addition, a Michigan Department of Transportation roadside park is located on Grand River Avenue in the Township.

Williamstown Township Community Park. The Township's 130-acre community park is located along Grand River Avenue and also has frontage on the Red Cedar River. Completed improvements include a parking lot, trails, a sledding hill, two soccer fields, two softball fields, and storage/well building. Proposed improvements to be completed include restrooms, a pavilion, playground equipment, concession facilities, picnic area, and volleyball courts.

Williamstown Township Hall Site. The Township Hall, located at the corner of North Zimmer and Germany Roads, is available to township residents for recreational use and for meetings of community clubs and organizations. The 10-acre site contains a ball field with a backstop, picnic pavilion, and soccer field. Portable restrooms are provided during the summer. The site suffers from inadequate drainage during periods of heavy rain. Very little space is left on the site for development of additional facilities.

The Williamston Community School District maintains a variety of recreation facilities at each of the school sites and at the Community Education center. The school district's facilities are oriented toward active recreation pursuits, but in some respects the school sites serve a neighborhood park function.

The City of Williamston's parks are the most complete in terms of variety of facilities. The City's parks offer both active and passive recreation opportunities for all age groups.

Classification of Recreation Facilities. For planning and management purposes, recreation professionals classify park and recreation facilities based on the type of facility and expected usage, as described in Table 27.

Table 24
PARKS AND RECREATION INVENTORY

	CLASSIFICATION	SITE SIZE (ACRES)	FACILITIES				
То	Township Facilities						
1.	Township Hall Site (neighborhood park)	10 acres	Ballfield, picnic pavilion, sports field				
2.	Williamstown Township Community Park (Community Park and Natural Resource Area)	130 acres	Nature area with trails, sledding hill, soccer fields, softball fields, storage/restroom building				
3.	MDOT roadside park (special purpose park)	Approx. 1.8 acres	Picnic tables, restrooms, river access				
4.	Grand River Avenue Bikeway	Not Applicable	Bike lane, from Meridian Road to Zimmer Road				
Scl	hool Owned Facilities						
1.	Elementary School (school park)	12.3 acres	Indoor gymnasiums (2), outdoor basketball court and play area, playground, softball diamonds (5), soccer fields (2)				
2.	Middle & High School (special purpose facility)	52.5 acres	Gymnasiums (2), wrestling/weight room, practice field, ball fields (2), nature trail, indoor swimming pool, tennis courts, soccer fields				
3.	School Athletic Center (special purpose facility)	6.0 acres	Lighted football field, 1/4 mile track, basketball courts, obstacle course, gymnasium				
Cit	ry-Owned Facilities						
1.	Memorial Park (community park)	13.0 acres	Baseball field, tennis courts (4), small play area				
2.	Community Center (neighborhood park)	n/a	Basketball courts (2), play equipment, picnic tables				
3.	Old McCormick Park & West McCormick Park (community park)	12.9 acres	Picnic facilities, softball field, playground (2)				
4.	Deer Creek Park (neighborhood park)	n/a	Ice skating, soccer, sledding, nature trail				
5.	Well No. 4 Park (mini-park)	n/a	Playground equipment				
Other Facilities							
1.	Brookshire Inn and Golf Course	42.07	18 hole golf course				

Source: McKenna Associates. Please see Parks and Recreation Master Plan for additional information about parks and recreation resources.

Table 25
CLASSIFICATION OF RECREATION FACILITIES

Classification	Description	Location Criteria	Size Criteria
Park basic unit of the park system. It serves uses the recreational and social focus of the park system.		¼ to ½ mile distance, 5 to 10 acres is uninterrupted by optimal. non-residential roads or other physical barriers.	
School-Park	Combining parks with school sites can fulfill the space requirements for other classes of parks, such as neighborhood, community, sports complex and special use facilities. The elementary school fits the classification of school-park.	Determined by location of the school property.	Variable – depends on the function.
Community Park	Serves a broader purpose than a neighborhood park. Focus is on meeting community-based recreation needs, as well as preserving unique landscapes and open spaces. The Township Community Park fits in this classification.	Determined by the quality and suitability of the site. Usually serves two or more neighborhoods within ½ to 3 miles. The Williamstown Township Community Park serves all neighborhoods in the Township.	As needed to accommodate desired uses. Usually between 30 and 50 acres.
Natural Resource Areas	Land set aside for preservation of significant natural resources, remnant landscapes, open space, and visual buffering. A portion of the Williamstown Township Community Park is a natural resource area.	Determined by resource availability.	Variable.
Special Use	Covers a broad range of parks and recreation facilities oriented toward a single-purpose. A golf course or bowling facility would be considered a special use facility.	Depends on the specific use.	Variable.
Park Trail	Multipurpose trail located within a greenway, park, or natural resource area. Focus is on recreational value and harmony with the natural environment.	There are three types: 1) Separate single-purpose hard-surfaced trails for pedestrians or bicyclists; 2) Multipurpose hard-surfaces trails for pedestrians, bicyclists, and in-line skaters; and 3) Nature trails for pedestrians. Nature trails may be hard- or soft-surfaced.	
On-Street Bikeways	Paved segments of roads that serve as a means to safely separate bicyclists from vehicular traffic. The Grand River Avenue Bike Lane is a type of on-street bikeway.	There are two types: 1) Bike I designated portion of the roa or exclusive use of bicyclists. Shared portion of the road the separation between motor vesuch as a paved shoulder.	d for the preferential 2) Bike Lane. A at provides

EVALUATION OF EXISTING RECREATION RESOURCES

For the purposes of analysis, the recreation facilities in the City and Township can be combined, acknowledging that facilities are shared by City and Township residents. If City and school facilities are considered, few recreation deficiencies are apparent in the Township. However, it is important to consider the following when making this evaluation:

- Facilities in the City do not meet all Township residents' needs. Residents have expressed a need for a broad range of facilities.
- Geographic clustering of most facilities in the City limits access by Township residents.
- School facilities are in the City. Furthermore, Township residents' access to school facilities is limited to time when they are not in use by students.
- Some of the facilities in the City do not meet minimum maintenance standards.

In 2012, the Michigan Department of Natural Resources published Suggested Facility Development Standards. In Table 28 we have determined the adequacy of the resources in Williamstown Township and the City of Williamston, using a base population of 10,000 (the current combined population according to the 2010 Census is 8,832). The Table shows that, based on the accepted standards, the Township and City generally have adequate facilities for the size population being served.

Table 26
ADEQUACY OF RECREATION RESOURCES

Recreation Facility	No. of Units per Population	Evaluation – Township and City Combined
Badminton	1 per 5,000	Not adequate
Basketball (Youth)	1 per 5,000	Adequate
Handball	1 per 20,000	Population does not justify facility
Tennis	1 court per 2,000	One court short
Volleyball	1 court per 5,000	Not adequate
Baseball	1 per 5,000	Adequate
Field Hockey	1 per 20,000	Population does not justify facility
Football	1 per 20,000	Adequate
Soccer	1 per 10,000	Adequate
Golf-Driving Range	1 per 50,000	Population does not justify facility
Softball	1 per 5,000	Adequate
Multiple Recreation Court	1 per 10,000	Deficient
Trails	1 system per region	Adequate
Archery Range	1 per 50,000	Population does not justify facility
Golf – Nine Hole	1 per 25,000	Adequate
Swimming Pool	1 per 20,000	Population does not justify facility

Source of Standards: Guidelines for the Development of Community Park, Recreation, Open Space, and Greenway Plans, prepared by the Michigan Department of Natural Resources Grants Management (Rev. 01/13/2012).

Community and Recreation Facilities

The nationally accepted standards are subject to adjustment based on the particular needs and interests of the local population. For example, the younger population in the Williamstown Township area seem to desire soccer; in other parts of the state lacrosse is the preferred field sport.

In 2006, the Township prepared a Parks and Recreation Master Plan which sets forth several actions to address deficiencies and provide a better recreation experience for residents. A summary of the proposed actions follows:

- 1. Continue to make improvements in the Williamstown Township Community Park.
- 2. Increase funding for parks and recreation, by seeking grants, seeking corporate and individual donations, user fees and facility rentals.
- 3. Develop trails and bikeways to address the interests of a majority of the residents.
- 4. Provide residents with a variety of recreation programs.
- 5. Acquire additional land for park to fulfill other goals. For example, acquisition of the single family parcel located in the center of the park on Grand River Avenue would permit the Township to fulfill acreage and programming goals for the Community Park.
- 6. Explore the creation of a regional authority to oversee development and maintenance of recreation facilities.

TRANSPORTATION ANALYSIS

OVERVIEW

The road system is of vital importance for the overall well-being of the Township and its residents. At its most basic level, the road system provides the means of moving people and goods within and through the Township. Depending on the type and location of the road, it may function primarily to provide through-access, or its primary function may be to provide access to adjacent land uses. The road system must equally accommodate all users including pedestrians, cyclists, and public and paratransit service. In Williamstown Township, which has several farms, the road system provides access to the varied agricultural operations.

Roads and road rights-of-way provide locations for public utilities, such as water, sewer, gas, electric, and telephone lines. Roads provide the means by which emergency and public services are delivered to residents. Roads provide access to parcels of land, thereby reducing the possibility of preserving agricultural and open lands. Most important, the road system establishes the basic form of the Township.

Because of the many functions and users of the road system, transportation has a significant impact on the economy, environmental quality, energy consumption, land development, and the general character of the Township. Accordingly, it is prudent to identify and understand deficiencies in the road system and to prepare alternatives to address those deficiencies.

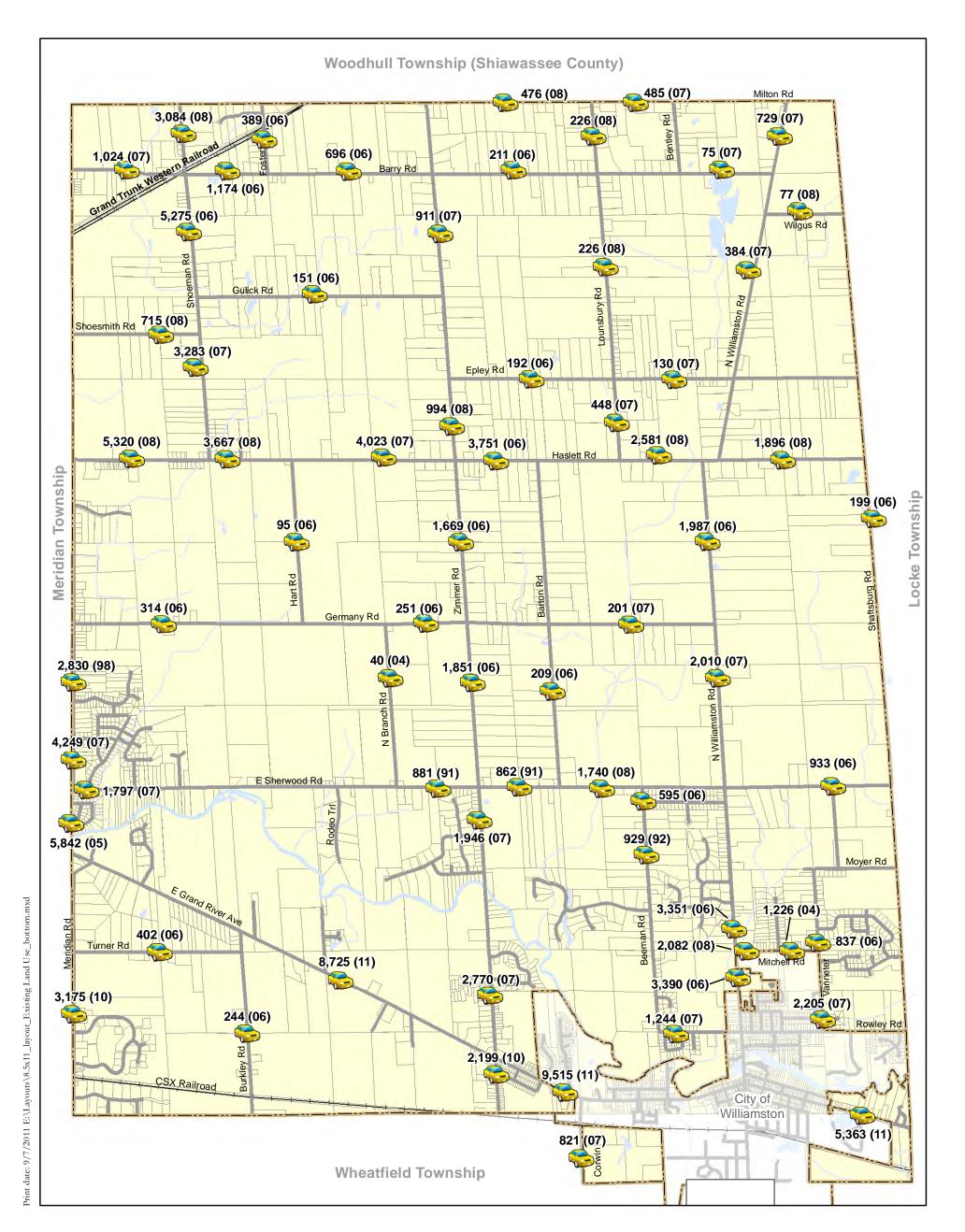
EXISTING CIRCULATION NETWORK

Roads in Williamstown Township are under the jurisdiction of two agencies, the Michigan Department of Transportation (MDOT) and the Ingham County Department of Transportation and Roads. MDOT has jurisdiction over Grand River Avenue (M-43), which is a part of the state trunkline system. All other roads are under the jurisdiction of the Ingham County Department of Transportation and Roads.

The existing road system is an irregular grid network of roads that are located on section and quarter section lines. The exception to this pattern being Grand River Avenue which runs diagonally through the southern part of the Township. The existing road system has sufficient capacity to serve the existing population of the Township and City without persistent or excessive congestion. As might be expected, east-west routes are well-developed, providing access to the Lansing/East Lansing area for the many daily commuters. Haslett Road, Sherwood Road, and Grand River Avenue are the primary east-west routes in the Township.

Continuous north-south routes are less well-developed. Zimmer Road is the only road that provides uninterrupted access across the entire Township. Zimmer Road, however, does not connect with any freeways. In addition to Zimmer Road, Williamston Road (Putnam Road in Williamston) and Meridian Road are considered the primary north-south routes in the Township.

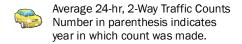
Traffic Volume. The Traffic Volumes map provides 24-hour, two-way traffic counts for all of the roads in the Township.



Map 12 Traffic Volumes

Williamstown Township, Ingham County, Michigan





Grand River Avenue is the most heavily travelled thoroughfare in the Township, carrying traffic through Williamston to the I-96 freeway as well as to destinations in Meridian Township and other points to the west. In the segment between Meridian Road and Zimmer Road, Grand River carries about 10,000 trips on a daily basis. The other major east-west route is Haslett Road. The level of traffic on Haslett Road builds as one moves from east to west so it appears its major function is to collect traffic headed to and from Meridian Township and other destinations to the west.

Zimmer and Williamston Roads are the primary north-south routes in the Township. Both carry about 2,000 trips a day within the Township, although volumes drop off considerably north of Haslett Road. It is evident that a lot of traffic from these two roads empties onto Haslett Road.

Another major north-south route in the Township is Shoeman Road, which provides access to I-69 to the north. Shoeman carries over 3,000 trips per day in the segment within the Township.

Table 24 summarizes traffic volume changes on key roads in the Township based on a comparison of values reported in the 2000 Master Plan, the 2005 Master Plan, and current counts.

Table 27
TRAFFIC VOLUME CHANGES ON SELECTED ROADS

TRAFFIC VOLUME CHANGES ON SELECTED RO		Traffic Volumes		Change		
	<u>Road</u>	<u>2000</u>	<u>2005</u>	Most Recent	2000-2005	2005-2012
Grand River Ave.	(east of Zimmer Rd.)	14,182	10,901	9,515 (2011)	-3,281 (-23.1%)	-1,386 (-12.7%)
	(bet. Zimmer and Meridian)	10,200	10,080	8,725 (2011)	-120 (-1.2%)	-1,355 (-13.4%)
Sherwood Rd.	(west of Zimmer Rd.)	1,900	2,017		+117 (+6.2%)	-1,136 (-56.3%)
	(east of Williamston Rd.)	1,200	1,379		+179 (+14.9%)	-446 (-32.3%)
Germany Rd.	(west of Zimmer Rd.)	300	381	251 (2006)	+81 (+27%)	-130 (-34.1%)
	(east of Zimmer Rd.)	240	275	201 (2007)	+35 (+14.6%)	-74 (-26.9%)
Haslett Rd.	(bet. Shoeman and Meridian)	4,900	6,020	5,320 (2008)	+1,120 (+22.9)	-700 (-11.6%)
	(bet. Shoeman and Zimmer)	2,500	3,560	3,667 (2008)	+1,060 (+42.4%)	+107 (+3%)
	(bet. Zimmer and Williamston)	2,400	3,481	2,581 (2008)	+1,081 (+45.1%)	-900 (-25.8%)
	(east of Williamston Rd.)	2,100	1,931	1,896 (2008)	-169 (-8%)	-35 (-1.8%)
Shoeman Rd.	(bet. Barry and Milton)	3,100	3,730	3,084 (2008)	+630 (+20.3%)	-646 (-17.3%)
	(bet. Haslett and Gulick)	2,400	2,978	3,283 (2007)	+578 (+24.1%)	+305 (+10.2%)
Zimmer Rd.	(south of Grand River)	2,415	2,605	2,199 (2010)	+190 (+7.9%)	-406 (-15.6%)
	(bet. Grand River and Trotter)	2,411	2,385	2,770 (2007)	-26 (-1.1%)	+385 (+16.1%)
	(bet. Sherwood and Cherry Valle)	1,900	1,887	1,946 (2007)	-13 (-0.7%)	+59 (+3.1%)
	(bet. Sherwood and Germany)	1,600	2,047	1,851 (2006)	+447 (+27.9%)	-196 (-9.6%)
	(bet. Germany and Haslett)	1,400	2,186	1,669 (2006)	+786 (+56.1%)	-517 (-23.7%)
	(north of Haslett)	1,300	1,192	994 (2008)	-108 (-8.3%)	-198 (-16.6%)
Williamston Rd.	(bet. Mitchell and Sherwood)	3,000	3,283	3,351 (2006)	+283 (+9.4%)	+68 (+2.1%)
	(bet. Sherwood and Germany)	2,400	2,074	2,010 (2007)	-326 (-13.6%)	-64 (-3.1%)
	(bet. Germany and Haslett)	2,300	2,047	1,987 (2006)	-253 (-11%)	-60 (-2.9%)
	(north of Haslett)	1,000	659	384 (2007)	-341 (-34.1%)	-275 (-41.7%)

Source: Ingham County Road Commission, Michigan Department of Transportation (Grand River Ave.)

According to traffic volume data collected by the Ingham County Department of Transportation and Roads, Haslett Road, between Shoeman and Meridian Road is the most travelled road segment in the Township (excluding Grand River Avenue). A 24-hour, 2-way traffic count recorded in 2008 revealed 5,320 trips, an increase of 420 trips compared to 2000. All segments of Haslett recorded trip increases

between 2000 and 2012, except the segment east of Williamston Road. Haslett Road carries traffic to and from Meridian Township and other destinations to the west and to and from I-69 via Shoeman Road.

Because it provides access to I-69, Shoeman Road experiences a comparatively large volume of traffic. In the segment within the Township, over 3,000 trips were recorded along Shoeman in 2007 and 2008. A substantial number of these trips involve pass-through traffic.

Another heavily travelled road is Williamston Road, particularly north of the City of Williamston, where 3,351 trips were recorded in 2006. As one moves north on Williamston Road, the traffic drops, reaching about 2,000 trips (2007) in the segments between Sherwood and Germany and between Germany and Haslett. These segments experienced a slight decrease in traffic between 2000 and 2006-2007.

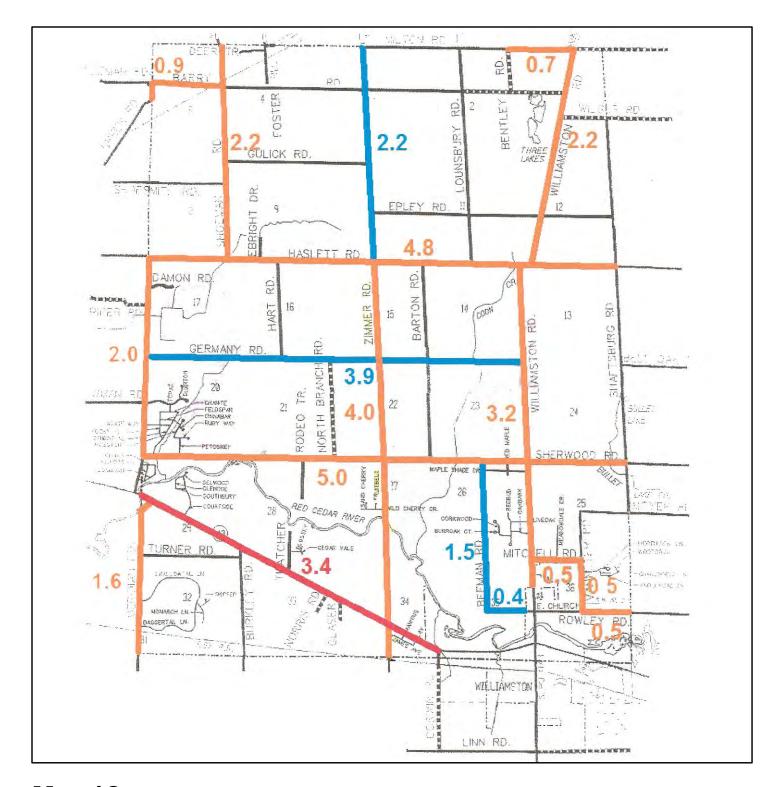
Zimmer Road experiences a fair amount of traffic, particularly in the segments in the south part of the Township. South of Grand River Avenue, the Department of Transportation and Roads recorded 2,199 trips (2010), a decline of 215 trips compared to 2000. In the segment immediately north of Grand River Avenue, 2,770 trips were recorded in 2007, a 359-trip increase compared to 2000. Traffic volumes decrease as one move northward on Zimmer Road.

ROAD CLASSIFICATIONS

The purpose served by each road or highway in the circulation system is best described through classification of the roads. Road classifications identify the type and volume of traffic that are appropriate for each segment of the road network. The classifications establish expectations among residents, Township officials, and transportation engineers concerning the operational characteristics of each road.

For the purposes of transportation planning, a functional classification of roads has been developed. This system includes the following road classes (see Map 13):

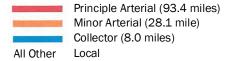
- Freeways are designed to handle large volumes of traffic moving at high speeds over long distances or between urban areas. The principal freeways serving Williamstown Township are I-96 and I-69. The interchange at Williamston Road, about 1½ miles south of Grand River Avenue, provides access to I-96. An interchange at Shoeman/Woodbury Road provides access to I-69, about 1½ miles north of the Township.
- Principal arterial roads and highways serve the major centers of activity, the highest traffic volume corridors, and the longest trips. Principal arterials provide an integrated network without stub connections and serve major traffic movements within the Township. Williamstown Township has one principal arterial, Grand River Avenue.
- Minor arterial roads interconnect with the principal arterial system and provide trips of moderate
 length and relatively high overall travel speeds with minimal interference to through movements.
 Minor arterial roads have a lower level of traffic mobility than principal arterials because they place
 more emphasis on land access. Minor arterials in Williamstown Township include Meridian Road,
 Zimmer Road, Williamston Road, Sherwood Road, Haslett Road, Shoeman Road, Mitchell Road, and
 sections of Milton Road, Barry Road, Vanneter Road, and Rowley Road.



Map 13 Functional Classification of Roads

MCKENNA MCKENNA FEET 0 100 200

Williamstown Township, Ingham County, Michigan



- Collector roads provide access to abutting properties and traffic circulation within residential, commercial, industrial, and agricultural areas. The purpose of a collector road is to collect traffic from throughout the Township and channel it to the arterial system. Generally, in the design of new road systems, efforts are made to discourage direct residential access onto collector or arterial roads, since the added curb cuts increase traffic conflicts and congestion; however, in communities like Williamstown Township, direct residential access is not uncommon because many roads serve a dual purpose. Collector roads in Williamstown Township include Germany Road, Beeman Road, and sections of Rowley Road and Zimmer Road.
- Local roads primarily provide direct access to abutting land and to collector and arterial streets. Movement of through traffic is usually discouraged on local roads. Examples of local roads in Williamstown Township include local subdivision streets, and certain county roads.

Another road classification system (last updated in 2005) is used by the County to establish funding priorities in accordance with Michigan Public Act 51 of 1951. The Act requires county road commissions to classify roads as either Primary or Local roads. In comparing the two classification systems, principal and minor arterials are generally classified as County Primary roads, and collector and local roads are generally classified as County Local roads.

CIRCULATION SYSTEM DEFICIENCIES

The capacity of the roads is generally adequate to handle the volumes of traffic generated by residents of the Township and the City in the 20-year timeframe covered by this Master Plan, provided that the roads are continually improved to increase capacity. According to Tri-County Regional Planning Commission projections, the combined population of the Township and City will reach 8,918 by the year 2035. Based on an average household size of 2.49 persons, there will be about 3,582 housing units in 2035. Based on data from the Institute of Traffic Engineers, an average of 10 daily trips are generated per housing unit, so an estimated total of 35,820 daily trips will be generated within the Township and City on a daily basis by the year 2035.

The 35,820 trips generated by residents will be distributed throughout the day. Approximately eleven percent of the trips will be made during the period of heaviest traffic, which is called the "peak hour" or "design hour." (The Michigan Department of Transportation used an eleven percent peak hour figure in the I-69 engineering reports.) During this peak hour, it is estimated that about a third of the trips, or about 1,300 trips, will be made north of Sherwood Road. About two-thirds of the peak hour trips, or about 2,600 trips, will be made south of Sherwood Road.

The peak hour trips will be further distributed on all roads in the network. Under the worst-case scenario all of the peak hour trips in the south part of the Township would cross the river and/or be distributed on one of the primary north-south routes: Meridian, Zimmer or Putnam (Williamston). If the trips are distributed evenly, then a maximum of 867 trips would be made on each route during the peak hour.

The next step in this analysis called for comparing projected traffic volumes to road capacity. According to the Institute of Transportation Engineers, the capacity of a two-way, two-lane road is a function of the flow rates in each direction, the speed of travel, the variance in speed in the traffic stream, and the availability of passing sight distance. The variance in speed is based primarily on road grades and the presence of trucks, recreational vehicles, or other low-performance vehicles.

Under ideal conditions, a two-lane rural highway could carry between 1,800 and 2,000 passenger cars per hour. The factors identified in the previous paragraph affect road capacity, however, so that at level of service "C" (stable flow) the maximum service volume is reduced to 1,320 vehicles per hour. A more realistic estimate of typical service volume, factoring in all of the conditions experienced on Williamstown Township roads, is approximately 700 vehicles per hour.

The comparison of the traffic projections with road capacity generally supports the conclusion that the capacity of the roads is generally adequate to handle the volumes of traffic generated by residents of the Township and the City in the 20-year timeframe covered by this master plan. Only Haslett Road west of Shoeman Road and east of Zimmer Road, Shoeman Road, and Williamston Road south of Sherwood are expected to exceed 700 vehicles per hour by 2020.

Crash (accident) analysis provides another perspective on circulation system deficiencies. Table 25 provides accident information for the top five accident-prone intersections in the Township.

Table 28
INTERSECTION ACCIDENT ANALYSIS

Intersection	No. of	Accident
	Accidents ¹	Rate ²
Zimmer Road at Grand River Avenue	76	0.00798
Meridian Road at Haslett Road	47	0.00883
Shoeman Road at Barry Road and the railroad	31	0.01005
Sherwood Road at Williamston Road	29	0.03108
East Sherwood Road at Zimmer Road	28	0.03178

Source: Ingham County Department of Transportation and Roads

Notes:

When analyzing accidents, it is important to look at the accident rate as well as total number of accidents. The accident rate relates traffic accidents to the total number of vehicles travelling through an intersection. Two intersections with the same accident rate are equal in terms of danger from accidents, even though they may have different traffic accident counts. The impact of this analysis can be seen in Table 25. The ranking based on total number of accidents is totally reversed when ranked on the basis of accident rate.

Numbers do not provide the full picture of circulation system deficiencies. Road conditions and availability of funding must be factored in. Maintenance for roads classified as Local Non-Subdivision roads by the Department of Transportation and Roads is underfunded, so the roads are subject to deterioration. Deterioration of Local Non-Subdivision roads could result in more traffic on County Primary roads, which would affect capacity of those roads. Recognizing this deficiency, the Township Board passed two policies (003 and 11) to provide guidance on use of limited road funds. Meanwhile, the Road Committee has also been working on funding, including consideration of a road millage.

Access Control. The capacity of a highway or road and traffic safety can quickly deteriorate if development is allowed to occur without proper attention to access control. Access control is a particular concern along Grand River Avenue, where most of the intensive development in the Township is planned to occur. As developments are proposed, attention must be focused on spacing between driveways, driveway design, potential for shared access, the need for acceleration/ deceleration lanes,

¹ Total accidents recorded between 2002 and 2011.

² Rate = Number of accidents per trip.

number of driveways per site, sight lines, and similar considerations. The Township has adopted a M-43 Grand River Corridor Overlay Zone containing access management standards for property abutting Grand River Avenue. The Green Zone Planned Development District, which is described in the Future Land Use chapter, complements the Grand River Corridor Overlay Zone by promoting development on parcels of 20 acres and larger with internal road systems.

Complete Streets. As more families move into the Township there will be more bicyclists and pedestrians. Bicycles can almost be considered a necessity for children, since most recreational facilities are beyond walking distance. As the number of cars, bicyclists, and pedestrians increases on Township roads, the potential for conflict exists. For the purposes of public safety, eventually it will be desirable to construct pathways on certain roads to accommodate non-motorized transportation. There are several alternatives to accommodate non-motorized traffic: conventional sidewalks for pedestrians, paved shoulders that are dedicated and marked for bicycle use, or separate bicycle pathways adjacent to the road. This concept of multiple uses of roads and road rights-of-way is often referred to as Complete Streets. Implementation of a Complete Streets strategy for a segment of road requires detailed study of what is legally and physically possible.

RECOMMENDATIONS

Three broad considerations form the basis for the road system improvement recommendations which follow. These considerations include:

- 1. The projections of future trip generation on Township roads. Trip generation is based on projected population growth and other development activity, as reflected on the Township's Future Land Use Map and in regional forecasts.
- 2. Road system deficiencies identified previously in this chapter.
- 3. The "philosophy" of the Township with respect to development of and improvement to the road system.

The philosophy of the Township is an important consideration. Most residents would probably agree that the Township should seek a transportation system that allows for efficient, safe, and convenient access throughout the Township. Based on opinion surveys, however, it is likely that residents would be willing to compromise on "efficiency" and "convenience" for the purposes of preserving rural character. Furthermore, residents probably would be willing to continue using the indirect routes to their homes and other destinations if it meant that the level of regional pass-through traffic could be kept to a minimum. In summary, based on opinions offered by residents in the past, direct access to I-69 and I-96 on a straight route and similar "improvements" are less important to residents than protecting the quiet, rural, and rural/residential character of the community and its roads.

Based on these considerations, the following recommendations are offered as possible solutions to the transportation deficiencies in Williamstown Township:

• Improve Access Over the Red Cedar River. The existing crossings must be maintained and upgraded. The Putnam Street bridge was upgraded in 2005, and the Zimmer Road bridge is scheduled to be replaced in 2013. Funding sources for the Zimmer Road bridge replacement include the Federal and State local bridge programs, and the Ingham County Department of Transportation and Roads.

 Maintain the Existing Road System. Maintaining the existing roads should take precedence over new road construction proposals. The intersection of Grand River Avenue and Zimmer Road is scheduled for improvements in 2013, as well as installation of a traffic signal in 2015. Additionally, other arterial roads identified earlier in this chapter will also require improvements.

Such improvements may include additional lane width, shoulder improvements, changes in vertical and horizontal alignment, removal of obstructions adjacent to the road, and so forth. Intersection improvements may include the addition of turn lanes, increasing the curve radii, signalization, improvements in corner sight distance, and improvements to intersection geometrics. The specific improvements in particular locations are subject to detailed engineering studies at the time the improvements are contemplated.

In light of residents' desire to preserve the rural character of the community, road design will be very important. Straight, five-lane paved roads that provide for maximum speeds do not preserve rural character. If additional lanes are needed to address capacity problems, then the additional lanes should be added only in the road segments where needed. Additional turn lanes, passing flares, and deceleration lanes should be located where they would achieve the same purposes as large scale road widening.

- Accommodate Non-Motorized Traffic/Complete Streets. A Trails and Greenways Master Plan was
 adopted on May 23, 2011. The plan's purpose is to accommodate pedestrians and bicyclists in the
 Township, with a special emphasis on the most densely developed portions. Further, this plan
 establishes proper locations for non-motorized trails and other recreational pathways and identifies
 resources to support plan implementation. The Transportation Alternatives Program (TAP) is a
 competitive grant program, administered by the Michigan Department of Transportation, that funds
 projects such as nonmotorized paths. This program may provide a means to fund portions of the
 Trails and Greenways Master Plan.
- Accommodate Public Transit. Bus service in Williamstown Township is provided by the Capital Area Transportation Authority (CATA). CATA currently offers three types of service to the Township and City: 1) Express weekday service to Lansing in the morning with return service in the evening; 2) the Williamston Connector, offering four trips daily to the Meridian Mall on weekdays and five trips daily to the Meridian Mall on weekends; and 3) the Williamston Redi-Ride, a demand-responsive service available within the Township, the City of Williamston, and the surrounding area. The Township also accommodates CATA park and ride at the Williamstown Township Community Park.

The need to accommodate transit service should be a consideration during site plan review. For example, turning radii in parking lots should be sufficient to accommodate the small connector buses without requiring them to back up. Designated areas should be provided for the busses to unload without blocking traffic or creating a safety hazard for riders.

• Coordinate Efforts with Other Public Agencies. The roads in Williamstown Township are a small part of a much larger system that is under the jurisdiction of the Michigan Department of Transportation and Ingham County Department of Transportation and Roads. A successful transportation system for the Township depends on coordination with the state and county agencies, as well as with the plans of surrounding communities.

Balance Natural Resource and Road Interests. Williamstown Township is a community with
incomparable natural resources and beauty, characterized by gently rolling terrain, fertile
agricultural lands, and mature trees and woods. These features enhance many Township roads,
with trees that arch over the roads, creating attractive canopies and providing the setting for scenic
vistas of farmlands, wooded areas, wetlands and other natural areas. Even roads that exhibit
these features serve essential transportation functions, though, carrying vehicular traffic, bicyclists,
and agricultural machinery.

It is important to seek a favorable balance between these seemingly competing interests, particularly when roads are slated for maintenance or reconstruction. Every effort must be made to protect the natural beauty of the Township as experienced along the roads, while recognizing the likelihood of some change when maintenance or reconstruction occurs.

FUTURE LAND USE

FUTURE LAND USE CONSIDERATIONS

Based on the analysis, goals, and policies set forth in this plan the following considerations have been identified that are pertinent to the future land use pattern in Williamstown Township:

Population Projections

The population projections in Chapter 3 of this plan estimated that the Township is projected to have a population of 5,189 persons in 2020 and 5,415 persons in 2030. Based on these projections, which take into account regional growth potential, expected household composition changes, and other factors, there is no need to allocate vast areas of the Township for residential development to accommodate the projected residential growth.

Economic Analysis

The Economic Analysis reveals that the total land area needed to serve the retail needs of the population of the Township is approximately 12.3 acres (assuming no community or regional shopping facilities), and approximately 8-10 acres of land is needed for office development. However, the potential for larger scale non-residential/mixed use development, occupying substantially more acreage, exists along Grand River Avenue within the Green Zone.

Existing Land Use

Existing development is subject to change over time, particularly when it involves nonconforming parcels. Existing land use becomes more difficult to change when it involves numerous parcels of land under separate ownership. The land use plan must recognize and adapt to the relative permanency of certain existing land uses. This is evident in a number of locations in the Township, particularly where the otherwise uniform agricultural land use pattern must be adjusted to accommodate existing large lot single family development.

Utilities

Intensive development in the absence of utilities (water and sanitary sewer) creates the potential for public safety and environmental problems. Consequently, high density residential, commercial, and office uses should be located only where connection to public utilities is reasonably feasible or where development of other suitable private systems can be achieved.

Williamstown Township is one of several municipal members of the Urban and Rural Service District/Urban Service Boundary Committee, which was created to help implement the Tri-County Regional Planning Commission's Regional Growth Initiative. One of the key tasks of the Committee is investigation of the feasibility of an urban service boundary (USB) policy for the region. Such a policy

Source: Tri-County Travel Modeling Conformity and Other Service, Phase III, Tri-County Regional Planning Commission

would guide public decision-makers who are contemplating extending public water or sanitary sewer utilities. An USB policy identifies boundaries within which utilities will be provided; properties outside the boundaries would not receive public utility services. A key advantage of this program is the protection of farmland, open space, and rural quality of life. Principle goals of the program are: use existing infrastructure rather than extend new utilities into rural areas; develop infill parcels before constructing on greenfield sites; and, keep municipal costs under control by not expanding infrastructure into greenfield areas. A more detailed description of urban services districts is provided later in this chapter.

Roads

The road system in Williamstown Township is an incomplete grid, and revenues for new road construction are limited. Under such circumstances, a compact development pattern is preferred so that limited road funds can be efficiently used and rural character can be retained where roads are not present.

Soils

There are two types of soils that are of particular significance with respect to the future land use plan: prime farmlands and soils that are suitable for septic systems. The boundaries between single family residential and agricultural lands, particularly in the north part of the Township, are based in part on the suitability of soils for the proposed uses. The Existing Land Use chapter of this plan examines agriculturally-suitable soils in greater detail.

Compatibility with Surrounding Communities

If the goal of compatibility with adjacent land uses is to be achieved, the land use plan must take into consideration adjacent land uses in other communities. The four surrounding Townships propose low density single family and agricultural uses along their borders with Williamstown Township. The City of Williamston proposes a mixture of multiple family, business, and industrial uses on the east and west sides of the City. The proposed land use plan for Williamstown Township is generally compatible with the adjacent land uses.

"Compatibility" with the City of Williamston has special significance, beyond mere compatibility of adjacent land uses. Township leaders have expressed a desire to provide for development that is not detrimental to Williamston. A land use pattern that would be most complimentary to Williamston would: 1) control residential and commercial sprawl, and 2) provide for intensive residential development in proximity to the City, thereby strengthening the market for existing City businesses.

"Natural" Borders Between Land Uses

A defensible plan demonstrates sound reasoning for boundaries between land uses. Accordingly, "natural" boundaries between land uses becomes important. In Williamstown Township, such natural boundaries include roads (e.g., Sherwood Road), the Red Cedar River, existing land use and lot patterns, and soil capabilities.

Environmental Concerns

One of the primary goals stated in the first chapter of this plan states that "preservation of natural features should be a prevailing objective in all future development." The Township must strive to protect the very features that give the community its appealing rural character, including woodlands and woodlots, wetlands, drainage courses, and rolling topography.

Ground and surface water impacts are important considerations in determining the future land use pattern, particularly in areas identified as water recharge areas. Protection of the quality and quantity of groundwater supplies is important because most Township residences are served by well water.

Protection of ground and surface water resources must address both land use patterns and operational features of land uses. In terms of land use patterns, the objective is to preserve the hydrologic cycle and the natural role of groundwater in replenishing surface waters. Addressing this objective requires assessment of the vulnerability and the impact of various land uses on groundwater resources:

- Studies have shown that urbanization typically increases pollutant export to surface and groundwater by at least an order of magnitude over predevelopment levels.
- Groundwater contamination is typically related to the storage, use and disposal of hazardous substances, including solvents, petroleum based products, and chemicals.
- If a land use activity is in an unsewered or on an unpaved area, the number of pathways of contamination is greater than when sewers are available.
- Land use activities that typically pose a threat to groundwater quality are most frequently
 classified as "industrial" or "commercial." Thus, in the interest of preserving groundwater
 quality, industrial and commercial uses should be located away from locations where
 groundwater vulnerability has been identified as a concern and toward areas that are served by
 sanitary sewers.
- Commercial agriculture operations often have under- or above-ground storage tanks containing petroleum products and/or chemicals. Consequently, commercial agriculture is a possible source of groundwater contamination.

The issue of groundwater vulnerability focuses on groundwater discharge and recharge areas. Groundwater discharge areas are typically the narrow areas close to lakes, streams and wetlands where there is a natural outflow of water from the saturated zone below. Groundwater recharge areas are locations where water moves from the surface into the saturated zone below, thereby replenishing the groundwater supply.

Theoretically, every area that is not a discharge area is a recharge area. However, some areas serve a more critical recharge function. According to the Ingham County Health Department maps, lands along the Red Cedar River and Coon Creek are recharge areas. The Future Land Use Map proposes a low density development pattern in these areas as a means of protection. New commercial and industrial development is located away from the recharge areas.

Groundwater protection must also address the operational features of land uses. Groundwater contamination is most frequently the result of leaking septic systems, improper floor drains, improper storage of hazardous substances, leaking underground storage tanks, above ground spills, overflowing tanks, condensation from air emissions, and improper waste disposal. Many of these avenues of contamination can be addressed in site plan review. Site plan applicants should be required to fully disclose locations of tanks, floor drains and connections, etc. and implement the best available technology to alleviate potential impact.

URBAN SERVICES DISTRICT

The Urban and Rural Service District/Urban Service Boundary (URSD/USB) Committee of the Tri-County Regional Planning Commission released the Tri-County Urban Service Management Study in March, 2011. The Study was prepared to implement the **2005 Regional Growth: Choices for Our Future** (Regional Growth Project), which promotes a sustainable and equitable regional land use pattern in the Tri-County region by establishing a boundary for an urban services district.

The Tri-County Regional Planning Commission adopted the recommendations of the Tri-County Urban Service Management Study on April 27, 2011. The report contained ten criteria for communities to use when planning for urban services district management. Following is a summary of the ten criteria:

- 1. Use existing and planned sewer and water infrastructure rather than allowing costly expansion into rural areas.
- 2. Plan development to make the best use of improved roads. Plan for distribution of the traffic in accordance with a road hierarchy, thereby making efficient use of the road network.
- 3. Promote connections between transportation systems so residents have options other than driving.
- 4. Direct development toward existing population centers.
- 5. Follow the guidelines and recommendations in the Master Plan and Zoning Ordinance
- 6. Direct development away from lands that have valuable natural resources or that are used for agriculture.
- 7. Concentrate growth close to support services, such as health, police and fire department services, to maintain efficiency, reduce costs, and improve safety.
- 8. Prepare a Capital Improvements Plan (CIP), which should include a list of improvements with costs that are necessary to achieve the vision set forth in the Master Plan.
- 9. Account for regional benefit factors, such as economic development projects and regional farmland preservation programs.
- 10. Account for existing and anticipated 425 Agreement² areas, where lands that have been conditionally transferred from one municipality to another for a designated amount of time in the interest of making efficient use of water and sewer services.

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A 425 Agreement is one that is created pursuant to Michigan Public Act 425 of 1984, the Intergovernmental Conditional Transfer of Property by Contract Act. This Act allows two or more municipalities to conditionally transfer property for the purpose of an economic development project.

Williamstown Township is implementing urban services management in two ways: through an Act 425 Agreement with the City of Williamston and through implementation of the Green Zone. In 2000, the Township and City executed an Act 425 Agreement covering land in the Township that is adjacent to the City. The land covered by the Agreement includes areas of potential service expansion and shared costs.

The urban services district shown on the Future Land Use Map is intended to accomplish the following objectives: 1) achieve efficient and cost-effective delivery of public services in the Township; 2) implement Smart Growth principles; 3) invest in infrastructure construction and maintenance based on proper planning consistent with projected population growth; 4) conserve natural resources; and 5) preserve rural open space.

Establishment of an urban services district is one of the primary methods of encouraging sustainable growth. The designation of the urban services boundaries was based on a thorough needs analysis using population projections and land supply. The analysis revealed there is sufficient developable land within the urban services district to satisfy the residential and non-residential needs in the foreseeable future. However, guidelines must be responsive to changing conditions; thus, the following policies are established to guide amendment to the urban services district boundary.

Urban Services District Amendment Policies

<u>Planning Commission Five-Year Review</u>. The Planning Commission shall review the urban services district boundary every five years concurrent with the Master Plan review that is required by the Michigan Planning Enabling Act. If the Planning Commission finds that it would serve the public interest to amend the urban services boundary it shall transmit a recommendation to the Township Board. In making their decisions, the Planning Commission and Township Board shall consider the ten criteria in the 2011 Tri-County Urban Service Management Study, as well as the following:

- Whether the amount of land included in the urban services district boundary will be sufficient to accommodate land uses projected for the ensuing 20 years.
- Whether the boundary should be revised based on changing demographic or economic projections.
- The ability of the Township to maintain acceptable levels of service and quality of life for existing and new residents.
- Whether proposed boundaries are along roads or other natural boundaries.
- The potential for development, based on analysis of soil types, vegetation, topography, availability of utilities, property lines, existing land use, and other land use determinants.

<u>Private Party Requests to Amend a Boundary.</u> Private property owners and developers may submit a request to the Township Board to amend the urban services district boundary. Prior to the Township Board making a decision, the Planning Commission shall evaluate the proposed amendment using the criteria for the Five-Year Review, after which the Commission shall make a recommendation to the Township Board. In making their decisions, the Planning Commission and Township Board shall consider the ten criteria in the 2011 Tri-County Urban Service Management Study, as well as the following:

- Location of the proposed expansion in relation to the existing urban services district.
- Documentation from the applicant that there are no sustainable development sites in the existing urban services district.
- Documentation of a compelling public health or safety issue for which the only solution is amending the urban services district boundary.
- The quality of life benefits compared to the economic burdens for the Township if the boundary is to be amended.

FUTURE LAND USE CONCEPT

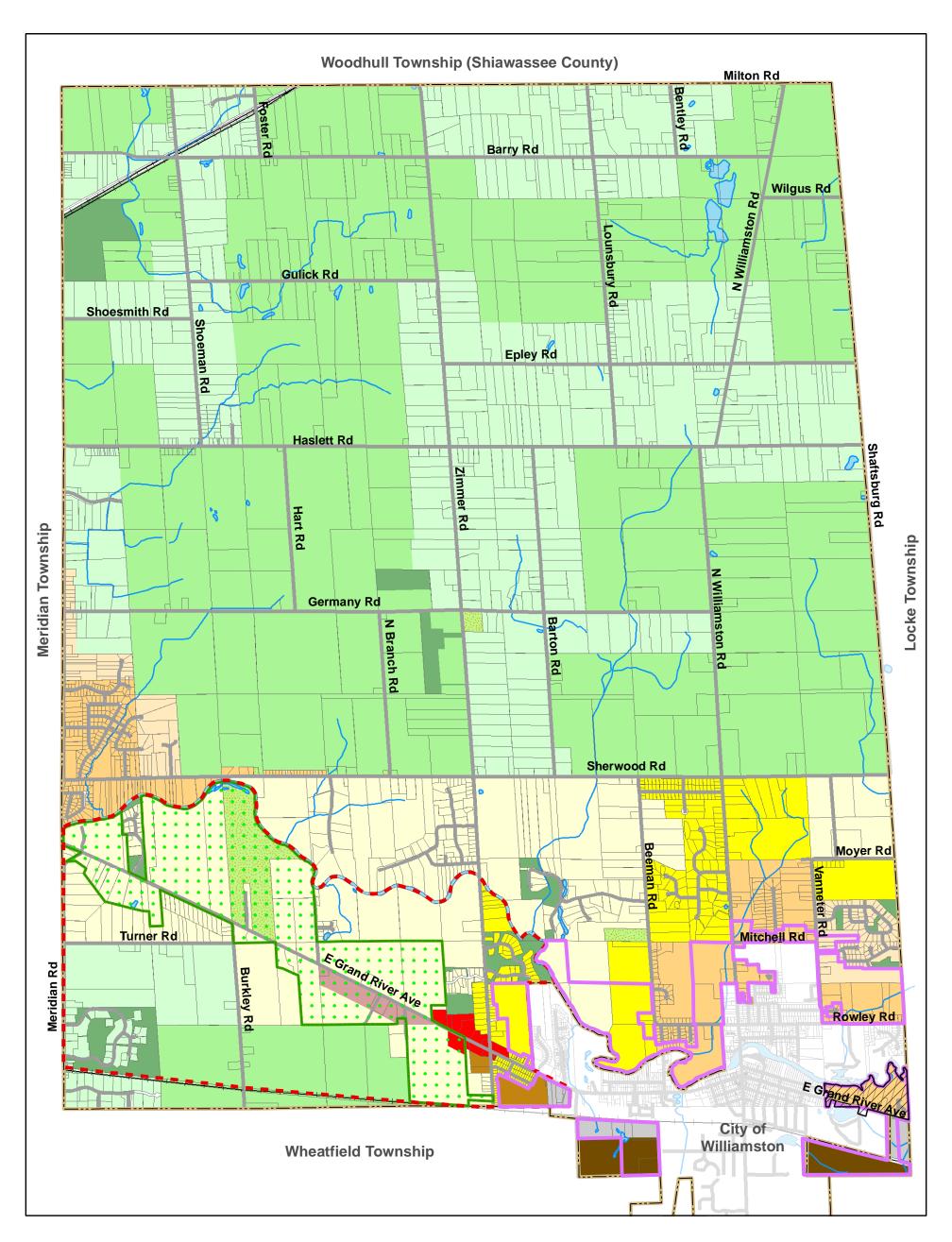
The basic concept for the Future Land Use Map (Map 14) is as follows:

- Intensive development is confined generally to the southern 1/3 of the Township, south of Sherwood Road. Development in this portion of the Township would: 1) be located close to commercial and public services in Meridian Township and Williamston, 2) benefit from a reasonably well developed road system, 3) minimize loss of agricultural lands, 4) maximize use of available public utility services, and 5) be compatible with land use in adjoining communities. An exception to this general pattern of more intensive development exists in the southwesterly portion of the Township, where large-scale agricultural uses are present.
- Maintain agricultural use of land north of Sherwood Road. This plan recognizes the presence of prime farmlands in the Township, and acknowledges and promotes current agricultural uses.
- The future land use map provides for two types of agricultural lands: "commercial" agricultural lands, and agricultural lands which have been encroached upon by residential development. Thus, the plan acknowledges previous land use decisions that have allowed some of the agricultural lands to be divided for residential use. The plan realistically acknowledges that it is not likely that these lands will be reassembled for future agricultural use. Hence, the need for a mixed agricultural/residential category.

Pursuant to the goals of maintaining agricultural lands and rural open space, it is essential that the Township adhere to zoning standards relating to lot area and lot width in portions of the Township designated Agriculture or Agriculture/Residential. Variances should not be used to undermine the primary goals of the master plan in these locations or elsewhere in the Township.

GRAND RIVER CORRIDOR PLAN

One of the most important and forward-thinking planning concepts set forth in the Master Plan is the Grand River Avenue Green Zone. The purpose of the Green Zone is to position the Township for development of such uses as: research and development, residential, parks and cultural institutions, continued farming, and small scale commercial. Development in the Green Zone could come about from spin-off businesses created because of work underway at Michigan State University. Development in the Green Zone is intended to excel in site design and building design quality. More complete descriptions of the Green Zone and Grand River Avenue issues are presented in the chapter titled Grand River Avenue Corridor Plan.



Map 14 Future Land Use

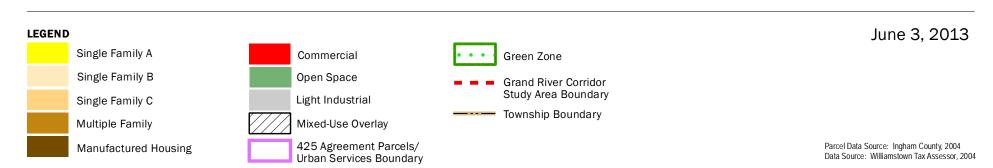
Williamstown Township, Ingham County, Michigan



2,000

4,000

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FUTURE LAND USE CATEGORIES

Land use categories displayed on the Future Land Use Map (Map 14) are described as follows:

Green Zone

The Green Zone is described previously in this chapter and in the Grand River Avenue Corridor Plan. The Statement of Purpose from the Green Zone Planned Development District provide a good summary of what this zone is intended to achieve:

"The Green Zone Planned Development District (the "Green Zone") is a diverse mixed use zoning district created to guide development of a portion of the Grand River corridor. Historically, land along Grand River Avenue, from approximately Zimmer Road to Meridian Road, has been used predominantly for agriculture. Historically, when agricultural uses cease, land transitions to rural open space. This transition provides opportunities for future development. By creating the Green Zone, the Township seeks more sustainable development than might be achieved under conventional zoning. Such development would be characterized by, for example, conservation of natural areas through compact design; preservation and use of native vegetation in landscaping; permeable paving; clearing and grading to minimize site disturbance; more narrow driving lanes; integrating bio-retention swales in parking lots, and similar measures. The regulations and standards that follow are intended to further the principles of sustainable development as applied to the Grand River corridor, with the overall goal of providing a quality living and working environment for residents and users of the district."

Agricultural Preservation

Lands designated for Agricultural Preservation have unique characteristics that make these lands suitable for continued agricultural uses. Lands designated Agricultural Preservation have a minimum lot area of 40 acres and generally have the following features:

- Prime farmlands or farmlands of local importance are prevalent (refer to the Prime Farmlands Map).
- Large acreage parcels are predominant and widespread lot split activity has not occurred.
- Lands are currently being used for agricultural purposes.

The preservation of significant portions of the Township for agricultural and open space uses is an important goal of this Master Plan. Williamstown Township contains lands that are particularly well suited for farming, as well as woodlands, wetlands, and open lands that contribute to the aesthetic and economic value of the community. These lands represent an irreplaceable and valuable resource, and if converted to residential or commercial use, an important community resource will be irrevocably lost.

Many of the same characteristics of the land that make it valuable for agricultural use also make it desirable for residential use. It is the policy of this Master Plan to preserve agricultural and open space lands designated for Agricultural Preservation in perpetuity. However, the Master Plan, Zoning Ordinance, and Subdivision Control Ordinance are not enough to dissuade speculative purchase of farmlands for future development, driving the cost of farmland beyond its value for agricultural use. These circumstances can result in agricultural disinvestment.

The most effective and least costly means of preserving agricultural land is zoning with a minimum lot size of 40 acres. Other programs that are sometimes used for agricultural preservation are Purchase of Development Rights (PDR) and Transfer of Development Rights (TDR). These programs require use of Township resources to implement, including financial resources (PDR) or administrative resources (TDR and PDR).

Open space zoning is another method to preserve open space, and, in some cases, agricultural lands. Open space zoning allows concentrated development on a portion of a parcel, with the requirement that the remainder of the parcel be preserved as open space or agricultural land in perpetuity. This method of agricultural preservation has an obvious downside – urbanization is required to achieve the desired agricultural preservation.

Agriculture/Residential

Certain lands are designated Agricultural/Residential to indicate their value as agricultural lands, and to also acknowledge previous lot split and residential development activity. Notwithstanding the residential development, continued use of these lands for agriculture is encouraged. The recommended minimum lot area for lands designated Agriculture/Residential is 10 acres, consistent with existing lot areas.

Rural Settlement

Certain lands south of Sherwood Road are designated Rural Settlement where large lot "Country Estate" residential development should occur, gradually replacing existing agricultural uses that are not consistent with large lot single family development. Activity of this type has already occurred, for example, along Rodeo Trail. The recommended minimum lot area for lands designated Rural Settlement is 5 acres.

Single Family

The Single Family land use category encompasses lands that have been or are expected to be developed exclusively for single family residential purposes, with no intervening agricultural land uses. Many areas designated Single Family have already experienced substantial subdivision development. The recommended minimum lot area in Single Family areas varies between 20,000 square feet and 2 acres.

<u>Single Family A</u> - The Single Family A land use designation is intended to permit large lot single family development in appropriate locations in the Township south of Sherwood Road. Areas planned for Single Family A include along Zimmer Road, and the area bounded by Williamston, Sherwood, Shaftsburg, and Moyer Roads. The minimum recommended lot area for lands designated Single Family A is 2 acres.

<u>Single Family B</u> - The Single Family B land use designation is intended to permit single family development in locations that are proximate to the City of Williamston. The minimum recommended lot area for lands designated Single Family B is 1 acre.

<u>Single Family C</u> - The Single Family C land use designation is intended to permit higher density single family development generally within a half-mile of the City of Williamston. The minimum recommended lot area for lands designated Single Family C is ½ acre.

Multiple Family

Multiple family areas are intended to permit up to 12 dwelling units per acre, and are located where there is access to commercial and public services including sanitary sewer service and public transit. Consequently, all Multiple Family areas are located in proximity to the Grand River Avenue corridor. There are also opportunities for multiple family development in areas designated for Manufactured Housing. Refer to the Manufactured Housing section below for details.

Manufactured Housing

Like multiple family uses, Manufactured Housing developments should be located where there is access to commercial and public services, including sanitary sewer service and public transit. Manufactured housing developments should meet the following locational criteria:

- 1. Manufactured housing developments should have a means of access to an arterial or collector road or a state highway.
- 2. Manufactured housing developments should have access to a public sanitary sewer system with adequate capacity or an approved community sanitary sewer treatment system.
- 3. Manufactured housing developments should be located within approximately one mile of retail business services in the City of Williamston.
- 4. Manufactured housing developments should be screened from adjacent conventional single family development. The screening may consist of abundant landscaping or a natural wooded buffer.
- 5. Manufactured housing development should not be located where it would result in cut-through traffic in existing residential neighborhoods.

Based on the above criteria and the goals and objectives in this plan, manufactured housing developments would be most appropriate on parcels of land in the existing sanitary sewer service area in the southern portion of the Township. There are two general areas on the Future Land Use Map where manufactured housing developments may be considered appropriate, depending upon the characteristics of the proposed project:

- South of the railroad right-of-way between the City of Williamston and Meech Road, in the southeast corner of the Township.
- South of the railroad right-of-way between Corwin Road and the City of Williamston, and southwest of the City of Williamston.

Commercial (Retail and Office)

The following criteria are applicable in determining where Commercial land should be located:

- New commercial development should be adjacent to existing development.
- Commercial development should be located where it is conveniently accessible (i.e. along a thoroughfare or at a crossroads).

- Commercial areas should be concentrated in nodes to prevent strip development.
- Commercial development in the Township should complement existing commercial facilities in the City of Williamston.

Based on these criteria, all Commercial areas are proposed along Grand River Avenue, consistent with the Grand River Avenue Corridor Analysis.

Mixed-Use Overlay

The Mixed Use Overlay land use designation is intended to:

- Allow a more intense development pattern and provide more development options and flexibility.
- Encourage redevelopment of properties.
- Encourage more intense development close to the City of Williamston where services are available.
- Encourage uses which complement existing uses in the City of Williamston.
- Provide pedestrian scale development.
- Promote development that reduces the number of daily vehicle trips required.

Based on these criteria, lands on the north side of Grand River Avenue to the east of the City of Williamston are designated for Mixed Use development in order to facilitate the redevelopment of these properties in a manner consistent with the existing character and development pattern found in the City of Williamston.

Industrial

Industrial land uses should be located where there is adequate public access, sufficient separation from adjoining lower-intensity uses, availability of adequate utilities, and access to an adequate information technology infrastructure. The Economic Analysis revealed that there are other areas in the region that are better able to accommodate the needs of modern industry. Consequently, the future land use map acknowledges existing industrial uses and provides for limited expansion adjacent to existing industrial areas, but does not provide for large scale industrial growth.

Public and Semi-Public

Public and Semi-Public land uses include the Township Hall, schools, churches, cemeteries, parks, and sites occupied by utilities (such as electric sub-stations). While only existing parks are shown on the Future Land Use Map as public and semi-public land uses, parks are appropriate in any zoning district.

Open Space

Lands designated for open space on the Future Land Use map are lands that have been permanently preserved. These lands include open space set aside as part of a subdivision, or lands upon which conservation easements are present or development rights have been ceded to the Township.

425 Agreement Parcels/Urban Services Boundary

The Township entered into a 425 agreement with the City of Williamston in June of 2000. The 425 agreement permits properties located within the boundaries of the agreement area to receive sanitary sewer and other public services (such as public water distribution, leaf pickup, and road maintenance) from the City of Williamston. The agreement is valid for 50 years from the date it was enacted, and may be renewed by written agreement of both municipalities.

It is the intent of the Master Plan that only properties located within the boundaries of the 425 agreement receive services such as public sanitary sewer and water. It is the intent of this Plan that properties located outside of the agreement area generally not be permitted to connect to a public water or sewer system.

IMPLEMENTATION

OVERVIEW

This chapter presents tools and techniques that citizens, community leaders, and Township staff can use to implement the recommendations of the Master Plan. These implementation measures are workable if there are people in the community with vision and tenacity and are willing to invest the time and effort required to make them work. Community improvement requires a compelling vision; persistence; the flexibility needed to respond to changing needs, opportunities, and circumstances; and an ability to achieve consensus.

The following sections outline Planning and Development, Regulation and Ordinances, Farmland and Open Space, and Economic Development tools and techniques that may be used to implement the recommendations of the Plan.

PLANNING AND DEVELOPMENT

- Review the Master Plan Every 5 Years. The Master Plan and other Township plans are not
 intended to be static plans. Therefore, it is important that the Planning Commission
 periodically review the Master Plan and other Township plans to ensure that they are still
 relevant and reflect the vision of the community. The Master Plan must be reviewed every 5
 years pursuant to the Michigan Planning Enabling Act.
- Update the Parks and Recreation Master Plan. In order to qualify for MDNR community recreation grants, the Township's Parks and Recreation Master Plan must be updated every 5 years. The Township's current Parks and Recreation Master Plan is more than 5 years old, so it must be updated. In addition to qualifying the Township for grants, a Parks and Recreation Master Plan provides guidance to the Parks and Recreation Committee and Township Board.
- Seek Funding to Implement the Trails and Greenways Plan. Implementation of the Trails and Greenways Plan requires the identification of priority segments and the search for funding.
 Successful funding programs look not only at conventional public sector sources (such as MDNR grants), but also private sector sources, such as businesses in or near the township, foundations, homeowers, etc.
- **Prepare a Capital Improvements Program.** The Planning Enabling Act states that the "planning commission, after adoption of a master plan, shall annually prepare a capital improvements program of public structures and improvements." The Planning Commission should work with the Township Supervisor to prepare this document.
- Open Space Conservation. The Township should continue to encourage the conservation of open space through easements, land donations, open space subdivisions, and flexible development options in the Zoning Ordinance.

REGULATIONS AND ORDINANCES

- Prepare and Adopt a Tree Protection Ordinance. Trees and woodlands are defining
 characteristics of Williamstown Township. They contribute to the Township's natural beauty
 and irreplaceable natural heritage. On a more practical level, trees and woodlands help
 prevent soil erosion and flooding, absorb air contamination, and reduce noise transmission.
 Given the value trees provide to the community, it is wise to adopt a tree protection ordinance
 to prevent indiscriminate cutting of trees and woodlands.
- Groundwater Protection Regulations. Develop controls of certain land uses in the interest of
 protecting groundwater recharge areas. In order to accomplish this goal, it is necessary to
 begin building a database to obtain an understanding of groundwater flows, potential sources of
 contamination, and vulnerability to hazards.
- **Update to Zoning Ordinance.** The Zoning Ordinance was recently totally re-written, so few amendments are foreseen. However, new land uses laws are enacted at the state level on a regular basis and it is important to incorporate appropriate amendments into the Zoning Ordinance.

FARMLAND AND OPEN SPACE PRESERVATION

- Maintain 40-Acre Zoning. The most effective and economical means of preserving agricultural land is with a minimum lot size of 40 acres. Accordingly, the Township should maintain this minimum in the AG-C, Commercial-Agricultural district.
- Michigan Agricultural Preservation Fund. The Michigan Agricultural Preservation Fund
 (MAPF) provides grants to local governments for the purpose of purchasing agricultural
 conservation easements through Purchase of Development Rights (PDR) programs. The MAPF
 is funded by the proceeds from the payback of property tax credit benefits when Farmland
 Development Rights Agreements (PA 116 contracts) are terminated, and from proceeds from
 the Agricultural Recapture Act (PA 261 of 2000).

The Agricultural Preservation Fund Board administers grant monies offered through the MAPF, and has established selection criteria. The criteria place a priority on farmland that has one or more of the following characteristics:

- Farmland that has a productive capacity suited for the production of feed, food and fiber.
- Farmland that would compliment and is part of a long-range plan for land preservation by the local unit of government in which the farmland is located.
- Farmland located in an area that would compliment other land protection efforts by creating a block of protected farmland.

- Farmland that has a greater portion or percentage of the agricultural easement value provided by the local unit of government or sources other than the Fund.

Grant applications are submitted by eligible local units of government. In order to be eligible for grant monies, the Township must have an adopted development rights ordinance providing for a PDR program, and have adopted a comprehensive land use plan that includes an agricultural preservation element within the last 10 years. The Future Land Use chapter of this Master Plan was developed with agricultural preservation as a key goal.

• State of Michigan Farmland and Open Space Preservation Program (PA 116). Public Act 116 of 1974 allows farmers to enroll into a limited contract, a farmland development rights agreement, with the state to keep their land in agricultural use. In exchange for enrollment farmers are allowed special tax breaks, in the form of exemptions from special assessments and a 3.5% tax credit through their state income tax to relief the some of the burden of their property tax payments. The Township should encourage eligible landowners to participate in the program.

ECONOMIC DEVELOPMENT

• Promote the Green Zone. An economic development committee should be established to promote the Green Zone. Such action would demonstrate the Township's belief in and support of the Green Zoning concept. The economic development committee would be charged with identifying businesses that might consider locating in the Green Zone, determining the businesses' development needs, and preparing promotional material to target such business. The economic development committee could also investigate legislative and financing tools (such as the Corridor Improvement Act) to help it accomplish its goals.

INFORMATION AND EDUCATION

The success of the Master Plan depends to a great extent on efforts to inform citizens about the Plan and the possible need for regulatory measures to implement the Plan. Successful implementation requires the support and active participation of residents, property owners, and business owners. A thoughtfully prepared public education program is needed.

For example, citizens should be made aware of the need to protect groundwater recharge areas, endangered ecosystems, and unique or sensitive environmental areas. They must be informed about voluntary and regulatory methods of assuring protection of these areas. Efforts should be made to identify the benefits to be achieved from new regulations.

Similar educational programs are recommended as an integral part of other aspects the implementation plan. Educational programs should generally precede establishment of new regulations.

REGIONAL PLANNING

- Regional Planning. As the Township has learned the past several years, there is much to be
 gained by working with regional planning agencies, such as the Tri-County Regional Planning
 Commission (TCRPC). The Township should continue to work with regional agencies on
 subjects of mutual interest that would lead to the betterment of the community.
- Continue to Work with the Ingham County Development of Transportation and Roads (ICDTR). The condition of roads, which are under the jurisdiction of ICDTR, is one of the most troublesome issues facing Township leaders. Township funds are not sufficient to make much of an impact on maintenance of the Township's road system. Consequently, it is necessary to maintain ongoing contact and good relations with the ICDTR, so that William Township will be given consideration as funding programs become available.
- Cooperation between Units of Government. Maximum impact is achieved when the
 Township is able to achieve cooperation from other units of government. The benefits of
 cooperation are readily apparent in the cooperative venture the established the Northeast
 Ingham Emergency Services Authority (NIESA), and the cooperative police services arrangement
 involving Meridian and Williamstown Townships.

LAND ACQUISITION

Land acquisition is an important supplement to land use regulations as a means of managing growth and protecting natural resources. Land acquisition can be used to control the use of a specific acquired parcel, or it can be used to influence the general growth of the Township.

Local land acquisition programs can be funded primarily by local property taxes (such as a dedicated millage or general fund revenues) or by grant programs. For example, the Township could use grant programs sponsored by the Michigan Department of Natural Resources to acquire park land and open space throughout the Township.

There are several approaches to acquiring interest in land to advance the goals of the Master Plan. Generally, the Township can take direct action to acquire property interest or it can rely on private voluntary land protection efforts.

<u>Direct Action by the Township</u>. If the Township takes direct action, it can acquire property in fee simple or it can acquire a partial interest through acquisition of easements. Fee simple acquisition provides the greatest level of control over the use of a parcel, but it also is the most expensive method of acquisition. In addition to the acquisition costs, fee simple acquisition removes property from the tax rolls, resulting in a decrease in property tax revenue.

Easements are distinct property rights that may be sold separately from other rights to the Township. Easements are effective for preserving sensitive lands, providing public access along drains or greenways, and allowing property owners to obtain income, estate, and property tax benefits for land stewardship while they continue to live on their land.

There are two Michigan statutes that address the issue of conservation easements. The Farmland and Open Space Preservation Act (Part 361 of Public Act 451 of 1994, commonly known as "Act 116") provides for dedication of an easement to a public entity, such as the Township or State. The Conservation and Historic Preservation Easement Act (Subpart II of Public Act 451 of 1994) gives a third party, such as a land trust, the right to enforce an easement. This act assumes that the easement will be perpetual.

<u>Private Voluntary Land Protection Efforts.</u> Instead of taking direct action, the Township can encourage and rely on private voluntary land protection efforts. The term "voluntary" has two meanings in this context:

- Property owners can voluntarily donate land or easements in the interest of conserving natural resources or natural features.
- To facilitate the natural resource protection program, private land trusts can be voluntarily
 established to make use of a variety of land acquisition and conservation techniques. Land
 trusts typically rely on fee simple acquisition and acquisition of easements.

Other than acquisition at full market value, private tools available to preserve land include:

- Donation of land or bargain sale (acquisition at below full market value),
- Options to buy (often used to secure a parcel of land while funding is being obtained),
- Rights-of-first-refusal (used to tie up a parcel without having to purchase it immediately),
- Leases (temporary control without the expense of acquisition),
- Pre-acquisition by a land trust (the land trust serves as the intermediary for the public agency, such as the Township), and
- Conservation investment (in essence, a real estate syndication for the purpose of resource protection).

Following are more detailed descriptions of the land preservation techniques described above.

Land Conservancy Activities

Transactions between a landowner and the Township can occur between a landowner and a private land conservancy organization, such as The Nature Conservancy, the American Farmland Trust, or the Trust for Public Land. The conservancy organization would then either manage the land itself or convey it, at some future date, to the Township when public funds become available.

<u>Private donations of land to the Township or a conservancy organization</u>. Landowners are sometimes willing simply to donate land to the Township or a conservancy for open space or natural area preservation purposes. The landowner has the satisfaction of seeing the parcel of land preserved, and also may obtain some benefits on income taxes, estate taxes, and property taxes. The Township obtains the benefit of preserving the land.

Private donations of conservation easements to the Township or a conservancy organization. Landowners are sometimes willing to donate a conservation easement on a parcel of land, which involves the transfer to the Township or a conservancy of a partial interest in a parcel of land for the purpose of preserving its natural amenities. The landowner might retain the right to continue to occupy the land, for example, but the right to use it for particular uses (e.g., to build houses on it or change its scenic character) has been donated to the government. The landowner would have the satisfaction of seeing the parcel of land preserved, and may also obtain some benefits on income taxes, estate taxes, and property taxes. The Township obtains the benefit of preserving the land, and avoids some of the costs of maintaining the property.

<u>Private donation of land to the Township or a conservancy organization, with the right to use the land until the donor's death</u>. A landowner sometimes wants to retain full title to a parcel of land and be able to continue to use it, until his or her death, but wishes to have the land transferred to the Township or conservancy organization at that time (or some other specified time). The landowner can thereby gain some tax benefits, but continue to use the land until his or her death.

Township or conservancy purchase of conservation easements. A landowner may not be willing to donate a conservation easement, but may be willing to sell such an easement to the Township or conservancy. The landowner might retain the right to continue to occupy the land, for example, but the right to use it for particular uses (e.g., to build houses on it or change its scenic character) has been sold to the Township or conservancy. The landowner would receive some payment for the easement, and may obtain some benefits on estate taxes and property taxes. This alternative would cost the Township or conservancy some revenue, but the cost would be less than the purchase of all the rights to the land.

<u>Leasing of land</u>. A landowner may not wish to lose permanent title to a parcel of land, but may be willing to lease it to the Township or conservancy for public use for a specified period of time.

<u>Placement of private land under the protection of the Farmland and Open Space Preservation Act or the Conservation and Historic Preservation Easement Act</u>. These two state laws can be used by private citizens and local government to protect land for specified periods of time. The landowner can thereby reduce the property taxes on the land, and the government gains the benefit of maintaining the land as open space.

Impact of Land Conservancy Activities

Since the late 1990's, several Planned Developments have been approved that have been designed as open space communities, with smaller lots clustered on the most buildable portions of the sites, leaving substantial amounts of open space. In some cases, a conservation easement over the open space has been dedicated to a conservancy, which has assumed responsibility for monitoring the open space. In other instances, a homeowners association is responsible for monitoring the open space.

As more open space is added to the system, attention will be focused on connectivity of the open space, which is essential to preserving wildlife corridors and creating recognizable greenbelts through the community.

ZONING PLAN

Section 33 of the Michigan Planning Enabling Act (Public Act 33 of 2008, as amended) calls for preparation of a zoning plan that "shall include an explanation of how the land use categories on the future land use map relate to the districts on the zoning map."

In Williamstown Township, the Zoning Map and Future Land Use Map convey the same general land use strategy, with the understanding that the Future Land Use Map is a visionary document, while the Zoning Map deals with practical day-to-day issues. Generally, both maps confine intensive development to the southern 1/3 of the Township, south of Sherwood Road. An exception to this pattern exists in the southwesterly portion of the Township, where large-scale agricultural uses are present.

Both maps promote agricultural use of land north of Sherwood Road. The presence of prime farmlands is highlighted through land use designations and zoning classifications on the two maps. The Future Land Use Map and Zoning Map provide for two types of agricultural lands: "commercial" agricultural lands, and agricultural lands that have been encroached on by residential development. Thus, the two maps acknowledge previous land use decisions that have allowed some of the agricultural lands to be divided for residential use.

All nonresidential development in the Township is located along the Grand River Avenue corridor. This is reflected on both the Land Use Map and Zoning Map, with the primary node of existing commercial development located near the intersection of Grand River Avenue and Zimmer Road. Of greatest significance, the Green Zone occupies most of the land fronting on Grand River Avenue, between Meridian Road and Zimmer Road.

The following table summarizes the relationship between the Future Land Use Map and the Zoning Map:

Future Land Use Classification	Corresponding Zoning District(s)
Agricultural Preserve	AG-C, Commercial Agriculture
Agricultural/Preservation	AG-SF, Agricultural Small Farms
Rural Settlement	RE, Rural Estates
Single Family A	RR, Rural Residential
Single Family B	R-1-S, Suburban Residential
Single Family C	R-1, One Family Residential
Multiple Family	RM-1, Multiple Family Residential
Manufactured Housing	Mobile Home Park
Commercial	B-1, Limited Business and B-2, Commercial Center
Research/Technology	OS-1, Office Service
Industrial	I-1, Light Industrial
Public/Semi-Public	AG-C, Commercial Agriculture, AG-SF, Agricultural Small Farms, and others
Open Space	Conservation Easement
Mixed Use Overlay	Corresponding District does not appear on Zoning Map
Green Zone	GD, Green Zone Planned Development District

WILLIAMSTOWN TOWNSHIP INGHAM COUNTY, MICHIGAN

RESOLUTION OF THE PLANNING COMMISSION ADOPTING THE MASTER PLAN AND FUTURE LAND USE MAP

At a regular meeting of the Planning Commission of the Williamstown Township, Ingham County, Michigan, held on September 17, 2013, at 7:30 p.m. prevailing local time.

PRESENT: LaMore, Giese, Eidt, Schultink, Brown Timm, Davis, Williams, DeShon

ABSENT: None

The following Preamble and Resolution were offered by Commissioner <u>DeShon</u> and supported by Commissioner <u>Schultink</u>:

WHEREAS, the Williamstown Township Planning Commission, pursuant to the Michigan Planning Enabling Act (Public Act 33 of 2008, as amended), has studied and prepared recommendations for the development of the Township; and

WHEREAS, the Planning Commission has developed a Master Plan consisting of research and analyses dealing with land use, demographics, retail and office uses, Grand River Avenue corridor development, industrial development, transportation, community facilities, recreation, and other pertinent topics; and

WHEREAS, the Planning Commission has used the Master Plan analyses to prepare a Future Land Use Map that allocates land in appropriate amounts for the future development of residential uses, commercial and office uses, industrial uses, mixed use, and public uses; and

WHEREAS, the Master Plan incorporates ideas from the Green Zone Planned Development zoning district, which will promote the development of a pedestrian oriented, mixed-use, and environmentally sensitive district along Grand River Avenue; and

WHEREAS, the Planning Commission held a public hearing on September 17, 2013, and considered all comments and concerns of the public; and

WHEREAS, the Planning Commission recognizes that the Master Plan and Future Land Use Map are flexible guides for public and private decision-making that will keep the Township in motion toward its vision to maintain outstanding quality of life for all residents.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of Williamstown Township hereby adopts the Master Plan and Future Land Use Map, subject to the addition of language about Natural Beauty Roads in the Transportation chapter, and resolves to use the Plan and Map together a guide to the overall development of the Township.

AYES:

LaMore, Giese, Eidt, Schultink, Brown Timm, Davis, DeShon

NAYS:

None

ABSTAIN:

Williams

RESOLUTION DECLARED ADOPTED

I hereby certify that the foregoing is a true and complete copy of a resolution adopted by the Planning Commission of Williamstown Township, Ingham County, Michigan, at a regular meeting held on September 17, 2013.

Erme Gaffner, Township Clerk

Date

Rex LaMore, Planning Commission Chairman

9-24-13 Date

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WILLIAMSTOWN TOWNSHIP INGHAM COUNTY, MICHIGAN RESOLUTION #105

RESOLUTION OF THE BOARD OF TRUSTEES ADOPTING THE MASTER PLAN AND FUTURE LAND USE MAP

At a regular meeting of the Board of Trustees of Williamstown Township, Ingham County, Michigan, held on December 11, 2013, at 7:00 p.m. prevailing local time.

PRESENT:

Trustee Imhoff, Trustee Eyster, Trustee Hayes, Treasurer Fielek and Clerk Gaffner

ABSENT:

Trustee Williams

The following Preamble and Resolution were offered by Trustee Eyster and supported by Trustee Hayes:

WHEREAS, the Williamstown Township Planning Commission, pursuant to the Michigan Planning Enabling Act (Public Act 33 of 2008, as amended), has studied and prepared recommendations for the development of the Township; and

WHEREAS, the Planning Commission has developed a Master Plan consisting of research and analyses dealing with land use, demographics, retail and office uses, Grand RiverAvenue corridor development, industrial development, transportation, community facilities, recreation, and other pertinent topics; and

WHEREAS, the Planning Commission has used the Master Plan analyses to prepare a Future Land Use Map that allocates land in appropriate amounts for the future development of residential uses, commercial and office uses, industrial uses, mixed use, and public uses; and

WHEREAS, the Master Plan incorporates ideas from the Green Zone Planned Development zoning district, which will promote the development of a pedestrian oriented, mixed-use, and environmentally sensitive district along Grand River Avenue; and

WHEREAS, the Planning Commission held a public hearing on September 17, 2013, and considered all comments and concerns of the public; and

WHEREAS, the Planning Commission recognizes that the Master Plan and Future Land Use Map are flexible guides for public and private decision-making that will keep the Township in motion toward its vision to maintain outstanding quality of life for all residents.

WHEREAS, the Planning Commission adopted the Master Plan and forwarded it the Board of Trustees for review and consideration, subject to the addition of the following text at the end of the Transportation chapter of the Plan:

Balance Natural Resources and Road Interests. Williamstown Township is a community
with incomparable natural resources and beauty, characterized by gently rolling terrain,
fertile agricultural lands, and mature trees and woods. These features enhance many

Township roads, with trees that arch over the roads, creating attractive canopies and providing the setting for scenic vistas of farmlands, wooded areas, wetlands and other natural areas. Even roads that exhibit these features serve essential transportation functions, though, carrying vehicular traffic, bicyclists, and agricultural machinery.

It is important to seek a favorable balance between these seemingly competing interests, particularly when roads are slated for maintenance or reconstruction. Every effort must be made to protect the natural beauty of the Township as experienced along the roads, while recognizing the likelihood of some change when maintenance or reconstruction occurs.

NOW, THEREFORE, BE IT RESOLVED that the Board of Trustees of Williamstown Township hereby adopts the Master Plan and Future Land Use Map, subject to the addition of the text noted herein at the end of the Transportation chapter, based on the recommendation of the Planning Commission, and resolves to use the Plan and Map together a guide to the overall development of the Township.

AYES:

Trustee Eyster, Trustee Hayes, Treasurer Fielek and Clerk Gaffner

NAYS:

Trustee Imhoff

ABSTAIN:

None

ABSENT:

Trustee Williams

RESOLUTION DECLARED ADOPTED

I hereby certify that the foregoing is a true and complete copy of a resolution adopted by the Board of Trustees of Williamstown Township, Ingham County, Michigan, at a regular meeting held on December 11, 2013.

Ernie Gaffner, Township Clerk

12/11/2013

Date

STAFF ACKNOWLEDGEMENTS

COMMUNITY PLANNING CONSULTANT

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Sabah Aboody-Keer	Senior Urban Designer