

**LAND USE PLAN MAP DESCRIPTION**

The following text describes the Future Land Use Map, including a general description of each land use category and the general locations recommended for each type of land use. It is important to emphasize that the land use categories used in this Plan are purposefully broad. The plan's intent is to communicate that development, within the category descriptions, will be consistent with the Plan's adopted Goals, Objectives and Policies.

One major premise of this Plan is that areas recommended for development should be provided with the full range of urban services within the planning period. In order for such services to be provided efficiently and economically, it is essential that development be concentrated in reasonably compact areas. Compact development makes maximum use of costly infrastructure (i.e., sewer facilities, water system, streets, etc.), much of which is already in place. Such compact development also keeps to a minimum those costs that are directly related to the distance that must be traveled by service personnel (i.e., police and fire personnel, waste collection crews, street maintenance and street cleaning crews, school buses, etc.). Inherent in this premise is the expectation that timing of improvements be carefully coordinated with development so that all necessary services are available when new development occurs.

Table XX identifies the approximate proportion (using GIS) of land designated to each land use category. Agricultural uses make up 34% of the land, residential uses make up 38%, non-residential makeup 20% and public and semi-public uses (including recreation) make up 9%.

Table XX

<b>Future Land Use</b>	<b>Acres</b>	<b>Percent of Total</b>
Agricultural	4,381	34%
Agricultural Estate	1,883	15%
Rural Estate Residential	81	1%
Low Density Residential	1528	12%
Planned Low Density Residential	846	7%
Suburban Residential	381	3%
General Business	118	1%
Mixed Use	202	2%
Industrial	1282	10%
Gravel Excavation	585	5%
Office/Technology	303	2%
Public/Private Recreation	917	7%
Public/Semi Public	300	2%

**Agricultural Uses**

Effort should be made to plan for the stabilization of those areas which might be best retained in their rural-like character promoting their value as agricultural resources and/or adequate land reserves for the future. This category is not intended to restrict agricultural development or rural-character residential development.

**AGRICULTURAL** - Land that is most suitable for cultivation of crops, the raising of livestock, or other types of related bona fide farm uses. This classification includes those areas which are, and will continue to be, used primarily for agricultural pursuits and held in reserve for future development. Within the Agriculture area, residential development should be limited to a density of one unit per 20 gross acres. Within the Agriculture area, land management activities associated with agricultural uses may be incompatible with residential development; however, such management activities are considered to be of primary importance in the Agricultural classification.

The northern portion of the township, generally, is identified for Agricultural use. Much of this area is currently farmed and is characterized by flat land and good soils. The transportation system in these areas is largely local streets, which meet the needs of the low density population. The extension of SR 63 in the northeastern portion of the Township may provide access for additional development opportunities, should that project come to fruition. As discussed in the Transportation Chapter of this plan, this project is still pending because of funding limitations, and there is continual concern about the potential disappearance of the proposed corridor due to development. Should additional development take place in this area, right-of-way preservation should be a top priority in order to maintain the proposed roadway alignment for the future.

Some additional areas of Agricultural use exist along the east side of Elkton, along Morganthaler Road and the west side of Gephart Road and in the southernmost portion of the Township along Smith and Goos Road. There is a large area of Agricultural land east of 3<sup>rd</sup> street that is almost completely within the floodplain area.

### **Residential Development Types**

Several differing residential densities are presented on the land use plan map. It is not the intention of this Plan to automatically allow development to occur at the upper end of the density ranges. Rather, the density of development should be controlled by the recommended density range and the availability of public facilities, water, sewer and transportation.

The density of development, permitted within a given residential zoning district of a city's zoning ordinance, should be within the broad density ranges identified in this Plan Update. Density is intended to be the major control of residential development; therefore, concepts such as "Cluster Type Development", "Conservation Subdivision Design" are strongly encouraged. Such concepts promote flexible and innovative design, making the best use of existing landforms, and preserving and integrating natural areas into such designs.

It is important to note that the amount of undeveloped land recommended for residential use is anticipated to be more than is needed during the planning period. Thus, it is evident that development can, and should, be phased to make the most efficient use of the existing infrastructure (e.g., streets, utilities, community facilities) and to provide for orderly growth. Proper phasing of development will also contribute to efforts to conserve energy and enhance air quality -- again realizing sustainable development and Smart Growth objectives (e.g., shortening trips to work, shopping, etc.) while striving for the most efficient use of taxpayer's dollars.

***AGRICULTURAL ESTATE*** - Areas so designated include land that is primarily residential in character, which may contain some agricultural uses in a limited fashion on lots greater than ten (10) gross acres in size.

The largest area recommended for this future land use is located in the western portion of the Township, generally north of Beissinger Road, and south of Warwick Road, west of Elkton Road. This area is characterized by slopes of greater than 15%. There are also areas of floodplain wetlands and wetland soils in this location along Four Mile Creek. Several smaller tributaries also exist in this area. Considerations for developing sites in this location should include these factors and minimize the impact on slopes and watercourses as appropriate. This majority of the streets serving this area are identified as local streets. Eaton Road is identified as a major collector – rural. Roadways in this area have a level of service (LOS) A or B. Roadway capacity exists in this area, but as additional development occurs they may need capacity improvements to keep current levels of service.

A small area in the central part of the township south of Morgenthaler Road and north of Riverside Drive is also recommended for Agricultural Estate use. This area is largely served by local streets. In this area Riverside Drive is identified as a minor arterial – rural. Roadways in this area have a level of service A or B.

Another small area recommended for Agricultural Estate use is in the central part of township between Trenton Road to the north and Riverside Drive to the south. Local streets are to the west. Trenton Road is identified as a minor arterial – urban and has a level of service B. Riverside Drive is identified as a collector – urban and has a level of service A. There are some water bodies located in this area that should be considered if the area is redeveloped.

In the southernmost part of the Township south of Pyramid Hill Sculpture Park another area is identified for Agricultural Estate, reflecting existing uses. The majority of this area is characterized with slopes greater than 15%. Some small water bodies are also located in this area, which is adjacent to the floodplain of the Great Miami River. These characteristics should be considered if the area is ever redeveloped. Hamilton Cleves Road serves this area and is identified as a major collector – rural. This roadway has a level of service B in this area, however to the north has a level of service D. Additional development in this area may necessitate offsite roadway improvements.

***RURAL ESTATE RESIDENTIAL*** - Areas so designated consist of single-family residential development, with lot sizes ranging from five (5) acres to ten (10) gross acres in size.

Some areas of Rural Residential Estate development exists in the southernmost part of the township both north and south of Pyramid Hill Sculpture Park. These areas are characterized by some steep slopes and are served by local roadways.

Existing rural estate residential development exists along the north side of Morgenthaler Road east of Jacksonburg Road. Morgenthaler Road is a local street and Jacksonburg Road is identified as a major collector. Both are level of service A.

***LOW DENSITY RESIDENTIAL*** - Areas so designated include single-family residential uses, with lot sizes ranging from one (1) acre to five (5) gross acres in size.

A large area in the southeast corner of the Township is identified as Low Density Residential. This includes some existing development and some additional areas for potential development. The southern portion of this area is in the floodplain along the Great Miami River. The area is accessed by Augspurger Road, which is identified as a minor collector - rural, and Gephart Road, a local street, both with levels of service A. Wayne Madison Road also serves this area. It is identified as a major collector - rural with level of service C.

Areas of Low Density Residential development currently exist in the southwest part of the township along the north side of Beissinger Road and along the frontage of a portion of Elkton Road. There are steep slopes of 15% or greater in this area. Biessinger Road and Elkton Road are both local streets with level of service A. Other small pockets of Low Density Residential areas exist along Trenton Road and Riverside Drive, along Jackson Road and Morgenthaler Road Northern, along Jacksonburg Road, along Taylor School Road in the central area of the Township east of seven mile, portions along Smith Road in the southernmost tip of township, and along Elkton Road and Grandview Drive. Streets serving these areas have levels of service A and B.

Additional areas recommended for Low Density Residential uses are located along Eaton Road in the southwest corner of the Township. Some low density residential uses currently exist in the area. Eaton Road is a two lane major collector – rural. Connectivity within developments along this road should be required, both to the north and internally, limiting the use of cul-de-sacs when possible. Access management techniques along Eaton Road will help to maintain good levels of service and ensure safety. Existing higher density development exists to the west outside of the Township.

***PLANNED RESIDENTIAL*** - Areas so designated include residential development that preserves natural features and takes advantage of shared amenities including: vehicle and pedestrian access, landscaping, open spaces and communal facilities.

Areas along the south side of Beissinger Road are recommended for Planned Residential Uses. These areas should be an extension of the development to the south in the City of Hamilton and should be respectful of the natural features in the area. The use of conservation development in this area is recommended, and should be permitted in the zoning ordinance as a by-right development type. This area is characterized by steep slopes, and contains some small tributaries leading to Two Mile Run and the Great Miami River. Transportation access is along Beissinger Road, which is currently a two lane local roadway with a level of service A. As this area develops additional capacity may be needed. Connectivity within developments along this road should be required, both to the south and internally, limiting the use of cul-de-sacs when possible. Access management techniques along Beissinger Road will help to maintain good levels of service and ensure safety.

Areas along the eastern side of Elkton Road extending to the Great Miami River are also

recommended for Planned Residential uses due to the topography and existing floodplain in the area. Using conservation development in this area would help to preserve these natural features. Parcels in this area are largely land locked, located behind existing development along the frontage of Elkton Road. Therefore, some redevelopment and coordination of uses will have to occur to provide proper access to the area. Elkton Road is a two lane local street in this area with a level of service A. As this area develops additional capacity may be needed. Connectivity within developments along this road should be required, limiting the use of cul-de-sacs when possible. Access management techniques along Elkton Road will help to maintain good levels of service and ensure safety.

Areas north of existing low density residential development along Elkton Road north of Grandview Drive are identified for Planned Residential Development. This land is adjacent to the floodplain of the Great Miami River. Elkton Road is a local street with level of service A. The street system may need additional improvements to serve new development and maintain good levels of service. Connectivity within developments along this road should be required, both to the north and internally, limiting the use of cul-de-sacs when possible. Access management techniques along Elkton Road will help to maintain good levels of service and ensure safety.

***SUBURBAN RESIDENTIAL*** - Areas so designated include single-family residential uses at a density of one (1) to four (4) homes per gross acre that are generally provided with higher levels of urban services.

Areas identified for Suburban Residential uses in this plan are for the most part existing development areas in Williamsdale, Cedar Grove and Sharon Park subdivisions. The single area identified for new Suburban Residential growth is just south of Sharon Park along Hamilton Cleves Road. Much of this area is located in the floodplain of the Great Miami River. Conservation development techniques should be used in this area. Connectivity within developments in this area should be required, both to the north and internally, limiting the use of cul-de-sacs when possible. Access management techniques along Hamilton Cleves Road will help to maintain good levels of service and ensure safety. Hamilton Cleves Road has a level of service D in this area and additional development may increase congestion without remediation.

### **Non-Residential Uses**

Non-residential land uses, including business and industry are integral to the tax base of a community. This plan identifies these uses on the land use map and intends to balance growth in population with growth in employment opportunities. This balance will ultimately give residents a chance to live, work, shop and recreate in the same community, thereby reducing travel time. Land uses in these categories include retail, office, industrial and providing a mix of uses (which may also include residential in some cases).

One of the most important aspects of identifying areas for industrial development is to ensure that such areas are adequately regulated to prevent intrusion of incompatible land uses. Such incompatible land uses, primarily residential land uses, tend to develop at a much more rapid pace. Once in place, development of adjoining or nearby industrial land becomes undesirable to

the new residents. Scarcity of industrial land, and the importance of industrial development and employment to the economic base, point to the need to better manage industrial development. Businesses and industries that employ more persons per acre of operations should be sought, versus those types that use large amounts of land resources, yet employ relatively few workers.

Based on advisory committee comments, it was determined that the need for industrial type development was limited. Office/Technology uses provide an alternative to manufacturing that would still enable the Township to increase employment opportunities. Office/Technology development should be constructed in an aesthetic manner on a campus like setting.

Mixed-use development refers to a tract of land or structure with more than one type of use (such as a mix of office, retail, residential, entertainment, cultural, recreation, etc.), all of which are physically and functionally integrated and are mutually supporting. Compact, higher intensity, pedestrian-oriented, mixed uses consume less land, and can cost less for supporting roads, utilities, housing, and for other fiscal impacts, such as infrastructure maintenance. For example, compact development requires less infrastructure investment for pavement and pipe for water and sewer, which can also affect housing costs. Similarly, residents of mixed-use developments may have shorter trips to grocery and hardware stores, healthcare, restaurants, and jobs. Mixed-use centers – of a scale appropriate to their surroundings – will concentrate uses support walking, biking and public transit, and automobiles.

***GENERAL BUSINESS*** - Areas so designated include moderate to highly commercialized retail, office and service business development serving the needs of the neighborhood and beyond. This classification accommodates neighborhood-scale, community business, general business and office uses.

General Business uses currently exist along US 127 north of Williamsdale; however these uses are within the floodplain, which makes redevelopment or improvement difficult. Additional areas of expanded General Business uses are identified in this plan to the north of this area along US 127 at Jacksonburg Road, just outside the floodplain. US 127 is a principal arterial, with a level of service C. Connectivity between development and redevelopment areas should be required, and access management techniques along US 127 will help improve levels of service and ensure safety. One challenge for congestion is the location of at grade railroad crossings in the area. To facilitate new development delay should be minimized and crossings removed where possible.

***INDUSTRIAL*** - Areas so designated include businesses involved in manufacturing, warehousing, assembling, or handling of goods or commodities.

The existing Miller Brewing properties and the AK Steel site and surrounding areas are recommended for continued Industrial uses. The Miller Brewing area is served by Trenton Road (LOS B) – Gephart Road (LOS A), Wayne Madison Road (LOS C), and Riverside Drive (LOS A/B). The existing AK Steel properties and surrounding area have rail access and transportation access via Augspurger Road (LOS A), Trenton Road (LOS B) and Jackson Road (LOS A). This site is adjacent to the Great Miami River and is an existing brownfield area with potential contamination that may complicate redevelopment.

**OFFICE/TECHNOLOGY** - Areas so designated include office uses and technology based businesses that employ highly skilled workers on campus-like settings.

The area along Trenton Road, southeast of Riverside Drive (LOS A) around the terminus of Wehr Road is recommended for Office/Technology uses. This area was previously identified as Industrial. This area also has access to rail, which is beneficial for shipping, but the existing at grade crossings may pose a problem.

**MIXED USE** - Areas containing a mixture of residential, public and small-scale business uses in close proximity to each other.

The Overpeck area has been identified to be an existing area of mixed use. Uses in this area vary, and opportunities exist for compact redevelopment. Additional areas along the east side of US 127, along Morganthaler Road to Cotton Run Road and on the west side of Cotton Run Road are recommended for Mixed Use. This area was selected for mixed use development opportunities because of the central location along a principal arterial roadway. This area is also a logical extension (and possible replacement) for the existing businesses located to the south within the floodplain. Development should include a mix of uses – retail, office and residential – in a compact, walkable area that can also be easily accessed by those in the Cedar Grove subdivision. A small part of this area is located in the floodplain. Proposed development should take this into consideration. Connectivity between development and redevelopment areas should be required, and the use of access management techniques along US 127 (LOS C) will help improve levels of service and ensure safety. One challenge for congestion is the location of at grade railroad crossings in the area. To facilitate new development delay should be minimized and crossings removed where possible.

**GRAVEL EXTRACTION** – Areas that can be used for the purpose of extracting sand, gravel or other materials, including accessory sorting areas.

Existing areas of gravel extraction are identified on the land use map. Additionally, properties owned by excavation companies but not yet actively mined are also identified. These are concentrated in the areas along Jacksonburg Road in the central part of the Township. It is recommended that standards for the removal of rock, sand and other minerals from the ground and the transportation of these materials within the Township be created. Activities should be monitored so that they do not adversely affect adjacent land uses or groundwater quality or quantity.

### **Public and Semi-Public Uses**

Additional areas for public and semi-public uses have not been identified on the land use map. This is a purposeful omission since opportunities, needs and resources for these additional facilities are variable at this time. In general, public facilities should be located to serve the greatest number of citizens in close proximity.

**PUBLIC/PRIVATE RECREATION** - Areas so designated should consist of public and

*semi-public recreational land use including active and passive recreation, open space, parks, nature preserves, golf courses, playgrounds and other similar facilities.*

Public and private parkland is located throughout the township, including Antennen Nature Preserve, Overpeck Park, Pyramid Hill Sculpture Park, and Camp Campbell Gard. Although not specifically shown on the future land use map, there is also a proposed location for a new pocket park in the area identified for suburban residential uses in the southern portion of the Township. The exact location for this facility is not identified; however the need has been recognized.

Additional areas of parkland are particularly suited to be placed in areas that have sensitive natural systems because of the generally passive nature of some activities. For example, existing park areas are in such locations. Portions of Antennen Nature Preserve and Camp Campbell Gard are in the floodplain. The Pyramid Hill Sculpture Park is located in areas with slopes of 15% or greater.

***PUBLIC/SEMI-PUBLIC*** - *Areas for public purposes such as schools, cemeteries, churches, libraries, government offices, utility facilities, and conservation uses.*

Areas throughout the township owned by governmental agencies, churches, and schools are identified on the future land use map as public/semi-public uses. Future locations for these types of uses should be convenient to concentrated nodes of population, and, when possible, have access to all modes of transportation.

### **Time of Travel Zones and Future Land Use**

One of the variables to consider is the use of land on and surrounding the aquifer and the surface water that interacts with it. For example, agricultural land uses may produce contaminants from pesticides, fertilizers, and manure storage. Residential uses may produce contaminants from failing septic systems, lawn fertilizers and improperly disposed household products. Industrial uses may have onsite storage of drums that may accidentally leak or processes that generate byproducts and waste that if improperly stored or disposed of, could be potential contaminants. Commercial uses such as junk yards, dry cleaning services, paint mixing, automotive repair and gas stations may also produce potential contaminants.

Since groundwater recharge comes from infiltration of the land's surface, increased impervious surfaces from land development are also a concern. Increased impervious surfaces inhibit infiltration and recharge. Additionally, increased runoff from impervious surfaces can pose a problem because contaminants such as gas, oil from automobiles and deicing salt from parking lots and roadways can get swept into streams. More runoff can also increase flooding events, washing various contaminants into streams.

As previously mentioned, source water protection areas are often identified as Time of Travel (TOT) zones because they indicate the time it will take a water particle to move in the saturated zone to a well. A line can be drawn around the area from which groundwater is expected to reach the well within a chosen time period, usually identified as a 1-year, 5-year, or 10-year TOT. Future land uses identified in this plan to be within the 1-, 5-, and 10-year time of travel

zones existing within the township include those seen in Table XXX. The majority of the area identified as industrial is the existing Miller Brewing facility, which is in existence at the time of this plan.

Table XXX

<b>Future Land Use</b>	<b>Acres in TOT Zones</b>	<b>% of Use in TOT Zones</b>	<b>% of Total Township Acres</b>
Agricultural	1,542	47%	12%
Agricultural Estate	194	6%	2%
General Business	70	2%	1%
Gravel Excavation	69	2%	1%
Industrial	597	18%	5%
Low Density Residential	191	6%	1%
Office/Technology	72	2%	1%
Public/Private Recreation	146	4%	1%
Public/Semi Public	174	5%	1%
Rural Estate Residential	24	1%	0%
Suburban Residential	206	6%	2%
<b>Total</b>	<b>3,285</b>	<b>100%</b>	<b>26%</b>