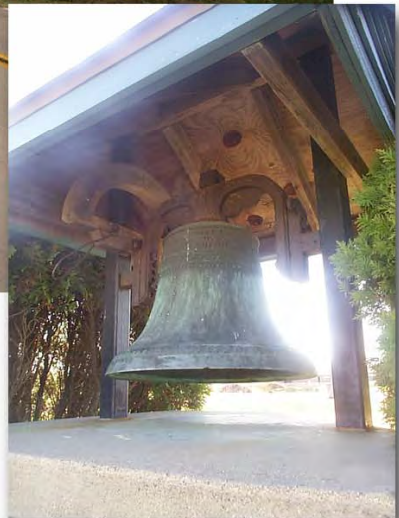


# KINGSTON TOWNSHIP

## Comprehensive Plan 2006



**ADOPTED JUNE 2, 2008----EFFECTIVE JULY 2, 2008**

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# Chapter 1

## Goals and Objectives

According to the 2000 U.S. Bureau of Census, Delaware County is the fastest growing county in Ohio by percentage of growth and the 40<sup>th</sup> fastest growing county in the U.S. from 1990-2000. From 2000-2001, only fourteen counties in the U.S. grew faster. Kingston Township has experienced modest growth from 1990-2000, putting its current population at 1,603.

Kingston Township is likely to remain a single-family residential rural and agricultural area due to a lack of public sanitary sewer service. The Township's first suburban style development NorthStar, utilizes an alternative central sewer system with land application. The Alum Creek and Little Walnut Creek corridors are two significant features in the township recommended for preservation through the use of conservation subdivision design. An approximate density of 1 unit per 1.95 acres is recommended for most of the township to help maintain rural character and protect conservation elements. Kingston Township embraces the concept of density neutral development.

### **A. Findings of the 2006 Comprehensive Plan:**

Many of the figures set forth in the document are based on the 2000 U.S Census

1. Population has grown by 41.11% from 1,136 in 1990 to 1,603 in 2000. Delaware County has grown by 64.3% during the same period.
2. 364 new homes have been built in the last 22 years (1980 to end of 2001).
3. From January 1987 to December 2000, 83 new subdivision lots were reviewed by the DCRPC, 76 of which were recorded. This does not include road frontage lot splits and 5-acre mini-farms.
4. From January 1998 to the end of 2001, 86 new lots ranging from 1 to 5 acres were created through the no-plat approval (lot split) process.
5. Agricultural and undeveloped acreage was still approximately 80% of the township in 2001, and the number one land use by acreage.
6. The local farm-to-market roads were not built to sustain their new functional roles as collector and arterial streets. Most collector roads need to be widened, but some narrow roads are considered part of the scenic character.
7. Kingston Township has significant natural beauty in the Alum Creek and Little Walnut Creek corridors, which need protection.
8. There are 606 total housing units within Kingston Township, 600 of which are single-family homes and 6 are mobile homes. The condition of the housing stock is good to excellent.
9. The Polaris area eight miles south of US 36/I-71 has been a huge job and traffic generator for Delaware County. As land becomes more scarce and expensive there, northerly commercial expansion up the US 23 corridor, along the US 36 corridor, and at the US 36/ I-71 interchange becomes more likely. The NorthStar development will provide approximately 300 acres of new commercial uses just south of Kingston in Berkshire Township (northeast of US 36/I-71 interchange).
10. Del-Co Water Company, Inc. provides potable water to most of the township.
11. There is currently no public sewer in Kingston Township. As of January 2003, Delaware County has no plans to provide the township with central sewer.

12. Buckeye Valley and Big Walnut school districts, which serve the township, have experienced modest growth in its student population over the past 10 years.
13. Porter-Kingston Fire District staffed by volunteers and one paid daytime firefighter provides fire protection to the township. Kingston Township generated 249 of 19,165 or 1.3% of the Delaware County Sheriff's complaints in 2001.
14. There is no township park, but nearby Alum Creek State Park and Hoover Reservoir provide passive open space and recreation. There may be a need for additional active recreation such as baseball and soccer fields, tennis and basketball courts, and a public swimming pool in the future.

## **Vision Statement**

*Ultimately, we would like Kingston Township to be a community that retains large lots, and a low residential density (generally less than one unit per 1.95 acres) in a rural setting with agriculture and significant permanent open space.*

*The rural character of the township will be maintained with a concerted effort to preserve open space, natural features of land, and farmland preservation with an emphasis on large residential lots. Rural roads would for the most part remain narrow two lane roads, yet safely carry local traffic. They would have a rough edge, with fencing that reminds us of the rural past, and mature landscaping to replace fence/tree rows if they are removed as part of planned developments.*

*Primary conservation features must be prioritized as restricted, permanent open space and preserved as the township develops in this order; #1 woodlands, #2 wildlife habitats, #3 quality wetland buffers and #4 riparian zones. Secondary conservation features including floodways, scenic views and vistas, and sloping land must also be considered as restricted, permanent open space. Prime farmland and cultural resources (historic, archaeological or of cultural value) that give a sense of our heritage should be preserved as part of all new developments.*

*There should be a variety of housing choices and price ranges, and adequate infrastructure to serve new development. We would like to see a diversity of housing types to meet different housing needs (i.e., older adults, empty nesters, individuals and families). There should be a balance of commercial, residential and recreational uses; commercial should be developed for a broader tax base, but should be in very few select areas buffered from exclusively residential areas.*

*We want to live in a community where growth is balanced with the conservation and enhancement of rural landscapes, agriculture, cultural and heritage resources, and the environment.*

## **B. Goals and Objectives of the Kingston Township Comprehensive Plan:**

### **Natural Resources**

#### **Goals:**

1. To preserve the rural character of Kingston Township as expressed in its open green areas.
2. To preserve the rural “look” along township roads via fencing and landscaping.
3. To preserve natural resources including woodlands, wetlands, creeks, rivers and floodplains.
4. To retain and protect wildlife habitats and riparian corridors.
5. To preserve scenic views and vistas as open space.
6. To preserve steep slopes where possible in order to avoid erosion.
7. To retain and protect prime farmland.
8. To preserve our heritage by protecting cultural resources (historic, archaeological, cultural).
9. To preserve a high degree of environmental quality.
10. To link PRD subdivisions with riparian corridors, bikeways and hiking paths.
11. To conserve the surface and ground water quality in the Little Walnut Creek and Alum Creek watersheds.

#### **Objectives:**

1. Obtain the linkage of subdivisions by streets, bike paths, or green way trails so neighborhoods are connected and pedestrian oriented.
2. Create a landscape detail for green way trails.
3. Retain wooded green ways along ravines, waterways and project perimeters.
4. Amend the zoning resolutions to identify and protect floodplains, jurisdictional wetlands, and to preserve steep slopes where possible.
5. Support amendment of county subdivision regulations to protect 100-year floodplains.
6. Set landscape and architectural design standards for PRD subdivisions. Stipulate centralized green space.
7. Create a rural landscape detail for PRD fronting on existing roads.
8. Amend the zoning text to require the appropriate landscaping buffer detail between residential and non-residential land uses. Retain natural vegetation and use existing topography as buffers.
9. Promote off-stream storm water detention in new developments.
10. Retain natural ravines and their vegetation as filter strips for surface water.

### **Agriculture**

#### **Goals:**

1. To provide an opportunity for agriculture to continue through flexible/creative zoning.
2. To retain low residential density in agricultural areas.

#### **Objectives:**

1. Leave gross density of 1.95 acres (85,000 sq. ft.) as the minimum requirement.
2. Use the Land Evaluation Site Assessment (LESA) system to evaluate lands worthy of Purchase of Agricultural Conservation Easements (PACE). This should be a voluntary system used in concert with the property owner’s request to sell an agricultural easement.

3. Preserve farmland by voluntary (sale) of development rights from farmland to adjacent farm villages (Conservation Subdivisions).
4. Apply for state or federal funding for purchase of agricultural easements.
5. Encourage farm preservation as a use for open space in PRD subdivisions.

## **Residential Development**

### **Goals:**

1. To relate land use and density to land suitability, utility availability, existing land use, and the recommendations for each sub area.
2. To consider the carrying capacity of infrastructure (sewer, water, fire protection, roads, etc) in establishing residential densities.
3. To provide for rural areas where agriculture is transitioning to large lot residential.
4. To retain a primarily single family residential housing mix, but permit a diversity of housing types.
5. To avoid sprawling subdivisions consisting only of lots and streets and no local parks or green space.
6. To protect local real estate values.
7. To consider the consistency of the development with the character of the surrounding area.

### **Objectives:**

1. Retain an overall low density (at most one unit per 1.95 acres with on-site sewage disposal systems).
2. Use the width of roads, the capacity of water and sewer systems, and the soil characteristics to limit development to the carrying capacity of the infrastructure, using the densities and land uses on the comprehensive plan recommended land use map as a guide.
3. Avoid development of uses or densities that cannot be serviced by currently available or imminently planned infrastructure, unless such development mitigates its unplanned infrastructure impacts.
4. Consider a Traditional Neighborhood Development as an alternative to standard subdivisions at appropriate crossroads locations.

## **Commercial Development**

### **Goals:**

1. To encourage commercial development in planned districts to broaden the jobs and tax base, and to prevent property taxes from rising faster than the growth in the township tax base.
2. To provide for dense landscape buffering between commercial and residential uses.
3. To encourage commercial and office development around the potential future I-71/S.R. 521 interchange if the interchange is constructed.
4. To provide for transitional land uses and dense landscape buffering between incompatible land uses.

### **Objectives:**

1. Identify an area for a small neighborhood commercial district to serve the needs of township residents.
2. Identify a possible commercial area around a SR 521/I-71 interchange if it is built.
3. Create development guidelines for planned commercial development.
4. Use parallel frontage or back roads on arterial roads to service the commercial uses and to control access points onto the arterial road.

## **Recreation**

### **Goals:**

1. To provide passive and active recreational areas as the township grows.
2. To link planned residential neighborhoods with green spaces and walking/biking paths.

### **Objectives:**

1. Acquire land for future Township parks for passive and active recreation (playing fields for organized sports).
2. Create a series of mini-parks (less than 1 acre) with ¼ mile spacing and neighborhood parks of 15 acres with active recreation with ½ mile spacing in large PRD neighborhoods.
3. Consider future partnership agreements for the purchase, development and management of recreational land within the township.

## **Township Services**

### **Goals:**

1. To recognize and maintain only those services needed for a predominantly agricultural and rural/low density community.
2. To expand township services at a rate to ensure public health and safety.
3. To acquire suitable land for the township's future needs.

### **Objectives**

1. Acquire new sites for township facilities, including fire, police, road maintenance, cemetery, etc.
2. Determine the services the township can provide as an agricultural/rural community.
3. Work with elected officials to increase services as needed, but not in a way to compete with urban development, as to retain a rural community.
4. Use the Comprehensive plan as the guideline in zoning.

## **Planning and Zoning**

### **Goals:**

1. To determine and implement an appropriate land use mix.
2. To implement and maintain the land use plan.
3. To enforce zoning regulations.

### **Objectives:**

1. Revise the zoning text and map in accordance with the comprehensive plan.
2. Create architectural guidelines for Planned Residential Development.
3. Acquire new sites for township facilities, including fire, police, road maintenance, cemetery, etc.
4. Develop policies for service provision that relate to the comprehensive plan.
5. Provide for 5 year updates and revisions to the plan.
6. Respond to zoning requests pursuant to the Comprehensive Plan recommendations.

## **Transportation**

### **Goals:**

1. To avoid congestion on local, county and state roads.
2. To improve the road network without destroying the rural character.
3. To seek developer mitigation of roads impacted by their developments.

### **Objectives:**

1. Require commercial parallel access roads and connections between planned commercial developments along arterial roads.
2. Work with ODOT to prevent the deterioration of S. R. 521 and S. R. 61.

## **Citizen Participation**

### **Goals:**

1. To ensure significant and diverse citizen input into the planning process.
2. To keep residents informed and connected.

### **Objectives:**

1. Use the steering committee as the primary citizen input to the Zoning Commission in amending the Comprehensive Plan.
2. Advertise open informational meetings to discuss and review the recommendations of the plan prior to public hearings.
3. Publish and mail a synopsis of the plan to every household in Kingston Township.
4. Encourage active citizen participation in future comprehensive plan updates.
5. Maintain a newsletter, website and e-mail notification system to keep residents informed and engaged.

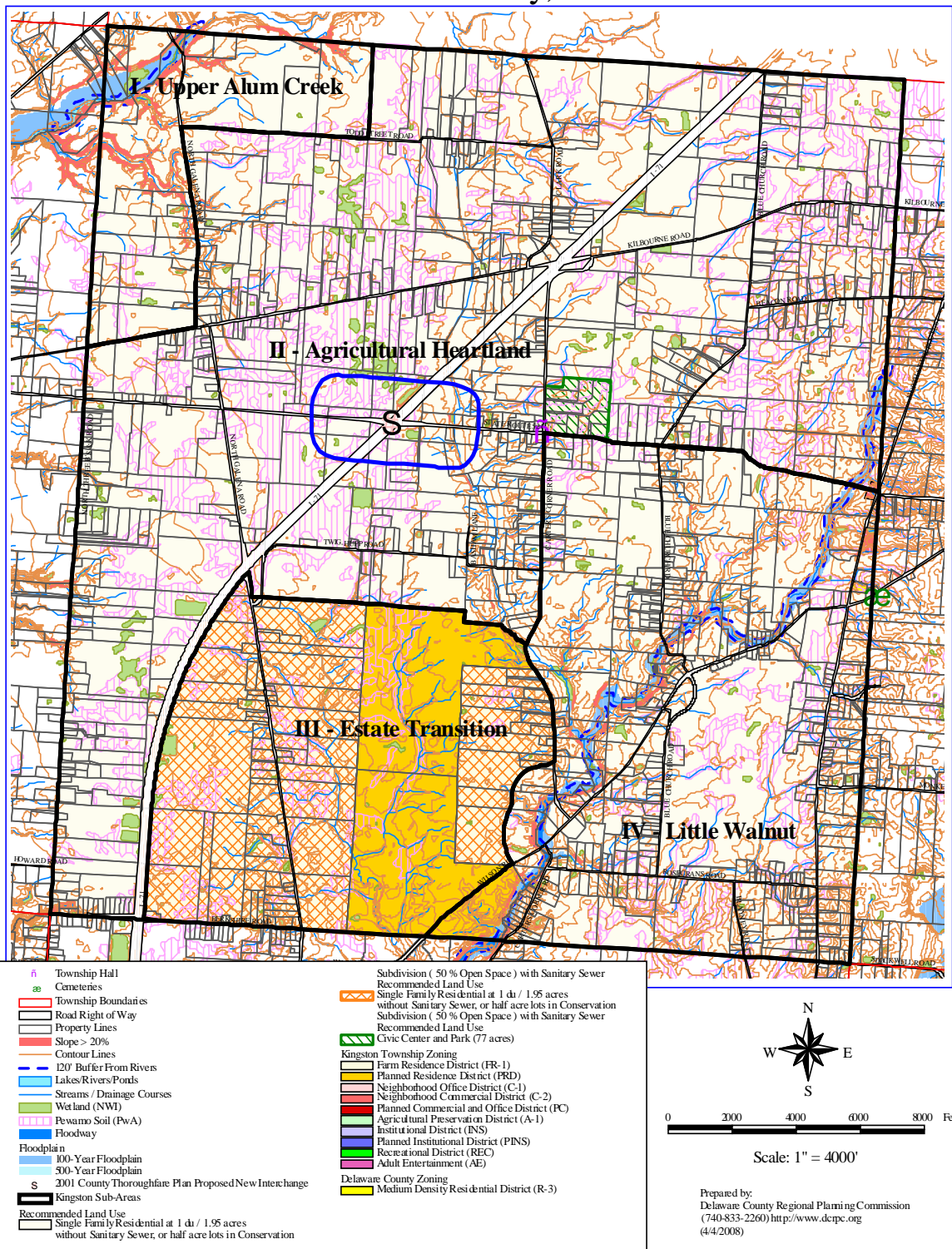
**C. Recommendations**

- Chapter 2 includes detailed Sub Area recommendations that relate to the 2006 Comprehensive Plan Map (please turn to Chapter 2 for those details).
- Please see the Comprehensive Plan Map (next page).



# Kingston Township Comprehensive Land Use Plan (Draft 2006)

## Delaware County, Ohio



## Chapter 2

### Recommendations

#### **2.1 Intent of the Kingston Township Comprehensive Land Use Plan**

The 2006 Kingston Township Comprehensive Land Use Plan is the sum of all the chapters and appendices. Chapter 2 is intended to be read and viewed in conjunction with the Comprehensive Land Use Plan (map) in Chapter 1.

#### **2.2 Sub Area I – Upper Alum Creek District**

**Boundaries:** *West:* Brown Township; *East:* East property line of Collier property, and N. Galena Road; *North:* Morrow County; *South:* Kilbourne Road and Todd Street Road.

**Land Area:** 991 acres



*Alum Creek, east of North Galena Road*

#### **A. General Facts and Findings**

This sub area contains Alum Creek passing from Morrow County through northwestern Kingston into Brown Township where it feeds into Alum Creek Lake, a public drinking water reservoir. There are also a series of well defined fingers which branch off of Alum Creek into a few large tracts of land still engaged in farming along Todd Street Road and Kilbourne Road.



The Alum Creek corridor is heavily wooded, contains floodplain and some steep slopes (greater than 20%). These elements are all critical to the environmental stability, natural beauty, and culture enjoyed by Kingston Township.

There is no sanitary sewer and none proposed. The Township's intent for this area is to limit the population density to protect surface and ground water quality, to prevent pollution of Alum Creek, to prevent undue congestion of the primitive rural road network, to protect floodplains and to protect the real estate values of large lot residential neighborhoods.

## **B. Sub Area I Recommendations**

The plan recommends a minimum lot size of 1.95 acres for all lands within this sub area. This is intended to limit the disturbance to the natural ecosystem and the preservation of groundwater. The Township should encourage conservation subdivision (50 percent open space) guidelines that promote natural landscapes (see Chapter 15) at the underlying density (1 unit / 1.95 acre) with a .5-acre minimum lot size. Tree preservation is encouraged to reduce stormwater runoff and protect surface and ground water quality.

A streamside "No-build" buffer is also recommended within the district for the protection of the Alum Creek and its wildlife. This buffer would extend 120' from the normal high water line.

Further preservation of natural areas in the township could be achieved through any or all of the following: (Source: Model Watercourse Protections MORPC 1999)

1. Identify and catalog the community's environmentally sensitive areas.
2. Establish a land trust to acquire and accept development rights and easements to unique natural areas such as scenic views, woodlands, and wetlands.
3. Cooperate with other public and private agencies interested in protecting the critical resources of the township.

## **2.3 Sub Area II – Agricultural Heartland**

**Boundaries:** *West:* Planning Area I and Brown Township; *North:* Todd Street Road and Morrow County; *East:* Porter Township, Carter's Corner Road, and I-71; *South:* approximately 1500' south of Twig-Hupp Road (north boundary of NorthStar development) and Berkshire Township.

**Land Area:** 8,604 acres

*Farm on North Galena Road*



## **A. General Facts and Findings**

Sub Area II is generally divided east-west by I-71 and north-south by SR 521. There is currently no access to I-71 in the Township. Much of the land along the other roads in this sub area (3 Bs and K, N. Galena, and Carter's Corner Roads) have already been split into road frontage residential lots on 1 to 5 acres.

The area is characterized by generally flat topography with prime agricultural soils in large undivided tracts of land. Sub Area II has the highest amount of prime agricultural soils and is made up largely of cultivated fields divided by tree lines and small wood lots. Some of the highest yielding soils are located along the I-71 corridor. There is no central sewer, and none proposed by the county. Soils are generally unsuitable for individual on-site treatment systems but can be used for land application systems, provided large retention ponds can hold the treated water for 6-7 months of the year. There is Del-Co water service for most of this planning area. It is likely that Sub Area II will remain at rural densities with larger lot sizes in order to have enough land for the required on-site sanitary systems.



*Farm on SR 521*

## **B. Sub Area II Recommendations**

The plan recommends this area to be the agricultural heart of the township. Due to the high seasonal water table of soils and lack of sanitary sewer, the minimum lot size for single-family residences should be 1.95 acres. To preserve agriculture, Conservation Subdivision Development could be encouraged at 1 unit per 1.95 acres gross density with a .5-acre minimum lot size and contiguous open space preserved for agriculture. Development rights could be transferred from agricultural lands to directly abutting, adjacent tracts for Farm Village developments, thus saving this area as a permanent agricultural and low-density core of the Township.

- The 2001 Delaware County Thoroughfare Plan proposes a new interchange at I-71 and SR 521. If the proposed interchange is constructed within the planning period, there may be an opportunity for limited planned commercial to serve area residents and traveling public. At the present time, the Director of ODOT opposes any new interchanges, so this may not occur.
- The primary use for the Agricultural Heartland will be for farm and accessory uses.
- Discourage multiple, road-frontage lot splits along SR 521. If developments are proposed, new streets should be constructed internal to the development.
- A tract on the northeast corner of SR 521 and Carter's Corner Road, adjacent to the existing Township Hall should be considered as a possible location for a future Township park and community facility campus. The tract is centrally located, large and flat enough for active recreation and community facilities, and is easily accessible. It would also afford the opportunity to preserve the historic Kingston Central School.

## **2.4 Sub Area III – Estate Transition District**

**Boundaries:** *North:* Approximately 1500' south of Twig-Hupp Road (north boundary of NorthStar development); *South:* Berkshire Township and Wilson Road; *East:* Carter's Corner Road and a line 1000' west of Little Walnut Creek; *West:* I-71.

**Land Area:** 1,994 acres

### **A. General Facts and Findings**

This sub area provides a transition from the relatively flat, open agricultural uses to the west into the rolling tributaries of the Little Walnut Creek to the east. Soils are moderately productive in terms of agriculture yield, but are generally suitable for small developments utilizing individual on-site septic systems, or larger developments with land application treatment systems. This sub area is also adjacent to Berkshire Township, which has approved its portion of the proposed Northstar residential development (651 new houses) at a density of 1.25 units/acre, as well as 306 acres of Planned Commercial just northeast of the I-71/36-37 Interchange. This sub area is intended to provide a transition from the higher densities of Berkshire Township to the lower densities in the rural agricultural heartland and Little Walnut Creek corridor.

### **B. Recommendations for Sub Area III**

The plan recommends a minimum lot size of 1.95 acres if served by on-site septic systems. However, to help preserve open space and protect critical resources, Conservation Subdivision Developments (50 percent open space) with a .5-acre minimum lot size could be encouraged at the underlying density with on-lot sewage disposal.

## **2.5 Sub Area IV – Little Walnut District**

**Boundaries:** *North:* SR 521; *South:* Berkshire Township; *East:* Porter Township; *West:* Carter's Corner, Wilson Road and a line 1000' west of Little Walnut Creek.

**Land Area:** 3,546 acres



## **A. General Facts and Findings**

This sub area contains the most rugged topography in the township. It contains the Little Walnut Creek and a network of tributaries, feeding into the Hoover Reservoir, a public drinking water reservoir, south of the Township. The Little Walnut Corridor also contains significant woods along the creek. Steep slopes, scenic views, vistas, wildlife and even scenic roadways typify the landscape. These elements are all critical to the environmental stability, natural beauty, and culture enjoyed by Kingston Township. Roads are narrow, curving with low speed limits, following the Creek and terrain.



*Little Walnut Creek, west of Carter's Corner Road*

There is limited sanitary sewer proposed. The Township's intent for this area is to limit the population density to protect surface and ground water quality, to prevent pollution of Little Walnut Creek, to prevent undue congestion of the primitive rural road network, to protect floodplains and to protect the real estate values of large lot residential neighborhoods.

## **B. Recommendations for Sub Area IV**

The plan recommends a minimum lot size of 1.95 acres for all lands within this sub area. This is intended to limit the disturbance to the natural ecosystem and the preservation of groundwater. The Township should encourage conservation subdivision (50 percent open space) guidelines that promote natural landscapes (see Chapter 15) at the underlying density (1 unit / 1.95 acre) with a .5-acre minimum lot size. Tree preservation is encouraged to reduce storm water runoff and protect surface and ground water quality.

A streamside “No-build” buffer is also recommended within the district for the protection of the Little Walnut Creek and its wildlife. This buffer would extend 120’ from the normal high water line.



*Little Walnut Creek, south of Blue Church Road*

Further preservation of natural areas in the township could be achieved through any or all of the following: (Source: Model Watercourse Protections MORPC 1999)

1. Identify and catalog the community’s environmentally sensitive areas.
2. Establish a land trust to acquire and accept development rights and easements to unique natural areas such as scenic views, woodlands, and wetlands.
3. Cooperate with other public and private agencies interested in protecting the critical resources of the township.

## **2.6 Future Land Use Mix**

The table below shows the future land use mix of the township if the township was totally built out.



### Future Land Use Mix- 2006 Kingston Township Comprehensive Plan

	<b>2001</b> (Actual)	<b>% Land</b>	<b>2002</b> Build-out per Comprehensive Plan	<b>% Land</b>
<b>Residential (SF +MF) **</b>	<b>2,355.49</b>	<b>15.46</b>	<b>14,183.10</b>	<b>93.09</b>
Single Family	2,355.49		14,183.10	
Multi family	0			
<b>Commercial</b>	<b>63.87</b>	<b>.40</b>	<b>170</b>	<b>1.11</b>
<b>Institutions</b>	<b>5.43</b>	<b>&lt;.1</b>	<b>25</b>	<b>.64</b>
<b>Industrial</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Agriculture and undeveloped</b> (includes forests)	<b>12,107.83</b>	<b>79.47</b>	<b>0</b>	<b>0</b>
<b>Lakes, rivers and public lands</b>	<b>259.68</b>	<b>1.70</b>	<b>336.68</b>	<b>2.20</b>
<b>Roads and Utilities</b>	<b>487.70</b>	<b>3.20</b>	<b>487.70</b>	<b>3.20</b>
<b>Vacant land rezoned, still undeveloped</b>	<b>19.23</b>	<b>.12</b>	<b>0</b>	<b>0</b>
<b>Acreage in Township</b>	<b>15,235.36</b>	<b>100</b>	<b>15,235.36</b>	<b>100</b>

### **2.7 Future Kingston Township Population At Build-out**

The future Kingston Township population at build-out depends largely on the development types. The traditional development pattern (road frontage lot splits) with individual on-site septic systems could continue, or large-scale developments utilizing a land application treatment system may occur.

The 2002 year-end projected population of Kingston Township was 1,821, which was based on a projected 634 housing units by year end. The NorthStar development is expected to add 2,183 people to the Township, doubling the population in the next 20 years. If all of Kingston Township was to develop with large-scale developments utilizing centralized sewer, the build-out population could be 26,994 according to the Delaware County Regional Planning Commission. This could potentially provide a large amount of open space and preserve conservation features that are valued by the residents. The continuation of the past trend (low-density, 1.95 acre lots) would result in a Kingston Township population of 17,761 (assuming 15% for new roads), but very little open space would remain.

The character of the township will continue to reveal itself as the plan is implemented. As time passes and new factors influence the validity of the 2006 vision, the township will have to revisit its plan and its vision to consider whether changes need to be made.

## **Chapter 3**

### **Township Planning**

#### **3.1 How Planning relates to zoning and the community vision**

The comprehensive plan is a set of policies, goals and recommended land use map for the future development of the township. However, as a plan, it has no direct power under Ohio township zoning law, under which this Township's enforceable standards are to be stated in the Township's Zoning Resolution.

The value of comprehensive planning includes the following:

- Citizen participation leads to better interaction between government and citizens.
- A comprehensive plan allows government to describe appropriate long range goals prior to the zoning hearing process.
- The comprehensive plan contains valuable information on land use, natural resources environmental concerns, housing, traffic analysis, etc., and serves as a policy guide for all land use decisions.
- The comprehensive plan is based on the consensus of citizens, and is a strong protection against legal challenges for inappropriate land use.
- The comprehensive plan contains a record of existing and proposed land uses.

The Township's Zoning Commission, consistent with the planning role prescribed in Ohio Revised Code 519.05, held hearings and reviewed numerous drafts over several years, prior to referring this plan to the Township Trustees for adoption. At-large residents and landowners of the township were encouraged to and did participate in the planning process.

#### **3.2 The Intent of the Kingston Township Comprehensive Plan**

The Kingston Township Comprehensive Land Use Plan is intended to:

1. Review land use, population, utility services, roads, and boundaries.
2. Review the economic, legislative, judicial and regulatory conditions.
3. Establish goals and policies that are representative of the community's values and visions of its future, and determine if they conform to current federal and state land use legislation and court decisions.
4. Compliment the goals with specific objectives for the growth in the ensuing five to ten years.
5. Create a text and map for the recommended land use of each parcel on a site-specific basis to guide future growth of the township.
6. Recommend amendments to local zoning, and the adoption of development policies to assure that the township will be what it has envisioned when it is all built out.

The Comprehensive Land Use Plan is intended to be site-specific, with land use and/or density classification attached to each parcel, and to be viewed from an environmental standpoint with policies to protect critical resource areas.

### **3.3 The DCRPC 1993 Comprehensive Plan-The Effect on the Township**

In 1993, the Delaware County Regional Planning Commission contracted with Frank Elmer and Assoc., Wilbur Smith and the SWA Group to prepare a Regional Comprehensive Plan for the entire Delaware County Planning Area. Kingston Township falls within the North Planning Area.

The 1993 DCRPC Regional Comprehensive Plan overlays data to create a land suitability map which, in conjunction with development policies for each planning area represents the best guidelines possible at the macro scale of the study. It is suggestive, not prescriptive.

The 1993 DCRPC Plan is the adopted Regional Plan. The Kingston Township Comprehensive Plan states the more specific vision, goals and objectives of the Township. If these plans differ in their recommendations, the Township plan takes precedence.

### **3.4 DALIS – How digital information affects the township’s ability to plan**

The Delaware County Auditor developed a Geographic Information System (GIS) for the primary purpose of accurately mapping tax parcels. DALIS stands for Delaware Area Land Information System. It is an accurate computer mapping system that offers both tabular and graphic real estate data for each of about 50,000 tax parcels.

This mapping system has a cadastral (property line) layer and topography layer. Topography is available in 2’, 5’, and 10’ contours depending upon which area of the county is viewed. In addition, the Auditor has also created revised soil maps and digital ortho photos with structures.

DALIS mapping is used as the base map for the 2006 Kingston Township Comprehensive Plan. The software used is Arc/Info and Arc/View, by ESRI. Planners may now view each parcel in a site-specific manner. This has allowed the Comprehensive Land Use Plan to be site specific.

## Chapter 4

### Population and Growth

#### **4.1 Population by Census Figures**

For the past 40 years, Kingston Township has had strong, steady growth.

**Table 4.1 Census of Population, Kingston Township 1960-2000**

<b>1960</b>	<b>1970</b>	<b>% growth 1960-70</b>	<b>1980</b>	<b>% growth 1970-80</b>	<b>1990</b>	<b>% growth 1980-90</b>	<b>2000</b>	<b>% growth 1990-2000</b>
508	567	11.61 %	959	69.14 %	1136	18.46 %	1603	41.11 %

According to the US Bureau of the Census, Population Division, Delaware County grew by 64.3% from 1990-2000, making it the fastest growing county in Ohio, and the 40th fastest growing county in America. Most of this growth has occurred south of the city of Delaware. From 2000-2001, only fourteen counties in the U.S. grew faster.

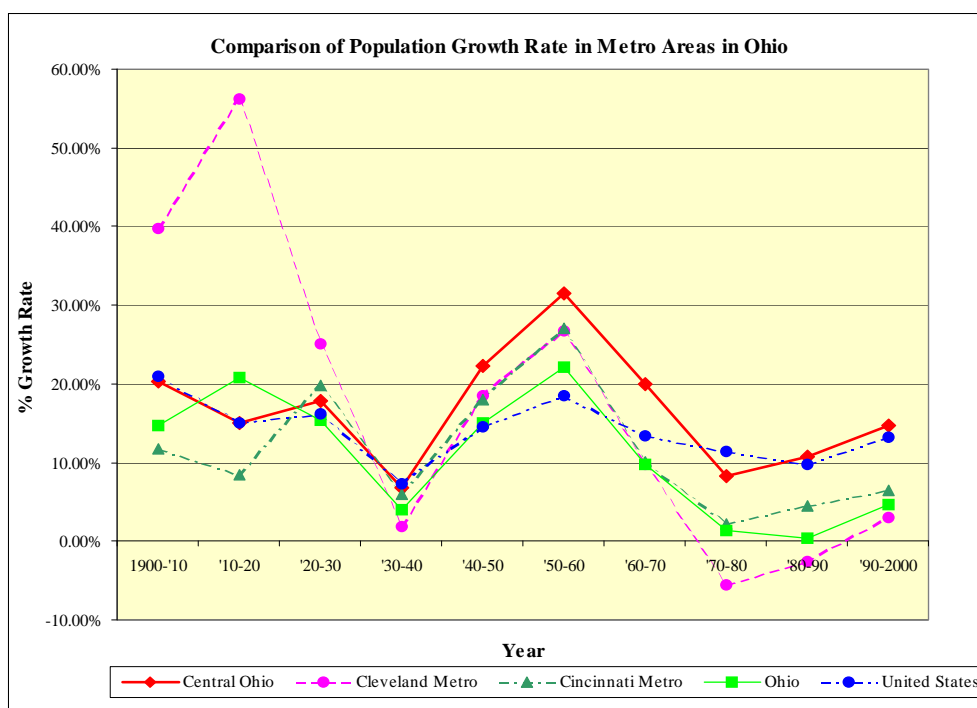
**Table 4.2 Ten Fastest Growing Counties in Ohio, by % Growth Rate 1990-2000**

(Source, US Bureau of Census, Census 2000; Statistical Information, Washington D.C, (301)-457-2422).

<b>Ohio County</b>	<b>1990 Population</b>	<b>2000 Population</b>	<b>1990-2000 % Growth Rate</b>	<b>Ohio Rank, 1990-2000</b>	<b>USA Rank 1990-2000</b>
Delaware	66,929	109,989	64.3 %	1	40
Warren	113,909	158,383	39 %	2	161
Union	31,969	40,909	28 %	3	365
Noble	11,336	14,058	24 %	4	484
Medina	122,354	151,095	23.5 %	5	504
Brown	34,966	42,285	20.9 %	6	607
Fairfield	103,461	122,759	18.7 %	7	720
Holmes	32,849	38,943	18.6 %	8	725
Clermont	150,187	177,977	18.5 %	9	727
Knox	47,473	54,500	14.8 %	10	984

20 Fastest Growing Counties in USA by Percent Change: April 1, 2000 to July 1, 2001						
Source: US Bureau of Census, 4/29/2002						
Rank	State	County	July 1, 2001	April 1, 2000	April 1, 2000	April 1, 2000
			Estimate	Population	to	to
				Estimates	July 1, 2001	July 1, 2001
				Base	Numeric	Percent
					Population	Population
					Change	Change
1	Colorado	Douglas	199,753	175,766	23,987	13.6
2	Virginia	Loudoun	190,903	169,599	21,304	12.6
3	Georgia	Forsyth	110,296	98,407	11,889	12.1
4	Texas	Rockwall	47,983	43,080	4,903	11.4
5	Texas	Williamson	278,067	249,967	28,100	11.2
6	Georgia	Henry	132,581	119,341	13,240	11.1
7	Kentucky	Spencer	13,039	11,766	1,273	10.8
8	Florida	Flagler	54,964	49,832	5,132	10.3
9	Texas	Collin	541,403	491,675	49,728	10.1
10	Georgia	Paulding	89,734	81,678	8,056	9.9
11	Georgia	Newton	68,047	62,001	6,046	9.8
12	Minnesota	Scott	98,100	89,498	8,602	9.6
13	Texas	Rains	10,006	9,139	867	9.5
14	South Dakota	Lincoln	26,322	24,131	2,191	9.1
15	Ohio	Delaware	119,752	109,989	9,763	8.9
16	Utah	Tooele	44,157	40,735	3,422	8.4
17	Florida	Wakulla	24,761	22,863	1,898	8.3
18	Virginia	Spotsylvania	97,760	90,395	7,365	8.1
19	Florida	Lake	227,598	210,528	17,070	8.1
20	California	Placer	268,512	248,399	20,113	8.1

The Delaware County growth rate has continued to increase as people pushed north from Franklin County (Columbus) into the “country” for larger lots or more “rural character”. While Franklin County is losing population by out-migration, Delaware is growing by immigration.



#### Population Information in Central Ohio

(Data source: U.S. Census Bureau)

Area Name	1990 Census	2000 Census	Changed # of Pop.	Total Growth R.	Births 1990-1999	Deaths 1990-1999	Natural G. # of Pop.	Int'l Migration	Domestic Migration
Franklin	961,437	1,068,978	107,541	11.19%	149,925	70,377	79,548	11,089	-21,749
Delaware	66,929	109,989	43,060	64.34%	9,856	4,515	5,341	440	25,347
Fairfield	103,472	122,759	19,287	18.64%	14,070	8,166	5,904	283	17,280
Licking	128,300	145,491	17,191	13.40%	17,230	11,100	6,130	285	8,103
Union	31,969	40,909	8,940	27.96%	4,685	2,498	2,187	75	6,576
Pickaway	48,244	52,727	4,483	9.29%	5,806	3,760	2,046	46	3,240
Madison	37,068	40,213	3,145	8.48%	4,803	2,843	1,960	77	2,349
<b>Central Ohio</b>	<b>1,377,419</b>	<b>1,581,066</b>	<b>203,647</b> <i>14.78%</i>	<b>14.78%</b>	<b>206,375</b>	<b>103,259</b>	<b>103,116</b> <i>7.49%</i>	<b>12,295</b> <i>0.89%</i>	<b>41,146</b> <i>2.99%</i>
<b>Ohio</b>	<b>10,847,115</b>	<b>11,353,140</b>	<b>506,025</b> <i>4.67%</i>	<b>4.67%</b>	<b>1,454,713</b>	<b>957,171</b>	<b>497,542</b> <i>4.59%</i>	<b>52,922.00</b> <i>0.49%</i>	<b>-166,200</b> <i>-1.53%</i>
<b>United States</b>	<b>248,709,873</b>	<b>281,421,906</b>	<b>32,712,033</b> <i>13.15%</i>	<b>13.15%</b>	<b>36,820,132</b>	<b>20,934,303</b>	<b>15,885,829</b> <i>6.39%</i>	<b>7,478,078</b> <i>3.01%</i>	<b>0</b> <i>0.00%</i>

Delaware County is growing largely by domestic in-migration. 25,347 new residents moved into the county from 1990 to 1999. Births minus deaths represented 5,341 new populations in this time span. By contrast, Franklin County experienced a net loss of -21,749 via outward migration from 1990-99. Delaware County received 62% of the domestic migration in Central Ohio from 1990-99.

To put Delaware County's rate of growth into national perspective, consider the state and national annual growth rates in Table 4.3.

**Table 4.3 Delaware County Growth Rate Vs. Ohio Vs. USA**

(Source, US Bureau of Census, Internet Release Date: April 2001; Statistical Information, Washington D.C, (301)-457-2422).

Area	1990 population	2000 population	Growth Rate 1990-2000
USA	248,709,873	281,421,906	13.15 %
Ohio	10,847,115	11,353,140	4.66 %
Central Ohio	1,377,419	1,581,066	14.78 %
Franklin Co.	961,437	1,068,978	11.2 %
Berkshire Twp.	1,713	1,946	13.6 %
Berlin Twp.	1,978	3,313	67.49 %
Brown Twp.	1,164	1,290	10.82 %
Concord Twp.	3,363	4,088	21.56 %
Delaware Twp.	1,607	1559	-2.99 %
Genoa Twp.	4,053	11,293	178.63 %
Harlem Twp.	3,391	3,762	10.94 %
<b>Kingston Twp.</b>	<b>1,136</b>	<b>1,603</b>	<b>41.11 %</b>
Liberty Twp.	3,790	9,182	142.27 %
Marlboro Twp.	213	227	6.57 %
Orange Twp.	3,789	12,464	228.95 %
Oxford Twp.	901	854	-5.22 %
Porter Twp.	1,345	1,696	26.10 %
Radnor Twp.	1,156	1,335	15.48 %
Scioto Twp.	1,698	2,122	24.97 %
Thompson Twp.	582	558	-4.12 %
Trenton Twp.	1,906	2,137	12.12 %
Troy Twp.	1,652	2,021	22.34 %
<b>Total Unincorp.</b>	<b>35,437</b>	<b>61,450</b>	<b>73.41 %</b>
Delaware	20,030	25,243	26.03 %
Dublin	3,811	4,283	12.39 %
Galena	361	305	-15.51 %
Sunbury	2,046	2,630	28.54 %
Shawnee Hills	423	419	-.95 %
Powell	2,154	6,247	190.02 %
Ashley	1059	1,216	14.83 %
Ostrander	431	405	-6.03 %
Westerville	1,177	5,900	401.27 %
Columbus	0	1,891	
<b>Total Incorp.</b>	<b>31,492</b>	<b>48,539</b>	<b>54.13 %</b>
<b>Total Delaware Co.</b>	<b>66,929</b>	<b>109,989</b>	<b>64.3 %</b>



Delaware County's population is 49.5% male and 50.5% female, over 94% White, and 80% residing in their own homes.

The following table provides census data for Kingston Township.

**Table DP-1. Profile of General Demographic Characteristics: 2000**

Geographic Area: Kingston township, Delaware County, Ohio

[For information on confidentiality protection, nonsampling error, and definitions, see text]

Subject	Number	Percent	Subject	Number	Percent
<b>Total population.....</b>	<b>1,603</b>	<b>100.0</b>	<b>HISPANIC OR LATINO AND RACE</b>		
<b>SEX AND AGE</b>			<b>Total population.....</b>	<b>1,603</b>	<b>100.0</b>
Male.....	828	51.7	Hispanic or Latino (of any race).....	1	0.1
Female.....	775	48.3	Mexican.....	-	-
Under 5 years.....	100	6.2	Puerto Rican.....	1	0.1
5 to 9 years.....	149	9.3	Cuban.....	-	-
10 to 14 years.....	155	9.7	Other Hispanic or Latino.....	-	-
15 to 19 years.....	117	7.3	Not Hispanic or Latino.....	1,602	99.9
20 to 24 years.....	37	2.3	White alone.....	1,576	98.3
25 to 34 years.....	176	11.0			
35 to 44 years.....	372	23.2	<b>RELATIONSHIP</b>		
45 to 54 years.....	244	15.2	<b>Total population.....</b>	<b>1,603</b>	<b>100.0</b>
55 to 59 years.....	87	5.4	In households.....	1,603	100.0
60 to 64 years.....	47	2.9	Householder.....	537	33.5
65 to 74 years.....	83	5.2	Spouse.....	432	26.9
75 to 84 years.....	31	1.9	Child.....	539	33.6
85 years and over.....	5	0.3	Own child under 18 years.....	448	27.9
Median age (years).....	36.7	(X)	Other relatives.....	43	2.7
18 years and over.....	1,122	70.0	Under 18 years.....	20	1.2
Male.....	567	35.4	Nonrelatives.....	52	3.2
Female.....	555	34.6	Unmarried partner.....	22	1.4
21 years and over.....	1,071	66.8	In group quarters.....	-	-
62 years and over.....	150	9.4	Institutionalized population.....	-	-
65 years and over.....	119	7.4	Noninstitutionalized population.....	-	-
Male.....	64	4.0			
Female.....	55	3.4	<b>HOUSEHOLD BY TYPE</b>		
<b>RACE</b>			<b>Total households.....</b>	<b>537</b>	<b>100.0</b>
One race.....	1,594	99.4	Family households (families).....	466	86.8
White.....	1,577	98.4	With own children under 18 years.....	234	43.6
Black or African American.....	7	0.4	Married-couple family.....	432	80.4
American Indian and Alaska Native.....	2	0.1	With own children under 18 years.....	217	40.4
Asian.....	7	0.4	Female householder, no husband present.....	21	3.9
Asian Indian.....	-	-	With own children under 18 years.....	11	2.0
Chinese.....	-	-	Nonfamily households.....	71	13.2
Filipino.....	1	0.1	Householder living alone.....	45	8.4
Japanese.....	-	-	Householder 65 years and over.....	14	2.6
Korean.....	-	-	Households with individuals under 18 years.....	252	46.9
Vietnamese.....	-	-	Households with individuals 65 years and over.....	81	15.1
Other Asian <sup>1</sup> .....	6	0.4	Average household size.....	2.99	(X)
Native Hawaiian and Other Pacific Islander.....	-	-	Average family size.....	3.18	(X)
Native Hawaiian.....	-	-	<b>HOUSING OCCUPANCY</b>		
Guamanian or Chamorro.....	-	-	<b>Total housing units.....</b>	<b>554</b>	<b>100.0</b>
Samoa.....	-	-	Occupied housing units.....	537	96.9
Other Pacific Islander <sup>2</sup> .....	-	-	Vacant housing units.....	17	3.1
Some other race.....	1	0.1	For seasonal, recreational, or occasional use.....	1	0.2
Two or more races.....	9	0.6	Homeowner vacancy rate (percent).....	0.6	(X)
<b>Race alone or in combination with one or more other races:<sup>3</sup></b>			Rental vacancy rate (percent).....	2.4	(X)
White.....	1,586	98.9	<b>HOUSING TENURE</b>		
Black or African American.....	12	0.7	<b>Occupied housing units.....</b>	<b>537</b>	<b>100.0</b>
American Indian and Alaska Native.....	5	0.3	Owner-occupied housing units.....	497	92.6
Asian.....	8	0.5	Renter-occupied housing units.....	40	7.4
Native Hawaiian and Other Pacific Islander.....	-	-	Average household size of owner-occupied units.....	3.02	(X)
Some other race.....	1	0.1	Average household size of renter-occupied units.....	2.58	(X)

- Represents zero or rounds to zero. (X) Not applicable.

<sup>1</sup> Other Asian alone, or two or more Asian categories.

<sup>2</sup> Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

<sup>3</sup> In combination with one or more of the other races listed. The six numbers may add to more than the total population and the six percentages may add to more than 100 percent because individuals may report more than one race.

Source: U.S. Census Bureau, Census 2000.

From 1990-2000, Kingston Township grew two thirds as fast as Delaware County as a whole. Kingston Township's population has grown from 1,136 in 1990 to a (projected, by DCRPC) 2002 year-end 1,821. Kingston's projected growth rate for 2001-2010 is 58.46%.

## **4.2 Population Projections**

The Delaware County Regional Planning Commission makes population projections based upon a Housing Unit Method. The formula works as follows:

- 1.) Last Census (2000) used as a base year.
- 2.) Number of residents per dwelling unit is calculated based upon the last census information (3.02 for Kingston Township).
- 3.) Number and type of new residential building permits is tracked by month for all jurisdictions.
- 4.) A time lag factor anticipates the occupancy date of new housing after building permit issuance.
- 5.) New population is projected for each jurisdiction based on the number of building permits issued times the number of residents per dwelling unit type, after the lag factor.
- 6.) New population added to last census data to create projected population.
- 7.) Vacancy Rate and Annual Death rate from the Census Bureau.

The Population by Housing Unit Method Projections table contains population projections for Delaware County through the year 2020. Based upon its current growth rate, Kingston Township could have a population of 2,751 in 2010 and 4,146 in 2020.

DELAWARE COUNTY REGIONAL PLANNING COMMISSION POPULATION PROJECTION (HOUSING UNIT METHOD) 2000 THROUGH 2020													
YEAR	1990 CENSUS (APRIL OF 1990)	2000 CENSUS (APRIL OF 2000)	POPULATION INDEX	H. UNITS VACANCY R.	END OF 2000	2001	2002	2003	2004	2005	GROWTH RATE (90-2000)	ANNUAL GROWTH R.	GROWTH RATE (2001-2010) (2011-2020)
							(Projected)						
TOWNSHIPS													
BERKSHIRE	1713	1946	2,810	4.5%	1974	2006	2036	2070	2113	2149	13.60%	1.28%	35.64%
BERLIN	1978	3313	2,810	4.7%	3489	3852	4294	4645	4892	5103	67.49%	5.29%	66.55%
BROWN	1164	1290	2,850	3.3%	1303	1336	1362	1397	1414	1429	10.82%	1.03%	14.29%
CONCORD	3363	4088	2,740	5.8%	4323	4994	5839	6594	7324	7956	21.56%	1.97%	116.12%
DELAWARE	1607	1559	2,630	7.0%	1580	1660	1777	1897	1982	2056	-2.99%	-0.30%	42.62%
CENOA	4053	11293	2,950	5.0%	12185	13931	15697	17389	18862	20133	178.63%	10.79%	89.81%
EARLEM	3391	3762	2,820	3.1%	3774	3798	3829	3861	3873	3881	10.94%	1.04%	3.60%
KINGSTON	1136	1603	3,020	3.1%	1652	1756	1821	1889	1981	2059	41.11%	3.50%	66.53%
LIBERTY	3790	9182	3,000	5.3%	9633	10291	10811	11375	11917	12380	142.27%	9.25%	59.94%
MARLBORO	213	227	2,690	6.7%	227	235	253	259	261	264	6.57%	0.64%	20.64%
ORANGE	3789	12464	2,930	8.4%	13226	14342	15734	17202	18507	19632	228.95%	12.65%	76.19%
OXFORD	901	854	2,870	7.2%	864	886	912	939	959	976	-5.22%	-0.53%	15.61%
PORTER	1345	1696	2,870	3.0%	1705	1726	1742	1759	1774	1785	26.10%	2.35%	5.53%
RADNOR	1156	1335	2,750	4.3%	1345	1363	1372	1388	1396	1402	15.48%	1.45%	5.69%
SCIOTO	1698	2122	2,740	4.7%	2154	2187	2203	2232	2256	2276	24.97%	2.25%	7.85%
THOMPSON	582	558	2,760	8.2%	559	568	586	591	595	598	-4.12%	-0.42%	10.22%
TRENTON	1906	2137	2,920	3.0%	2143	2159	2184	2223	2263	2296	12.12%	1.15%	9.73%
TROY	1652	2021	2,520	8.5%	2018	2027	2056	2106	2160	2206	22.34%	2.04%	3.29%
TOTAL UNINC.	35,437	61,450	2,810	5.3%	64,154	69,097	74,509	79,815	84,528	88,380	73.41%	5.66%	59.21%
INCORPORATED AREAS													
DELAWARE	2030	25743	2,630	6.7%	25900	26565	27283	27889	28372	28802	26.03%	2.34%	21.74%
GALENA	361	305	2,610	7.6%	305	305	304	305	304	303	-15.51%	-1.67%	4.38%
SUNBURY	2046	2630	2,550	3.9%	2692	2812	2975	3114	3218	3311	28.54%	2.54%	22.95%
SHAWNEEHILLS	423	419	2,320	9.0%	429	436	448	467	475	483	-0.95%	-0.09%	7.23%
POWELL	2154	6247	3,180	2.8%	6434	6716	6995	7286	7623	7931	190.02%	11.24%	41.38%
ASHLEY	1059	1216	2,660	6.2%	1284	1278	1272	1269	1264	1258	14.83%	1.39%	6.64%
OSTRANDER	431	405	2,680	5.1%	403	401	399	396	394	392	-6.03%	-0.62%	5.88%
DUBLIN	3811	4283	3,040	6.9%	4291	4285	4266	4255	4242	4228	12.39%	1.17%	5.25%
WESTERVILLE	1177	5900	2,820	3.7%	6748	7073	7312	7452	7635	7799	401.27%	17.49%	66.53%
COLUMBUS	0	1891	2,480	7.8%	2546	2830	3070	3362	3574	3767			172.58%
TOTAL INC.	31,492	48,539	2,697	5.0%	51,033	52,700	54,325	55,796	57,100	58,274	54.13%	4.42%	35.61%
T. INC & UNINC.	66,929	109,989	2,700	6.4%	115,186	121,797	128,835	135,611	141,628	146,654	64.34%	5.09%	48.76%

THIS FIGURE CONSIDERS:

1) ANNEXATION

2) SINGLE F. AND MULTI F. OR CONDOMINIUM BUILDING PERMITS

3) VACANCY RATE

4) 8 MONTHS CONSTRUCTION TIME AFTER GETTING BUILDING PERMIT

5) ANNUAL DEATH RATE FROM THE CENSUS BUREAU (0.6058% (90-95), 0.5853 (2000-2003), 0.5778 (2003-2011))

6) POPULATION INDEX AND HOUSING UNITS VACANCY RATE IS FROM CENSUS 2000

NOTE: POTENTIAL SHIFTS IN POPULATION BY UNCHARTED TRENDS MAY OCCUR, FOR EXAMPLE EXTENSIONS OF SIBBERS, UNANTICIPATED HIGHER DENSITY REZONINGS, ETC.

### 4.3 Building Permits and Population Growth

The building permit numbers, more than the census, tell what is happening in Kingston Township. From 1980 to the end of 1989, the township saw an average of 8 new single family houses per year. Since 1990 the average increased to 22 per year. However, a closer look reveals that 28.6% of all new housing since 1980 has occurred in the last 3 years (104 permits). Typically, homes in the township have been built one-at-a-time on individual acreage lots with septic systems.

DELAWARE COUNTY REGIONAL PLANNING COMMISSION NUMBER OF BUILDING PERMITS 1980 THROUGH 2001																							
YEAR	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total ('80-'01)
<b>TOWNSHIPS</b>																							
BERKSHIRE	6	3	2	6	6	13	30	28	26	26	30	18	27	26	13	21	22	16	17	34	16	16	402
BERLIN	8	11	4	9	11	19	19	34	32	17	13	22	26	35	39	65	66	54	98	117	128	182	1,009
BROWN	3	2	2	9	5	3	5	10	15	13	8	7	9	12	14	11	17	9	10	8	17	10	199
CONCORD	16	16	4	11	14	26	42	44	51	27	30	22	33	38	42	35	30	43	96	103	235	350	1,308
DELAWARE	3	5	2	2	7	5	6	6	5	6	11	9	5	10	12	3	4	12	25	11	31	49	229
GENOA	9	3	10	21	30	27	66	52	39	40	51	54	114	187	271	243	363	342	622	507	651	667	4,369
HARLEM	13	8	8	19	19	16	32	33	30	19	18	17	32	37	27	25	30	30	23	27	16	18	497
KINGSTON	6	3	2	7	9	11	6	14	15	7	14	12	22	32	20	19	18	19	24	37	30	37	364
LIBERTY	20	18	9	19	35	37	60	59	93	57	73	91	164	153	202	164	202	231	262	322	276	198	2,745
MARLBORO	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	1	1	0	1	1	1	10	18
ORANGE	11	5	5	56	57	43	110	150	139	80	84	103	135	170	180	188	268	352	378	637	410	536	4,097
OXFORD	0	1	2	3	4	1	2	4	3	4	8	8	6	7	7	3	6	6	4	9	10	11	109
PORTER	10	5	7	6	4	6	14	11	17	17	10	21	20	12	25	12	13	16	17	11	12	9	275
RADNOR	7	3	6	4	3	2	1	5	7	8	9	7	11	15	12	13	11	9	13	11	12	5	174
SCIOTO	16	8	8	12	14	21	17	30	21	11	22	15	17	28	26	33	26	20	27	37	21	9	439
THOMPSON	1	0	1	2	1	1	6	4	2	7	1	3	3	0	2	0	3	4	4	4	2	11	62
TRENTON	6	7	3	7	9	4	8	17	15	16	11	12	12	17	9	11	25	17	13	12	10	11	252
TROY	0	6	1	21	4	6	5	18	13	7	15	5	9	13	18	9	15	13	12	6	7	14	217
<b>TOTAL UNINCORP.</b>	<b>135</b>	<b>104</b>	<b>76</b>	<b>214</b>	<b>232</b>	<b>241</b>	<b>430</b>	<b>519</b>	<b>524</b>	<b>362</b>	<b>408</b>	<b>426</b>	<b>646</b>	<b>792</b>	<b>919</b>	<b>856</b>	<b>1,120</b>	<b>1,193</b>	<b>1,646</b>	<b>1,894</b>	<b>1,885</b>	<b>2,143</b>	<b>16,765</b>
<b>INCORPORATED AREAS</b>																							
DELAWARE	132	104	6	54	46	103	86	160	150	322	89	76	87	111	245	305	465	248	355	790	318	368	4,620
GALENA	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	2	0	2	2	1	0	10
SUNBURY	2	0	0	1	8	13	5	4	8	4	3	3	11	10	14	17	40	30	33	19	47	75	347
SHAWNEE HILLS															3	7	1	2	1	0	4	5	23
POWELL	9	9	7	7	24	56	105	202	137	129	92	73	89	169	166	103	130	163	217	141	103	105	2,236
ASHLEY											1	1		0	2	3	0	2	0	0	1	0	10
OSTRANDER	2	0	0	0	2	2	6	2	2	0	1	0	0	1	0	9	7	1	0	1	0	0	36
DUBLIN																				4	9	1	14
WESTERVILLE																					140	122	262
COLUMBUS																83	121	546	184	774	146	97	1,951
<b>TOTAL INC.</b>	<b>145</b>	<b>113</b>	<b>13</b>	<b>62</b>	<b>80</b>	<b>174</b>	<b>203</b>	<b>369</b>	<b>297</b>	<b>456</b>	<b>186</b>	<b>153</b>	<b>187</b>	<b>291</b>	<b>430</b>	<b>527</b>	<b>766</b>	<b>992</b>	<b>792</b>	<b>1,731</b>	<b>769</b>	<b>773</b>	<b>9,509</b>
<b>T. INC&amp;UNINC.</b>	<b>280</b>	<b>217</b>	<b>89</b>	<b>276</b>	<b>312</b>	<b>415</b>	<b>633</b>	<b>888</b>	<b>821</b>	<b>818</b>	<b>594</b>	<b>579</b>	<b>833</b>	<b>1,083</b>	<b>1,349</b>	<b>1,383</b>	<b>1,886</b>	<b>2,185</b>	<b>2,438</b>	<b>3,625</b>	<b>2,654</b>	<b>2,916</b>	<b>26,274</b>

NOTE: 1) IN THE CITY OF DELAWARE AND COLUMBUS, THOSE FIGURES ARE INCLUDING MULTI-FAMILY RESIDENTIAL BUILDING PERMITS.

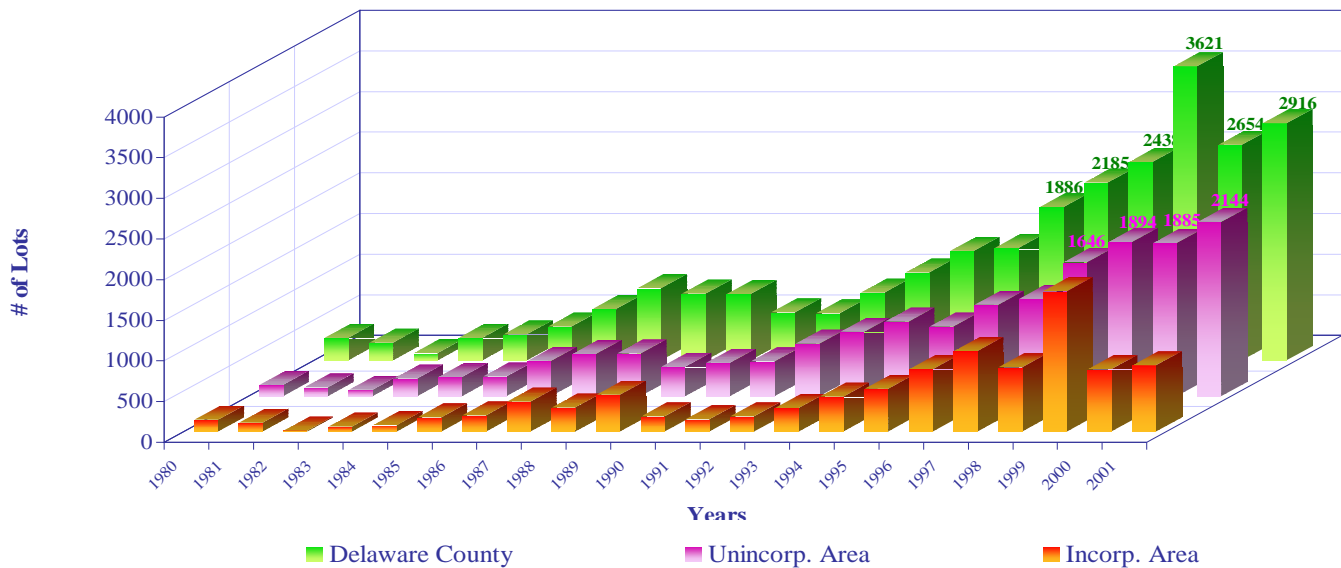
2) FROM 1997, THOSE FIGURES ARE INCLUDING MULTI-FAMILY RESIDENTIAL BUILDING PERMITS IN TOWNSHIPS

3) PLEASE CHECK DCRPC WEBSITE (WWW.DCRPC.ORG) FOR 2002 INFORMATION.

SOURCE: DELAWARE COUNTY REGIONAL PLANNING COMMISSION.

# Building Permit Trends in Delaware County

1980 Through 2001



## Delaware County Residential Building Permits 2002 (UNINCOR. AREAS)

(Up-dated 1/02/03)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	SUB-TOTAL	VOID BP*	TOTAL
<b>Berkshire</b>	1	1	2	1	3	0	1	2	1	0	2	0	14		14
<b>Berlin</b>	9	9	16	19	20	8	15	6	24	20	5	6	157		157
<b>Brown</b>	1	4	1	2	3	0	0	2	0	1	0	0	14		14
<b>Concord</b>	31	19	29	34	21	26	28	16	21	39	13	17	294		294
<b>Delaware</b>	5	2	7	1	3	9	9	1	5	0	4	0	46		46
<b>Genoa</b>	35	47	70	64	53	64	77	55	51	84	53	55	708		708
<b>Harlem</b>	2	2	3	2	0	4	1	5	0	2	1	4	26		26
<b>Kingston</b>	0	1	0	6	2	2	3	2	0	9	6	3	34		34
<b>Liberty</b>	6	20	23	34	24	16	13	21	14	33	17	17	238		238
<b>Marlboro</b>	0	1	0	0	0	1	0	0	0	0	2	0	4		4
<b>Orange</b>	47	50	43	48	51	80	50	20	53	54	40	25	561		561
<b>Oxford</b>	0	3	1	2	0	1	1	0	1	1		1	11		11
<b>Porter</b>	0	2	1	0	2	0	1	1	3	0	0	1	11		11
<b>Radnor</b>	0	1	2	2	1	0	0	0	4	3	1	1	15		15
<b>Scioto</b>	0	1	2	1	4	0	2	1	3	1	1	2	18		18
<b>Thompson</b>	0	0	0	0	1	1	0	2	1	2	1	0	8		8
<b>Trenton</b>	2	0	2	2	2	1	2	1	1	0	0	0	13		13
<b>Troy</b>	1	5	0	6	2	1	1	3	3	1	1	0	24		24
<b>Total</b>	<b>140</b>	<b>168</b>	<b>202</b>	<b>224</b>	<b>192</b>	<b>214</b>	<b>204</b>	<b>138</b>	<b>185</b>	<b>250</b>	<b>147</b>	<b>132</b>	<b>2196</b>	<b>-7</b>	<b>2189</b>
<i>Total in 2001</i>	130	126	120	164	236	238	200	186	219	179	193	171	2162	-19	2143
<i>Total in 2000</i>	97	124	178	121	271	201	124	174	178	165	114	138	1885		1885
<i>Total in 1999</i>	85	114	213	181	178	270	205	149	146	102	100	151	1894		1894
<i>Total in 1998</i>	71	98	132	185	126	153	169	188	121	161	106	136	1646		1646

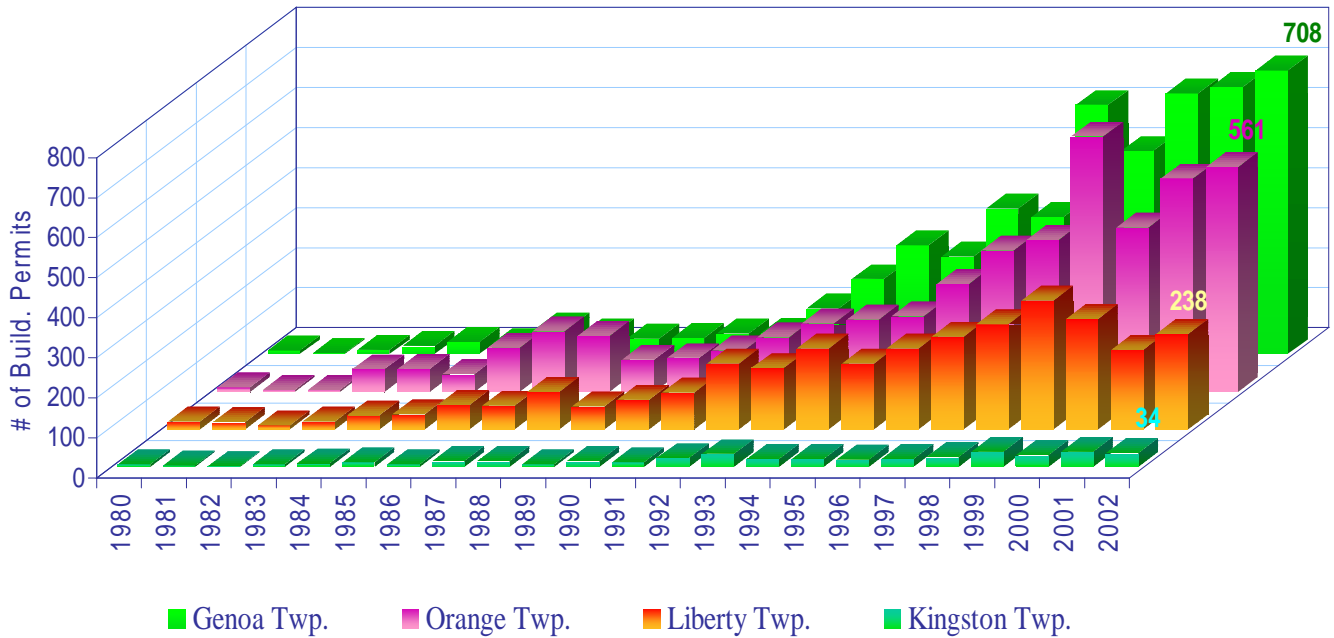
\* Indicates that a Building Permit was issued for a parcel, cancelled and later re-issued as a new permit for the same parcel.\*

Multi-Family	
Concord	includes 2 permits in Feb, 6 in Mar, 4 in Apr 4 in jun, 6 in July 3 in sept, 5 in oct
Genoa	includes 2 permits in Feb, 4 in Mar, 4 in Apr, 2 in May 12 in jun, 14 in July, 18 in aug, 8 in sept 17 in oct 9 in nov, 18 in dec.
Orange	includes 15 permits in May, 48 in jun, 4, 2 in dec
Delaware	includes 4 in nov

Pag

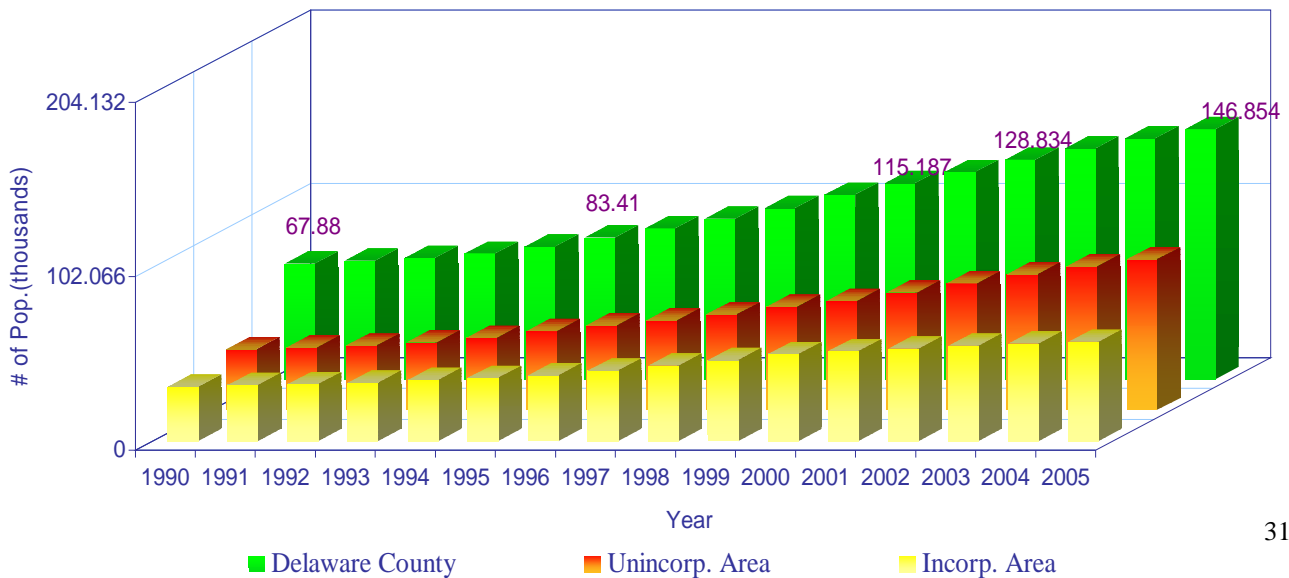
# Township Building Permit Trends in Delaware County

1980 Through 2002



# Population Projection to 2005

(Housing Unit Method)



#### **4.4 Population and Building Permit Growth, Kingston Township Summary**

According to the U.S. Bureau of Census, Delaware County is the fastest growing county in Ohio by percentage of growth (64.3 % increase from 1990-2000) and the 40<sup>th</sup> fastest growing county in the USA. From 2000-2001 the county was the 15<sup>th</sup> fastest growing in the country. The highest growth areas were in Orange Township (228.95 %), Genoa Township (178.63 %) and Liberty Township (142.27 %). Those three townships have county sewer service, which permits higher densities and spawns growth by production builders in large subdivisions. Meanwhile, Kingston Township, without sanitary sewer service, grew modestly by 467, from a population of 1,136 in 1990 to 1,603 in 2000, an increase of 41.11%.

## Chapter 5

### Development and Change 1980-2000

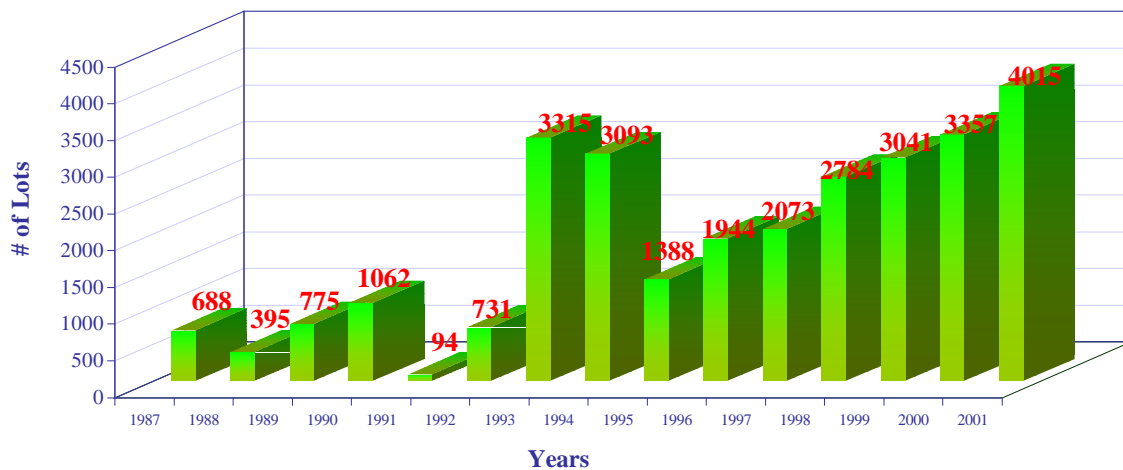
#### 5.1 Development Indicators

One indicator of future growth is platting activity for new subdivisions, since this precedes building permits.

Table 5.1 New Delaware County Subdivisions

## Subdivision Proposals

### Total # of Approved Lots By RPC



# of Lots Including Preliminary or Final Approved Proposals

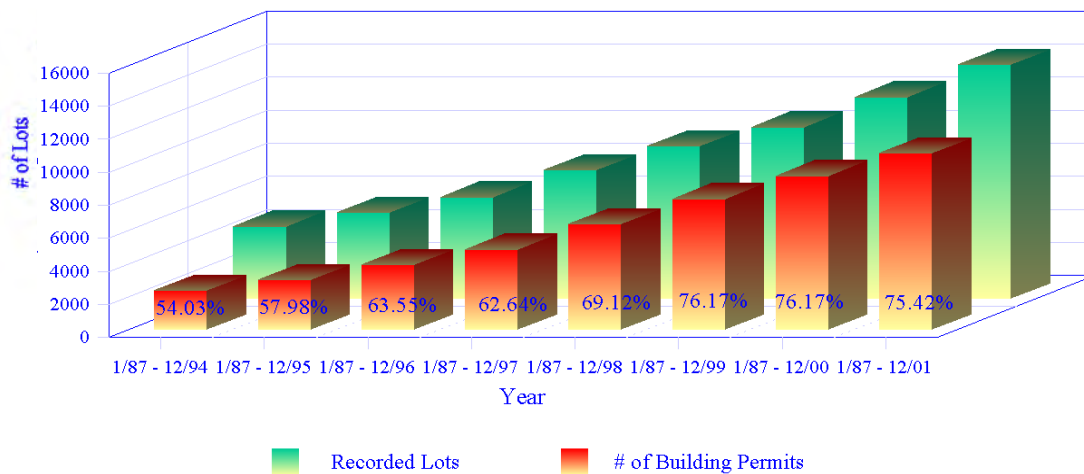
From January 1993 to December 2000, 70 new subdivision lots were platted in Kingston Township. This figure does not include road frontage lot splits and five-acre mini-farms. From January 1998 to the end of 2001, 86 new lots ranging from 1 to 5 acres were created through the no-plat approval (lot split) process. In 2000, 50 such lots were recorded. During the same 4-year period, 472 lot splits were approved for all of Delaware County. It should also be noted that of all the subdivisions platted in the township, the majority would be considered lot splits by today's standards. It is clear that residential growth in Kingston Township is not occurring by traditional subdivisions with streets, but by road frontage lot splits.



**Table 5.2 Subdivisions in Delaware County 1/1/93- 12/31/2000**

Subdivision Proposals of Unincorporated  
Jurisdictions in Delaware County

**Building Permits Issued to Recorded Lots by Year  
(Lot Absorption Rate)**



NOTE: Lot Absorption Rate = Building Permits / Recorded Lots

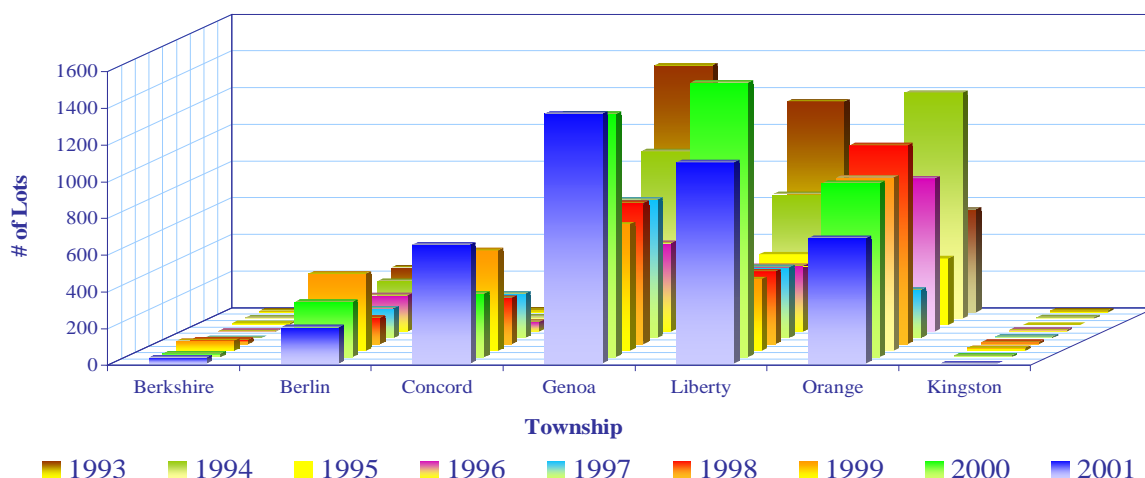
SUMMARY STATISTICS OF 2001 SUBDIVISION PROPOSALS					
ACTIVE SUBDIVISION PROPOSALS APPROVED BY RPC					
TOWNSHIP	TOTAL		SINGLE-F.	MULTI-F.	**NON-RESL.
	ACREAGE	*# OF LOTS	# OF LOTS	# OF H-UNITS	# OF LOTS
BERKSHIRE	172.05	33	32	0	1
BERLIN	232.08	198	198	0	0
BROWN	0.00	0	0	0	0
CONCORD	330.49	649	649	0	0
DELAWARE	121.97	72	72	0	0
GENOA	904.29	1,362	1,362	66	0
HARLEM	32.17	15	15	0	0
KINGSTON	0.00	0	0	0	0
LIBERTY	1,103.14	1,093	1,061	144	31
MARLBORO	0.00	0	0	0	0
ORANGE	426.25	684	683	0	1
OXFORD	36.57	9	9	0	0
PORTER	0.00	0	0	0	0
RADNOR	0.00	0	0	0	0
SCIOTO	39.28	17	17	0	0
THOMPSON	0.00	0	0	0	0
TRENTON	71.75	11	11	0	0
TROY	105.08	34	34	0	0
<b>TOTAL</b>	<b>3,575.12</b>	<b>4,177</b>	<b>4,143</b>	<b>210</b>	<b>33</b>
NOTE*: NUMBER OF LOTS INCLUDING TOTAL SUBDIVIDED LOTS IN 2001					
NOTE**: NUMBER OF SUBDIVIDED LOTS FOR COMMERCIAL OR INDUSTRIAL USE					

Subdivision lots follow a process of sketch plan, preliminary plan, final plat approval and then recording. Developers often pause in the platting process in anticipation of favorable housing market conditions. The DCRPC tracks the progress of subdivisions.

**Table 5.3 Status of Subdivision Lots**

## Subdivision Proposals of Unincorporated Jurisdictions in Delaware County

### # of Approved Lots By Township and by Year



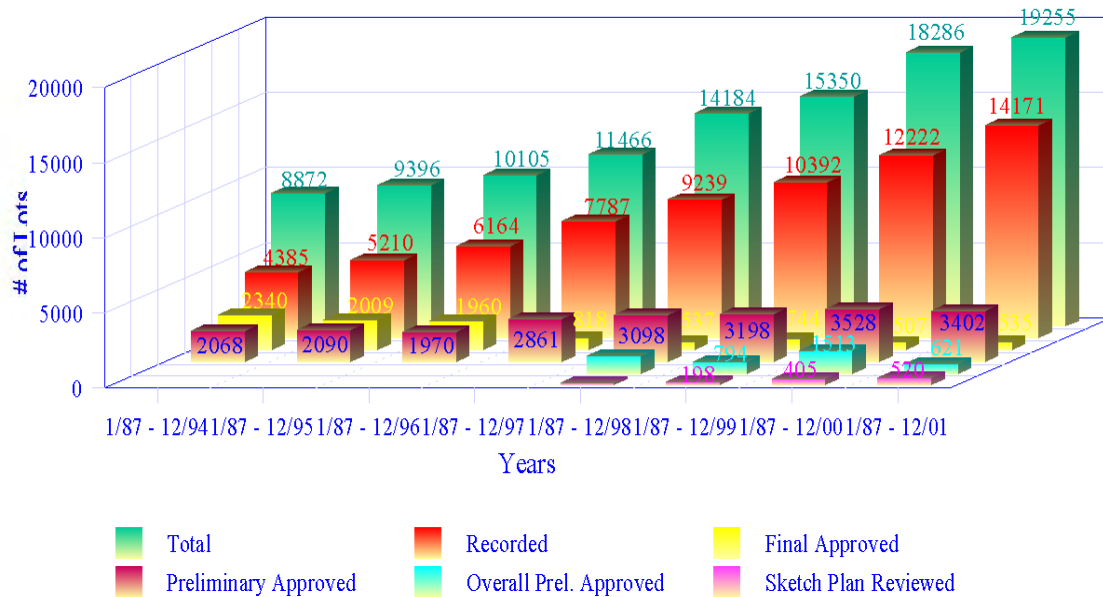
**SUMMARY STATISTICS OF SUBDIVISION DATA BASE FROM 1/1/87 TO 12/31/01**

		TOTAL # OF LOTS APPROVED BY RPC								
TOWNSHIP		1993	1994	1995	1996	1997	1998	1999	2000	2001
BERKSHIRE		9	6	10	3	0	24	55	19	33
BERLIN		244	206	107	198	162	145	420	302	198
BROWN		6	0	0	8	0	2	4	10	0
CONCORD		15	11	19	52	241	254	548	346	649
DELAWARE		24	4	19	5	209	83	59	39	72
GENOA		1,346	912	425	483	753	771	690	1,326	1,362
HARLEM		11	11	26	9	4	3	31	0	15
KINGSTON		10	7	0	8	8	12	16	9	0
LIBERTY		1,149	679	386	358	386	398	391	1,497	1,097
MARLBORO		0	0	0	0	0	0	0	5	0
ORANGE		562	1,232	364	834	263	1,085	943	949	684
OXFORD		0	0	0	0	0	0	0	9	9
PORTER		4	2	2	2	3	0	2	0	0
RADNOR		8	0	0	0	0	0	5	3	0
SCIOTO		2	11	7	11	4	0	28	38	17
THOMPSON		0	0	0	3	0	0	21	0	0
TRENTON		7	9	23	0	0	0	19	5	11
TROY		8	3	0	11	0	4	4	13	34
TOTAL		3,405	3,093	1,388	1,985	2,033	2,781	3,236	4,570	4,181
* TOTAL # OF LOTS INCLUDE S-F. & M-F. SUBDIV. AND OTHER USE SUBDIVISION PROPOSALS										

\* TOTAL # OF LOTS INCLUDE S-F. & M-F. SUBDIV. AND OTHER USE SUBDIVISION PROPOSALS

## Subdivision Proposals of Unincorporated Jurisdictions in Delaware County

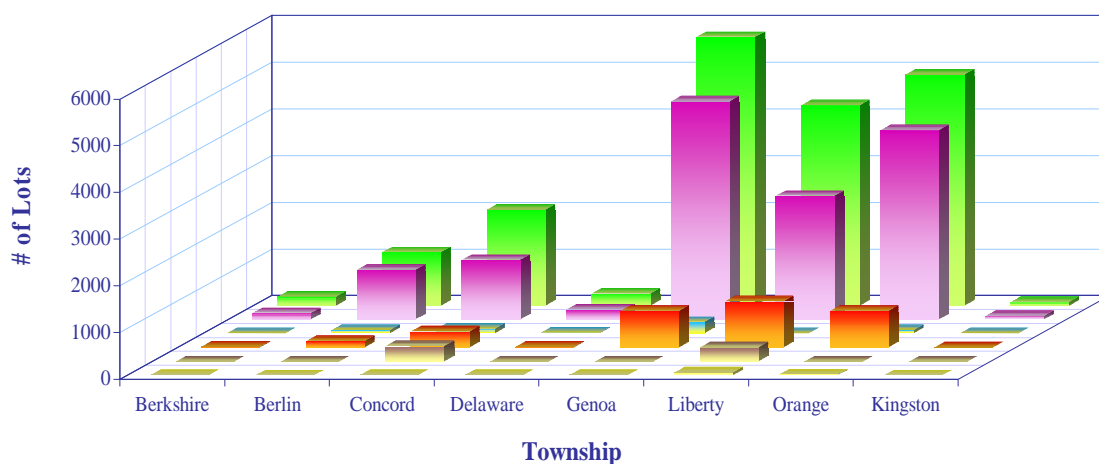
### # of Approved Lots by Status



SUMMARY STATISTICS OF ACTIVE SUBDIVISION DATA BASE FROM 1/1/87 TO 12/31/01								
TOTAL NUMBER OF S-F. LOTS APPROVED BY RPC								
	1/87 - 12/94	1/87 - 12/95	1/87 - 12/96	1/87 - 12/97	1/87 - 12/98	1/87 - 12/99	1/87 - 12/00	1/87 - 12/01
<b>TOTAL LOTS</b>	8,872	9,396	10,105	11,466	14,184	15,350	18,286	19,255
<b>RECORDED LOTS</b>	4,385	5,210	6,164	7,787	9,239	10,392	12,222	14,171
<b>FINAL APP'D</b>	2,340	2,009	1,960	818	537	744	507	535
<b>RPREL. APP'D</b>	2,068	2,090	1,970	2,861	3,098	3,198	3,528	3,402
<b>OVERALL PREL.</b>					1,164	794	1,513	621
<b>SKETCH REVIEW</b>					146	198	405	520
<b>TABLED</b>						24	111	6
<b>BLDG PERMITS</b>	2,369	3,021	3,917	4,878	6,386	7,916	9,309	10,688
<b>BR-RATIO</b>	54.03%	57.98%	63.55%	62.64%	69.12%	76.17%	76.17%	75.42%
NOTE: BR-RATIO = BLDG PERMITS / RECORDED LOTS								
NOTE: THESE FIGURES NOT INCLUDING THE EXPIRED S-F. LOTS								

# Subdivision Proposals of Unincorporated Jurisdictions in Delaware County

## # of Approved S-F Lots By Status (1/87 - 12/01)



■ Total      ■ Recorded      ■ Final Approved  
■ Preliminary Approved      ■ Overall Prel.      ■ Sketch Reviewed

SUMMARY STATISTICS OF SUBDIVISION DATA BASE FROM 1/1/87 TO 12/31/01

TOWNSHIP	ACREAGE	NUMBER OF S-F. LOTS							M_H_UNIT	BLDGPER	EXPIRED LOTS
		TOTAL*	RECORDED	FINAL APP'D	PREL APP'D	OVERALL PREL	TABLED	SKETCH REVIEW			
BERKSHIRE	545.47	193	140	3	19	0	0	8	0	115	26
BERLIN	1,165.19	1,143	1,068	75	143	0	0	0	0	662	30
BROWN	196.63	77	26	0	0	0	0	0	0	22	51
CONCORD	1,830.18	2,053	1,276	99	343	325	2	4	95	809	91
DELAWARE	278.51	254	210	22	16	0	0	6	48	123	30
GENOA	3,875.90	5,751	4,673	244	781	0	0	6	126	3,473	95
HARLEM	367.23	134	95	0	15	0	0	0	0	66	24
KINGSTON	268.76	83	76	0	0	0	0	0	0	52	7
LIBERTY	4,550.99	4,293	2,647	7	991	296	4	65	1,223	2,134	528
MARLBORO	32.16	7	2	0	5	0	0	0	0	1	0
ORANGE	2,871.96	4,953	4,055	77	784	0	9	16	1,335	3,088	68
OXFORD	36.57	9	9	0	0	0	0	0	0	0	0
PORTER	250.19	19	19	0	0	0	0	0	0	14	0
RADNOR	153.82	32	24	0	0	0	0	0	0	17	10
SCIOTO	238.83	72	44	0	17	0	0	0	0	28	13
THOMPSON	51.99	24	24	0	0	0	0	0	0	5	0
TRENTON	319.26	62	53	0	0	0	0	7	0	32	4
TROY	249.07	96	55	0	0	0	0	31	0	47	0
<b>TOTAL</b>	<b>17,282.71</b>	<b>19,255</b>	<b>14,496</b>	<b>527</b>	<b>3,114</b>	<b>621</b>	<b>15</b>	<b>143</b>	<b>2,827</b>	<b>10,688</b>	<b>977</b>

NOTE 1: BR (RATIO) = # OF BUILDING PERMITS / # OF RECORDED LOTS = 75.62%

NOTE 2: TOTAL\* DOES NOT INCLUDE THE EXPIRED SUBDIVISION PROPOSALS

NOTE 3: M\_H\_UNIT INCLUDES THE EXPIRED SUBDIVISION PROPOSALS

## Kingston Township Subdivisions

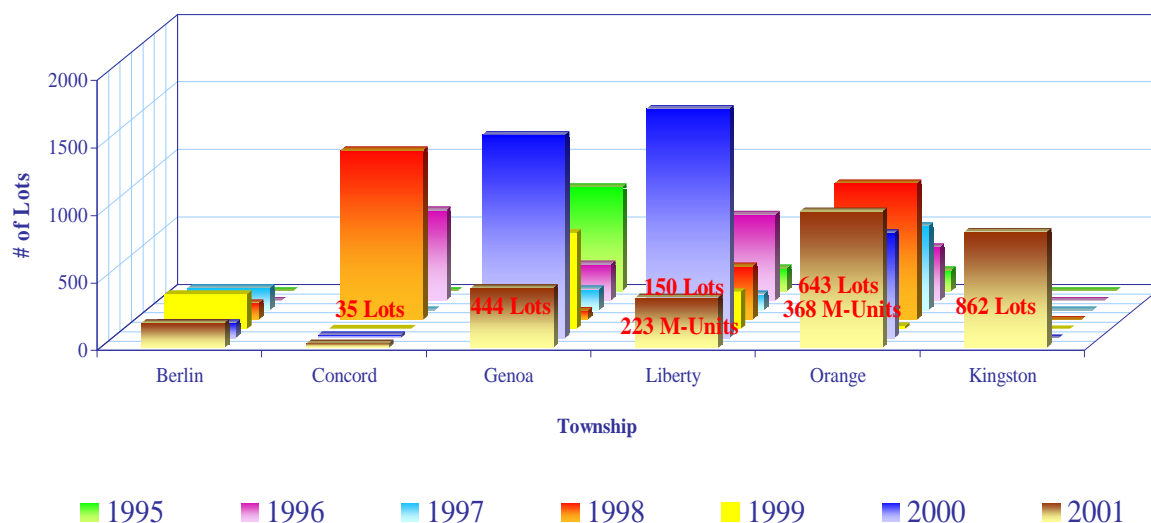
Subdivision Name	# of Lots	Acreage	# of Building Permits	CAD	Recorded Date	School District
SIGLAR	10	16.19000	10	N	7/27/87	BIG WALNUT
COUNTRY HOLLOW SEC. 1	4	4.41000	4	N	11/30/87	BUCKEYE VALLEY
AUGUST ACRES	4	5.00000	4	N	9/25/92	BUCKEYE VALLEY
COUNTRY HOLLOW SEC. 2	9	15.60000	8	N	8/30/90	BUCKEYE VALLEY
PODERYS	10	15.80000	7	N	4/21/94	BIG WALNUT
WILDWOOD LANE ACRES	3	7.40000	2	N	10/18/94	BIG WALNUT
SCHIRTZINGER SUBD #3	2	5.91000	0	N	7/5/95	BUCKEYE VALLEY
MAIN ESTATES	2	7.09000	1	N	8/15/95	BIG WALNUT
MACHU PICCHU #1	4	8.00000	3	Y	9/23/97	BUCKEYE VALLEY
MACHU PICCHU #2	4	6.00000	5	N	8/18/97	BUCKEYE VALLEY
INDIGO RUN	3	38.66000	0	Y	6/22/99	BUCKEYE VALLEY
RYAN GLEN	5	34.69000	3	Y	2/4/98	BUCKEYE VALLEY
R.J. KOPP SUBDIVISION	4	35.85000	3	Y	7/8/99	BUCKEYE VALLEY
LA FORZA DEL DESTINO	3	6.72000	3	Y	10/28/99	BIG WALNUT
GROVE SUBDIVISION	2	25.15000	0	Y	2/15/00	BIG WALNUT
II TROVATORE	5	8.25000	0	Y	10/9/00	BUCKEYE VALLEY
TWINBROOK	4	5.88000	3	N	7/17/72	BUCKEYE VALLEY
TWIN BROOK #2	3	6.84000	2	N	8/27/73	BUCKEYE VALLEY
SCHIRTZINGER	4	8.00000	2	N	3/20/78	BUCKEYE VALLEY
YONTZ	4	13.47000	4	N	11/21/78	BUCKEYE VALLEY
PAULEY	4	4.76000	4	N	7/26/79	BUCKEYE VALLEY
ODEL ACRES	1	1.20000	1	N	12/21/83	BUCKEYE VALLEY
SCHIRTZINGER	1	5.00000	1	N	12/27/71	BUCKEYE VALLEY
VAN SICKLE	4	8.80000	4	N	3/1/79	BUCKEYE VALLEY
FOLKESTONE	4	0.00000	4	N/A	3/26/79	BUCKEYE VALLEY
COUNTRY EXTATES	3	4.03000	3	N	11/22/71	BUCKEYE VALLEY
HILL ACRES	4	0.00000	4	N/A	10/7/58	BIG WALNUT
BARTOK	4	8.18000	4	N	7/18/78	BIG WALNUT
BARTOK #2	4	12.63000	4	N	2/22/79	BIG WALNUT
BOYD ACRES	3	0.00000	3	N/A	12/7/64	BIG WALNUT
BRADFORD	3	4.78000	2	N	8/27/79	BIG WALNUT
KNOLLS	4	4.45000	4	N	12/28/77	BIG WALNUT
DECKER	4	4.73000	3	N	1/21/82	BIG WALNUT
WILDWOOD ESTATES #1	4	7.83000	4	N	12/18/80	BIG WALNUT
STATE ROUTE 61	4	4.03000	4	N	3/19/75	BIG WALNUT
MONKEY HOLLOW	3	4.33000	2	N	1/28/76	BIG WALNUT
MONKEY HOLLOW #2	3	3.00000	3	N	3/30/76	BIG WALNUT
KINGSTON RIDGE	2	4.67000	2	N	4/30/73	BIG WALNUT
ROSECRANS	4	5.85000	4	N	5/1/75	BIG WALNUT
ROSECRANS #2	4	4.99000	4	N	1/3/78	BIG WALNUT
FAIRCHILD	1	0.00000	1	N/A	4/10/61	BIG WALNUT
RESUB OF LOT # 130, MAIN EST.	2	3.04000	0	N	6/14/00	BIG WALNUT

## Delaware County Lot Splits from 01/1998 to 12/2001

TOWNSHIP	TOTAL LOTS	TOTAL ACREAGE	VACANT LOTS	VACANT ACREAGE
BERKSHIRE	31	65.48	24	44.47
BERLIN	30	67.58	27	59.09
BROWN	18	44.59	15	36.34
CONCORD	45	96.65	31	63.43
DELAWARE	13	22.99	8	13.69
GENOA	49	103.39	36	77.47
HARLEM	29	50.18	18	28.46
<b>KINGSTON</b>	<b>102</b>	<b>197.35</b>	<b>86</b>	<b>166.51</b>
LIBERTY	58	112.20	33	81.59
MARLBORO	17	48.12	16	35.20
ORANGE	25	47.95	15	37.59
OXFORD	53	122.32	48	102.03
PORTER	4	12.24	3	9.38
RADNOR	11	29.58	9	23.57
SCIOTO	56	111.17	45	85.49
THOMPSON	11	18.73	6	9.27
TRENTON	18	41.26	11	24.71
TROY	45	102.70	41	92.21
TOTAL	615	1294.48	472	990.48

# Rezoning Proposals of Unincorporated Jurisdictions in Delaware County

**Total # of Lots by Township and By Year**



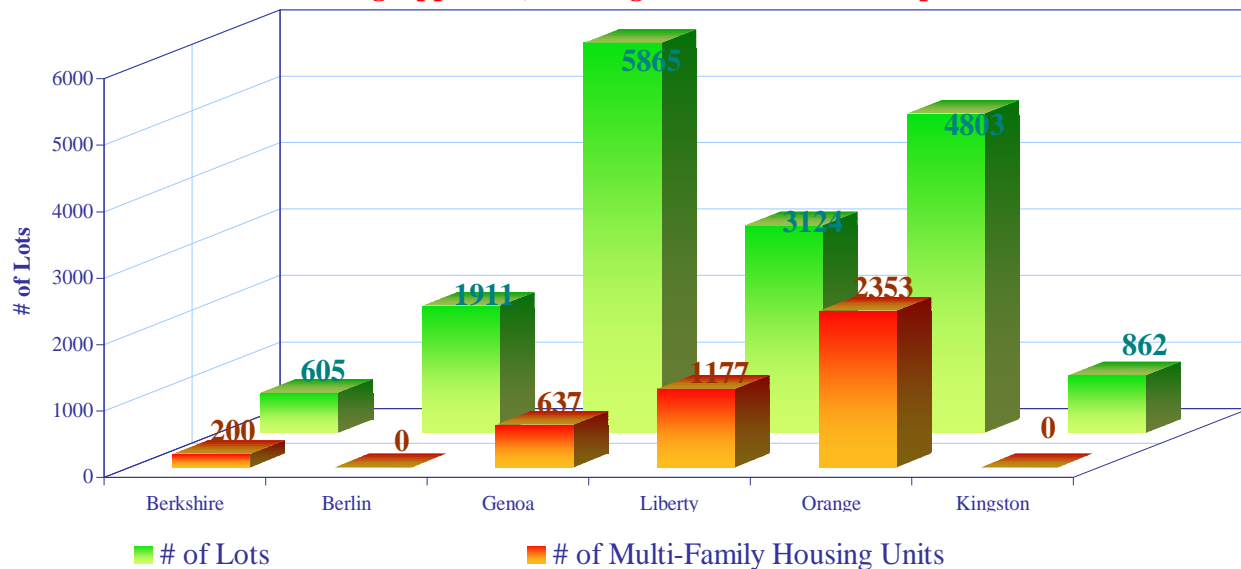
Note: # of Lots Including Single-F. Lots and Multi-F. Housing Units.

## SUMMARY STATISTICS OF REZONING DATA BASE FROM 1/1/89 TO 12/31/01

ACTIVE REZONING PROPOSALS REVIEWED BY RPC							
TOWNSHIP	TOTAL		RESIDENTIAL		NON-RESIDENTIAL		
	ACREAGE	ACREAGE	# OF LOTS	# OF M-F HU	ACREAGE	# SQ. FT	
BERKSHIRE	1,587.35	882.32	639	373	705.03	272,235	
BERLIN	1,284.64	1,141.70	2,032	0	142.94	464,840	
BROWN	42.91	0.00	0	0	42.91	4,644	
CONCORD	1,402.42	1,192.54	1,762	164	209.88	53,290	
DELAWARE	218.54	216.38	297	0	2.16	8,663	
GENOA	3,084.96	3,003.15	6,759	457	81.81	465,781	
HARLEM	483.07	314.10	119	0	168.94	900	
KINGSTON	899.79	886.47	862	0	13.32	0	
LIBERTY	3,272.51	2,498.97	3,200	1,737	773.54	2,820,394	
MARLBORO	2.10	3,195.69	0	0	2.10	4,280	
ORANGE	3,777.92	0.00	5,252	2,455	582.22	5,006,745	
OXFORD	1.02	0.00	0	0	1.02	1,920	
PORTER	4.50	4.50	2	0	0.00	0	
RADNOR	14.42	0.00	0	0	14.42	1,350	
SCIOTO	595.62	1.50	1	0	594.12	0	
THOMPSON	0.00	0.00	0	0	0.00	0	
TRENTON	352.36	343.08	111	0	9.27	23,600	
TROY	40.09	0.00	0	0	40.09	19,250	
<b>TOTAL</b>	<b>17,064.22</b>	<b>13,680.40</b>	<b>21,036</b>	<b>5,186</b>	<b>3,383.77</b>	<b>9,147,892</b>	

# Rezoning Proposals of Unincorporated Jurisdictions in Delaware County

**Total # of Lots by Type(1/89 - 12/01)**  
(including Approved, Pending and Withdrawn Proposals)

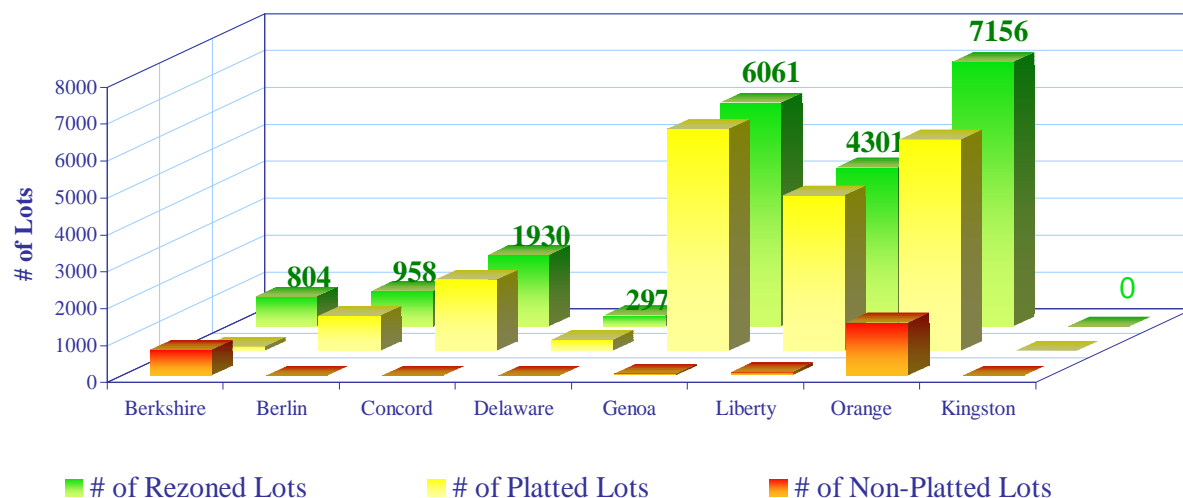


## SUMMARY STATISTICS OF REZONING DATA BASE FROM 1/1/89 TO 12/31/01

ACTIVE REZONING PROPOSALS REVIEWED BY RPC								
TOWNSHIP	TOTAL		APPROVED		PENDING		*T. OR W.	
	# LOTS	# M-F. HU	# LOTS	# M-F. HU	# LOTS	# M-F. HU	# LOTS	# M-F. HU
BERKSHIRE	605	200	604	200	1	0	0	0
BERLIN	1911	0	958	0	0	0	953	0
BROWN	0	0	0	0	0	0	0	0
CONCORD	1763	167	1763	167	0	0	0	0
DELAWARE	297	0	297	0	0	0	0	0
GENOA	5865	637	5424	637	441	0	0	0
HARLEM	99	0	97	0	0	0	2	0
KINGSTON	862	0	0	0	862	0	0	0
LIBERTY	3124	1177	3124	1177	0	0	0	0
MARLBORO	0	0	0	0	0	0	0	0
ORANGE	4803	2353	4803	2353	0	0	0	0
OXFORD	0	0	0	0	0	0	0	0
PORTER	2	0	2	0	0	0	0	0
RADNOR	0	0	0	0	0	0	0	0
SCIOTO	1	0	0	0	1	0	0	0
THOMPSON	0	0	0	0	0	0	0	0
TRENTON	75	0	75	0	0	0	0	0
TROY	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>19407</b>	<b>4534</b>	<b>17147</b>	<b>4534</b>	<b>1305</b>	<b>0</b>	<b>955</b>	<b>0</b>
NOTE: *T. OR W. MEANS TABLED OR WITHDRAWN REZONING PROPOSALS								

# Rezoning Proposals of Unincorporated Jurisdictions in Delaware County

## # of Rezoned Lots by Platting Status(1/89-12/01)



### SUMMARY STATISTICS OF REZONING DATA BASE FROM 1/1/89 TO 12/31/01

#### ACTIVE REZONING PROPOSALS REVIEWED BY RPC

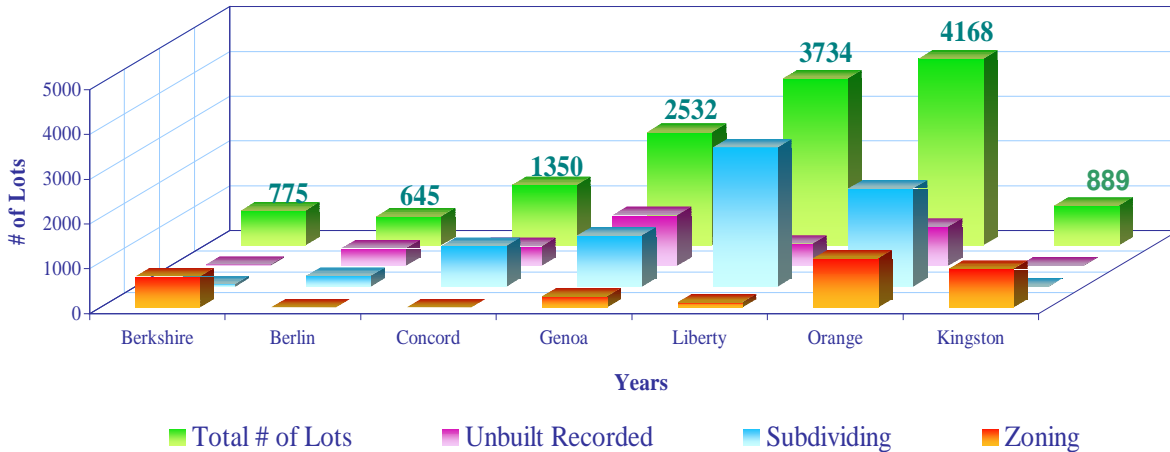
TOWNSHIP	# OF S-F. LOTS & M-F. H-UNITS			PLATTING
	REZONED*	PLATTED	NON-PLATTED	RATE
BERKSHIRE	804	112	692	13.93%
BERLIN	958	958	0	100.00%
BROWN	0	0	0	0.00%
CONCORD	1930	1929	1	99.95%
DELAWARE	297	297	0	100.00%
GENOA	6061	6013	48	99.21%
HARLEM	97	85	12	87.63%
KINGSTON	0	0	0	0.00%
LIBERTY	4301	4215	86	98.00%
MARLBORO	0	0	0	0.00%
ORANGE	7156	5726	1430	80.02%
OXFORD	0	0	0	0.00%
PORTER	2	2	0	100.00%
RADNOR	0	0	0	0.00%
SCIOTO	0	0	0	0.00%
THOMPSON	0	0	0	0.00%
TRENTON	75	49	26	65.33%
TROY	0	0	0	0.00%
<b>TOTAL</b>	<b>21681</b>	<b>19386</b>	<b>2295</b>	<b>89.41%</b>

NOTE: # OF REZONED LOTS\* IS INCLUDING ALL REZONING PROPOSALS WHICH ARE APPROVED OR PENDING IN TOWNSHIPS



# Rezoning & Subdivision Proposals of Unincorporated Jurisdictions in Delaware County

## Number of Available S-F Lots & M-F Units by Status



Note: 1. 'Subdividing' Lots includes Final Approved, Prel. Approved, Sketch Reviewed or Expired Lots.  
2. 'Zoning Lots includes Approved or Pending Lots.

### SUMMARY STATISTICS OF REZONING AND SUBDIVISION

ACTIVE PROPOSALS APPROVED BY RPC AND TOWNSHIPS

TOTAL NUMBER OF AVAILABLE LOTS AND HOUSING UNITS FOR NEW BUILDING PERMITS

TOWNSHIP	*TOTAL	SUBTOTAL	NUMBER OF AVAILABLE SUBDIVISION S-F LOTS						***M-F. UNIT		NUMBER OF ZONING LOTS			
			****UNBUILT	FINAL	PREL.	OVERALL	TABLED	SKETCH	APPROVED	EXPIRED	*APPROVED BY ZONIN		PENDING IN TWP.	
			RECORDED	APP'D	APP'D	PREL.		REVIEW			S-F. LOTS	M-F. UNITS	S-F. LOTS	M-F. UNITS
BERKSHIRE	775	56	26	3	19	0	0	8	0	26	492	200	1	0
BERLIN	645	615	397	75	143	0	0	0	0	30	0	0	0	0
BROWN	56	5	5	0	0	0	0	0	0	51	0	0	0	0
CONCORD	1350	1214	441	99	343	325	2	4	44	91	1	0	0	0
DELAWARE	208	130	86	22	16	0	0	6	48	30	0	0	0	0
GENOA	2532	2167	1136	244	781	0	0	6	21	95	18	46	185	0
HARLEM	80	44	29	0	15	0	0	0	0	24	12	0	0	0
KINGSTON	889	20	20	0	0	0	0	0	0	7	0	0	862	0
LIBERTY	3734	1864	501	7	991	296	4	65	1223	528	86	0	0	33
MARLBORO	6	6	1	0	5	0	0	0	0	0	0	0	0	0
ORANGE	4168	1766	880	77	784	0	9	16	1239	68	447	648	0	0
OXFORD	9	9	9	0	0	0	0	0	0	0	0	0	0	0
PORTER	5	5	5	0	0	0	0	0	0	0	0	0	0	0
RADNOR	17	7	7	0	0	0	0	0	0	10	0	0	0	0
SCIOTO	48	34	17	0	17	0	0	0	0	13	0	0	1	0
THOMPSON	19	19	19	0	0	0	0	0	0	0	0	0	0	0
TRENTON	59	28	21	0	0	0	0	7	0	4	27	0	0	0
TROY	39	39	8	0	0	0	0	31	0	0	0	0	0	0
<b>TOTAL</b>	<b>14639</b>	<b>8028</b>	<b>3608</b>	<b>527</b>	<b>3114</b>	<b>621</b>	<b>15</b>	<b>143</b>	<b>2575</b>	<b>977</b>	<b>1083</b>	<b>894</b>	<b>1049</b>	<b>33</b>

NOTE\*: TOTAL NUMBER OF AVAILABLE S-F LOTS AND M-F H-UNITTS

NOTE\*\*: TOTAL LOTS APPROVED BY ZONING, BUT NOT SUBDIVIDED YET (NON-PLATTED LOTS)

NOTE\*\*\*: FIGURES ONLY COUNT THE HU HASNT GOT BUILDING PERMIT

NOTE\*\*\*\*: UNBUILT MEANS LOTS HASNT GOT BUILDING PERMITS

NOTE: SUBDIVISION PROPOSALS DATA FROM 1/87 TO 12/01

NOTE: REZONING PROPOSALS DATA FROM 1/89 TO 12/01

## **5.2 Summary of Development Indicators in Delaware County and Kingston Township**

Kingston Township has experienced modest growth in the last 10 years. Kingston's increase pales in comparison to the townships in southern Delaware County due to a lack of sanitary sewer. Kingston Township's residential growth could potentially increase substantially as a result of Land Application System technology (centralized sanitary sewers provided on site pursuant to OEPA approval). At the time of this writing, a large residential and golf course community (NorthStar) of 866 acres has been rezoned on the former Margaret Wise farm. NorthStar will introduce suburban lot sizes of 9,000 square feet, with 651 house lots laid out around a golf course and open space that doubles as irrigation areas for land application of treated effluent from an on-site wastewater treatment plant.

There are some observed trends that merit concern for the townships in Delaware County. Significant zoning and subdivision activity has lead to a buildup of supply in subdivision lots available for development. As of December 31, 2000, there were 12,969 single family lots or multi-family housing units in the development approval process. This means that all 12,969 lots had received at least zoning approval or had begun the subdivision process. These 12,969 housing units represent an eight (8) year supply, using the average number of new housing permits in the townships for the previous 5 years (1,548/yr). A three (3) year supply is considered normal. Despite this significant increase in platting and zoning, subdivision activity has remained strong. DCRPC reviewed 4,570 new lots in 2000.

**Table 5.4 Total Number of Available Lots and MF Units in Delaware County Twps. 1/1/2001**

<u>All Delaware County Townships Combined</u>	
• Multi family zoning pending	173
• Single family zoning pending	321
• Multi family zoning approved, not platted	361
• Single family zoning approved, not platted	951
• Multi family with subdiv. approval	1,141
• Expired subdivision (can be restored)	773
• Sketch plan reviewed	424
• Tabled	111
• Overall preliminary subdivision approved	1,513
• Preliminary approved subdivisions	3,573
• Final subdivision approved (not recorded)	504
• <u>Unbuilt, recorded lots</u>	<u>3,136</u>
<b>Totals</b>	<b>12,969*</b>

\* Totals are not the sum of all categories, since there can be zonings that are also an expired subdivision.

### **5.3 Effects of Growth-Community Perception**

The Building Industry Association of Columbus and Franklin County conducted a Delaware County survey in June 1998 to gauge sentiments about the effects of growth. Four hundred likely voters were canvassed for 18 minutes apiece about various growth concerns. The data was county wide.

- Development/Loss of farmland, Growth Planning, and Traffic were #2, #4, and #6 concerns.
- 40.8% said we are doing a poor job of managing growth and development.
- 55.8% said we are doing a poor job to reduce traffic congestion
- Amenities/access was cited (20.2%) as positive aspects of growth.
- 53.9% said they want growth to continue, but the pace is too fast.
- 49.4% said government should encourage planned growth.
- #1 and #2 priorities on managing growth were keeping up with school construction and protecting the environment and open spaces.

A second detailed survey was performed in Delaware County in 1998 relative to the environmental health of the county. The Protocol for Assessing Community Excellence in Environmental Health (PACE-EH) survey asked questions in person and by mail relating to the community's perception of its environmental health. Trained volunteers surveyed 500 students in five local high schools and 200 county fair attendees. In addition, the survey questions were mailed to 40,000 households.

The top five PACE environmental concerns were:

1. Need for more parks, green space, wildlife habitats (733 responses)
2. County development, zoning, annexation out of control (721)
3. Surface water pollution from sewage systems (686)
4. Surface water pollution from factories, agriculture (685)
5. Environmental Education (660)

It may be observed that in Southern Delaware County, there is an opinion that growth has many negative attributes:

- too much traffic,
- unplanned neighborhoods,
- lack of environmental and open space protection,
- inadequate new school construction, and too rapid pace of growth.

Kingston Township has not yet experienced the rapid pace of growth that is seen in Genoa, Orange, and Liberty Townships. Nonetheless, the township is now in the middle of its largest growth spurt in its history. More growth is imminent. The comprehensive plan needs to address how this growth can best be managed.

## **Chapter 6**

### **Issues and Opportunities**

The Comprehensive Planning process is a forum for the development issues (forces) pushing and pulling at the township. The issues are categorized as strengths, opportunities, weaknesses, or threats. The township's response to these issues is a future vision, or strategic plan of action for the township's development.

#### **6.1 Citizen Participation in the Decision Making Process**

##### **A. Need for Citizen Participation**

The Comprehensive Plan is intended to be a reasonable vision of how the township should ultimately look; including built areas and open space. Plans typically look 5-10 years into the future, with the understanding that unforeseen circumstances may change the vision.

The planning process demands broad representation of the populace to ascertain current issues, and to set goals for the future. Each community may take a slightly different approach to involving the public, but a citizen participation element is the backbone of the process; it provides legitimacy to the resulting plan.

In general, the citizen participation should be:

- Representative of the population and land ownership of the township
- More broad based than just elected and appointed officials
- Long term and open to continuing debate
- Influential in the recommendations made to appointed and elected officials

##### **B. Open Invitation to the Process**

The Kingston Township Zoning Commission took three steps to open the discussion to the community.

1. A story in the local newspaper outlined the planning process and invited all to attend.
2. Posted legal advertisements for the public meetings to discuss the plan.
3. Requested a core group of citizens to join a Comprehensive Plan Steering Committee, which would work on the plan and forward the final draft to the Zoning Commission for consideration. A fifteen (15) member Steering Committee was organized. This core group agreed to meet on a monthly basis until the plan was completed.

##### **C. Commencement of the Planning Process**

On October 10, 2001 approximately 25 residents attended the first public meeting for the comprehensive planning process at the Township Hall, at which time they discussed the following items:

1. Why do we need a Comprehensive Plan for future land use?
2. What do we like about Kingston Township?

3. What do we dislike about Kingston Township?
4. What do we want the township to look like when it is ultimately developed?
5. What is our Vision for the development of the township for the next 5-10 years?

## **6.2 Citizens' Likes and Dislikes Regarding Current Development of Kingston Twp.**

The group of 25 was asked what they liked about Kingston Township's development and what they disliked. This simple question is asked because the responses can be reformulated into issues, which can then be categorized as Strengths, Opportunities, Weaknesses and Threats to the future development of the township (S.W.O.T.s).

<b>Likes</b>	<b>Dislikes</b>
Rural setting (12)	36/37 traffic (9)
Agricultural character (10)	Speed limits too high (3)
Low density (1 per 5 acres) This statement was also clarified with the addition that if everyone lived on a two acre lot, that would not be rural character. (10)	Light pollution from south (4)
No subdivisions (10)	Lack of local zoning control (11)
Road system is adequate	Inadequate fire protection
Lack of commercial	Length of school bus ride (long) (1)
Low traffic	Lack of hardened berm (3)
Topography/variety (5)	Cell/TV towers (4)
Limited cell towers (1)	Unightly clutter on property (4)
Reasonable taxes/growth (2)	Lack of county law enforcement (1)
Open Spaces (5)	
Two-lane roads (1)	
Peace and quiet (9)	
Natural resources/wildlife (1)	
Lower crime rate	
Small town community feel (2)	

Those in attendance at the meeting were asked to vote with stickers for the top three concerns they felt most strongly about on both the "likes" side and the "dislikes" side. The most popular issue was Rural Setting. The next set of ranked issues included Agricultural Character, Low Density, and No Subdivisions, with Peace and Quiet ranking close behind. Also receiving votes were Topography, Open Space, Reasonable Taxes, Small Town Community, Few Cell Towers and Two Lane Roads.

In the dislikes category, the most votes went to the Lack of Zoning Control and 36/37 Traffic and its effect on the township. Other concerns cited were Light Pollution from the South, Cell and TV Towers, and Unightly Clutter on Property. Also receiving votes: Speed Limits Too High, Lack of Hardened Berm along Roadways, Length of School Bus Ride and Lack of County Law Enforcement.

### **6.3 Issues regarding the township's current development**

The group also identified other general issues, and development opportunities related to the future of Kingston Township:

1. Land Application Sanitary Sewer Systems – a threat to rural character?
2. New Roads- County Thoroughfare Plan (Potential I-71 interchange).
3. Limited local commercial uses desired.
4. Farmland Preservation – Should we?
5. Keep industrial uses out.
6. Traffic as development occurs.
7. Emergency service

### **6.4 Issues and Opportunities**

During a second meeting on November 14, 2001, the steering committee and other concerned citizens ranked the issues above in order of importance. The numbers assigned to each represents each item's average rank. Respondents ranked each item on a scale of 5 to –5 with 5 being strongly agree and –5 strongly disagree. The table in Section 6.4 is a further analysis of the Likes/Dislikes in Section 6.2. Rural Character was expanded in 6.2 but not in 6.4.

<b>LIKES</b>	<b>AVERAGE</b>	<b>DISLIKES</b>	<b>AVERAGE</b>
1. Rural setting	4.82	1. 36/37 traffic	4.45
2. Peace and quiet	4.73	2. Lack of local zoning control	3.64
3. Natural resources/wildlife	4.45	3. Unsightly clutter on property	3.64
4. Agricultural character	4.36	4. Light pollution from the south	3.36
5. Open spaces	4.27	<u>5. Cell/TV towers</u>	<u>3.18</u>
6. Reasonable taxes/growth	4.18	Inadequate fire protection	2.64
7. Lower crime rate	4.18	Length of school bus ride	2.27
8. Limited Cell Towers	4.09	Lack of a hardened berm	2.00
9. Small town community feel	4.00	Lack of county law enforcement	1.36
<u>10. Topography/variety</u>	<u>3.64</u>	Speed limits too high	1.00
Low density*	3.45		
Lack of commercial	3.36		
Two-lane roads	3.18		
No subdivisions	2.91		
<u>Low traffic</u>	<u>2.81</u>		
Road system is adequate	1.18		

Issues that face the community today and down the road can be determined in the strengths, weaknesses, opportunities and threats strategic planning exercise. The likes, dislikes, issues and opportunities were ranked and placed into four categories (SWOT) by the Steering Committee on November 14, 2001. This instrument becomes an outline for a strategic plan of development. This strategic plan reflects general issues that must be addressed by the comprehensive plan.

#### **Strengths**

- Rural setting
- Agricultural character
- Low density

- Open spaces
- Peace and quiet
- Small town community feel
- Natural resources/wildlife
- Topography/variety
- Road system adequate for today
- Lower crime rate

#### **Weaknesses**

- Lack of local zoning control
- No subdivision – patchwork of large lot splits with no common/continuous open space
- Road system may not be adequate for the future
- Lack of commercial tax base
- Unsightly clutter on property

#### **Opportunities**

- Subdivisions that protect open spaces
- Commercial - to strengthen tax base
- No County sewer in the Township – may decrease the probability of high density development

#### **Threats**

- Lack of local zoning control
- Suburban style subdivisions (no open spaces)
- Poor access management creates traffic problems
- Cell/TV towers
- Light pollution from the south
- Loss of agricultural production

### **6.5 Vision Statement for Future Development**

The group of approximately 25 residents on October 10, 2001 drafted a future vision for the community development pattern, or vision statement:

#### **Vision Statement**

*When Kingston Township is all built out, we would like it to retain a rural setting with agricultural character, low density, peace and quiet, no large subdivisions, with open spaces, while retaining our rural roads with moderate traffic.*

The mission of the Kingston Township steering committee is to analyze the factors that influence future development patterns, consider the strengths, weaknesses, opportunities and threats to attaining the vision, and select a plan that assures the desired result.

## Chapter 7

### Existing Land Use

#### **7.1 Land Use Maps**

DCRPC staff has generated four different land use maps. Each tells a different story of how land is being used.

#### **I. Existing Land Use Map**

The existing land use map (*see Kingston Township Existing Land Use map the next page* ) displays single family residential, commercial, agricultural and open space, industrial by color. The land use is determined by the Auditor's tax codes. This acreage is displayed in Table 7.1.

**Table 7.1 Kingston Township Land Use by Acreage 1990-2001**

	<b>1990</b> (Satellite imagery)	<b>% Land</b>	<b>2001*</b> (Auditor's tax data)	<b>% Land</b>
<b>Residential (SF +MF) **</b>	<b>810.08</b>	<b>5.31</b>	<b>2,355.49</b>	<b>15.46</b>
Single Family	810.08		2,355.49	
Multi family	0.00		0	
<b>Commercial</b>	<b>.90</b>	<b>&lt;.1</b>	<b>63.87</b>	<b>.40</b>
<b>Institutions</b>	<b>2.46</b>	<b>&lt;.1</b>	<b>5.43</b>	<b>&lt;.1</b>
<b>Industrial</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Agriculture and undeveloped</b> (includes forests)	<b>13,641.23</b>	<b>89.54</b>	<b>12,107.83</b>	<b>79.47</b>
<b>Lakes, rivers and public lands***</b>	<b>284.13</b>	<b>1.86</b>	<b>259.68</b>	<b>1.70</b>
<b>Roads and Utilities****</b>	<b>481.29</b>	<b>3.16</b>	<b>487.70</b>	<b>3.20</b>
<b>Vacant land rezoned, still undeveloped</b>	<b>14.83</b>	<b>&lt;.1</b>	<b>19.23</b>	<b>.12</b>
<b>Acreage in Township</b>	<b>15,234.92</b>		<b>15,235.36</b>	

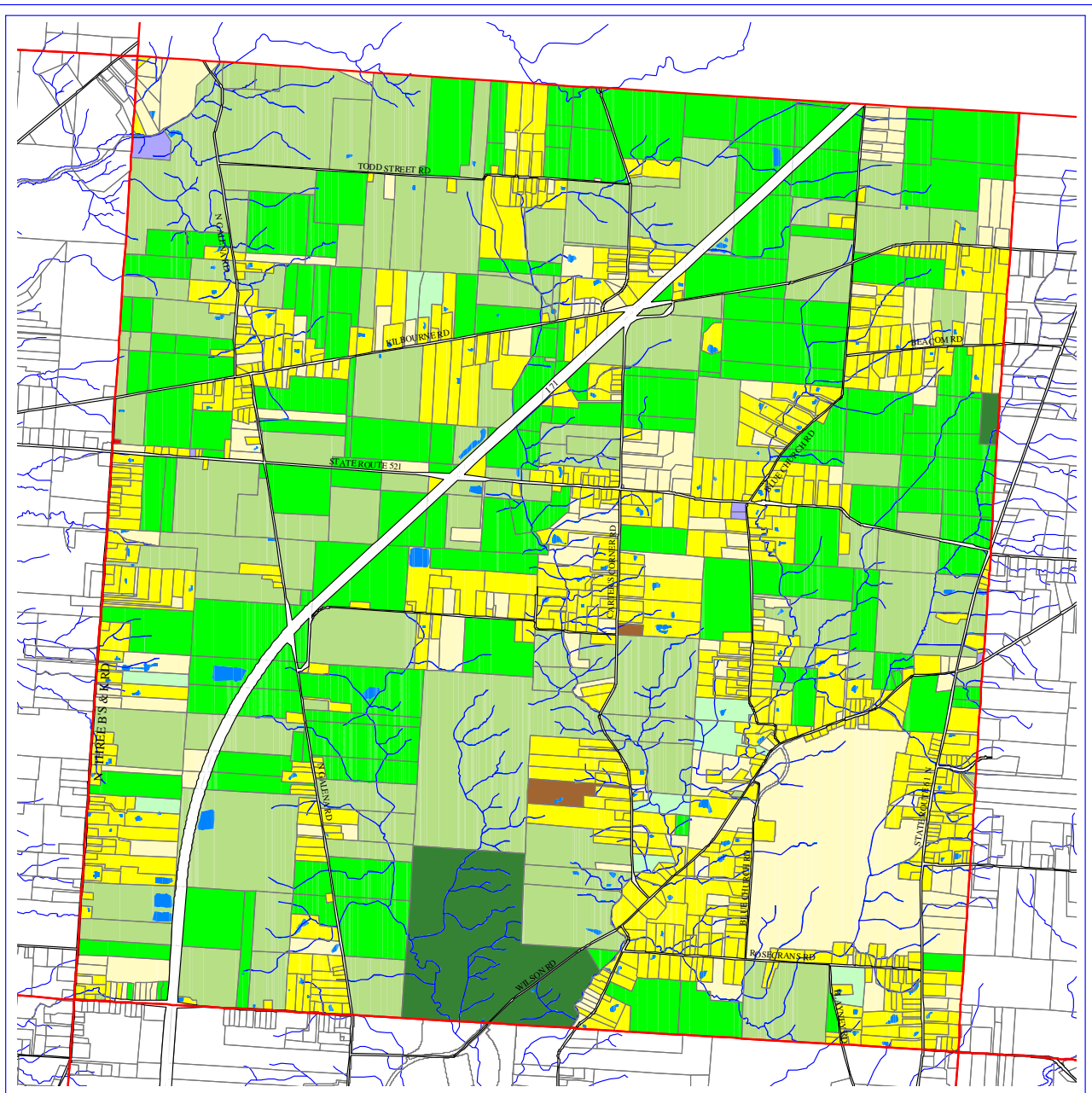
\* The 2001 DALIS Geographic Information System acreage vector data.

\*\*2001 residential acreage calculated using DALIS data for entire parcel.

\*\*\* Area created as follows: Lakes, ponds and rivers polygons calculated by GIS. Streams (including seasonal swales on the USGS maps) were given a width of 20 feet, and multiplied times the number of lineal feet.

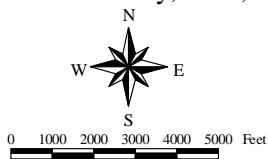
\*\*\*\*The ROW area for roads and utilities is 488 acres. There are no railroads in Kingston Township.





## Map 7.1 Existing Land Use

Kingston Township  
Delaware County, Ohio, 04/2008



Prepared By: Delaware County Regional Planning Commission (740-368-1960)  
Sources: DALIS project  
(4/8/2008)

<span style="border: 1px solid red; display: inline-block; width: 15px; height: 10px;"></span> Township Boundary	<span style="background-color: #ccccff; display: inline-block; width: 15px; height: 10px;"></span> Institution
<span style="border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Road Right of Way	<span style="background-color: #99cc99; display: inline-block; width: 15px; height: 10px;"></span> Agricultural
<span style="border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Property Lines	<span style="background-color: #99cc99; display: inline-block; width: 15px; height: 10px;"></span> Agricultural Vacant Land
<span style="color: blue; font-size: 2px;">~~~~~</span> Streams	<span style="background-color: #ffff99; display: inline-block; width: 15px; height: 10px;"></span> Residential Vacant Land
<b>Existing Land Use 4/2008</b>	<span style="background-color: #669933; display: inline-block; width: 15px; height: 10px;"></span> Golf Courses / Parks
<span style="background-color: #ffff00; display: inline-block; width: 15px; height: 10px;"></span> Single Family	<span style="background-color: #cccccc; display: inline-block; width: 15px; height: 10px;"></span> Road Right of Way
<span style="background-color: #996633; display: inline-block; width: 15px; height: 10px;"></span> Multi Family	<span style="background-color: #0099cc; display: inline-block; width: 15px; height: 10px;"></span> Rivers / Lakes / Streams
<span style="background-color: #ff0000; display: inline-block; width: 15px; height: 10px;"></span> Commercial	<span style="background-color: #99ff99; display: inline-block; width: 15px; height: 10px;"></span> Open Space / Remaining Land

## Findings of the DALIS Existing Land Use Map 2001

1. Residential land has nearly tripled from 810 in 1990 to 2,355 in 2001.
2. Agricultural and undeveloped land has decreased 11.2% from 13,641 in 1990 to 12,108 in 2001. Agriculture/undeveloped land is still the primary land use at 79.47% of all acreage.
3. There is no multifamily housing in Kingston Township. Commercial, industrial and institutional activity remains low, only 63.87 acres as of 2001.

## II. 2001 Windshield Survey of Existing Land Use

An existing land use field or “windshield” survey was taken in June 2001. While the DALIS land use categories are based on Auditor’s tax data, the field survey is intended to:

- a.) update the Auditor’s data to the present
- b.) record the actual land uses (Auditor’s data gives general categories and the owner, but not the actual land use name)
- c.) record housing conditions from a basic exterior view on a scale of 1-5

DCRPC staff performed the survey using 1997 aerial photos at a scale of 1”=400’. The results are compiled in the following table:

### Existing Land Use (unit count) in Kingston Township

June 2001

Section	Single-Family	Two-Family		Multi-Family		MH	Housing Conditions*						Commercial**	Institutional
	Units	Units	Res.	Units	Res.		1	2	3	4	5	None		
1 of 16	13	0	0	0	0	0	4	6	3	0	0	0	0	0
2 of 16	17	0	0	0	0	0	9	7	1	0	0	0	0	0
3 of 16	9	0	0	0	0	1	7	1	2	0	0	0	0	0
4 of 16	26	0	0	0	0	0	23	3	0	0	0	0	0	0
5 of 16	61	0	0	0	0	0	48	10	2	1	0	0	4	0
6 of 16	41	0	0	0	0	0	31	8	2	0	0	0	1	0
7 of 16	70	0	0	0	0	0	67	1	1	0	1	0	1	3
8 of 16	25	0	0	0	0	0	19	5	1	0	0	0	0	0
9 of 16	37	0	0	0	0	1	25	9	2	2	0	0	0	0
10 of 16	19	0	0	0	0	1	9	8	2	0	1	0	0	0
11 of 16	71	0	0	0	0	0	63	5	3	0	0	0	1	1
12 of 16	47	0	0	0	0	2	43	4	1	1	0	0	0	0
13 of 16	40	0	0	0	0	0	27	11	1	1	0	0	0	0
14 of 16	9	0	0	0	0	0	9	0	0	0	0	0	0	0
15 of 16	55	0	0	0	0	1	40	14	2	0	0	0	0	0
16 of 16	60	0	0	0	0	0	52	7	1	0	0	0	0	0
<b>Totals</b>	<b>600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>476</b>	<b>99</b>	<b>24</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>7</b>	<b>4</b>

\*\*Commercial count includes three public utility towers (3 cellular tower).

Source- Field Survey completed, checked and compiled by DCRPC.

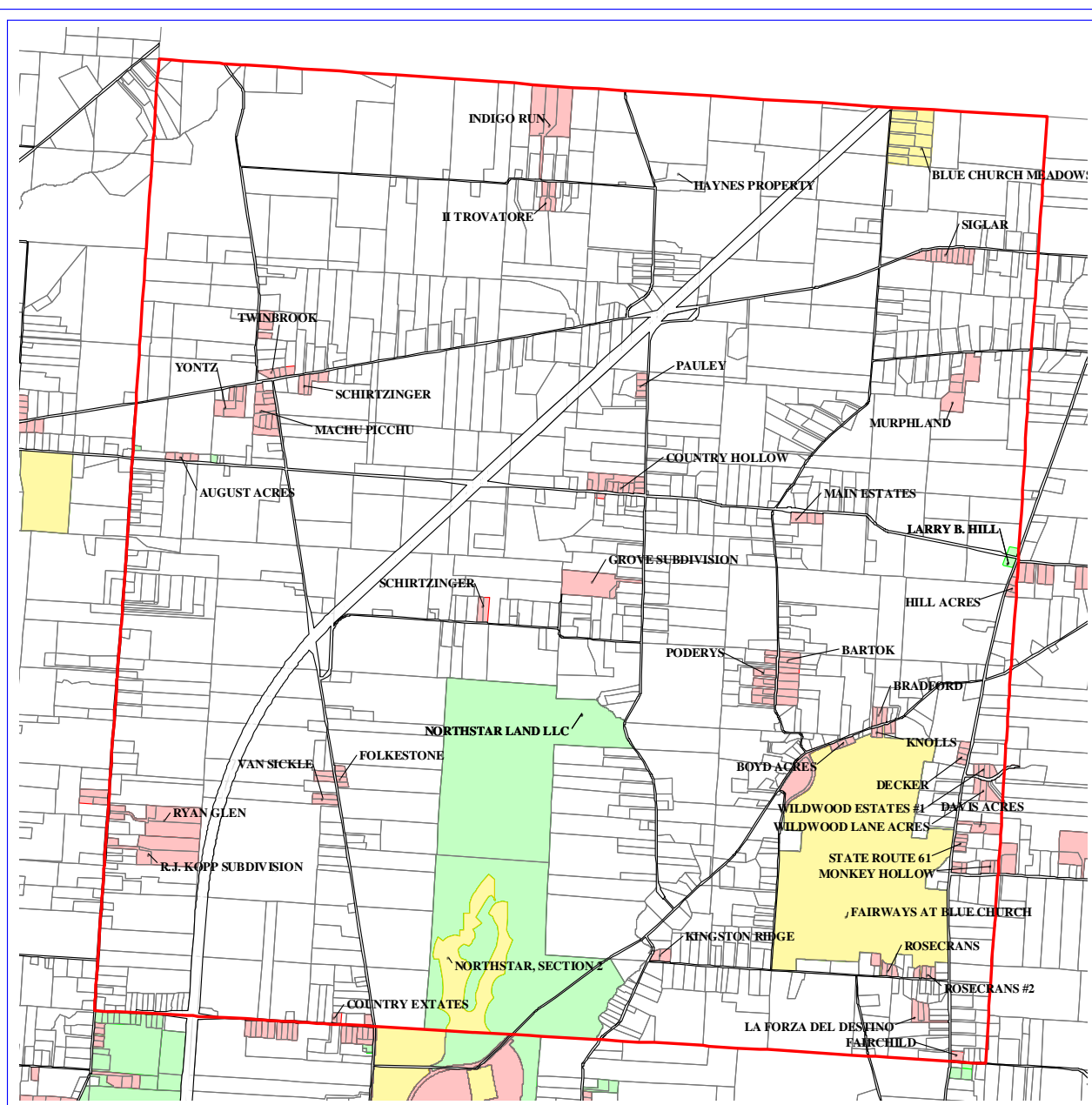
#### \*Housing Conditions

- 1.) Sound: no defects, a meticulously maintained structure, or a recently completed new structure.
- 2.) Sound: slight defects- structure in which defects were correctable by normal maintenance.
- 3.) Sound: deteriorated- an intermediate defect, for example, a roof sagging, a wall unit warped, a foundation settled unevenly or a chimney eroding.
- 4.) Dilapidated: critical defects- a structure in a state of disrepair to the extent that the present condition might impose a threat to the health and safety of its occupants but which was still considered inhabitable.
- 5.) Uninhabitable: extensive critical defects- structures in a state of disrepair to the extent that the unit is not suitable for habitation.

Kingston Township is still a primarily agricultural and single family residential township. There are 600 single-family dwelling units, 5 mobile homes (as defined in appendix H), 7 commercial uses, 4 institutional uses and no industrial uses in 2001. The condition of the housing stock is good to excellent. Of 600 units of housing, 476 or 79% were rated excellent by exterior survey, 17% were rated good, and only 5% was rated as poor or very poor. Two structures were deteriorated to the point of being considered uninhabitable and requiring demolition. These results will be discussed further in Chapter 7, Housing.

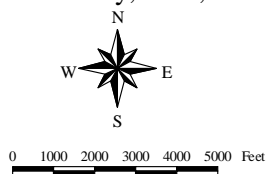
### **III. Development Pattern Map**

A third type of existing land use map defines the progress of anticipated development. The development pattern map tracks the size and location of zonings and subdivisions. Kingston's Development Pattern Map, December 2001, depicts these various characteristics. Further information, called attribute information, is available from the DCRPC GIS and the County DALIS. Such information includes building permit issuance, developer/landowner, subdivision names, number of homes and density.



## Map 7.2 Development Pattern

Kingston Township  
Delaware County, Ohio, 04/2008



Prepared By: Delaware County Regional Planning Commission (740-833-2260) (4/8/2008)

<span style="border: 2px solid red; display: inline-block; width: 20px; height: 10px;"></span>	Kingston Township Boundary
<span style="border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>	Road Right of Way
<span style="display: inline-block; width: 20px; height: 10px; background-color: #f0f0f0;"></span>	Parcels
<span style="display: inline-block; width: 20px; height: 10px; background-color: #ffb6c1;"></span>	Recorded Subdivision
<span style="display: inline-block; width: 20px; height: 10px; background-color: #ffff00;"></span>	Proposed Subdivision
<span style="display: inline-block; width: 20px; height: 10px; background-color: #90ee90;"></span>	Rezoned Subdivisions

#### **IV. Land in Speculation Map**

A fourth type of potential land use map based upon land ownership and adjacency to known development sites, is the Land in Speculation Map. Using the DALIS, DCRPC staff can query all landowners for lands that are owned by:

- Known land developers and subdividers
- Known homebuilding companies
- Limited liability corporations (LLC)
- Trusts
- Incorporated entities

For tax and estate planning purposes there may be non-development entities that use one of these types of ownership, so the land in speculation map is a best guess, not a certain picture of how much land may be in speculation. Lands that are adjacent to current development may also be targets of expansion. They are also identified as possible land in speculation.

# Map 7.3 Land In Speculation

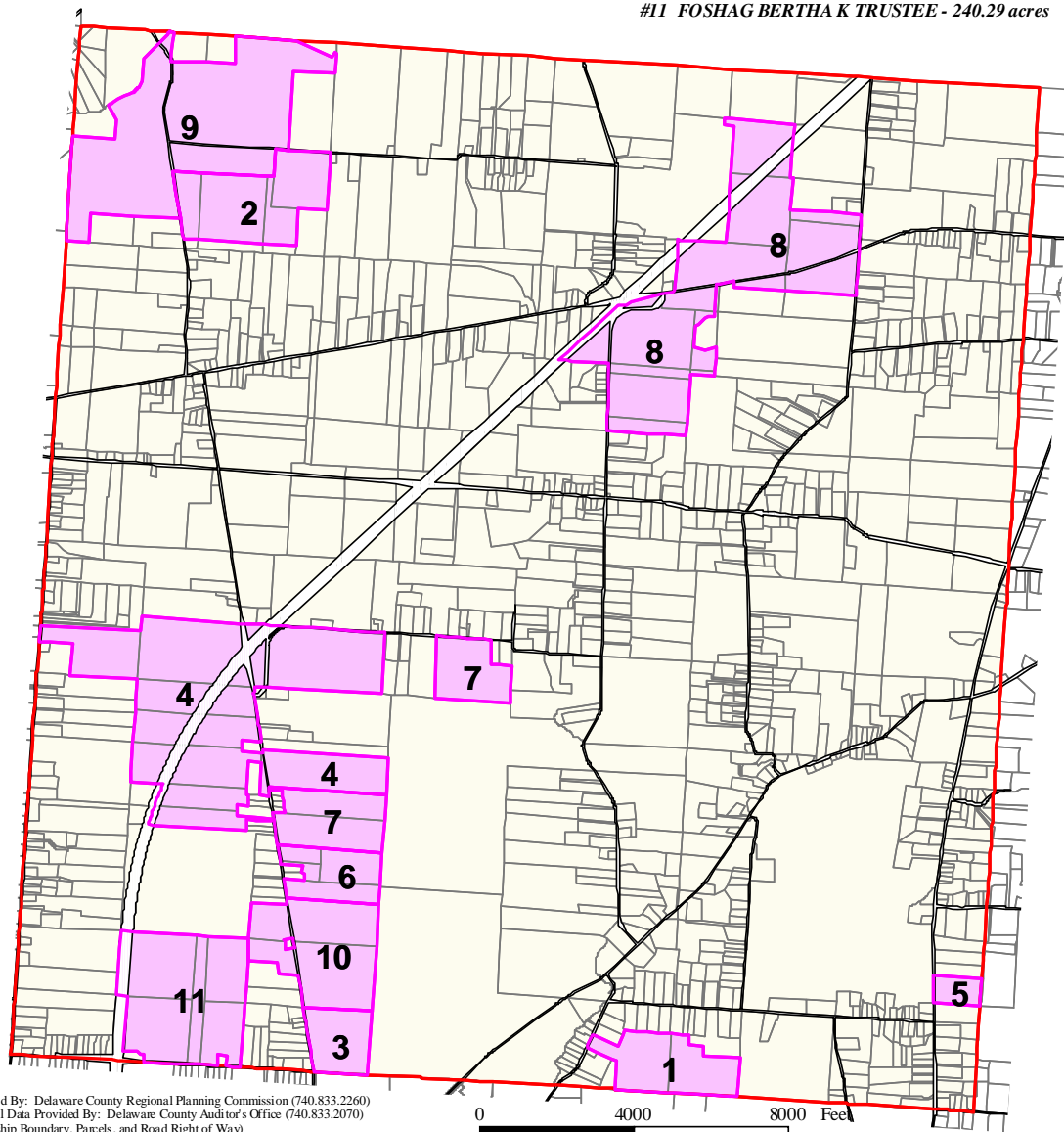
Kingston Township, Delaware Co. Ohio

- Kingston Township Boundary
- Road Right of Way
- Parcels
- Owned by Builder, Developer, LLC, or Trustee



## Land In Speculation Ownership:

- #1 EPEC LLC - 103.89 acres
- #2 GLORIB FARMS INC - 261.50 acres
- #3 OHIO LINA FAMILY - 59.72 acres
- #4 DELCA INC - 614.63 acres
- #5 LEGACY 61 PARTNERS LP - 20 acres
- #6 MDMR L P - 74.58 acres
- #7 PROICOU FAMILY LTD - 160.84 acres
- #8 KRAUSS FAMILY LIMITED - 489.77 acres
- #9 WA FEARN TRUST CO - 555.71 acres
- #10 MAXIO INC - 172.41 acres
- #11 FOSHAG BERTHA K TRUSTEE - 240.29 acres



Prepared By: Delaware County Regional Planning Commission (740.833.2260)  
 Original Data Provided By: Delaware County Auditor's Office (740.833.2070)  
 (Township Boundary, Parcels, and Road Right of Way)  
 Printed: January 24, 2008

## **V. Observations on Existing Land Use and Current development Patterns in 2001**

Now that we have studied the various existing land use maps (DALIS Existing Land Use Map, Kingston Development Pattern Map, Land in Speculation Map, and the acreage tabulations from the windshield survey), we may draw some observations about emerging land use patterns in Kingston Township.

- 1) Agriculture/undeveloped land is still the primary land use at 79.47% of all acreage.
- 2) The township is made up of 15,235 acres, divided by Interstate 71.
- 3) Roads and utility rights of way comprise 488 acres, or about 3.2% of the total land area.
- 4) Slightly more than 1,500 acres (10%) in the Township has been converted from agriculture or undeveloped land to residential use.
- 5) Residential land acreage increased by 190% or 1,545 acres in the last decade. In contrast, population only increased by 46%, as discussed in Chapter 2.
- 6) Single family residential use accounts for 15% of the land use, compared to just over 5% in 1990.
- 7) Residential land use is concentrated along roads; there are no suburban subdivisions.
- 8) Sections of the township can still be considered a “blank canvas” of open land. Toward the southern half of the township, large tracts are still intact.
- 9) There were 600 single-family homes, and 6 mobile homes observed in the windshield survey.
- 10) There were 7 commercial uses by windshield survey.
- 11) Four institutional uses were observed in the windshield survey (township hall, churches and cemeteries).
- 12) The township includes no municipalities within its border and isn’t threatened with annexation.
- 13) There appear to be 2,248.57 acres of land or 14.82% in speculation (42 parcels, 9 owners), including 866.47 acres in the NorthStar development and 605.78 acres in the proposed Pastures at Blue Church development.

## **VI. Conclusions**

The impact of future land use patterns must be considered. Some of the many influences on land development patterns are:

- \$ The power of money (market demand)
- Regional economic conditions
- Location
- Sanitary sewer service areas, sewer capacity, density of development by sewer design
- Soils and their suitability for on- site sewage disposal systems
- Natural resources (topography, floodplains, wetlands)
- Public/private centralized water service areas and capacity
- Roads and traffic congestion
- Community Facilities (schools, fire, police, etc.)
- Local zoning
- Banking/lending practices for kinds of development

Kingston Township has choices. Township zoning controls the type and density of future development. If the township intends to retain its rural character at a time of unprecedented growth, it must imagine itself “all built-out” in alternative scenarios, and pursue the scenario it prefers.

The book Rural by Design, by Randall Arendt (Planners Press, American Planning Association) is one guide to other development patterns that may augment the large lot and conventional development patterns the township has already experienced.



## **Chapter 8**

### **Natural Resources and Conservation**

Kingston Township has beauty in its natural resources. If these resources are not conserved and protected, then the vision of the township to preserve its rural character and its natural resources will not be achieved and the principal attribute of the township will be diminished. Conservation features including woodlands, wildlife habitats, quality wetland buffers and riparian zones must be of primary focus, followed by floodways, scenic views and vistas and sloping land. Prime farmland and cultural resources must also be preserved as part of new developments.

#### **8.1 Topography-(DALIS contours)**

Kingston Township has relatively mild differences in elevations and slopes. The elevation map (Map 8.2) indicates a 170-foot difference in elevation from the highest point of the township to the lowest. The eastern edge of the township ranges from 1040 to 1070 feet above sea level. The highest point is toward the southeast on the Porter Township line between SR 656 and Wildwood Lane (1070'). The lowest elevation is in the northwest corner of the township where Alum Creek enters Brown Township (900'). The elevation at the point where Little Walnut Creek enters Berkshire Township is 925'.

#### **8.2 Slopes Greater than 20%**

The township set a goal to preserve its natural beauty. One important element of the Township's natural beauty is its ravines. Retaining slopes greater than 20% for open space as the township develops will be very important in achieving this goal. The steep slope map (Map 8.3) indicates slopes over 20%. Generally, roads do not exceed 10% slope, and houses with walkout basements can typically be built on slopes up to 20%, or slightly greater. In Kingston Township, the steep slopes are mainly located in the ravines that lead to Alum Creek and Little Walnut Creek in the northeast and southeast portions of the Township.

#### **8.3 Floodplains, bodies of water**

The National Flood Insurance Program, discourages development in the 100 year floodplain and prohibits development in the 100 year floodway. These areas are mapped in detail by the US Army Corps of Engineers for the Federal Emergency Management Agency (FEMA). The Floodplain Map (Map 8.4) gives a general location of the floodplains. For specific information see the FEMA maps at the Delaware County Building Department, 50 Channing Street, Delaware Ohio (740-833-2200).

Floodplains perform several critical functions in their undisturbed state (adapted from Protecting Floodplain Resources, A Guidebook for Communities, Federal Interagency Floodplain Management Task Force and FEMA, June 1996):

- Water Resources - Natural flood and erosion control  
Provide flood storage and conveyance; reduce flood velocities; reduce peak flows; reduce sedimentation

- Water Quality Maintenance  
Filter nutrients from runoff; process organic wastes; moderate temperature fluctuations
- Groundwater Recharge  
Promote infiltration and aquifer recharge; reduce frequency and duration of low surface flows
- Biological Resources  
Rich, alluvial soils promote vegetative growth; maintain biodiversity; maintain integrity of ecosystems
- Fish and Wildlife habitats  
Provide breeding and feeding grounds; create and enhance waterfowl habitat; protect habitats for rare and endangered species.
- Societal Resources  
Harvest of wild and cultivated products; enhance agricultural lands; provide sites for aquaculture; restore and enhance forest lands
- Recreational Opportunities  
Provide areas for passive and active uses; provide open space; provide aesthetic pleasure
- Scientific Study and Outdoor Education  
Contain cultural resources (historic and archeological sites); environmental studies

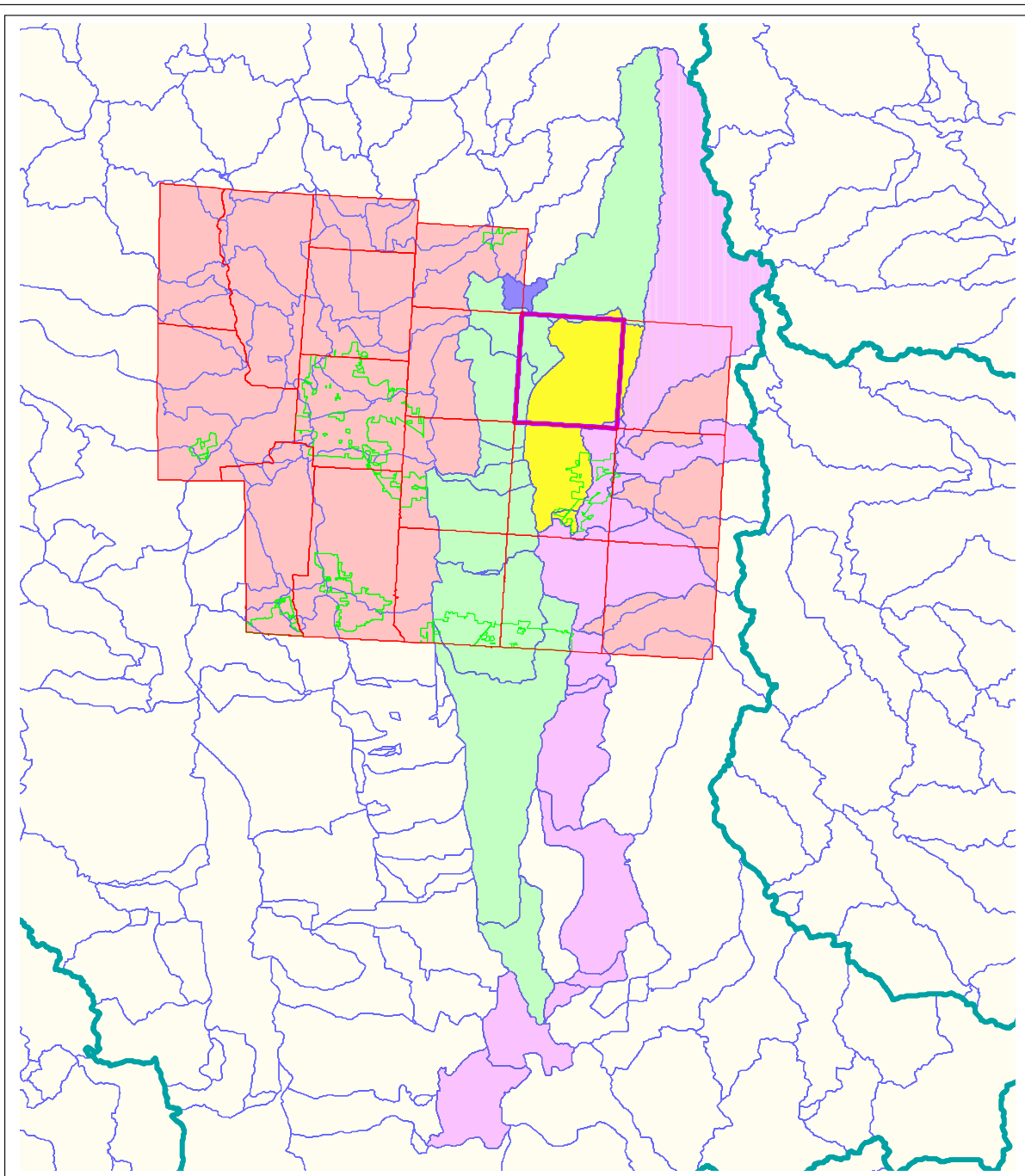
For all these reasons, the 100-year floodplains in Kingston Township should be protected. Some counties, such as Franklin, have large meandering flat floodplains, which comprise a great deal of the developable area of the county. In an urban county, where such land is precious, it is understandable, but not advisable, that some conversion to urban uses based on fill or elevated pilings may occur. In Delaware County, the floodplains are narrow and limited. They comprise a very small portion of the land area, and they occur on four rivers which are state scenic (Olentangy), drinking water sources (Alum Creek, Scioto, Big Walnut), or recreational (all four).

The Delaware County FEMA floodplain maps were revised in 1999. Floodplain elevations in some areas have risen for the 100-year flood as suburban development increases runoff into the waterways after storms at a greater rate than before. With floodplains rising, and all the natural benefits of floodplains listed previously, it is foolish to permit residential development in the 100-year floodplain at or slightly above the current 100-year floodplain elevation. The subsidy for the low cost national flood insurance comes from federal taxes. Each land use decision to permit development in the 100 year flood plain not only puts people in harm's way, but also potentially burdens all American taxpayers with the cost of continuing to bail out bad development after a flood.

#### **8.4 Groundwater resources**

There are generally four aquifer systems in Delaware County. The eastern portion of the County has sandstone aquifers with a yield of 15 to 25 gallons per minute (GPM) at depths of 95 feet. The southern portion of the County has thin lenses of sand and gravel within thick layers of clay fill with a lower yield. The center of the County is a shale aquifer where dry wells are common with a yield of 0 to 3 (GPM) at 75 feet. The western part of the County has a carbonate aquifer type with yields up to 1,000 (GPM) at depths of less than 85 feet. (Source: Ohio State University Extension).

Groundwater is a valuable natural resource. It is an essential part of the hydrological cycle and provides drinking water to areas in the township that are not served by public water. Groundwater should be conserved and its quality as a drinking water supply should be protected, especially for those areas of the township that are not served by public water.

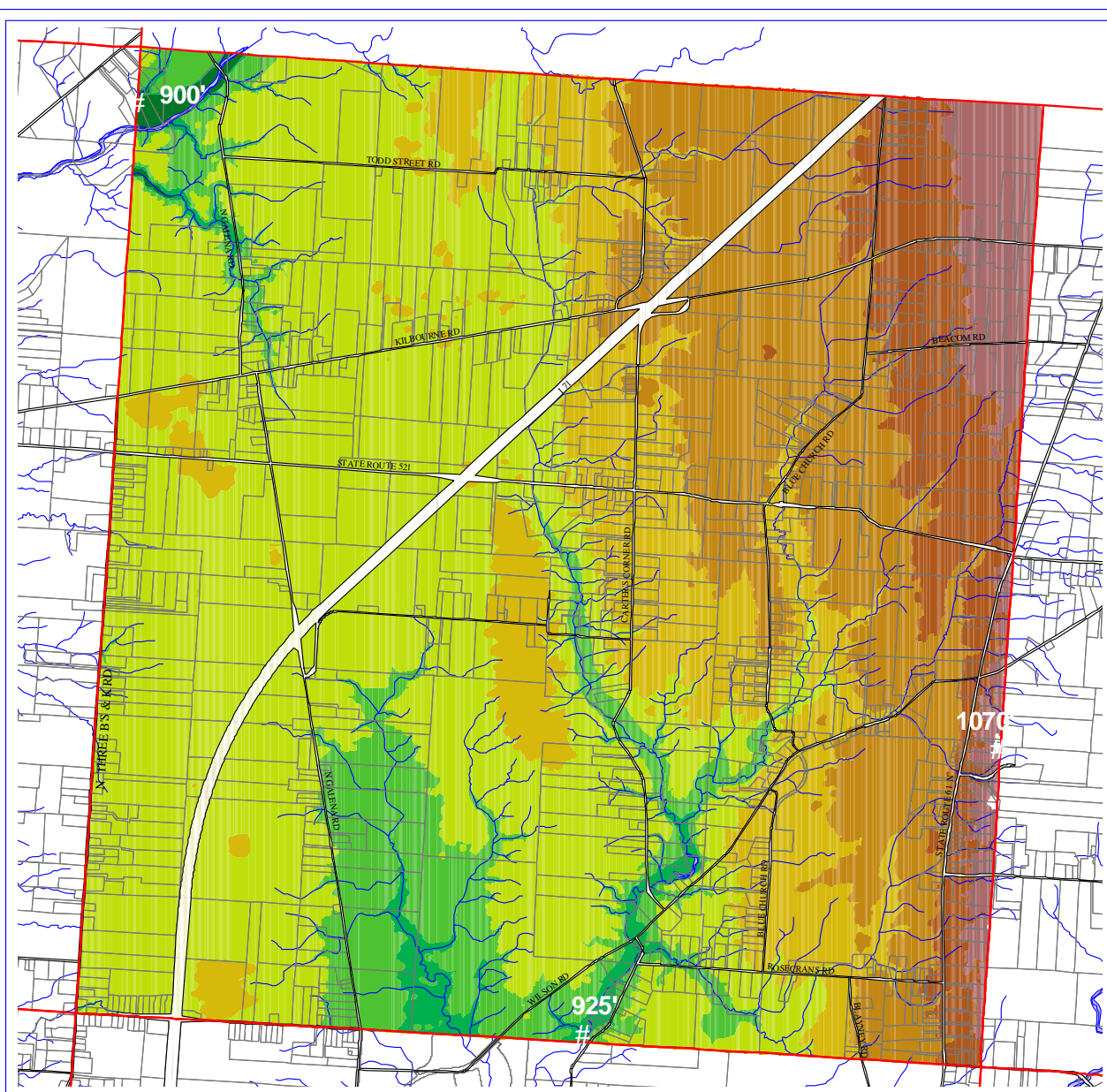


Map 8.1 Watersheds, Delaware County, Ohio

- Kingston Township
- Hydrologic Unit Boundaries
- Watersheds Boundaries
- Alum Creek Watershed
- Big Walnut Watershed
- Little Walnut Watershed
- West Branch Watershed
- Incorporated Area in Delaware County
- Delaware County

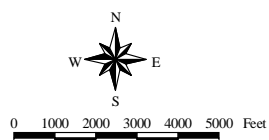


Prepared By: Delaware County Regional Planning Commission  
 (740-833-2260) [www.dcrpc.org](http://www.dcrpc.org)  
 Source: Watershed Boundaries from ODNR 1996  
 Hydrologic Units from USGS 2001

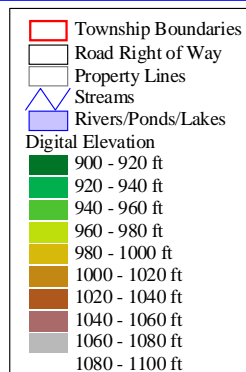


## Map 8.2 Digital Elevation

Kingston Township  
Delaware County, Ohio, 04/2008



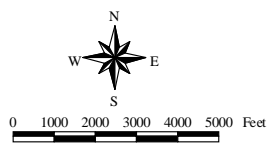
Prepared By: Delaware County Regional Planning Commission (740-833-2260)  
Source: Delaware County Auditor's Office DALIS project  
(4/8/2008)



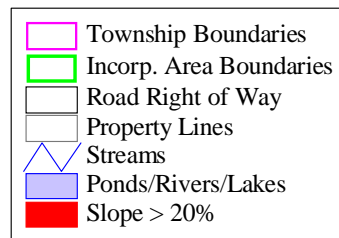


## Map 8.3 Slopes

Kingston Township  
Delaware County, Ohio, 04/2008



Prepared By: Delaware County Regional Planning Commission (740-833-2260)  
(4/8/2008)

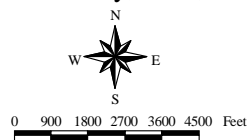




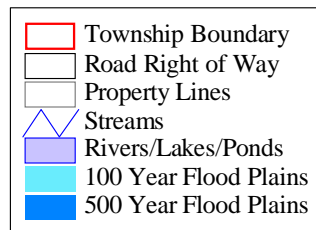


## Map 8.4 Floodplains

Kingston Township  
Delaware County, Ohio, 04/2008



Prepared By: Delaware County Regional Planning Commission (740-833-2260)  
Source: Delaware County Auditor's Office DALIS project  
(4/8/2008)





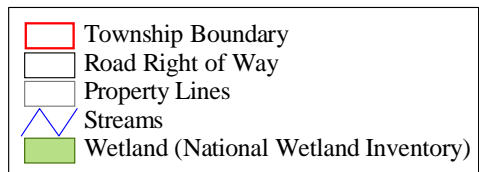
## Map 8.5 Wetlands

Kingston Township  
Delaware County, Ohio, 04/2008

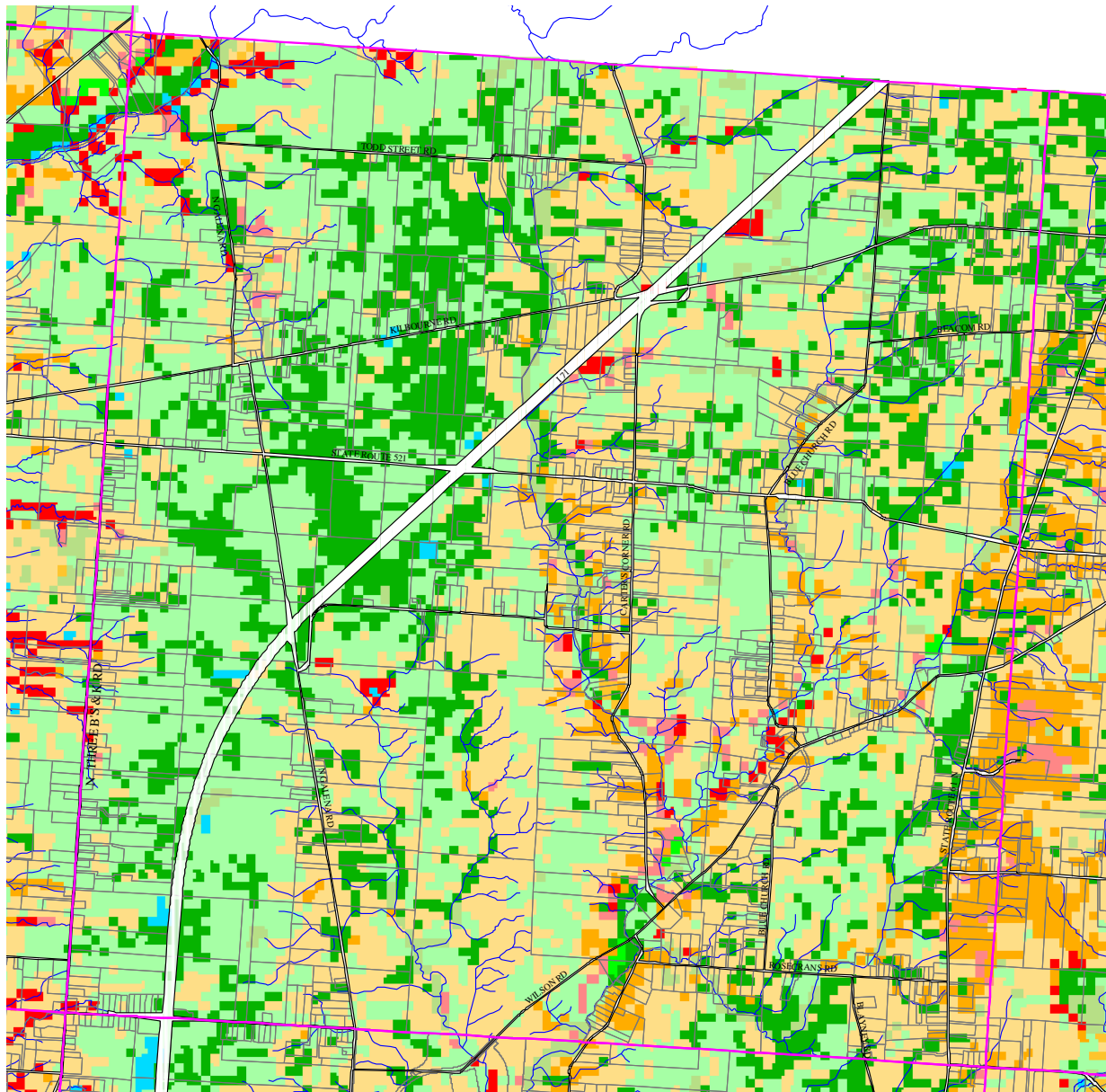


0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 Feet

Prepared By: Delaware County Regional Planning Commission (740-833-2260)  
Source: National Wetland Inventory (NWI)  
(4/8/2008)

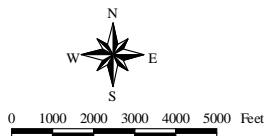




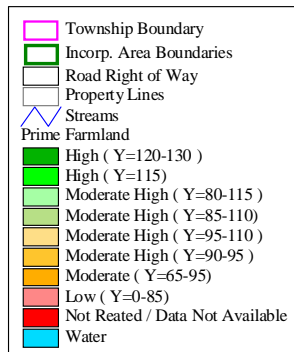


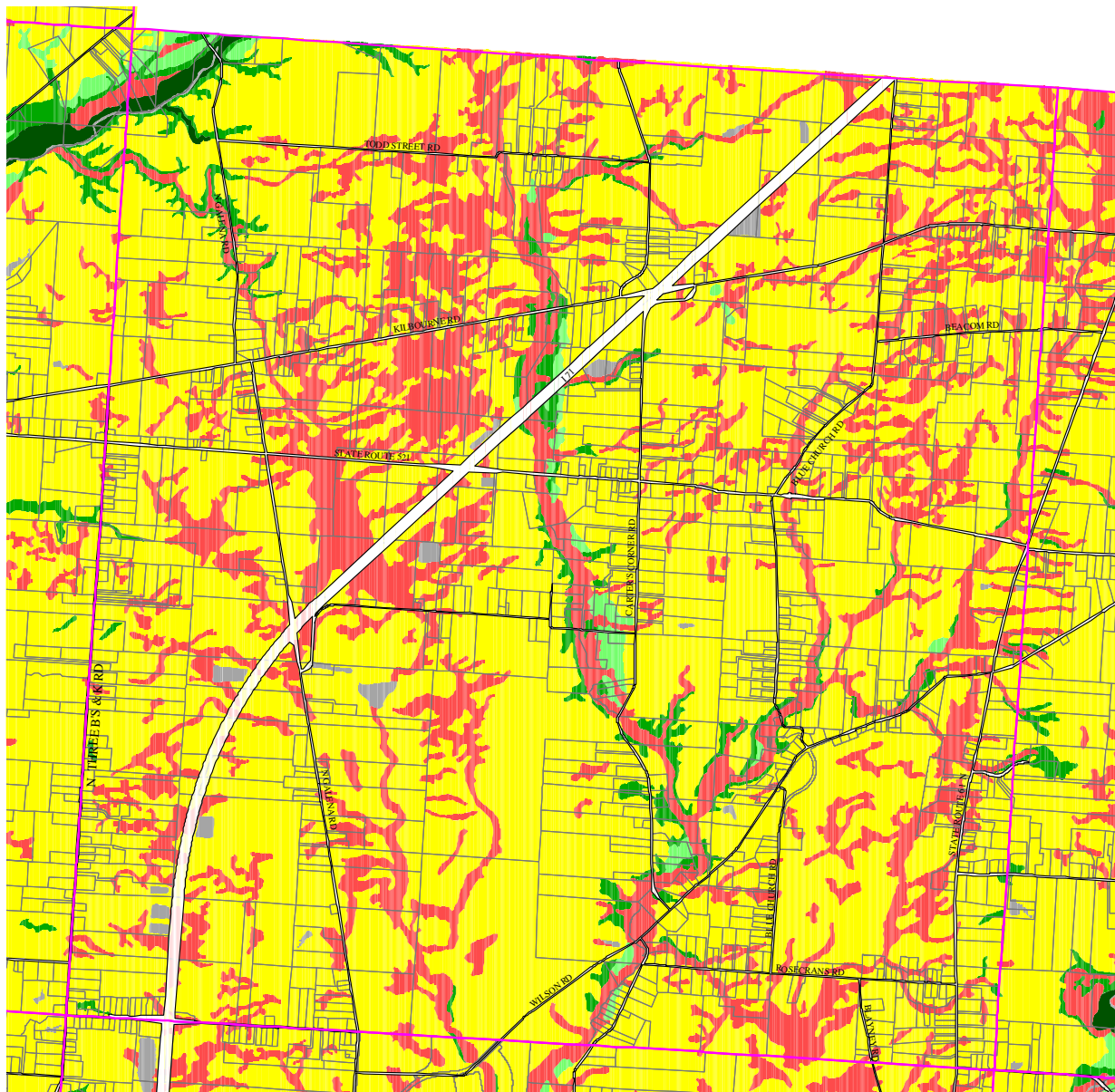
## Map 8.6 Prime Agricultural Soils

Kingston Township  
Delaware County, Ohio, 04/2008



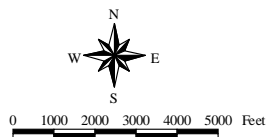
Prepared By: Delaware County Regional Planning Commission (740-833-2260)  
Source: OCAP  
(4/8/2008)



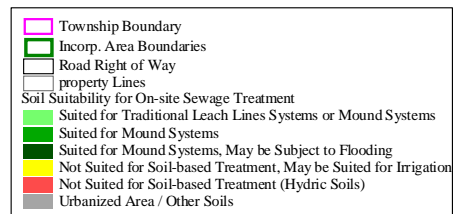


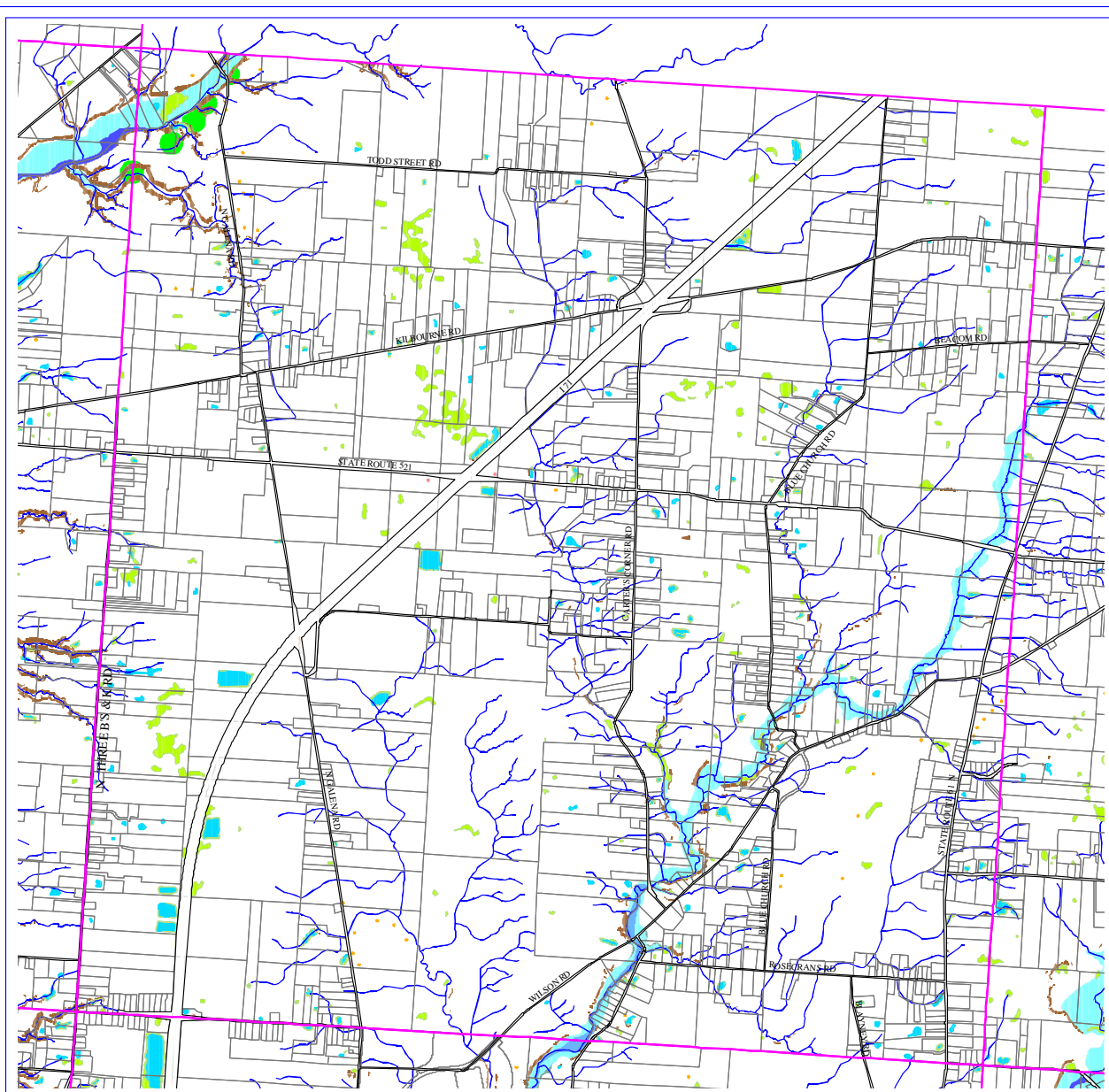
## Map 8.7 Soils Suitable for Septic Systems

Kingston Township  
Delaware County, Ohio, 04/2008



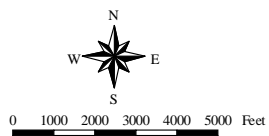
Prepared By: Delaware County Regional Planning Commission (740-833-2260)  
(4/8/2008)





## Map 8.8 Critical Resources

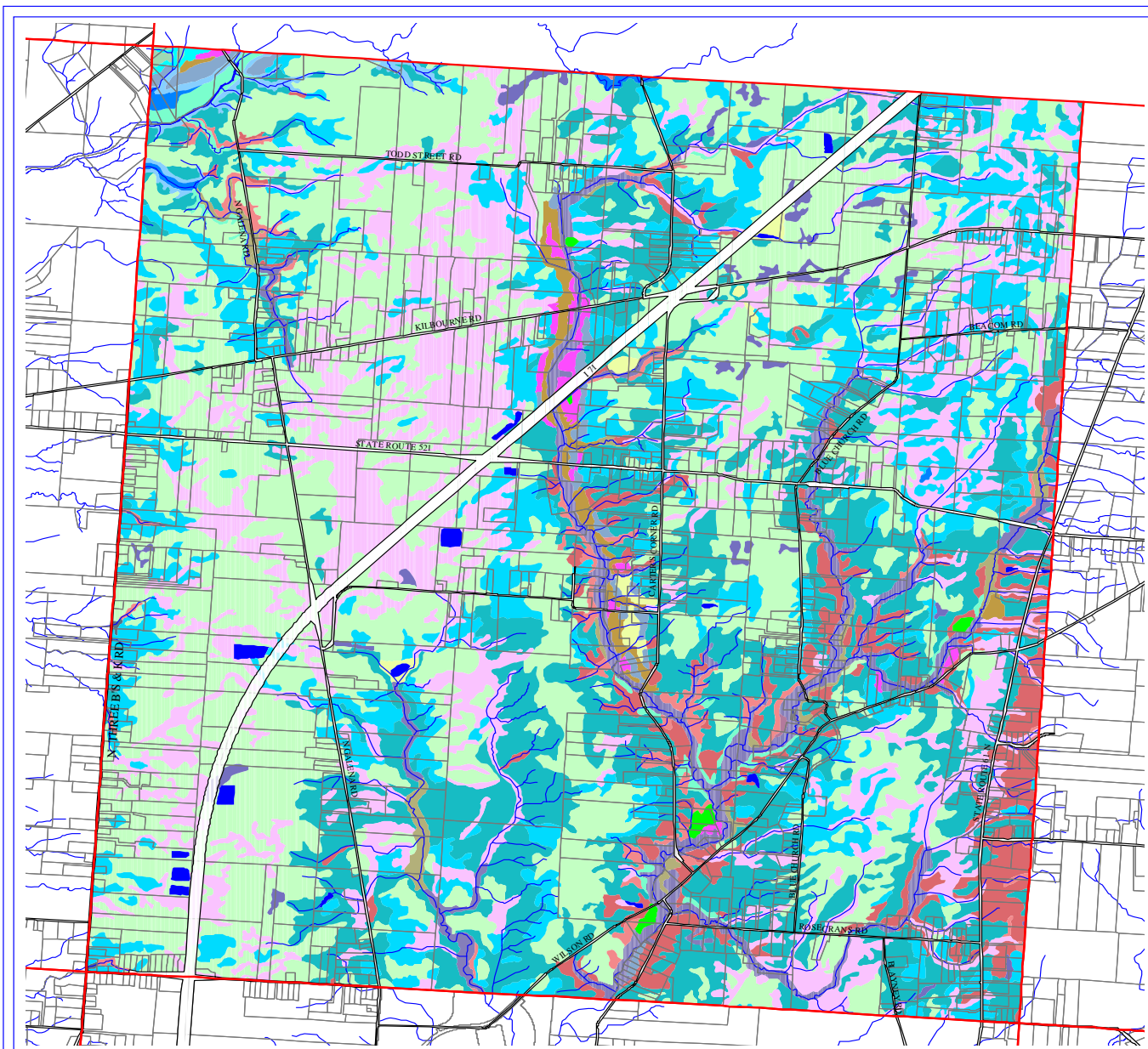
Kingston Township  
Delaware County, Ohio, 04/2008



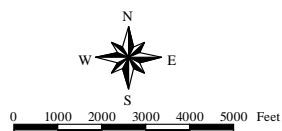
Prepared By: Delaware County Regional Planning Commission (740-833-2260)  
(4/8/2008)

- Township Boundary
- Incorp. Area Boundaries
- Road Right of Way
- Property Lines
- Critical Resources**
- Archaeological Sites (OHPO) buffer 50'
- National Register Sites (OHPO) buffer 50'
- Historic Sites (OHPO) buffer 50'
- Streams / Drainage Courses
- Ponds
- Wetland (NWI)
- Rivers / Lakes
- Floodway
- Slope  $\geq 20\%$
- 100-year Floodplain
- 500-year Floodplain
- Heritage Sites Buffer 328' by ODNR
- Heritage Sites Buffer 1/2 mile by ODNR



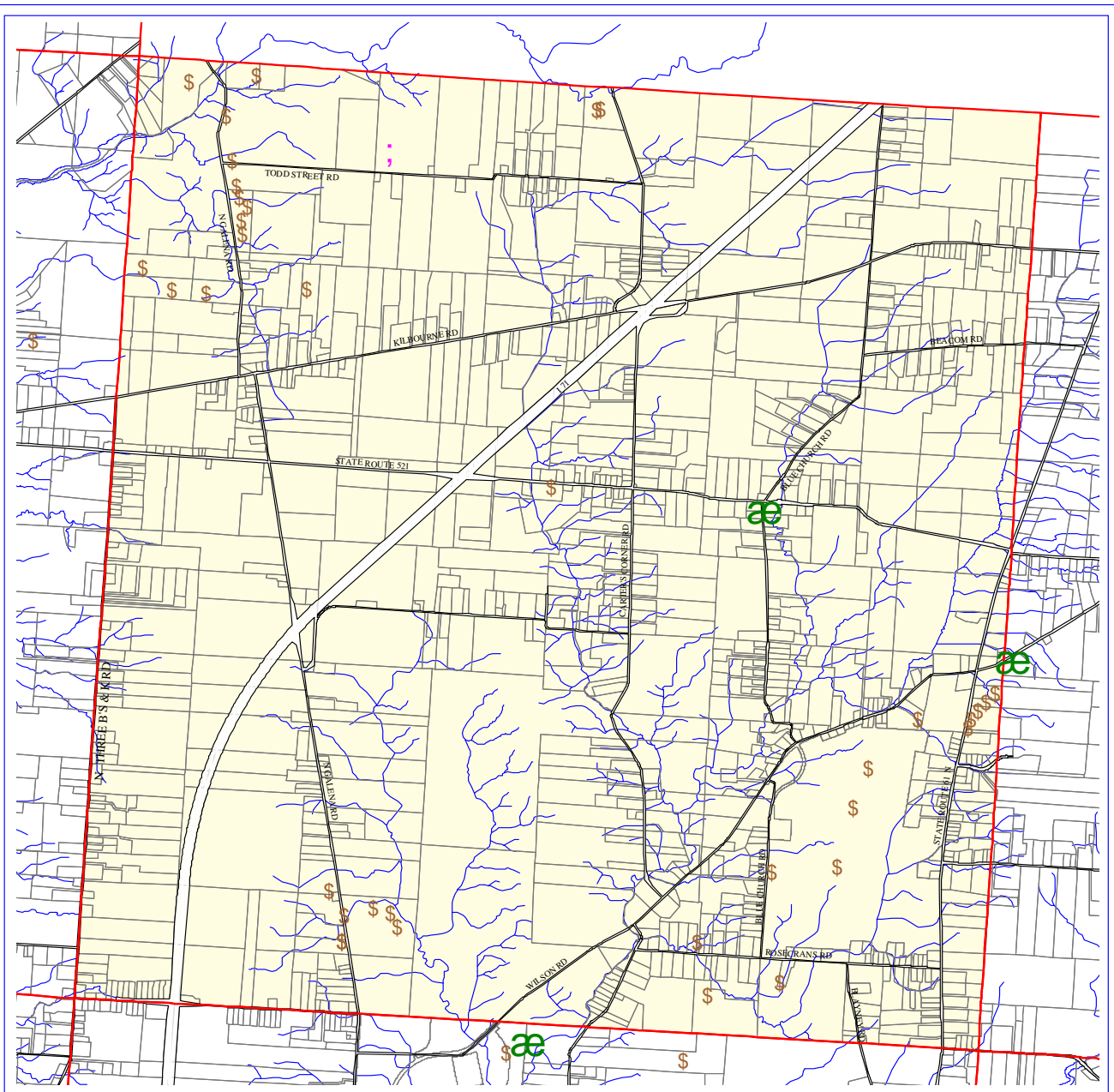


**Map 8.9 Soils**  
 Kingston Township  
 Delaware County, Ohio, 04/2008



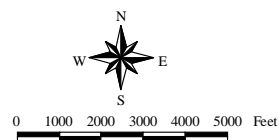
Prepared By: Delaware County Regional Planning Commission (740-833-2260)  
 Source: Delaware County Auditor's Office DALIS project  
 (4/8/2008)

<span style="border: 1px solid red; display: inline-block; width: 20px; height: 10px;"></span> Township Boundary	<span style="display: inline-block; width: 20px; height: 10px; background-color: #C00000;"></span> CaC2	<span style="display: inline-block; width: 20px; height: 10px; background-color: #808000;"></span> LsA
<span style="border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> Road Right of Way	<span style="display: inline-block; width: 20px; height: 10px; background-color: #000080;"></span> CnA	<span style="display: inline-block; width: 20px; height: 10px; background-color: #00FFFF;"></span> LyD2
<span style="border: 1px solid gray; display: inline-block; width: 20px; height: 10px;"></span> Property Lines	<span style="display: inline-block; width: 20px; height: 10px; background-color: #FFFF00;"></span> GaC2	<span style="display: inline-block; width: 20px; height: 10px; background-color: #800000;"></span> MfA
<b>Soil</b>	<span style="display: inline-block; width: 20px; height: 10px; background-color: #00FF00;"></span> GbA	<span style="display: inline-block; width: 20px; height: 10px; background-color: #FFC0CB;"></span> PwA
<span style="display: inline-block; width: 20px; height: 10px; background-color: #FF0000;"></span> AmD2	<span style="display: inline-block; width: 20px; height: 10px; background-color: #000080;"></span> GbB	<span style="display: inline-block; width: 20px; height: 10px; background-color: #0000FF;"></span> SkA
<span style="display: inline-block; width: 20px; height: 10px; background-color: #00FF00;"></span> AmE	<span style="display: inline-block; width: 20px; height: 10px; background-color: #800080;"></span> GcB	<span style="display: inline-block; width: 20px; height: 10px; background-color: #800080;"></span> SnA
<span style="display: inline-block; width: 20px; height: 10px; background-color: #808000;"></span> AmF	<span style="display: inline-block; width: 20px; height: 10px; background-color: #008080;"></span> GwB	<span style="display: inline-block; width: 20px; height: 10px; background-color: #800080;"></span> Uc
<span style="display: inline-block; width: 20px; height: 10px; background-color: #00FF00;"></span> BeA	<span style="display: inline-block; width: 20px; height: 10px; background-color: #0000FF;"></span> HeF	<span style="display: inline-block; width: 20px; height: 10px; background-color: #FFFF00;"></span> Up
<span style="display: inline-block; width: 20px; height: 10px; background-color: #0000FF;"></span> BeB	<span style="display: inline-block; width: 20px; height: 10px; background-color: #FF00FF;"></span> JmA	<span style="display: inline-block; width: 20px; height: 10px; background-color: #0000FF;"></span> W
<span style="display: inline-block; width: 20px; height: 10px; background-color: #008080;"></span> CaB	<span style="display: inline-block; width: 20px; height: 10px; background-color: #808080;"></span> LbF	
	<span style="display: inline-block; width: 20px; height: 10px; background-color: #00FF00;"></span> LoA	



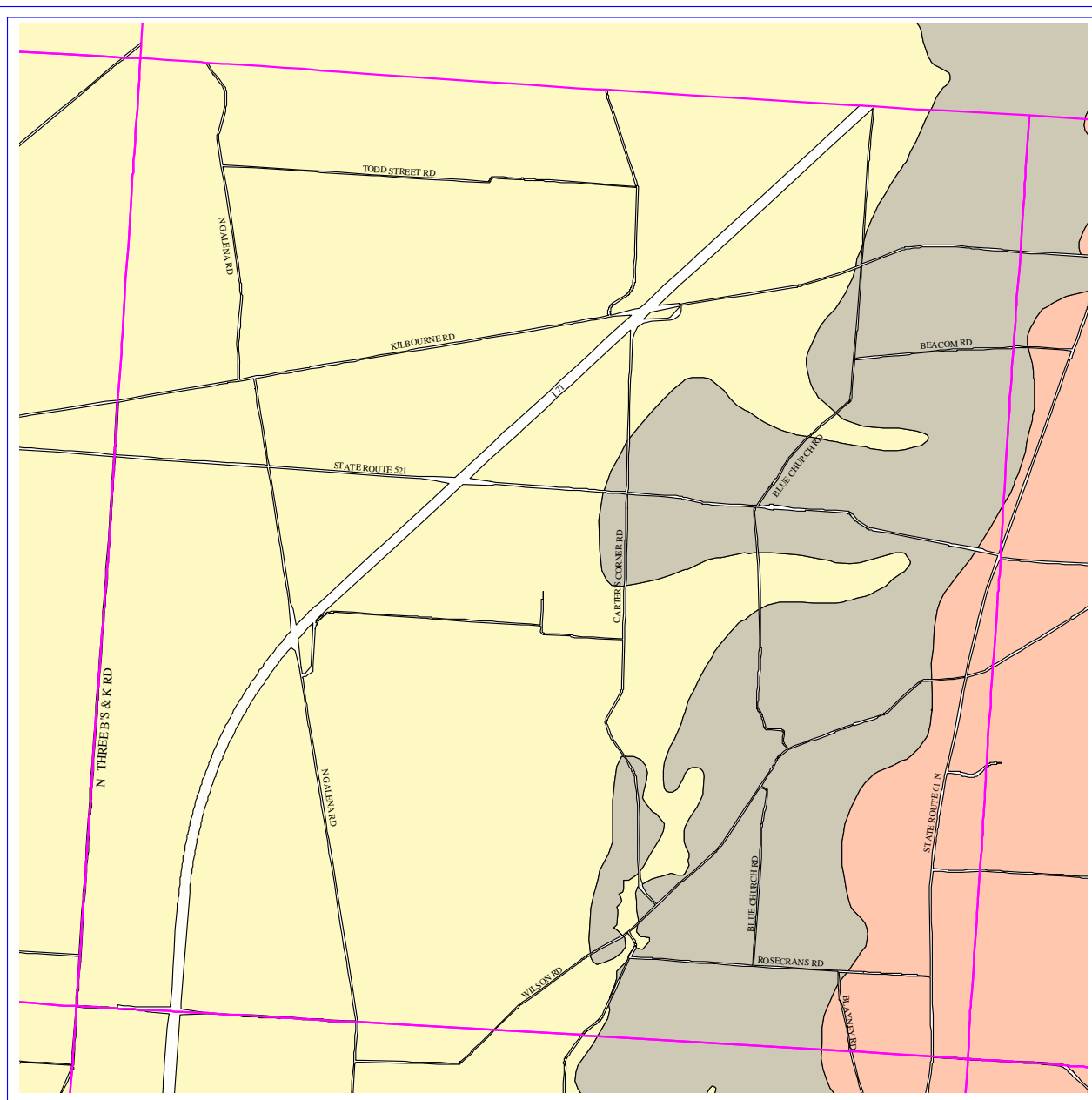
## Map 8.10 Historical, Archeological, Cemetery Sites

Kingston Township  
Delaware County, Ohio, 04/2008



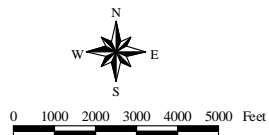
Prepared By: Delaware County Regional Planning Commission (740-833-2260)  
(4/8/2008)

<span style="color: pink;">•</span>	Historical Sites
<span style="color: orange;">\$</span>	Archeological Sites
<span style="color: green;">æ</span>	Cemeteries
<span style="border: 2px solid red; display: inline-block; width: 15px; height: 10px;"></span>	Township Boundaries
<span style="border-bottom: 2px solid black; display: inline-block; width: 20px;"></span>	Road Right of Way
<span style="border-bottom: 1px solid black; display: inline-block; width: 20px;"></span>	Property Lines
<span style="color: blue;">~</span>	Streams



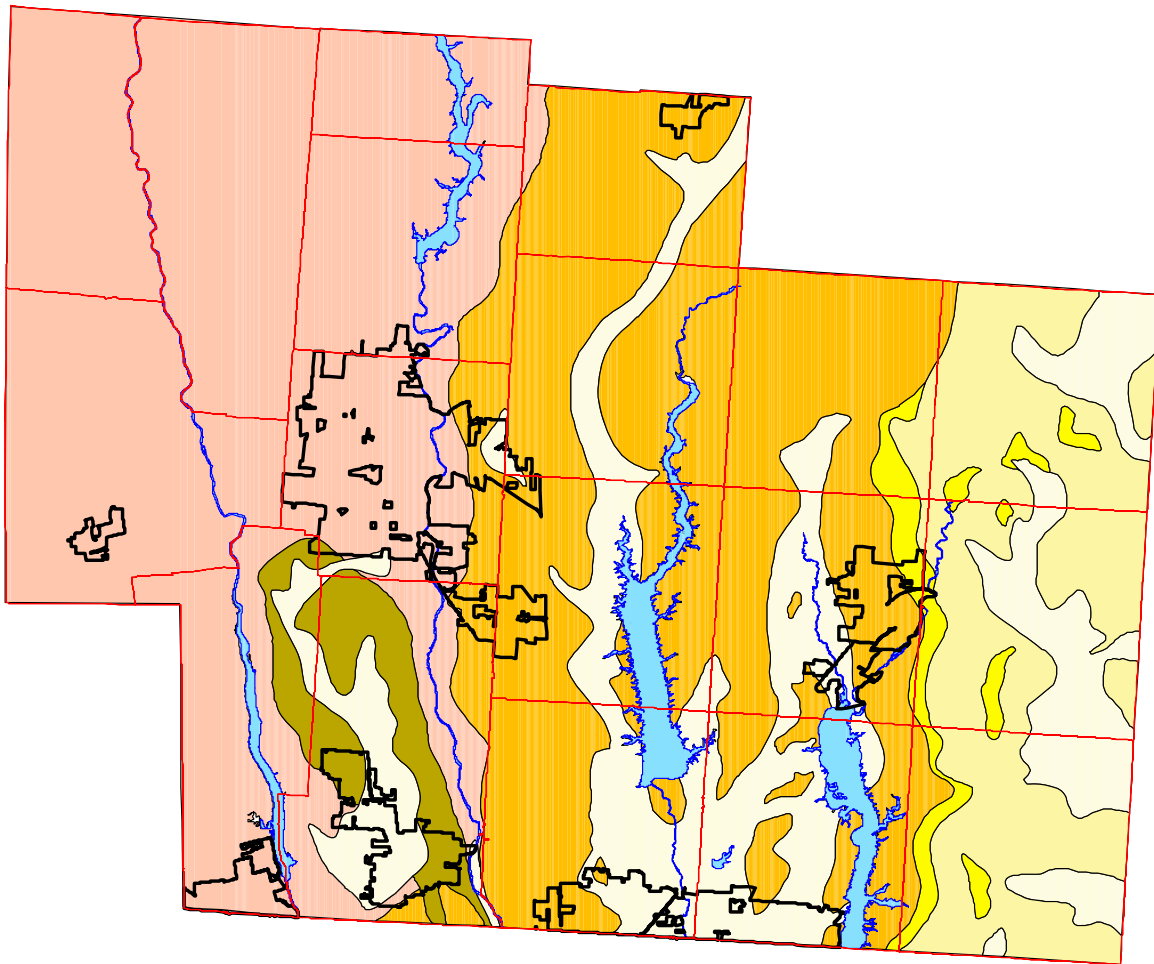
## Map 8.11 Bedrock Type

Kingston Township  
Delaware County, Ohio, 04/2008



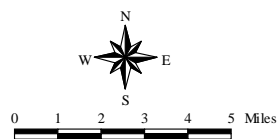
Prepared By: Delaware County Regional Planning Commission (740-833-2260)  
(4/8/2008)

<span style="border: 1px solid pink; display: inline-block; width: 10px; height: 10px;"></span>	Township Boundary
<span style="border: 1px solid green; display: inline-block; width: 10px; height: 10px;"></span>	Incorp. Area Boundaries
<span style="border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	Road Right of Way
<b>Bedrock Type</b>	
<span style="display: inline-block; width: 10px; height: 10px; background-color: #8B4513;"></span>	Columbus Limestone (Dc)
<span style="display: inline-block; width: 10px; height: 10px; background-color: #A0522D;"></span>	Delaware Limestone (Dd)
<span style="display: inline-block; width: 10px; height: 10px; background-color: #F0E68C;"></span>	Ohio Shale (Doh)
<span style="display: inline-block; width: 10px; height: 10px; background-color: #FF8C00;"></span>	Olentangy Shale (Dol)
<span style="display: inline-block; width: 10px; height: 10px; background-color: #A9A9A9;"></span>	Bedford Shale (MDbd)
<span style="display: inline-block; width: 10px; height: 10px; background-color: #FF6347;"></span>	Berea Sandstone (Mb)
<span style="display: inline-block; width: 10px; height: 10px; background-color: #8B4513;"></span>	Sunbury Shale (Ms)
<span style="display: inline-block; width: 10px; height: 10px; background-color: #6A5ACD;"></span>	Mississippian Undivided (Mu)
<span style="display: inline-block; width: 10px; height: 10px; background-color: #9370DB;"></span>	Salina Undifferentiated (Ss)
<span style="display: inline-block; width: 10px; height: 10px; background-color: #800080;"></span>	Salina Undifferentiated (Ssu)



## Map 8.12 Groundwater Aquifer Type

Kingston Township  
Delaware County, Ohio, 04/2008



Prepared By: Delaware County Regional Planning Commission (740-833-2260)  
(4/8/2008)

	Township Boundary
	Township boundary
	Incorp. Areas
	River / Lakes
<b>Ground Water (Aquifer Type)</b>	
	Limestone - Well_Yield > 100 GPM, Well_Depth > 100'
	Sand/Gravel - Well_Yield 10-25 GPM, Well_Depth < 100'
	Sandstone - Well_Yield 10-25 GPM, Well_Depth < 120'
	Sandstone/Shale - Well_Yield 3-10 GPM
	Shale - Well_Yield < 3 GPM
	Shale/Limestone - Well_Yield > 100 GPM, Well_Depth > 100'

## **8.5 Wetlands**

Wetlands are generally defined as soils that support a predominance of wetland (hydrophytic) vegetation, and/or are under water at least two weeks per year. The more specific definition of wetlands under the jurisdiction of the US Army corps of Engineers is found in the Corps of Engineers Wetlands Delineation manual Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Miss.

Jurisdictional wetlands are regulated by the Clean Water Act of 1972, Section 404. They consist of:

1. hydric soils,
2. hydrophytic vegetation,
3. wetland hydrology (this means they support more than 50% wetland vegetation, are poorly drained, and are periodically inundated or saturated).

Jurisdictional wetlands serve many of the same functions as floodplains, and deserve to be protected for the same reasons. Much of Kingston Township's wetlands are tilled agricultural fields, which if tilled before 1985, are exempt from regulation unless they revert back to their natural state. Others are in low lying ravine areas. Wetlands can be enhanced to be an attractive and functional part of the storm water detention system in developments. They work better than man-made basins, since their wetland vegetation serves to trap, filter and break down surface runoff pollutants, as well as assist in groundwater recharge acting as habitat for a wide variety of plant and animal species.

Wetlands also help to mitigate flood and drought conditions trapping water and releasing it slowly over time.

The Wetlands Map (Map 8.5) shows the location of potential wetlands from OCAP satellite imaging. These locations are raster data, meaning that because they are derived from satellite imaging, the information has square edges and is general in detail. They should not be too closely relied upon, but may indicate the locations of potential jurisdictional wetlands.

In January 2001, the United States Supreme Court determined that only wetlands that drain to flowing waters would be protected by the Clean Water Act. This does not mean that isolated pockets of wetlands are not important. Such pockets may indeed be valuable, especially for stopover places for migrating waterfowl as well as breeding areas for declining amphibian populations. Isolated pockets or "perched" wetlands however, do not come under the federal protection of the Clean Water Act.

## **8.6 Prime Agricultural Soils**

The Prime Agriculture Soils map (Map 8.6) shows the location of soils suited to high yields in Kingston Township. Agriculture is still an important land use in Kingston Township, although the land value for future development may exceed the short-term value for continued agricultural use.

Creative zoning and development techniques may be able to save some agricultural land as open space. There is a methodology to evaluate which farms should be preserved, based upon highest yield soils, proximity to utilities, four-lane highways, and dense settlements. The method is called the



Land Evaluation Site Assessment system or LESA and is created by the US Department of Agriculture.

When farms are considered for purchase of development rights, those with the highest LESA ranking might be given the most favorable consideration. The DCRPC and the Delaware Soil and Water District can perform the LESA evaluation.

### **8.7 Soil Suitability for Septic Systems**

Sanitary sewer service is not yet available to the township. Therefore, it is useful to evaluate the soil capability for septic systems. Land with very poor suitability for septic may require centralized sanitary sewer for development. The Soil Suitability for Septic Systems Map (Map 8.7) displays this information. Much of Kingston Township has Pewamo soil, which has a high amount of clay and is poorly drained. This soil is unacceptable for leach fields due to the seasonal high water table. As a result, lot sizes must be large enough to locate suitable soil for a leach field and reserve leach field. Furthermore, overall density must remain low due to saturation of these soils. Soils are a major consideration on density of population in non sewerred areas.

### **8.8 Combined Critical Resources**

The Combined Critical Resources map (Map 8.8) displays generalized floodplains, water, wetlands, prime agricultural soils and 100 foot suggested setbacks from major watercourses. Since it is a goal to preserve the natural resources of the township, this map should be used as an evaluation tool when land is developed.

### **8.9 Development or Harvesting of Natural Resources**

There are currently limited mined deposits of natural resources in Kingston Township (i.e. minerals, stone, gravel, oil, natural gas). There are recent oil and gas strikes in the township. Prime agricultural soils are the main natural resource and farming should be encouraged as long as it is economically viable. It is conceivable that someday these prime agricultural soils could be extracted and moved for landscaping or other uses. There may be some commercially viable limestone deposits in the township, although they are deep below the surface and would require underground mines for extraction. There is very little potential for sand and gravel mining as well. The most likely candidate would be mining Bedford shale along the eastern third of the township for the production of bricks. This same bedrock layer is mined in Marion County to the north. The Berea sandstone to the southeast also has some limited potential for foundation material, but is not likely (Source: Ohio Geological Survey, Industrial Mining Group).

The township should develop policies regarding the development of valuable natural resources, either as part of a specific zoning district, or as a conditional use if certain performance standards are met (noise prevention, dust control, buffering and screening, appropriate access, hours of operation, etc). Mining operations should not be permitted within the 100-year floodway, and if proposed within the 100-year floodplain should only be permitted with strict environmental controls to prevent water pollution, flotation of equipment and other related hazards. Mining operations must take into account the proximity of existing residential uses.

## Chapter 9

### Housing

Housing has been the primary index of growth in Kingston Township. The township is a rural community with limited central sewer. Del-Co water service extends along most roadways. The township has maintained low residential densities because of its lack of urban services and reliance on septic systems. The recently amended Planned Residential Development (PRD) permits a variety of housing types and an overall maximum gross density of 1 unit/1.95 acres which is density neutral with the Farm Residence District.

#### **9.1 Existing Housing Stock**

A house-to-house windshield survey was conducted in June 2001. An exterior condition of each house was derived based upon five criteria. The housing survey results are in Table 9.1.

**Table 9.1 Kingston Township Housing Survey Results, June 2001, Field Survey**

Housing Type	Total # Units	#Units Sound: no defects	# Units Sound: slight defects	# Units Sound: deteriorated	# Units dilapidated	# Units uninhabitable
SF	600	475	95	23	5	2
TF	0	0	0	0	0	0
MF	0	0	0	0	0	0
Mobile Homes	6	1	4	1	0	0
Totals	606	476	99	24	5	2
% Totals	100%	78%	17%	4%	<1%	<1%

#### **Findings**

Based upon the housing survey, several points about housing may be made:

- There is no significant problem with deteriorated housing stock in Kingston Township.
  - A. 78% of all housing is either new or maintained like new (sound, no defects).
  - B. 17% of all housing is in good condition (sound, slight defects).
  - C. Only 4% of all housing appeared to be sound but deteriorated.
  - D. Only 5 units (0.8%) appeared dilapidated.
  - E. Two units (0.3%) appeared uninhabitable.
- Housing in the township is entirely single family. This is largely due to the lack of sanitary sewer and other services that multi-family housing demands.
- Kingston Township may someday wish to adopt a housing code to assure the constant maintenance of its housing stock, to maintain property values and stable neighborhoods.

## **9.2 Housing Needs**

Kingston Township is ranked 18<sup>th</sup> in total housing units in Delaware County and has been the twelfth-largest provider of new housing stock from 1980 to 2000 (327 units), ranked by building permits issued (Table 9.2, DCRPC Number of Building Permits 1980-2000). Kingston Township has provided 1.40% of the total new housing in Delaware County in the last 20 years. The top five communities (city of Delaware, Genoa, Orange, Liberty Townships, and Powell) have provided almost 70% of all the housing in Delaware County during the same period. Those communities have centralized sewer service.

Table 9.2 also shows vacancy rates, as determined by the US Bureau of Census during the April 2000 count. In general, vacancy rates show a healthy supply of new homes available for sale. Vacancy rates below 2% indicate a tight housing market, while vacancy rates of 5% are normal for a market with reasonable supply for market demand.

**Table 9.2 Housing Providers in Delaware County, by Reported Building Permits 1980-2000**

Name of Community	Census 2000 Housing Units April, 2000	County Rank, Housing Units, Census 2000	Vacancy Rate, Census April, 2000	Building Permits 1980-2000	% total permits issued 1980-2000, Delaware County
Berkshire Township	712	16	4.5 %	386	1.65 %
Berlin Township	1,239	11	4.7 %	827	3.54 %
Brown Township	479	21	3.3 %	189	0.80 %
Concord Township	1,374	10	5.8 %	958	4.10 %
Delaware Township	373	22	7.0 %	180	0.77 %
Genoa Township	4,058	3	5.0 %	3,702	15.8 %
Harlem Township	1,382	9	3.1 %	479	2.05 %
<b>Kingston Township</b>	<b>554</b>	<b>18</b>	<b>3.1 %</b>	<b>327</b>	<b>1.40 %</b>
Liberty Township	3,469	4	5.3 %	2,547	10.9 %
Marlboro Township	167	26	6.7 %	8	.034 %
Orange Township	5,055	2	8.4 %	3,561	15.24 %
Oxford Township	318	23	7.2 %	98	0.41 %
Porter Township	597	17	3.0 %	266	1.13 %
Radnor Township	511	19	4.3 %	169	0.72 %
Scioto Township	864	14	4.7 %	430	1.84 %
Thompson Township	220	24	8.2 %	51	0.21 %
Trenton township	769	15	3.0 %	241	1.03 %
Troy Township	1,210	12	8.5 %	203	0.86 %
<b>Total Townships</b>	<b>23,273</b>		<b>5.3 %</b>	<b>14,622</b>	<b>62.59 %</b>
Columbus	1,660	7	7.8 %	1,854*	7.93 %
Delaware city	10,208	1	6.7 %	4,252	18.2 %
Galena	132	28	7.6 %	10	0.042 %
Sunbury	1,057	13	3.9 %	272	1.16 %
Shawnee Hills	199	25	9.0 %	18	0.077 %
Powell	2,032	6	2.8 %	2,131	9.12 %
Ashley	500	20	6.2 %	10	0.042 %
Ostrander	156	27	5.1 %	36	0.15 %
Dublin	1,501	8	6.9 %	13**	0.055%
Westerville	2,311	5	3.7 %	140***	0.59 %
<b>Total Incorporated areas</b>	<b>19,756</b>		<b>5.0 %</b>	<b>8,736</b>	<b>37.4 %</b>
<b>Total All Reporting Incorp. &amp; Unincorp. Areas in Delaware Co.</b>	<b>43,029</b>			<b>23,358</b>	<b>100 %</b>

\*- Data available from 1995-2000 only

\*\* Data from 1999- 2000 only

\*\*\* Data from 2000 only

### **9.3 Open Space Developments**

The Delaware County townships that have experienced the most growth (Liberty, Orange, and Genoa) have access to county sanitary sewer. In 1996 the Ohio EPA amended their anti-degradation rules, making it more difficult to discharge treated effluents from sewage treatment plants to running streams. In order to facilitate centralized sewer systems that cannot discharge to running streams, the Ohio EPA now allows alternative centralized sewage treatment systems with appropriate design, and maintenance. The most popular alternative in Delaware County (three systems approved) is the standard tertiary treatment plant using the treated effluents to be spray irrigated onto an acceptable vegetated area, normally a golf course. The decision to permit such an alternative centralized treatment plant is the jurisdiction of the Delaware County Sanitary Engineer and the Ohio EPA. Since such planned developments normally require rezoning, the zoning decision is left to the township or county.

This change in sewer policy has led to a surge in “golf course” development in townships that previously had no sanitary sewer service. The developments use the golf course as an irrigation area for the treated wastewater. Houses are placed around the golf course, which enhances house lot prices. This form of cluster housing may be appropriate, depending on the gross overall density and other service demands. These golf course communities, with on-site centralized sewer facilities, may shift more housing starts to previously rural, non-sewer service areas. This could redistribute the housing geography in Delaware County.

For example, in 1997 Concord Township had no sanitary sewer service from Delaware County. Annual new home permits in Concord Township on large lots (one acre or larger) with septic systems averaged 30 homes per year from 1980-1997. Tartan Fields subdivision was approved in Concord Township in 1997. Tartan Fields is a Planned Residential Development using cluster single family homes on ¼ acre lots surrounding a golf course that is irrigated by treated effluents from a centralized sanitary sewer system built by the developer and dedicated to the county for ownership and maintenance.

In 1998, Scioto Reserve subdivision was approved in Concord Township. It also uses an on-site centralized sanitary sewer with treatment plant and irrigation of a golf course. With Scioto Reserve and Tartan Fields subdivisions under construction, Concord Township can expect its annual permits to increase again, perhaps to 200 per year. In the space of just 3 years, Concord Township may move from the 8<sup>th</sup> largest number of annual new home permits in the county to 4<sup>th</sup> largest due to these two new “golf course” developments.

The Dornoch Golf Course community in Berlin and Delaware townships was developed similar to Tartan Fields and Scioto Reserve with residential homes clustered around a golf course that also serves as a spray irrigation area for its wastewater treatment plant. However, in 2007, the Dornoch Golf Course owners filed for bankruptcy. A developer purchased the golf course land to develop a portion of it into additional residential units. The homeowners, who believed they had purchased homes on permanent open space, sued to prevent the loss of the open space which they believed would also degrade the value of their property and leave inadequate spray area for the sewer plant. Situations like this can be avoided by ensuring that legally binding documents are recorded to preserve open spaces as permanent, irrevocable no build zones.

NorthStar will be a 1700-acre, mixed-use golf course community that spans two townships, Berkshire and Kingston. The land lies east of I-71 and north of US 36/SR37. The Berkshire Township portion of NorthStar includes commercial (318 acres), a golf course and residential (654 units/521 acres). The Kingston Township portion includes a golf course and residential (651 units/866 acres).

Although NorthStar's proposed residential gross densities are less than the 2 developments in Concord (1.1 units/acre compared with 1.7 units/acre), the 1516 units could trigger new house construction rates that resemble the boom experienced in Concord Township over the last 3 years. NorthStar was approved at 723 units but the rezoning was overturned by voters in November 2003. The golf course 90 acres was rezoned to Recreational District in the Spring of 2004. A rezoning to Planned Residence District was ultimately approved for 651 units in 2005.

**Table 9.3 Potential Developments in Delaware County with Alternative Centralized Sanitary**

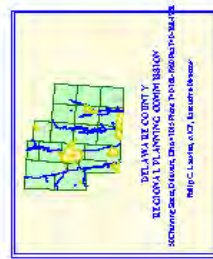
**Sewage Disposal Provided On-Site (as of January, 2001)**

<u>Development</u>	<u>Location</u>	<u>Township</u>	<u>Acres</u>	<u># Units Approved</u>	<u># Units Proposed</u>	<u>Potential Density</u>	<u>Status</u>
Tartan Fields	Concord Road	Concord	302	449		1.49/ac	Construction
Dornoch	US 23	Liberty/Delaware	282	393		1.39/ac	Construction
Scioto Reserve	Home Road, Riverside Drive	Concord	695	1250		1.8/ac	Construction
Tanglewood	Cheshire Road	Berlin/Liberty	573		1035	1.8/ac	Withdrawn
NorthStar	N. Galena Road	Kingston/Berkshire	965		1500	1.55/ac	Pending
West Farm	Robins Road	Harlem	175		540	3.1/ac	Optioned
Woods Farm	SR 605	Harlem	128		260	2/ac	Optioned
<b>Totals</b>				<b>2,092</b>	<b>3,335</b>		

Economics drive the Land Application System equation in Delaware County.

- Land prices for land with water and county sewer in Delaware County townships are approximately \$20,000 per raw acre for large tracts, which yield densities of 2 units per acre. Finished lot prices are \$40,000 - \$50,000 in such developments.
- Land prices in agricultural areas of the county are \$2,500 to \$6,000 per acre for large tracts. Existing PRD Zoning permits cluster densities of 2-8 units (varies by township) per acre with "centralized" water and sewer, even in rural areas. This zoning was written 20 years earlier, when centralized sewer meant public sewer extended by the county. Such sewer extensions followed the major roadways where services and infrastructure could be provided.
- Land Application Systems can allegedly be constructed for \$5,000/unit on a large-scale basis (500 units or more). Delaware County sewer tap fees are \$5,900/unit. 1,000 units of housing on a Land Application System potentially saves the developer \$900,000 in Delaware County sewer tap fees.
- If developers can convince homebuyers to drive farther into the country and buy into a Land Application development, the developer can potentially pay less for land, save on sewer installation costs, and receive equivalent or greater densities, while marketing the "rural character" buyers demand.

# Potential Developments Served by Alternative Central Sewer in Delaware County, Ohio.



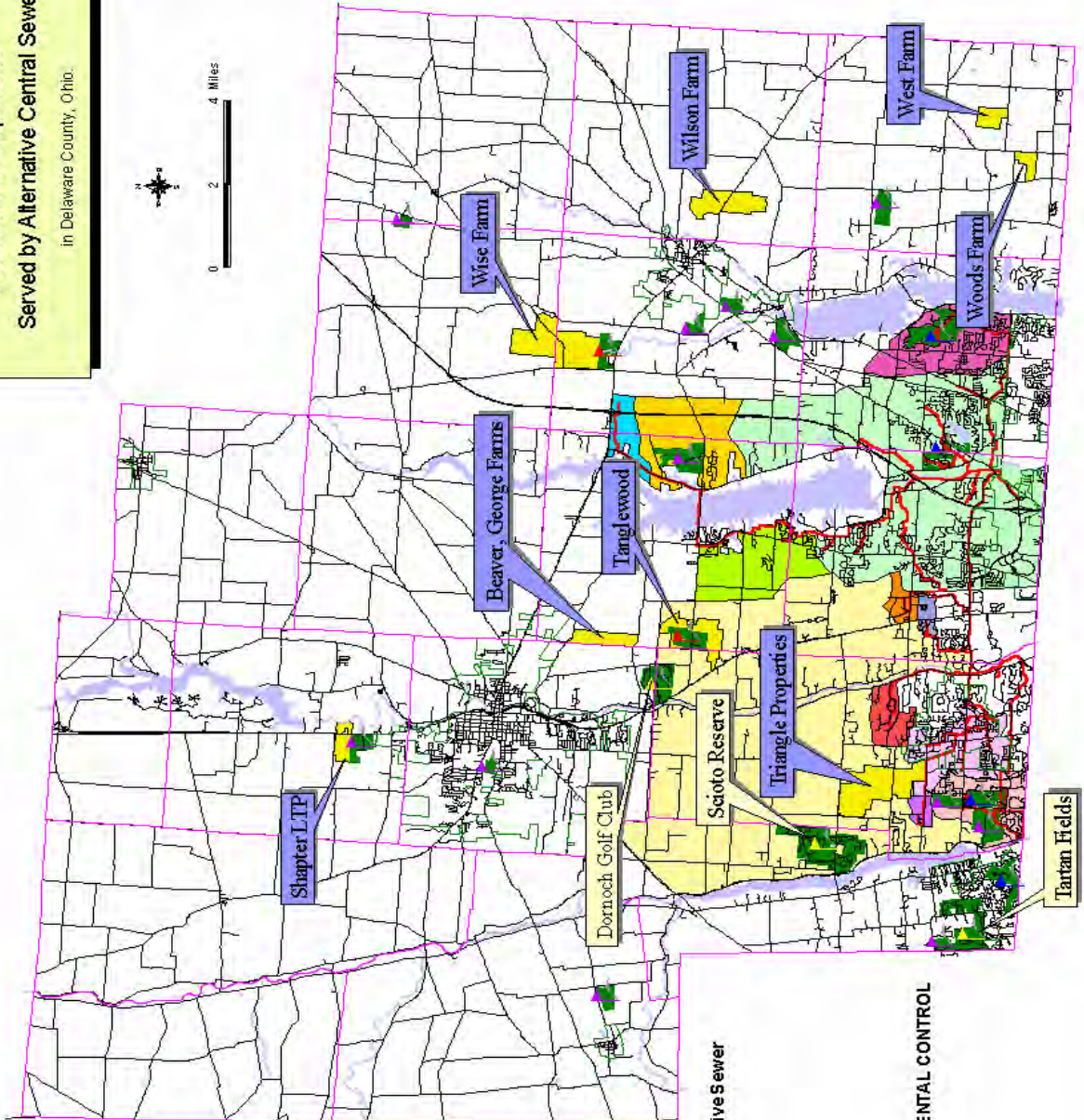
Prepared By: Delaware County Regional Planning Commission  
03/05/17/2003 365-1000  
(12/20/1999)

Legend

Township Boundary  
Incorp. Areas  
Golf Course Location

Proposed  
Approved  
Developed  
Golf Course  
Roads  
Main Sewer Lines  
Hydropoly  
Golf Courses  
Possible Subdivisions with Alternative Sewer  
Sewer Service Areas

ZONE A - EAST ALUM CREEK  
ZONE B - CHESHIRE  
ZONE C - PEACHBLOW  
ZONE D - ALUM CREEK  
ZONE E - MAXTOWN  
ZONE F - ORANGE ROAD  
ZONE G - HIDDEN RAVINES  
ZONE H - OLENTANGY ENVIRONMENTAL CONTROL  
ZONE I - WINGATE FARMS  
ZONE J - LIBERTY HILLS  
ZONE K - LEATHER LIPS  
ZONE L - SELDOM SEEN  
ZONE M - POTENTIAL



#### **9.4 Zero Discharge, On-Site Centralized Sanitary Sewer Systems-Planning Opportunity or Threat?**

For Ohio Townships, Land Application Systems can be both an opportunity and a threat.

- **Opportunity #1** If cluster developments with Land Application Systems are proposed in areas anticipated to be served by county sewer, the Land Application Systems can augment the county's sewer capacity. This means additional areas for sewer users may be accommodated without future upgrades to the treatment plant. This can be a benefit.
- **Opportunity #2** Agricultural (non-urban service) areas can use properly worded cluster development (such as the Farm Village Concept adopted by portions of Delaware and Franklin Counties) to transfer development rights from working farmland to adjacent cluster developments. The key to success of this concept is low density (one unit per two acres might be an appropriate gross density). Homes in such areas may be tightly clustered on smaller lots; the Land Application System can be used as irrigation on appropriate set-aside areas for agriculture and managed open space. This preserves farmland.
- **Opportunity #3** Land application systems can also augment the water capacity of the potable water supply by reducing the summer lawn watering peak usage. By using a parallel gray water system to irrigate open space, lawns and golf courses, potable water demand could be reduced during droughts. Check with the OEPA on permitting lawns to be gray watered. This may not be allowed.
- **Threat #1** Ohio townships should be cautious when using alternative sanitary sewer systems to achieve urban densities (greater than one unit per acre) in rural areas. These areas typically have no broad base of community services available to them (i.e. fire and police protection, public transportation, shopping, recreation, entertainment, and cultural activities). Every demand for such services requires trips in cars. Local roads typically cannot support significant trip increases for high density, large-scale development. The cost of upgrading farm to market roads to accommodate leapfrog development would likely exceed the benefits of the development.
- **Threat #2** If gross densities of more than one unit per acre are allowed in rural (non-urban service) areas, more farms become targets for golf course development, and existing golf courses become targets for effluent irrigation easements. This does not preserve farmland, which has been identified as a legitimate government interest by the Ohio Legislature.
- **Threat #3** Most municipal or county sewage treatment plants are built using general obligation bonds. Sewer tap fees typically make the bond payments. If developments construct their own treatment plant and avoid sewer tap fees, they may compete with a municipal or county sewer system. Property owners may incur increased taxes if a shortfall in tap fees occurs. Note: This does not appear to be a threat in Delaware County because there is more demand for county sewer than supply, so tap fees should continue to be collected regardless of Land Application System developments.



- **Threat #4** If the county does not maintain the Land Application System treatment plant, it may be prone to failure. These LAS systems should be considered permanent. Delaware County prefers county ownership of the plant (by dedication) to assure proper design and maintenance. Home Owners Associations are notoriously under-financed and ill equipped to maintain or oversee maintenance of sewage treatment plants.

To prepare for potential suburban-density developments using Land Application Systems or other approved “centralized” on-site sewage disposal systems, Ohio townships should:

- Adopt up-to-date land use plans with recommended densities as the basis for their zoning.
- Permit Land Application Systems as accommodations to development only when the use and density conform to the comprehensive plan.
- Avoid gross tract densities greater than one unit per acre in truly rural areas. Even lower gross densities are appropriate in prime agricultural areas.
- Encourage county ownership and maintenance of the sewage system as a consideration in rezoning.

## **9.5 Future Housing Needs**

In order to make future housing projections, a community might anticipate what services they can, or should, provide for what kinds of housing. The community should also anticipate further their share of the future population of the area and allocate the distribution of housing types.

Few rural communities attempt such an analysis, leaving the housing mix up to the real estate market and traditional power of zoning, which is seldom so analytical. In a high-growth area such as Delaware County, where all recent population projections have been low, it is impossible to anticipate what the county’s share of the state’s population will be, and distribute that amount among the townships, villages and cities. Furthermore, this is not a centralized economy, but a free market economy.

Ohio annexation law currently favors the cities. If landowners wish to annex and are contiguous, annexation is generally approved. Zoning battles occur along the edges of cities over density, which translates to land value, with developers sometimes playing one jurisdiction against the other to get the most density.

Where the possibility of annexation exists, townships cannot be certain of their future boundaries. For that reason, it is impossible to assess fair share allocations of housing to be provided by the township when a city or village, which may offer superior services, may annex some of that land and provide housing at a higher density. Higher density housing and a wider range of housing types can be provided in Delaware City than in the township.

A more pragmatic approach to housing distribution is to determine:

- How the community wants to look when it is all built out (vision);
- What services it can reasonably provide;
- What its reasonable and fair share of the mix of population would be.

Kingston Township's future housing mix and densities will be shaped by the vision of the community when it is all built out. Decision-making will be influenced by the available utilities, natural resources and limited services the township can economically provide. This is reflected on the Comprehensive Land Use Plan in Chapter 1.

## **9.6 Housing Policies**

Kingston Township has established goals of maintaining a mostly single family residential housing mix due to its lack of sanitary sewer and the township's desire to maintain a sense of rural character. Kingston Township's share of Delaware County housing starts is likely to remain small, until the NorthStar development begins, which will significantly increase the number, pace and variety of housing offered. The Township should continually evaluate its housing mix as new developments are proposed.

Columbus and Delaware City are the primary multi-family providers in the Delaware County housing market. They offer higher densities than the townships. The City of Delaware has recently passed a high-density apartment district that will compete with Columbus for land yield (approximately 15 units per acre). The townships cannot compete in the range of urban services with the cities in Delaware County (Delaware, Columbus, Westerville and Powell), which have the economic and service clout to provide the larger share of the multi-family market.

For this reason, the townships should not be expected to provide large percentages of their future land use mix in multi-family housing. In those areas where there is access to major road networks, in transition to commercial uses, or as part of large planned developments, multi-family housing can and will occur in the townships. Kingston Township could receive multi-family housing requests as part of larger planned developments. It must evaluate its housing mix in light of all state and federal housing laws and binding court decisions. The census does not have any data for housing conditions. This was a windshield survey performed by the RPC staff. That information is in Table 9.1. There are other census data for housing available on our website ([www.dcrpc.org](http://www.dcrpc.org)).

## Chapter 10

### General Economic Conditions

Land development and fulfillment of the comprehensive plan depend on a strong local economy. Within the national economy there are regional economies moving forward or slumping due to local conditions. Delaware is one of Ohio's most affluent counties, with one of the lowest unemployment rates. The central Ohio economy (especially Franklin and Delaware County) drives Kingston Township's economy.

In March 2001, the United States economy slipped into a national recession. Despite low interest rates and low inflation rates, the long period of expansion from 1991 to 2001 was ended. The effects of the September 11, 2001 terrorist attacks on the United States deepened the economic downturn. A 12/21/01 report by the U.S Commerce Department declared the US economy "turned in its weakest performance in a decade in the third quarter, shrinking at an annual rate of 1.3 %" (Columbus Dispatch, 12/22/01).

Signs of economic weakness:

- U.S. unemployment rate jumped from 4% in August, 2000 to 5.7% November 2001 (Columbus Dispatch).
- Ohio's unemployment rate rose from 4.2% in July, 2000 to 4.7% in November 2001 (Columbus Dispatch).
- Central Ohio unemployment rose from 2.4% (11/00) to 3.2% (11/01) (Business First, 1/11/02)
- Central Ohio Labor Force was at 904,300, a decrease from July 2001 high levels of approximately 918,000, but still ahead of the 12 month low of 871,800 in December 2000. (Business First, 1/11/02)
- Central Ohio Labor Force (excluding Union County) showed an average of 41 weekly work hours, compared to 42.7 weekly work hours in October 2000. (Business First 1/11/02).
- Delaware County unemployment rose from 1.9% (August 2000) to 2.7% (November 2001) (Columbus Dispatch), but still remains one of the lowest unemployment rates in Ohio.
- Greater Columbus industrial vacancy rates rose from 7.9% first quarter 1998 to 10.18% fourth quarter 2001 (Columbus Business First Market Report, 1/18/02).
- Greater Columbus area office vacancy rates are expected to reach 10-15% in 2002 (Columbus Business First Market Report, 1/18/02)

Although economic data from the 2000 U.S. census is not yet available (February 2002), there are local indicators that presage a re-emergence of the strong Delaware County economy.

Signs of economic strength:

- Delaware County Per Capita Income was \$35,042 in 1999, the highest in the State. Its' 11.29% increase from 1994-96 was the fastest growing per capita income of any county in Ohio and 52<sup>nd</sup> in the USA (Ohio Development Department web site).
- Polaris Fashion Place Mall opened in November 2001, with record-breaking sales tax receipts. The mall is a destination for central Ohio shoppers, bringing new dollars into Delaware County. Polaris Centers of Commerce is the largest office park in central Ohio, with 3.8 million square

feet of office space, 28 buildings and 900 of 1200 acres built. The JP Morgan Chase Corporate Office Center (Polaris) is the largest office building in central Ohio (2 million square feet).

- Affluence is the mark of the Polaris region. Within a 10-mile radius of Polaris are 200,000 households with a median household income of \$54,400. The upscale Easton Mall/office-park, by comparison, counts 300,000 homes with a \$40,600 household median (Business First).
- While new platting activity in the Delaware County townships slowed in November and December 2001, new construction continued, fed by cheap mortgage rates of 6% - 7.5% for fixed 30-year loans. Final 2001 building permit tallies for the unincorporated Delaware County townships showed 2144 new building permits, the largest number ever in Delaware County. Kingston Township was the number seven provider, with 37 new homes.
- Kroger built a \$69 million, 750,000 square foot food distribution warehouse on US 36 in the city of Delaware, at Glenn Road. The facility will create 276 new full-time jobs, and retain/transfer 387 full time jobs, paying an average \$13.00 per hour. The state of Ohio “estimates the new project will generate \$587,221 in additional corporate franchise and individual income taxes in the next 10 years.
- 21 of 52 Greater Columbus Stocks (as of January 9, 2002, Business First newspaper) were at, or within 10% of their 52 week highs. Many of these 21 companies have a presence in Delaware County (Bob Evans; Dominion Homes; Glimcher Realty Trust; Greif Brothers; Huntington Bancshares; Max & Erma’s; M/I Schottenstein; Wendy’s International).

### **10.1 Employment by Industry in Delaware County**

Delaware County has a broad-based economy, as described by employment sectors in Table 10.1.

**Table 10.1 Employment by (covered) Industry in Delaware County, 2000**

(Source: Ohio Development Department, OBES/LMI place of work data) \*This does not include all employment

<b>6.1.1.1 Employment Category</b>	<b>2000 Employees</b>	<b>% of Total</b>
1. Wholesale and Retail Trade	10,259	29.1%
2. Services	8,831	25.0%
3. Manufacturing	4,901	13.9%
4. Government	4,618	13.1%
5. Finance, Insurance Real Estate	3,027	8.6%
6. Construction	2,446	6.9%
7. Transportation/Utilities	553	1.6%
8. Agriculture, Forestry, Fishing	543	1.5%
9. Mining	120	0.3%

**Table 10.2 Major Employers, Delaware County** (Source: Delaware County Economic Dev.)

<b><u>Employer</u></b>	<b><u>Employment Sector</u></b>	<b><u># Employees</u></b>
Advance Auto Parts	Trade (vehicle parts)	304
American Showa	Manufacturing (vehicle suspensions)	375
Bank One	Finance	1,000
Cigna	Insurance	450
Delaware City BD of Education	Government	559
Delaware County	Government	810
Grady Memorial Hospital	Service (medical)	657
Meijer	Trade (retail)	348
Olentangy Local Schools	Government	672
Ohio Wesleyan University	Service (Higher Education)	495
PPG Industries	Manufacturing (paint)	563
Wal Mart Store #2725	Trade (retail)	465

## **10.2 Kingston Township Economy**

Kingston Township's economy was historically based on agriculture. Some commercial land uses have been developed in the township.

**Table 10.3 Businesses in Kingston Township, by Windshield Survey, June 2001:**

<b>Business Name</b>	<b>Business Type</b>
Product Tooling Inc.	Machine shop
Dale's Tree Farm	Tree farm
Lazy L Nursery	Nursery
Basham's Retreat	Campground/retreat
Taylor Tree Farm	Tree Farm
W. W. Excavating	Excavating
Country Cabin	
Walnut Country Club (Porter/Kingston)	Golf course

Kingston Township has the possibility for additional economic development on or with access to SR 521 and SR 61. A potential future interchange at I-71/SR 521 could provide additional opportunities for commercial tax base. Access management (limiting left turn movements and combining curb cuts) will be important to safe traffic flow. Because there is currently limited county sanitary sewer service in Kingston Township, commercial and industrial development is likely to be limited to those uses that do not need sewer.

If lands could be served by either County sewer or by a privately constructed OEPA approved centralized sanitary sewer system that is dedicated to the county for ownership and maintenance, then the commercial and industrial tax base could be expanded. The 1700-acre NorthStar development in Kingston and Berkshire Township will utilize land application of the treated effluent from a central sanitary treatment plant. Although the proposed residential densities are a third of the densities in Polaris, the 318 acres of planned commercial in Berkshire is equivalent to two regional shopping malls.

### **10.3 Agricultural Component of the Delaware County Economy**

Agriculture is still the largest land use (by acreage) in Delaware County. It is also still a significant land use in Kingston Township. In 1998 the Delaware County Commissioners appointed an Agricultural Preservation Task Force to study the issue of loss of farmland and to prepare a strategy for agricultural preservation. The Task Force determined that:

“Over a 15 year period, 1982-1997, agriculture in Delaware County has been constant in that it is still a family owned industry and it is still a vibrant economical resource with sales of over \$64 million in 1997. However, there has also been a great amount of change in the industry over those 15 years. The number of farmland acres in Delaware County has continually declined. In 1997, 160,770 farm acres remained in Delaware County. The farmland acres that remain are no longer owned by the farm operators, but are rented from someone outside the farming operation. To compensate for this loss of farmland, farmers have turned to producing higher value crops, added value products and direct marketing. Farm commodity production is becoming polarized with the loss of livestock operations and a move toward crop production. This loss of diversity will increase the chances that a commodity specific issue will dramatically impact the total Delaware County agricultural sector” (page 20, Delaware County Farmland Preservation Plan, June 2000).

#### **Table 10.4 Amount of Agricultural Land in Delaware County**

• Delaware County- Total Acreage	293,700
• Delaware Co. Agricultural Acres (2000-Ohio Dept. Dev.)	175,000
• Percent of Delaware County Acres in Agriculture	60%
• Ohio Acreage in Agriculture, 2000	14,900,000 acres
• Delaware County's Share of Total Ohio Agricultural Acres	1.2 %

#### **Table 10.5 Census of Agriculture, Loss of Farmland in Delaware County**

Source: 1995 Ohio Dept. of Agriculture Annual Report, 1997 Census of Agriculture County Profile

<b>Period</b>	<b>Land in Farms</b>
1992-1997	-5 %
1982-92	-10 %
1974-92	-11 %
1964-92	-18 %
1954-92	-31 %
1945-92	-39 %

**Table 10.6 Census of Agriculture, Land Use Change 1950-1997 in Delaware County**

Source: 2000 Ohio Dept. of Agriculture Annual Report

Land Use	% Change
Cropland	-18 %
Permanent Pasture	-92 %
Woodland Not Pastured	-39 %
Other Land	-60 %
Total Land in Farms	-38 %

A farm is defined as a place with annual sales of agricultural commodities of \$1,000 or more. Agriculture represented 770 farms in 1999 according to the Delaware County Farm Bureau. The 1997 Census of Agriculture reports a much lower number of 627 farms. These employees (most are family farmers) represent an estimated 1.9% of the total Delaware County labor force (893 farm workers/47,230 total labor force).

In 1997, the total value of all non-farm sector sales/receipts/shipments in Delaware County was \$3,506,597,000 (Source: Delaware County Economic Development/US Census Bureau County Business Patterns and Economic Conditions). Total 1999 cash receipts for all agricultural production in Delaware County was \$47,979,000. This represented 1.3% of the total sales/receipts for the county.

The US Bureau of Economic Analysis reported in May 1999 that non-farm personal income in Delaware County in 1997 was \$2,625,058,000, and Farm income was \$22,431,000.

**Table 10.7 Delaware County Agricultural Comparison: 1994 & 2000**

	1994	2000
<b>Number of Farms*</b>	710	770
<b>Average Farm Size</b>	254 ac	227
<b>Total Land in Farms</b>	180,000 ac	175,000
<b>Fertilizer Deliveries</b>	10,615 tons	21,534 tons
<b>Commercial Grain Storage Capacity</b>	562,000 bushels	317,000 bushels

\* A farm is defined as a place with annual sales of agricultural commodities of \$1,000 or more.

Source: 1995 and 2000 Ohio Department of Agriculture Annual Report

**Table 10. 8 Highlights of Agriculture: 1997 and 1992**

1997 CENSUS OF AGRICULTURE		
HIGHLIGHTS OF AGRICULTURE: 1997 AND 1992		
DELAWARE COUNTY, OHIO		
Item	ALL FARMS	
	1997	1992
Farms .....number..	627	688
Land in farms .....acres..	16077 0	16901 7
Average size of farm .....acres..	256	246
Value of land and buildings@ 1:		
Average per farm .....dollars..	72112 5	59044 4
Average per acre .....dollars..	3019	2352
Estimated market value of all Machinery and equipment@ 1		
Average per farm .....dollars..	53398	52406
Farms by size:		
1 to 9 acres .....	56	69
10 to 49 acres .....	206	216
50 to 179 acres .....	175	200
180 to 499 acres .....	101	105
500 to 999 acres .....	53	55
1,000 acres or more .....	36	43
Total cropland .....farms..	578	640
Acres..	14451 1	15134 7

**Table 10. 9 Delaware County Agricultural Production: Comparison, 1994 & 2000**

Crop	1994 Acres	2000 Acres	1994 Production	2000 Production	2000 Rank*
<b>Corn</b> (grain)	43,300	42,500	5,000,600 Bu	6,391,100 Bu	35
<b>Soybeans</b>	72,200	71,900	2,255,700 Bu	2,967,900 Bu	33
<b>Wheat</b>	18,800	12,800	969,100 Bu	933,500 Bu	32
<b>Oats</b>	-	-	-		
<b>Hay</b>	8,300	8,600	21,100	28,500 ton	58

\*2000 Production rank out of Ohio's 88 counties

Source: 1995 and 1999 Ohio Department of Agriculture Annual Report



**Table 10. 10 Delaware County Cash Receipts from Marketing of Farm Commodities**

Crop	1994	1999
Corn	\$13,921,000	\$10,607,000
Soybeans	21,208,000	14,674,000
Wheat	3,353,000	1,917,000
Oats and Hay	633,000	649,000
Other Crops	14,393,000	13,581,000
Dairy and Milk	2,687,000	1,955,000
Cattle and Calves	1,828,000	1,231,000
Hogs and Pigs	2,808,000	2,787,000
Poultry and other Livestock	953,000	578,000
Total	<b>\$61,784,000</b>	<b>\$47,979,000</b>
Average per farm	<b>\$84,635</b>	<b>\$62,311</b>

Source: 1995 and 2000 Ohio Department of Agriculture Annual Report

**Observations about the Agricultural Impact on Delaware County's Economy in 2000:**

- 60% of the land was in agriculture
- 1.9% (estimated) of the labor force was in agriculture
- 1.3% of the total cash county receipts for production of goods and services was in agriculture
- .85 % (less than one percent) of total county personal income was in agriculture
- Agriculture is still a large land use, but it is becoming a smaller portion of the local economy.

**10.4 Local Housing and Real Estate Market**

Delaware County's housing market had been strong for two decades until recently. The townships have primarily provided upscale single family housing, while the cities of Delaware and Columbus have provided more moderate income and middle class housing.

The Mid Year Greater Columbus Blue Chip Economic Forecast (August 16, 2000, Greater Columbus Chamber of Commerce) warned that the declining ability of residents to find affordable housing threatens the Greater Columbus economic expansion. As reported in Business First (8/25/00) " even with high average incomes and large down payments, the majority of newly built homes in Greater Columbus are economically out of reach for most regional residents. A household making \$40,300, the average income for the region, and placing a 20 percent down payment on a home could afford only 4 percent of the area's new houses."

In the townships of Delaware County (see Summary Statistics of Rezoning and Subdivision, Chapter 3) there were 12,969 lots in the subdivision "pipeline" for approval on 12/31/2001. Based upon a three-year average absorption of 1,976 new lots in the unincorporated townships, the 12,969 house-lots represent a 6.5 year supply. If too much high-end housing is offered to the market, and if demand becomes reduced by weakness in the local, state and national economy, the Delaware County real estate economy could suffer.

## **10.5 Other Economic Indicators**

- Delaware County's poverty rate was the lowest in Ohio in 1999 (3.6%), one-third that of Franklin County (11.6%). All other central Ohio counties average 7% (Source: Census Bureau).
- According to the 2000 Census, Delaware County has the highest educational attainment rate of any central Ohio county. 92.9% of the population is a high school graduate, 41% has at least a Bachelor's degree, and 12.9% of the population has a Master's or higher college degree. By comparison, combined college level attainment in other counties is: Franklin: 31.8%; Fairfield: 20.8%; Licking: 18.4%; Madison: 13%; Pickaway: 11.4%; and Union: 15.9%.
- Delaware County ranks third in the state of Ohio's 88 counties in the highest per capita property taxes, with 1997 revenues of \$1,063.86 per capita.

## **10.6 Economic Development in Delaware County**

### **Enterprise Zones**

Delaware County's established enterprise zone program provides tax abatements in return for guaranteed job creation. The enterprise zone program has been successful in creating 1,346 new jobs at 31 firms receiving abatements as of 12/31/00 (source, Ohio Dept. of Development, Ohio Enterprise Zone Program Annual Report for 2000). The four enterprise zones in Delaware County are in Orange Township, city of Delaware, Westerville, and the village of Sunbury.

**Table 10.11 Summary of Enterprise Zone Data, 2000**

### **Ohio Dept. of Development, Ohio Enterprise Zone Program Annual Report for 2000**

	Agreements	Jobs				New Payroll (000's)		Investment (000's)			
		Retained		Created				Real Property		Personal Property	
		Committed	Actual	Committed	Actual	Committed	Actual	Committed	Actual	Committed	Actual
CITY OF DELAWARE	18	329	345	867	534	\$ 21,404.00	\$ 13,525.00	\$ 29,570.00	\$ 40,101.00	\$ 110,062.00	\$ 81,383.00
VILLAGE OF SUNBURY	3	0	25	94	69	\$ 1,931.00	\$ 1,374.00	\$ 3,726.00	\$ 5,749.00	\$ 0.00	\$ 10,956.00
ORANGE TOWNSHIP	9	206	329	1,005	578	\$ 25,404.00	\$ 20,124.00	\$ 26,643.00	\$ 36,280.00	\$ 66,945.00	\$ 108,286.00
CITY OF WESTERVILLE	1	0	104	100	165	\$ 1,700.00	\$ 4,607.00	\$ 3,650.00	\$ 4,609.00	\$ 31,000.00	\$ 16,157.00
County Totals:	31	535	803	2,066	1,346	\$ 50,439.00	\$ 39,629.00	\$ 63,589.00	\$ 86,738.00	\$ 208,007.00	\$ 216,782.00

The Enterprise Zone Program is having a significant impact on Ohio's economy and remains an integral part of the economic development strategy of many local governments (Ohio Dept. of Development, Ohio Enterprise Zone Program Annual Report for 2000).

## **10.7 Kingston Township Future Economic Development**

Kingston Township could:

- Consider future commercial development served by on-site (i.e. zero discharge, land application sewer systems) or expanded County sewer service.
- Prevent the oversupply of commercial property before there is an apparent market need by zoning only for planned commercial uses when there is a known end user. Phasing of large projects helps the incremental absorption of the land costs to the developer and avoids oversupply of product.

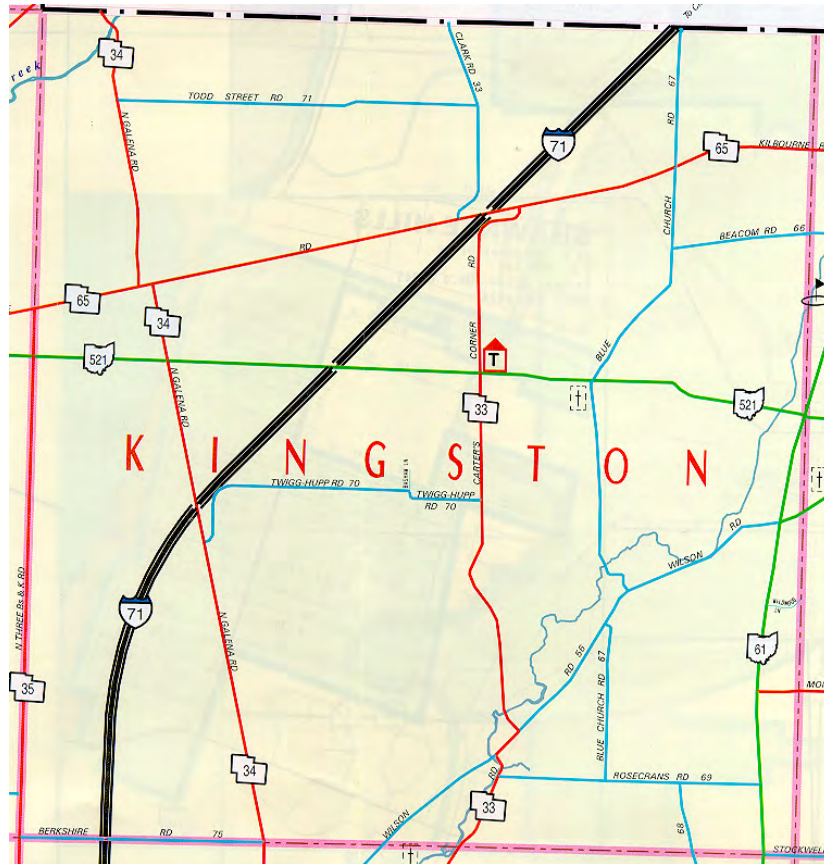
# Chapter 11

## Roads and Transportation

### 11.1 General Information

Kingston Township roads originally were established for farm access in the early nineteenth century. These original township roads continue to be the only avenue for local transportation. With the exception of a few small residential subdivisions, all development in the township has taken place along these original farm-to-market roads. As the area develops, these historic roads are changing function. What was once unpaved, narrow horse and buggy tracks are now paved, narrow, township and county roads used as collector and arterial streets. As traffic counts increase, roadway improvements and new roads will be needed.

### Map 11.1 Kingston Township Rural Roads



## **11.2 Bus Service**

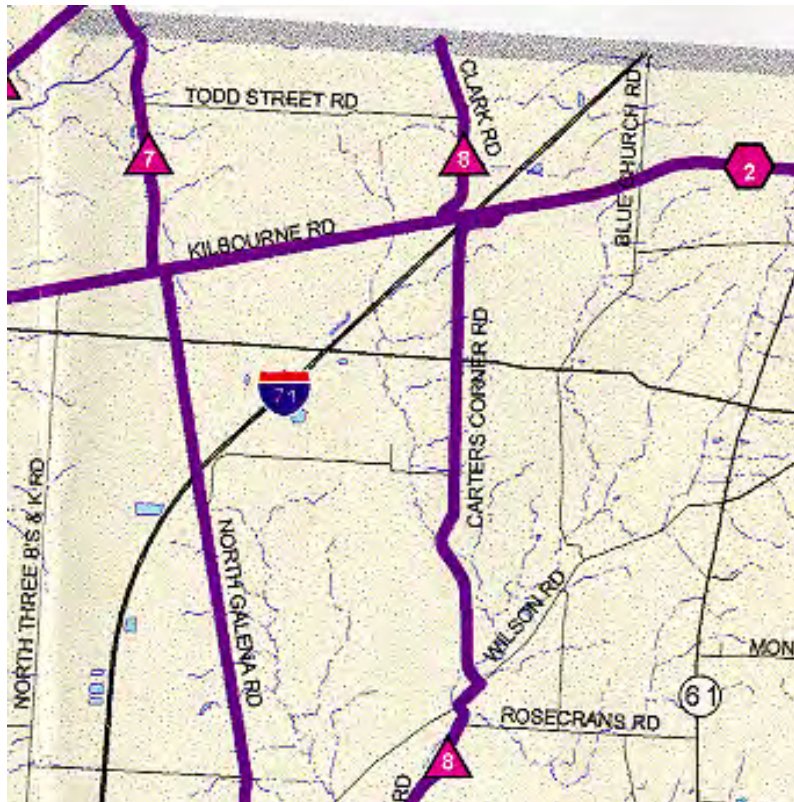
Automobiles are the primary means of transportation in Kingston Township. The Delaware Area Transportation Authority (DATA) offers an on-call non-scheduled bus service from point-to-point in the county. A Central Ohio Transit Authority (COTA) linkage from Crosswoods delivers bus riders to any COTA stop in Franklin County. As the township grows, new transportation options should be considered.

## **11.3 Bikeways**

No bikeways exist in the township. The Mid Ohio Regional Planning Commission (MORPC) has prepared a regional bikeway plan for Franklin and Delaware Counties, in hopes of obtaining Transportation Equity Act 21 funding. The bikeway plan recommends three bikeways along traditional roads and rail rights-of way in Kingston Township.

### **Map 11.2 MORPC Bikeway System Draft**

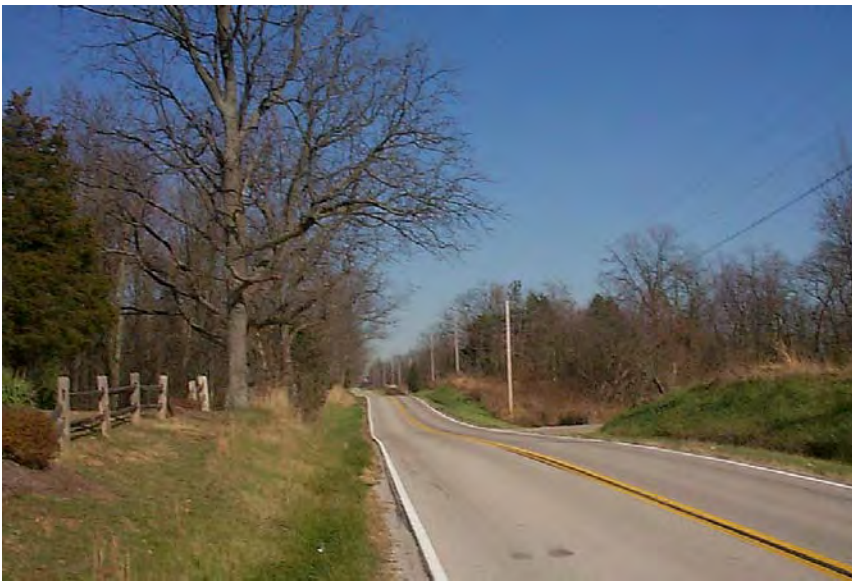
- *North South #7*, which follows North Galena Road through the entire township.
- *North South #8*, which follows Carter's Corner Road to I-71 and then continuing on Clark Road to the north.
  - *East West #2*, which follows Kilbourne Road.



## **11.4 Road Maintenance**

Kingston Township roads are maintained by various authorities:

- Federal and state roads are maintained by District 6, Ohio Department of Transportation.
- The Delaware County Engineer maintains county roads Carter's Corner, North Galena, North 3 Bs and K, Monkey Hollow and Kilbourne Roads..
- The Township maintains township roads.
- Homeowner associations maintain private subdivision roads.
- Common Access Driveways (CADs) are 12- foot wide private streets used in small subdivisions (2-5 lots), which are maintained by the lot owners. Individual private driveways are maintained by owners.



*Wilson Road.*

## **11.5 Federal and State Roads**

- a.) **State Route 521**- Approximately five miles of S. R. 521, a two-lane state highway, runs from Kilbourne in Brown Township to Olive Green in Porter Township. This road is surrounded predominately by agriculture and large lot single family residences.
- b.) **Interstate 71** - There are approximately six miles of I-71 through the township. Currently, there are no interchanges with access directly to the township. This four-lane divided highway is heavily traveled with trucks and passenger vehicles carrying interstate commerce.
- c.) **State Route 61** – Approximately 2.7 miles of two-lane State Route 61 passes through the southeastern portion of the Township.

Kingston Township is negatively impacted from traffic on S. R. 36/37 from the I-71 interchange in Berkshire Township. Inappropriate strip commercial development with multiple access points on

State highways could damage their ability to function. Proper access management practices should be used to preserve the function of these roads.

### **11.6 County Roads**

The Delaware County Engineer maintains five county roads (18.05 miles) in Kingston Township (see Table 9.1).

**Table 11.1 County Roads and Conditions in Kingston Township, 1998**

#	7	Road Name	Surface Width	Road Width	Surface Type	Road Length (miles)
3		Carter's Corner	16	20, 22	G2, H2	4.22
3		North Galena Road	16, 18	22, 24	G2	5.38
3		N. 3 Bs and K Road	17	21	H2	3.27
5		Monkey Hollow Road	16	22	H2	.27
6		Kilbourne Road	18	24, 32	H2, I	4.91

Road carrying capacity is determined by the width of the paved surface and the number of lanes. The speed of the road is generally determined by such factors as road width, pavement conditions, curve radii, topography, number of driveways and cross traffic movements.

Future land development will lower the level of service (LOS) of county roads. Upgrades will be needed to keep pace with the increased traffic counts. The DCRPC has estimated future population per square mile based on densities (see Table 11.2).

**Table 9.2 Dwelling Unit Density Per Acre and the Equivalent Population per Square Mile**

# Units/acre x	#Persons/unit x	% Developable/ac x	Acres/ Square Mile =	Population/ Square Mile
.2	2.7	95 %	640	328
.5	2.7	90 %	640	778
1	2.7	90 %	640	1555
1.25	2.7	85 %	640	1836
1.5	2.7	85 %	640	2203
2	2.7	85 %	640	2938
3	2.7	80 %	640	4147
4	2.7	80 %	640	5530
5	2.7	80 %	640	6912
6	2.7	80 %	640	8294

Based upon a similar analysis, engineers can anticipate the size of road needed to serve a calculated density of population. A generalized table for road size versus population density at full build-out is provided in Table 11.3 (Author: Scott Pike, Delaware County Engineer's office).



**Table 11.3 Road Size and Type Needed to Serve Specific Population Density/Square Mile**

Density (# Units/ac)	Average Annual Daily Trips/ Square Mile	Directional Design Hour Traffic	Road Class Required	Level Of Service	Calculation #Lanes Each Direction	Actual #Lanes	Width Needed (Feet) *
.2	1,220	139	Local	A	0.24	2	38'
				C	0.11	2	38'
				E	0.08	2	38'
.5	2,880	328	Collector	A	0.56	2	38'
				C	0.27	2	38'
				E	0.19	2	38'
1	5,760	655	Arterial	A	1.12	2	38'
				C	0.54	2	38'
				E	0.38	2	38'
1.25	6,800	774	Arterial	A	1.32	4	62'
				C	0.64	2	38'
				E	0.45	2	38'
1.5	8,160	928	Arterial	A	1.58	4	62'
				C	0.76	2	38'
				E	0.54	2	38'
2	10,880	1,238	Arterial	A	2.11	4	62'
				C	1.02	2	38'
				E	0.72	2	38'
3	15,360	1,747	Arterial	A	2.98	6	86'
				C	1.43	4	62'
				E	1.02	2	38'
4	20,480	2,330	Arterial	A	3.97	8	110'
				C	1.91	4	62'
				E	1.36	4	62'
5	25,600	2,912	Arterial	A	4.96	10	134'
				C	2.39	6	86'
				E	1.70	4	62'
6	30,720	3,494	Arterial	A	5.96	12	158'
				C	2.87	6	86'
				E	2.04	4	62'

**\*With 12' lanes and 7'shoulder each side**

**Assumptions:**

1. 8% trucks
  2. Level terrain
  3. # vehicles per hour per lane = SFL:
- LOS A 650  
LOS C 1,350  
LOS E 1,900

**11.7 Township Roads**

The Township currently maintains twelve roads (17.59 miles), two of which are major or minor collectors. According to the Delaware County Engineer, all township and county local and collector roads should be at least 20 feet of surface width with an additional shoulder of five to seven feet. Many county and township roads do not meet this standard.

County standards permit a Low Volume, Low Density (LVLD) road width of 18' of pavement within a 50 foot right of way provided that there are no more than 15 homes served, and no possibility of future connection.

**Table 11.4 Kingston Township Roads 1998**

#	Road Name	Surface Width	Road Width	Surface Type	Road Length (miles)
3	Clark Road	18	22, 32	E2	1.33
5	Stockwell Road	16	16	F	.09
5	Wilson Road	18	20, 22	G1, H1	3.06
6	Beacom Road	8, 12	14, 20	E2	.85
6	Blue Church Road	14, 18	20, 22, 24, 26	H2, E2	4.71
6	Blaney Road	18	22	H2	.43
6	Rosecrans Road	18	20, 22	H2	1.64
7	Twigg-Hupp Road	18	22, 28	H2, X	2.04
7	Todd Street	18	18, 22	G1	2.24
7	Berkshire Road	18	18, 20, 28	H2	.75
2	Basham Lane	14	18	H2	.22
3	Wildwood Drive	20	32	I	.23

Source: ODOT Road Inventory 1999    \*Field checked 02/28/01

**Notes: Surface Types**

- A Primitive Road
- B Unimproved Road
- C Graded and drained earth road
- E2 Gravel or stone road

- F Bituminous surface treated road
- G1 Mixed bituminous combined base with surface under 7"
- G2 Mixed bituminous combined base with surface 7" or more
- H1 Bituminous Penetration combined base under 7"
- H2 Bituminous penetration combined base 7" or over
- I Bituminous concrete sheet asphalt or rock asphalt road
- J Portland Cement Road
- K Brick Road
- L Block Road

**Table 11.5 Kingston Township Bridge Inspections**

(Source: Delaware County Engineer's Office Bridge Inspection Report 2006)

Road Name	Bridge #	Year Built	Intersected Features	Type	# Span	Length	Horizontal Clearance	Year Inspected	Sufficiency Rating *
Blue Church	067-1.51	1930	No Name Ditch	321	1	37	24	2006	83.5
Blue Church	067-2.83	2003	Br. Little Walnut Ck.	195	1	22	32	2006	99.9
Carter's Corner	033-5.21	1996	Br. Little Walnut Ck.	321	1	30	30.8	2006	96.9
Carter's Corner	033-5.46	1992	Little Walnut Ck.	221	2	73	32	2006	96.9
Carter's Corner	033-6.40	1930	Little Walnut Ck.	321	1	32	22	2006	40.1 **
Clark	033-9.75	1984	No Name Ditch	395	3	20	20	2006	99.7
Clark	033-10.00	1987	Br. Little Walnut Ck.	321	1	16	24.6	2006	78.8
Clark	033-10.45	1930	No Name Ditch	221	1	28	24	2006	77.3
Kilbourne	065-5.01	1988	Sheets Ditch 318	195	1	14	28.5	2006	98.9
Kilbourne	065-6.54	1999	Br. Little Walnut Ck.	321	1	35	32	2006	99.7
North Galena	034-9.03	1994	Todd Run	321	1	19	27.9	2006	95.4
North Galena	034-10.16	1999	Alum Creek	131	3	199	32	2006	99.9
Rosecrans	069-0.31	1930	No Name Ditch	111	1	16	18.2	2005	99.9
Rosecrans	069-0.95	1999	Br. Little Walnut Ck.	195	1	22	26	2006	96.6
Todd	071-2.15	1996	Little Walnut Ck.	195	1	21	30	2006	100
Twigg-Hupp	070-0.84	1920	No Name Ditch	111	1	19	16.4	2006	71.9
Twigg-Hupp	070-1.69	1913	Little Walnut Ck.	221	1	30	20	2006	75.9
Wilson	056-1.68	1930	Little Walnut Ck.	322	2	48	16	2006	19.6 ***

**Bridge Type Legend:**

First # = Material

1 = Concrete

2 = Prestress Concrete

3 = Steel

4 = Timber

5 = Steel

6 = Aluminum

7 = Cast Iron

8 = Wrought Iron

0 = Other

Second # = Span Type

1 = Slab

2 = Beam

3 = Box Beam

4 = Truss

5 = Arch

6 = Girder

7 = Frame

8 = Suspension

9 = Culvert

0 = Other

Third # = Description

1 = Simple Span

2 = Continuous

3 = Deck

4 = Thru

5 = Filled

6 = Orthotropic

7 = Movable – Lift

8 = Movable – Bascule

9 = Movable – Swing

0 = Other

\* = Rating out of 100 possible points that indicates the overall sufficiency of the bridge including load capacity, geometry & condition

\*\* = Replacement scheduled 2008, estimated cost \$495,000

\*\*\* = Replacement scheduled 2008, estimated cost \$557,000

## **11.8 Functional Classifications**

The Delaware County Engineer has created categories for roads in their 1999 **Design Standards**. The 2001 Delaware County Thoroughfare Plan identifies arterial and collector streets (see foldout map titled Delaware County and City **Thoroughfare Plan Proposed Functional Classification** of Roadways and Alternatives).

**From the Design Standards Definitions: Arterial streets** – Arterial Streets have the primary purpose of carrying through traffic to and from residential, commercial, and industrial areas and the secondary purpose of providing access to abutting property. It is usually a continuous route carrying heavy loads and a large volume of traffic. Average Daily Traffic (ADT) is usually in excess of 3,500 vehicles.

- Major Arterials: State Route 521, State Route 61
- Minor Arterials: North Galena, Wilson Road

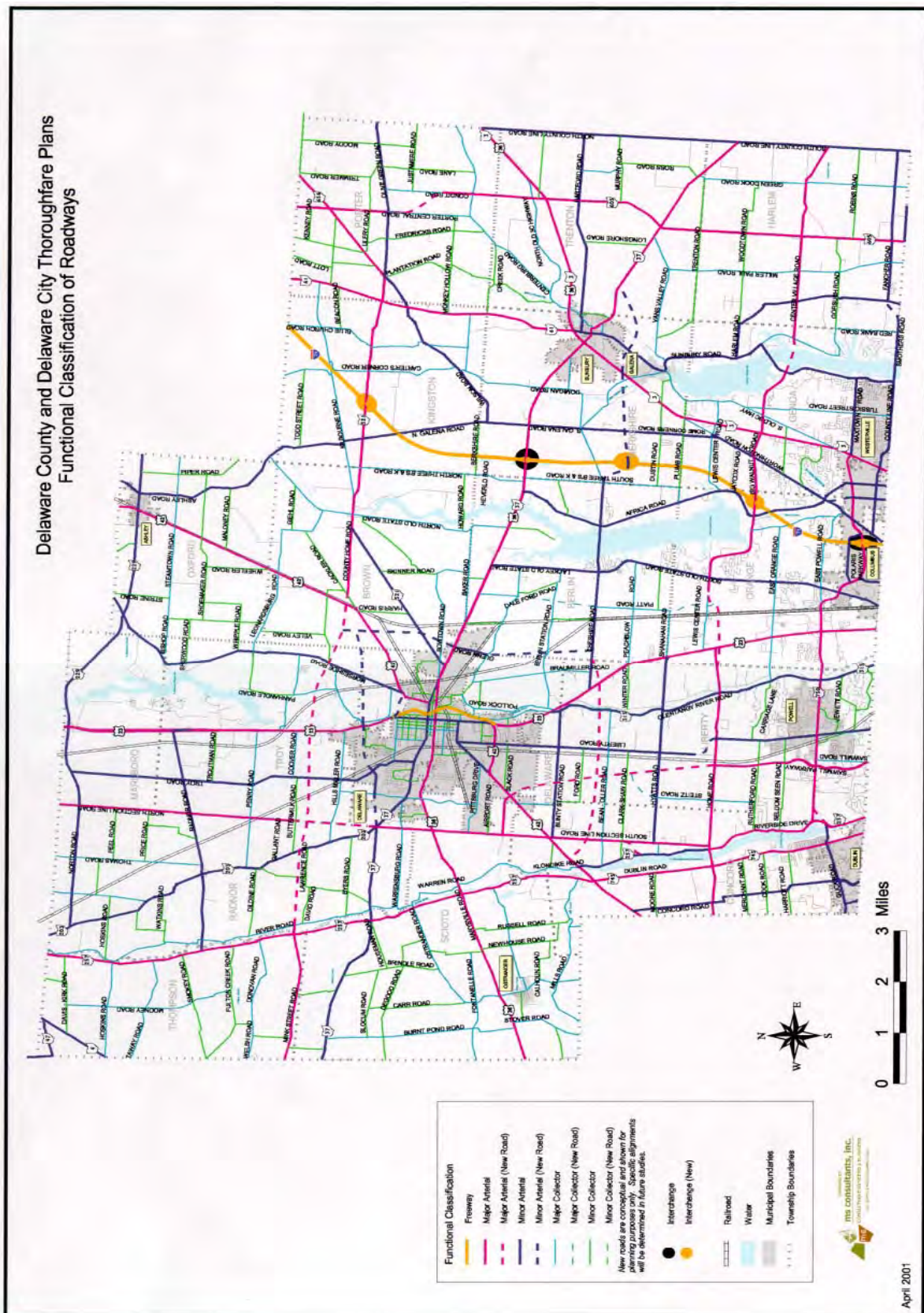
**From the Design Standards Definitions: Collector Streets-** Collector Streets have the primary purpose of intercepting traffic from intersecting local streets and handling this movement to the nearest major collector or arterial street. ADTs typically range from 1,500 to 3,500 vehicles, with AM peak hour traffic about 7-8% and PM peak hour of 10%.

- Major Collector Streets: Kilbourne Road, North Three B's and K Road, Carter's Corner Road, Clark Road, Blue Church Road
- Minor Collector Streets: Todd Street Road, Beacom Road, Rosecrans Road, Berkshire Road

**From the Design Standards Definitions: Local Streets-** Local streets represent the lowest category. Their primary function is to serve abutting land use. Typical ADTs range from 100 to 1,500 vehicles. Local streets are further classified as Loop, Through and Cul-de-sac.

- Examples: Twig-Hupp Road, Wildwood Lane

**Map 11.3 Delaware County and City Thoroughfare Plans**



## **11.9 Traffic Counts**

Map 11.4 shows traffic counts taken on arterial and collector roads. This map is from the 2001 Thoroughfare Plan.

**Map 11.4 Kingston Township Traffic Counts**



## **11.10 General Access Management Principles**

Access management is the practice of limiting curb cuts on major roads to prevent conflicting turning movements and maintain safe traffic flow. The Ohio Department of Transportation (ODOT) has some authority for restricting access to state highways. According to ODOT, poor access management can reduce highway capacity to 20% of its design. Delay is as much as 74% greater on highways without access management. 60% of urban and 40% of rural crashes are driveway and intersection related.

### **ODOT Access Management Principles:**

- Regulate the location, spacing and design of drives.
- Space access points so they do not interact with each other.
- Provide adequate sight distance for driveways.
- Use appropriate curve radius, lane widths, driveway angle.
- Provide turn lanes to separate conflict points for acceleration, deceleration, & storage lanes.
- Prohibit some turns in critical areas; relocate that activity to a less conflicted point.
- Restrict driveways to fewer than 30 per mile (every 350 lineal feet maximum).

- Use feeder roads to relocate critical movements and to handle short trips parallel to the main road.
- Locate driveways away from intersections to reduce conflicts (corner clearance).
- Use right in, right out drives to prevent unwanted left turns across traffic.
- Use zoning with access management to develop good site plans.
- Connect parking lots; share driveways.
- Use frontage roads to connect commercial traffic, and keep it parallel to the main road.
- Connect frontage roads to collector streets at properly spaced intersections.
- Use “backage” roads as rear access roads connecting commercial uses.
- Avoid individual, closely spaced curb cuts to “bowling alley” lots.
- Use the 30-curb cuts/mile standard, or maximum of one access each 350 feet.
- Avoid disconnected street systems.
- Encourage internal access to out-parcels.
- Minimize the number of traffic signals. Two per mile is ideal (half mile spaced).
- Use medians to separate traffic flows.
- Coordinate access permit review between ODOT, local zoning and building departments

When new sites are zoned for commercial use, access management is imperative. Access management practices are appropriate for driveway cuts on all arterial roads. The Delaware County Engineer is considering access management standards for new driveway cuts on certain County Roads. Pending HB366 would empower counties to regulate driveways on county roads.

### **11.11 Future Roads - The Thoroughfare Plan**

“Original” farm-to-market county and township roads are often narrower than new subdivision streets, and sometimes built to a lighter load bearing standard. A plan for the major streets or highways, or “Thoroughfare” plan is a tool for counties and townships. The Thoroughfare Plan is enabled by Ohio Revised Code Section 711.10:

“Whenever a regional planning commission adopts a plan for the major streets or highways of the county or region, then no plat of a subdivision of land within the county or region, other than land within a municipal corporation”...“shall be recorded until it is approved by the regional planning commission.”

The Delaware County Thoroughfare Plan was adopted in December 2001 by the Delaware County Commissioners. The Thoroughfare Plan recommends one future improvement in Kingston Township.

#### **2001 Delaware County Thoroughfare Plan Recommendations**

- Alternative X is a new interchange at Interstate 71 and State Route 521. There is no timetable for this improvement.

The traditional county and township roads, built as local farm to market roads, are being pressed into service as collectors, major collectors, or even minor arterial streets, yet they are often narrower than new subdivision streets, and sometimes built to a lighter load bearing standard. The cost of upgrading county and township roads to collector or arterial standards can be prohibitive.



In each planning sub-area, the ability of the road to carry the traffic, its functional classification, and the cost of upgrading it can be factors in determining the timing of land use and density changes. Excess traffic, by itself, is not grounds in Ohio to justify denying a zoning change.

The Thoroughfare Plan does recommend network improvements which include upgrading N. Galena Road and Kilbourne Road. No details or timetable is noted for these improvements. The plan also recommends realignments of the following intersections: N. Galena at Kilbourne Road, and Carter's Corner Road at Wilson Road (SR 656).

### **11.12 Other Road Related Issues**

As Delaware County grows, traffic increases. Traffic generation is one consideration in rezoning requests, but by itself is not a valid reason to deny a zoning.

#### **Traffic considerations to rezoning**

Patterns of Development--Traffic can be reduced by the design of the development and the mix of land uses. Low density (one acre lots or larger) development generates significant traffic per unit, but the number of units is modest overall. In large developments with densities greater than one unit per acre a mix of local convenience commercial uses and a network of sidewalks, trails and bike paths can reduce auto trips. Consideration should be given to neo-traditional development patterns (see Chapter 13) for planned developments utilizing smaller lots, while maintaining existing density requirements. A combination of a grid street core, with curvilinear edges may allow for the preservation of open space. A typical home in an exclusively residential area generates 10 or more trips per day. A home located in a neighborhood that is designed to be convenient for walking and biking with mixed commercial and service uses can reduce auto trips to as little as 4 trips per home per day.

Traffic Impact--New development proposals should be assessed for their trip generation. An assessment using ITE trip generation rates should be submitted by the developer as part of any planned development. As a general rule, if the trip generation is more than 1000 vehicles per day, a full-fledged traffic study should be performed to determine the impact and mitigation measures needed. Current level of service (LOS) and post development LOS should be compared. Roads should not be degraded below LOS C on a scale of A-F.

Impact Fees--Ohio planning and zoning legislation does not currently empower townships to charge impact fees to offset costs of service expansion (roads, schools, parks, etc.). Generally, road improvements immediately adjacent to the development can be attributable to the project as part of the subdivision and zoning process. If large impact development proposals do not reasonably offer to mitigate their significant off-site impacts, they may impose an undue burden on the township. In such cases the rezoning may be premature.

#### **Air Pollution Standards**

Delaware County is one of 32 counties in Ohio where air pollution exceeded the 8-hour US EPA air quality standard for ozone. It is important to recognize that air pollution may come into Ohio from other states. The 8-hour standard has been appealed to the US Supreme Court.

If the 8-hour standard is supported by the Court, then there may be substantial impacts on economic development and transportation. Some of the possible consequences:

- a. loss of federal funding for state infrastructure (roads and other improvements)
- b. requirement of potentially more expensive, cleaner burning fuels
- c. use of vapor controls at fueling stations
- d. emissions testing (E check) of tailpipes (not currently planned)
- e. voluntary restrictions on travel with staggered work hours, etc.

### **NorthStar and The Pastures at Blue Church**

The NorthStar Golf Resort and The Pastures at Blue Church developments will have a dramatic impact on traffic and road related issues. The Kingston portion of the NorthStar Golf Resort alone could generate as many as 6,510 additional trips per day. Such an increase will no doubt affect N. Galena Road, Wilson Road, Carter's Corner Road and others as motorists find additional paths through the existing road network. A similar impact will occur with respect to Wilson Road, Rosecrans Road, Blue Church Road, Carter's Corner Road, Monkey Hollow Road and State Route 61 when the project alternatively known as The Pastures at Blue Church is developed.

### **Project Clear**

(Community Leadership to Effect Air Emission Reductions) is a community oriented partnership between the Columbus Health Department, The Ohio State University and the Mid-Ohio Regional Planning Commission. Project CLEAR will evaluate and recommend strategies to reduce air emissions that contribute to smog and ground level ozone in Central Ohio. Even small details, such as providing tree islands in commercial parking lots, can reduce the incidence of ground level ozone, and should be a consideration in the zoning process when reviewing development plans.

## CHAPTER 12

### Utilities

#### 12.1 Water

The Del-Co Water Company, a cooperatively owned private water company established in 1973, serves most of Kingston Township with potable water. As the county has grown, Del-Co has expanded its service to provide larger diameter water lines for residential and commercial service as well as fire protection.

#### Supply

Del-Co Water is the largest rural water system in the State of Ohio. It provides service to Delaware and Morrow Counties and extends into Union, Franklin, and Marion Counties. The service area measures approximately thirty-two miles north to south and twenty-four miles east to west. Del-Co draws surface water from the Olentangy River and from the Alum Creek reservoir. The water is pumped to up-ground reservoirs on South Old State Road and Olentangy River Road prior to treatment. Wells along the Kokosing River in Knox County provide additional supply.



**Del-Co Water Headquarters and Up-Ground Reservoirs on State Route 315, Liberty Twp.**

Del-Co has expanded its water supply to keep pace with growth of the county. For example, in 1998 Del-Co added over 1,800 new customers and installed over 63 miles of new water lines. In 1999, the company again added 2,177 additional customers and installed 67 miles of new water lines. Del-Co has constructed a new administrative office building, a million-gallon storage tank in Morrow County and a second water treatment plant on S. Old State Road in Orange Township.

The rapid growth of Delaware County has strained water treatment capabilities during summer months. Del-Co has a current daily treatment and pumping capacity of 17 million gallons per day (mgd). In May of 1999, with a minor drought, demand was 13mgd, with approximately 9 mgd attributed to lawn watering. Because of this, Del-Co is currently maintaining a permanent odd/even day/address sprinkling regulation.

Three future supply locations are planned at the Whetstone River, northwest of Ashley, 400 acres on the Scioto River at SR257 and Donovan Road, and South Old State Road in Orange Township

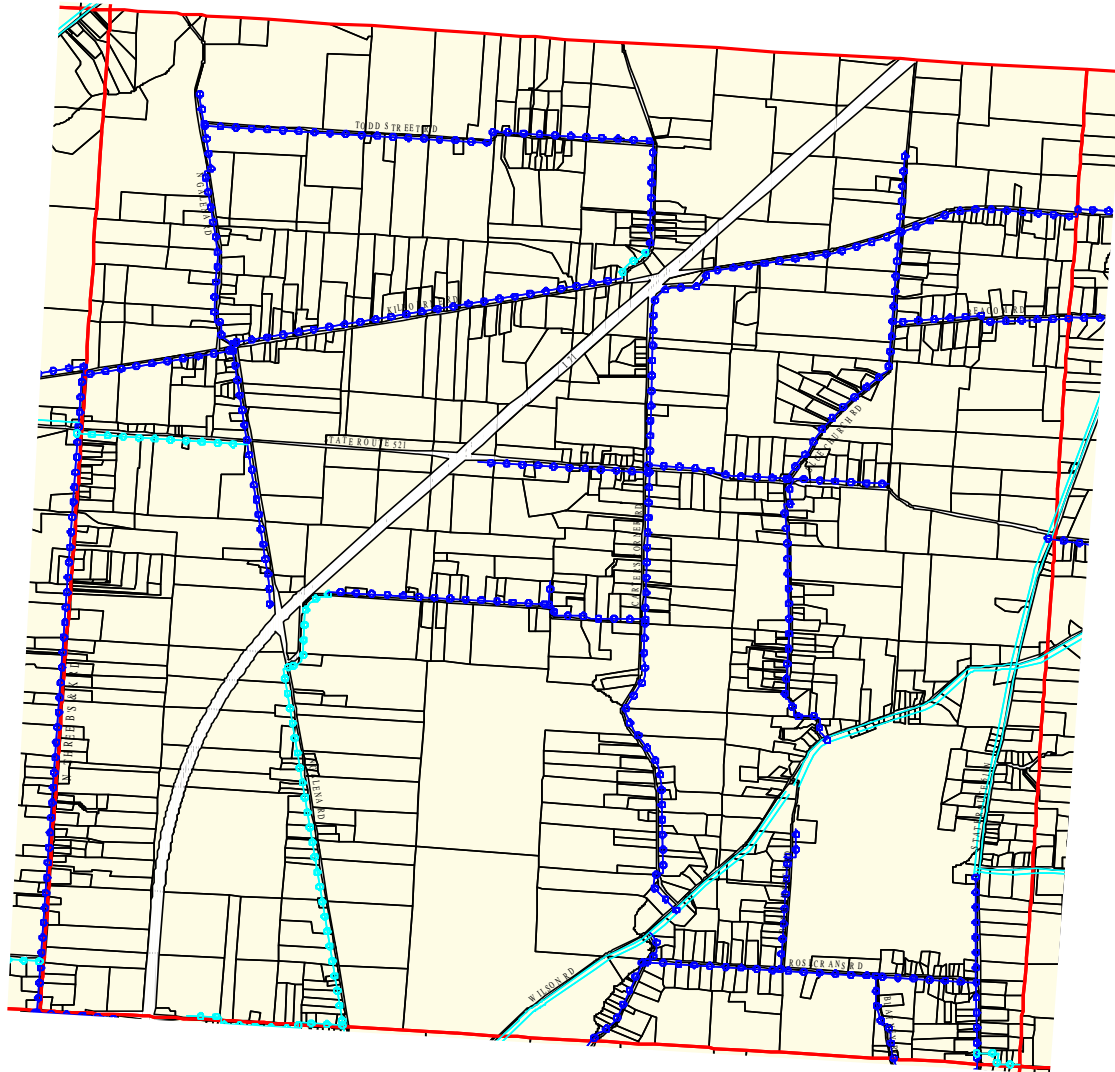
With these new facilities, a total of 38 mgd is Del-Co's long term pumping and treatment capacity. Year 2000 service population for Del-Co was approximately 66,700 (59,099 in Delaware County). This is expected to double in twenty years. If water demand also doubles, the peak pumping of 26 mgd would be within the realm of Del-Co's supply and treatment plan. Growth beyond a service population of 140,000 in the villages and townships would require additional supply sources and treatment facilities.

### **Water Lines in Kingston Township**

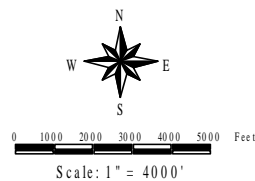
Map 12.1 shows the location and diameter of water lines in the township. Development densities greater than one unit per acre typically require fire hydrants, which require a minimum 6-inch diameter water line.

## Map 12.1 Water Lines, Kingston Township

### Water Lines, Kingston Township, Delaware County, Ohio



- Township Boundary
- Railroad
- Road Right of Way
- Property Lines
- DEL-CO Waterlines
- 0" - 2" Pipe
- 3" - 5" Pipe
- 6" - 8" Pipe
- 9" - 24" Pipe
- 25" - 63" Pipe



Prepared by: Delaware County Regional Planning Commission (740-833-2260)  
<http://www.dcrpc.org>  
 Source: DEL-CO Water Company  
 (1/16/2004)

## **12.2 Sanitary Sewer**

Kingston Township currently has no centralized sanitary sewer service to the township, nor is any proposed by the County in the planning period 2000-2010. Kingston Township primarily uses septic systems and leach fields for sewage disposal. The NorthStar development land application sewer system was intended to serve only the NorthStar Development will be operated by Delaware County.

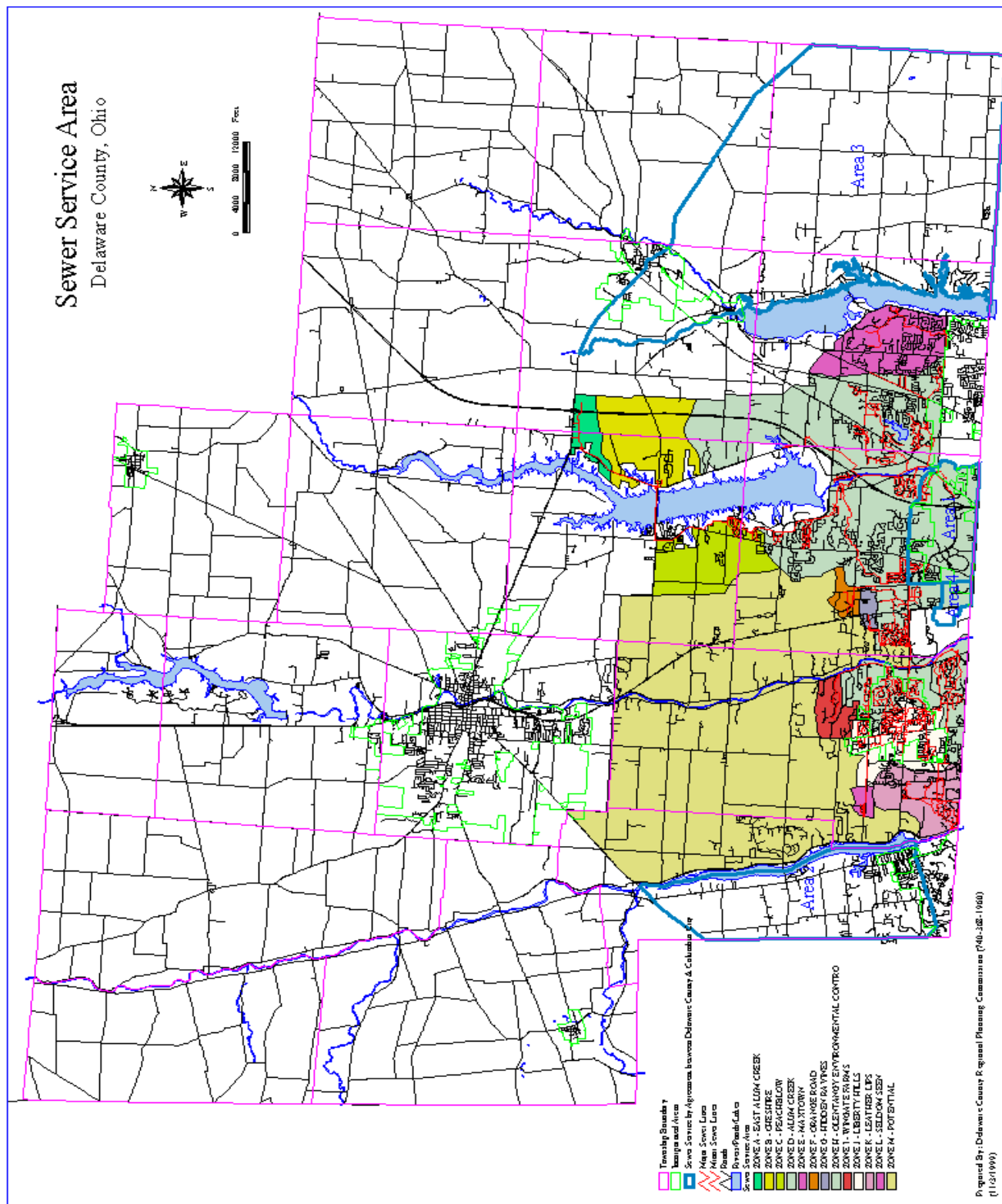
### **Delaware County – Sanitary Sewer**

The Delaware County Sanitary Sewer Department, a division of the County Commissioners, provides sanitary sewer service in un-incorporated areas. There are currently two plants, the Olentangy Environmental Control Center (OECC), located on the West Bank of the Olentangy River at the Franklin County Line and the Alum Creek Wastewater Treatment Plant located along the east side of Walker Wood Blvd., north of E. Powell Road and next to I-71. The current capacity of the OECC is approximately 6 million gallons per day (mgd). The new Alum Creek wastewater treatment plant opened in June of 2001 is intended to serve the central and east side of the county. Its capacity is 10 mgd, with an offsite discharge to Alum Creek below the dam.

The Delaware County Sanitary Engineer has created sanitary sewer service areas (see map 10.2) based on lift stations. The service area also takes into consideration a large area that could potentially be served by the Olentangy Treatment facility, which is based on a facilities plan from 1975. Kingston Township is currently outside of these service areas, and county sewer is not likely to be made available as far north as Kingston Township within the next ten years.

Based upon current flows to both treatment plants and approximately 13,000 dwelling units in the zoning or subdivision approval process, the current design capacity of both treatment plants are committed on paper, even though it may take 6-8 years to use the available sewer taps. Since there is no new sewer capacity in the County system after currently zoned properties develop, Kingston Township should not expect any centralized Delaware County sanitary sewer service in the foreseeable future.

**Map 12.2 Sanitary Sewer Service Area**



## **Sewer Agreement – City of Columbus**

Delaware County entered into an agreement with the City of Columbus to provide service to the Polaris development in 1991. By agreement, either Delaware County or Columbus could build a sewage treatment plant to serve land east of the Hoover Reservoir (south of SR 37) and discharge into it. The allowable density is 4 persons (1.37 dwelling units) per acre. This area is depicted on Map 10.2.

## **Sewer Policy- OEPA**

Centralized sewer systems traditionally meant placing sewage in a pipe, and sending it to a publicly owned sewage treatment plant that discharged to a running stream.

1. In 1996 the Ohio Environmental Protection Agency changed its anti-degradation requirements for surface discharge from a wastewater treatment plant. This has prompted alternative “zero discharge” centralized sewage disposal systems, such as on-site treatment plants that use the treated effluent to irrigate a golf course. Permits are issued by the OEPA. This action allows an opportunity for cluster development in rural areas with lot sizes smaller than would have been possible without centralized sewers. Tartan Fields and Scioto Reserve subdivisions in Concord Township use on site treatment plants dedicated to Delaware County, and land application of treated effluents on golf courses.
2. If zero discharge sewer systems are proposed within sewer service areas, the land application systems can augment the county’s sewer capacity. This means sewer users may be accommodated without building additional county treatment plant capacity.
3. If zero discharge sewer systems are proposed in non-sewer service areas, cluster development could preserve open space (Scioto Reserve, Tartan Fields, NorthStar).
4. Zero discharge central sewer systems themselves are not a threat. The threat is using zero discharge sewer systems to accommodate zoning for inappropriately high densities in areas without urban services. This fosters leapfrog suburban development that requires services that cannot be easily or economically provided by the township (fire and police protection, schools, road upgrades, public transportation, shopping, entertainment, and cultural activities).
5. Kingston Township must use its vision of the future, its recommended land use plan and zoning to potentially permit zero discharge centralized sewer systems as accommodations to development only when the use and density conform to the township comprehensive plan. Where such systems are permitted, the county should (preferably) be deeded ownership and control of the system for proper maintenance.

## **12.3 Electric**

American Electric Power and Consolidated Electric Power provide electric service to Kingston Township. The Utilities Map shows the service area.

The nearest electric transmission line is south of Kingston Township. No structures are permitted within the rights of way and recorded easements for these transmission lines. The locations of these lines are shown on the Comprehensive Land Use Plan Map (Chapter 15).

There is presumed to be no limitation to growth of the Township because of shortage of electric power.



## **12.4 Gas**

Suburban Natural Gas of Lewis Center, and Columbia Gas are the major gas providers for Delaware County. However, Kingston Township is not in either provider's service area.

## **12.5 Telecommunications/cellular**

Under current state and federal laws, telecommunications towers are permitted in any non-residentially zoned districts. Under Ohio law, townships can regulate (which may include prohibition) telecommunications towers in residential districts if objections are filed by abutting property owners.

## **12.6 Storm Water Management**

Storm water management is reviewed by the Delaware County Engineer's office for subdivisions, and road construction. The Delaware County Soil and Water Conservation District maintains ditches by agreement with the County Engineer's maintenance program. As of December 31, 1999 there were 70 projects on county ditch maintenance, 46 of which were subdivisions.

**Table 12.1 Drainage Structures on Maintenance**

<b>Open Ditch</b>	<b>38.26 miles</b>
<b>Tile drains</b>	<b>27.38 miles</b>
<b>Surface Drains</b>	<b>.62 miles</b>
<b>Retention/Detention Basins</b>	<b>121</b>

# Utilities, Kingston Township, Delaware County, Ohio

Utilities, Kingston Township, Delaware County, Ohio

Legend:

- Township boundary
- Incorporated Area
- Bridges location
- Rail road
- Road Right of Way
- Property Lines
- Streams
- Rivers/Lakes/Ponds
- Electric Power Service District Boundary
- American Electric Power
- Consolidated Electric Co.
- Dayton Power & Light
- Licking E. C.
- Morrow E. C.
- Ohio Edison
- Ohio Power
- Union E. C.

Scale: 1" = 4000'

Prepared by: Delaware County Regional Planning Commission (740-833-2260)  
http://www.dcrpc.org  
(12/18/2001)

## CHAPTER 13

### Community Facilities

#### **13.1 Schools**

Kingston Township is evenly divided into the Buckeye Valley School District and the Big Walnut School District (see Map 13.1). The Buckeye Valley School District also includes most of Concord, Scioto, and Thompson, about half of Troy, and all of Brown, Radnor, Marlboro and Oxford Townships. The Big Walnut School District includes most of Trenton, Harlem, Berkshire, and nearly half of Porter and Genoa Townships.

The Ohio Department of Education evaluates each school district in the State of Ohio annually, based on 27 standards and an associated ranking. Table 13.1 illustrates the Buckeye Valley and Big Walnut districts academic rankings. Both districts received “Continuous Improvement” rankings.

**Table 13.1 Performance Ratings for Kingston Township School Districts**

Performance Standards	Min. State Performance	Buckeye Valley Schools	Big Walnut Schools
<b>Grade 4 – Prof. Tests</b>			
Citizenship	75%	64.7%	72.8%
Mathematics	75%	60.3%	72.3%
Reading	75%	62.2%	62.3%
Writing	75%	85.1%	86.4%
Science	75%	58.3%	69.6%
<b>Grade 6 – Prof. Tests</b>			
Citizenship	75%	74.2%	81.2%
Mathematics	75%	58.9%	64.0%
Reading	75%	66.9%	72.0%
Writing	75%	82.8%	88.2%
Science	75%	56.4%	73.1%
<b>Grade 9 – Prof. Tests (8<sup>th</sup>,9<sup>th</sup>)</b>			
Citizenship	75%	89.6%	90.3%
Mathematics	75%	78.0%	78.4%
Reading	75%	92.8%	94.5%
Writing	75%	94.0%	91.7%
Science	75%	88.5%	84.4%
<b>Grade 9 – Prof. Tests (8<sup>th</sup>,9<sup>th</sup>,10<sup>th</sup>)</b>			
Citizenship	85%	95.1%	93.5%
Mathematics	85%	92.0%	88.3%
Reading	85%	97.5%	97.8%
Writing	85%	99.4%	98.7%
Science	85%	94.5%	92.2%
<b>Grade 12 – Prof. Tests</b>			
Citizenship	60%	71.4%	58.5%
Mathematics	60%	60.0%	58.2%
Reading	60%	78.4%	63.3%
Writing	60%	86.8%	78.6%
Science	60%	69.3%	60.7%
<b>Student Attendance Rate</b>	93%	94.5%	94.9%
<b>Graduation Rate</b>	90%	92.9%	93.3%
<b>Overall State Ranking</b>		<b>Continuous Improvement (19 of 27)</b>	<b>Continuous Improvement (18 of 27)</b>

*(Source: Ohio Department of Education 2002 Report Cards)*

The Delaware city and county boards of education established the Delaware Joint Vocational School in 1974 as a career/technical school for Delaware County residents. Delaware JVS, The Area Career Center, now provides career training and academic instruction to over 650 area High School juniors and seniors who desire skilled employment immediately upon high school graduation.

## **A. Enrollment Growth**

### **Buckeye Valley**

The following tables show the current enrollment numbers as well as the trend over the last ten years. Table 13.4 shows the projections performed by Planning Advocates in 2001 for enrollment growth to 2010-11.

**Table 13.2. Buckeye Valley Local School District 2003-04 Building Enrollments**

Grade Level	East Elementary (Ashley)	North Elementary (Radnor)	West Elementary (Ostrander)	Middle School	High School	Totals
K*-5	378	256	340	-	-	974
6-8	-	-	-	543	-	543
9-12	-	-	-	-	663	663
JVS	-	-	-	-	51	51
Total	378	256	340	543	714	2,231

\*K- Kindergarten

(Source: Buckeye Valley Local School District, January 31, 2004)

**Table 13.3. Buckeye Valley 1993-94 to 2002-03 School-Year Enrollment**

Grade	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
K*-5	1,023	1,023	998	1,009	993	973	969	966	993	977
6-8	535	578	552	538	553	504	522	516	537	576
9-12	648	702	752	785	799	788	744	739	689	704
Total	2,206	2,303	2,302	2,332	2,345	2,265	2,235	2,221	2,219	2,257
Change	+2.5%	+4.4%	-0.1%	+1.3%	+0.6%	-3.4%	-1.3%	-0.6%	-0.1%	+1.7%

\*K- Kindergarten

(Source: Buckeye Valley Local School District, 2004)

**Table 13.4. Enrollment Projections, Buckeye Valley Local School District**

Grade	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
K* - 5	1,167	1,234	1,427	1,412	1,473	1,508	1,551	1,617
6 - 8	539	546	522	537	575	670	749	782
9 - 12	747	753	783	781	770	762	756	810
Total	2,453	2,533	2,732	2,730	2,818	2,940	3,056	3,209

\*K- Kindergarten

(Source: Enrollment Projections by Planning Advocates, Inc. 2001)

The enrollment projections for the Buckeye Valley School District show a “most likely” 44.5% enrollment increase by 2010-11 or 990 new students (Projected 2010-11 enrollment / Current 2001-02 enrollment). This is a significant change from the slow growth of the last 10 years (1.05%). The future trend indicates an overall steady growth with small dips in certain grade groups at different times (see table 13.4). The increase is primarily due to major residential developments underway in the Districts’ southern territory.

## **Big Walnut**

The following tables represent the current enrollment numbers for the Big Walnut School District as well as the trend over the last ten years and projections for the next ten years.

**Table 13.5 2001-02 Big Walnut Local School District Enrollments**

Grade	Big Walnut Elementary	Harrison Street Elementary	Hylan Souders Elementary	Middle School	High School	JVS / Other	Total
<b>P*</b>	23		15				<b>38</b>
<b>K***</b>	64	34	66				<b>164</b>
<b>1-5</b>	325	256	349				<b>930</b>
<b>6-8</b>				650			<b>650</b>
<b>9-12</b>					864	48	<b>912</b>
<b>Total</b>	<b>412</b>	<b>290</b>	<b>430</b>	<b>650</b>	<b>864</b>	<b>48</b>	<b>2694</b>

(Source: Big Walnut Local School District, 2002)

\* P – Preschool

\*\* MH – Multiple Handicaps

\*\*\* K- Kindergarten

**Table 13.6 Big Walnut Enrollment 1991-01**

Grade	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
<b>K* - 5</b>	1223	1195	1238	1206	1202	1202	1169	1211	1191	1155
<b>6 – 8</b>	564	614	631	654	635	648	653	627	644	638
<b>9 – 12</b>	715	718	727	746	821	838	850	837	862	886
<b>K - 12</b>	<b>2502</b>	<b>2527</b>	<b>2596</b>	<b>2606</b>	<b>2658</b>	<b>2688</b>	<b>2672</b>	<b>2675</b>	<b>2697</b>	<b>2679</b>

(Source: Planning Advocates, 2001)

\*K- Kindergarten

Enrollment has increased slowly since the 1991-92 school year, with a 7.1% increase of 177 students. Projections done by Planning Advocates in 2001 show that the enrollments will continue to increase.

**Table 13.7 Most Likely Enrollment Projections, Big Walnut Local School District**

Gr	20	20	20	20	20	20	20	20	20	20
<b>K*</b>	11	11	12	12	12	13	13	13	13	14
<b>6 –</b>	64	63	62	62	64	65	66	64	68	73
<b>9 –</b>	89	89	88	84	85	83	84	89	86	88
<b>K -</b>	<b>26</b>	<b>26</b>	<b>27</b>	<b>27</b>	<b>27</b>	<b>28</b>	<b>28</b>	<b>29</b>	<b>29</b>	<b>30</b>

(Source: Enrollment Projections by Planning Advocates, Inc. 2001)

\* K- Kindergarten

The enrollment projections for the Big Walnut School District show a “most likely” 13% enrollment increase by 2010-11, or 349 new students. This is a slightly higher rate than the growth of the last 10 years, but much lower than that expected in the Buckeye Valley School District. The projections, however, do not include the potential enrollment from NorthStar development, which is entirely within the Big Walnut District.

## **B. Current Facilities**

### **Buckeye Valley**

The Buckeye Valley Local School District has a \$10 million operating budget including 26 voted mills and a 1% income tax.

Buckeye Valley High School is located at 901 Coover Road. Buckeye Valley Middle School is located at 683 Coover Road. (Opened 1997)

There are three elementary schools in the Buckeye Valley School District:

- East Elementary located at 522 E. High Street, Ashley
- North Elementary located at 4230 St. Route 203, Radnor
- West Elementary located at 61 North 3<sup>rd</sup> Street, Ostrander

The Buckeye Valley Local School District facility plan from 1989 is now being updated by Planning Advocates, Inc. Many of the recommendations of the 1989 facilities plan have been realized. With the growth over the last ten years, this update is necessary to ensure that the district continues to provide the best educational opportunities for its students.

### **Big Walnut**

Big Walnut Local School District currently contains one high school, one middle school and three elementary schools:

- Big Walnut High School: 555 South Old 3C Highway, Sunbury
- Big Walnut Middle School: Hill Street, Sunbury
- Big Walnut Elementary: 940 South Old 3C Highway, Sunbury
- Harrison Street Elementary: 70 Harrison Street, Sunbury
- Hylen Souders Elementary: 4121 Miller Paul Road, Harlem Township

#### **Big Walnut Local School District - 10 Year Facility Plan**

(Recommended by the District Development Committee, February 1998)

The following long-range facility improvements are recommended:

- Continue the grade configuration for K-5, 6-8, and 9-12 groupings. This vertical organization structure appears to serve the educational programs and is responsive to maximum use of existing facilities.

- Add new space and renovate existing space at the middle school to expand and improve the quality of the learning environment.
- Maintain Harrison Street Elementary School to serve K-5 at a reduced capacity for instructional needs during planning and construction of new facilities.
- Construct a new elementary school at a location convenient to present and future student residences, especially in the northwest quadrant.
- Plan a second elementary school to serve the students in at least 10 years or sooner if needed.
- Use capital funds to construct new buildings in response to growth and for the qualitative improvement of the existing facilities, which have potential long-term use.

More specifically, it is recommended that the following long-term improvement program be implemented:

#### High School

- That the existing high school continues to serve grades 9-12 at a capacity of approximately 875 with the necessary academic classrooms, laboratories, special education classrooms and support facilities as the program dictates.

#### Middle School

- That the existing middle school building be expanded approximately 30,000 square feet with an addition to provide improved specialized facilities for a capacity of 750 students and that the existing physical environment be renovated to provide for the use of technology and an improved modern learning environment.

#### Elementary School

- That both Big Walnut Elementary and Souders Elementary schools continue to each serve Pre-Kindergarten through Grade 5 students and that the enrollments should not exceed approximately 450 students at each site.
- That Harrison Street Elementary School receive attention to maintenance items and that the capacity be reduced to serve as an instructional Pre-K – 5 center until additional and replacement schools are available.
- That a new Pre-K – 5 school with a capacity of approximately 450 students be constructed in the Northwest Quadrant of the school system.

The cost of these facilities is anticipated to be \$13,320,500 using 1997 construction costs.

## **C. Funding for Schools**

**Table 13.8 District Expenditures Per Pupil**

	<b>Buckeye Valley</b>	<b>Big Walnut</b>
<b>Instruction</b>	\$3,822	\$3,837
<b>Building Operations</b>	\$1,620	\$1,372
<b>Administration</b>	\$856	\$758
<b>Pupil Support</b>	\$795	\$614
<b>Staff Support</b>	\$57	\$80
<b>Totals</b>	<b>\$7,150</b>	<b>\$6,661</b>

*Source: Ohio Department of Education, 2002 District Report Cards*

**Table 13.9 District Revenues Per Pupil**

	<b>Buckeye Valley</b>	<b>Big Walnut</b>
<b>Local Funds</b>	\$3,851	\$4,271
<b>State Funds</b>	\$2,633	\$2,222
<b>Federal Funds</b>	\$181	\$217
<b>Totals</b>	<b>\$6,665</b>	<b>\$6,710</b>

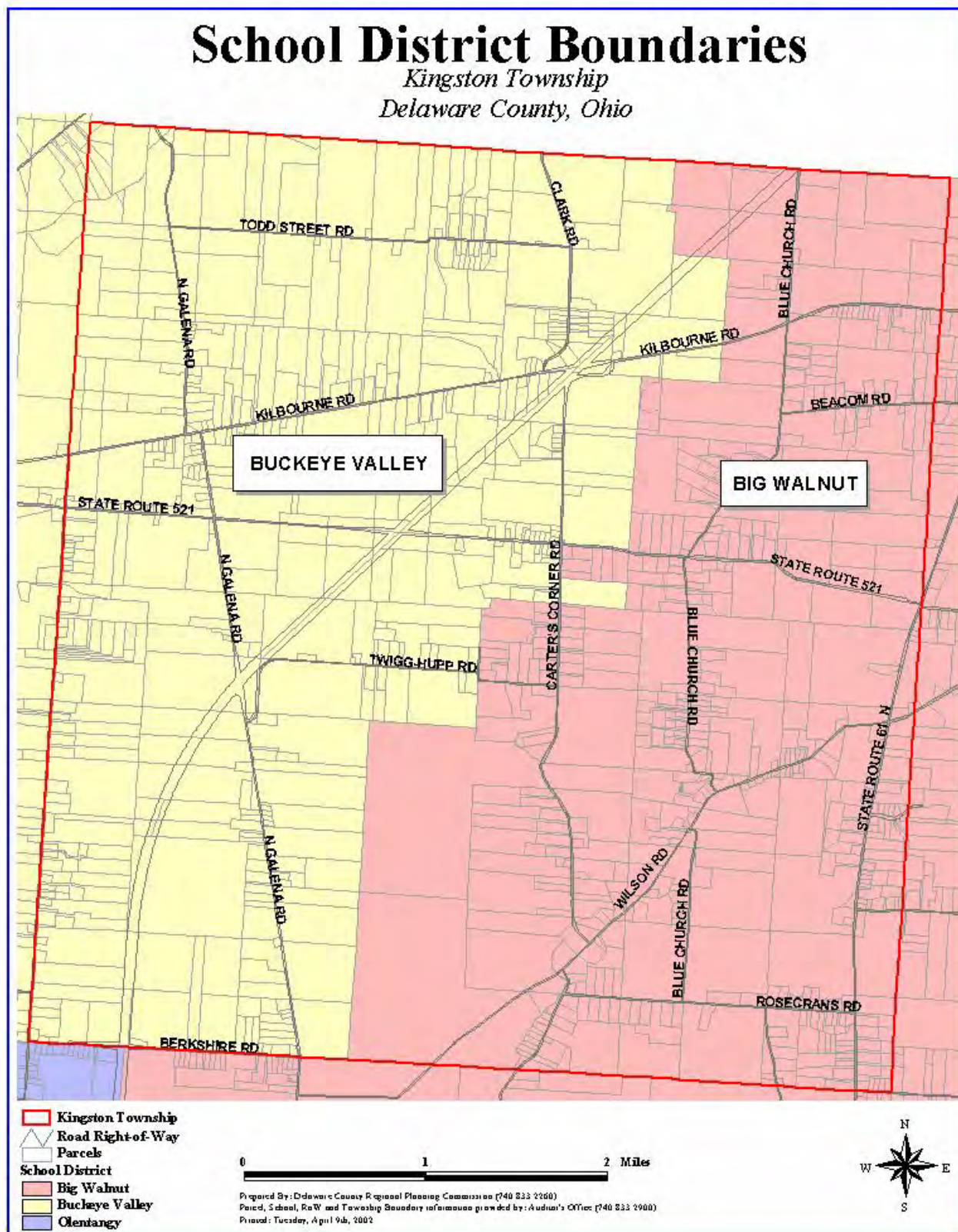
*Source: Ohio Department of Education, 2002 District Report Cards*

## **D. Effect of Land Use Planning on School Planning**

With the growth of Scioto Reserve Subdivision in Concord Township (748 acres, 1255 dwellings), there will also be an increase in the student population of Buckeye Valley. The NorthStar development in Kingston and Berkshire Townships (1400 acres, approximately 1500 dwellings, plus 300 acres commercial) and The Pastures at Blue Church development in Kingston Township could have a similar impact on the Big Walnut Schools.



**Map 13.1 Kingston Township School Districts**



### **13.2 Historic Sites**

There are no sites in Kingston Township listed on the National Register of Historic Places. There are however several historically significant structures. Some of these include the following:

- **Rosecrans Memorial:** designating the birthplace of General William G. Rosecrans. Located 1.2 miles west of State Route 61, on the south side of Rosecrans Road. General Rosecrans is buried in Arlington Cemetery, Washington D.C.
- **Kingston Center School** is a former one-room schoolhouse located on the northeast corner of State Route 521 and Carter's Corner Road. It is used today as the Township Hall.
- **Lott School** is a former one-room schoolhouse at the corner of Carter's Corner Road and Wilson Road. It has been converted to a residence and is still occupied today.

The Critical Resources Map in Chapter 6 (Map 6.7) indicates possible archeological sites. These sites are mapped by the State of Ohio OCAP data available from the Ohio Department of Natural Resources. The DCRPC has no information regarding any materials found at any of these sites.

### **13.3 Libraries**

Currently there are no public libraries in Kingston Township. Residents can obtain a library card at any of the following libraries.

***The Delaware County District Library*** has its downtown library at 84 East Winter Street, Delaware, and branch libraries in the Village of Powell at 460 S. Liberty Street, and Ostrander at 75 North 4<sup>th</sup> Street.

The District Library employs 30 people or 24 full time equivalents. Its annual budget is approximately \$2 million, which is used for staff salaries and materials, maintenance, and operating expenses. 94 % of the budget comes from state income tax and the remaining 6 % is generated by overdue fines.

There are 75,000 residents in the Delaware District Library service area and 42,000 registered borrowers (borrowers can be outside of the district). School districts that are in the service area include Olentangy, Delaware City, Buckeye Valley, Elgin Local (in Delaware County), Dublin (in Delaware County), and North Union (within Delaware County). Currently, the District has 145,000 volumes. The "old" rule of thumb is that there should be 3 volumes per capita. This shortfall of 5,000 is not considered a problem because libraries in general have evolved to offer other resources for patrons. The District's long range plan is to monitor the growth area and provide service to the expanding population, expand facilities if necessary, and promote home based programs.

***The Sunbury Community Library*** is located at 44 Burrer Drive in Sunbury. It is funded by state income tax set aside for libraries. Its primary mission is to serve the Big Walnut School District, but any resident of the State of Ohio may obtain a library card and use the library. Their building was constructed in 1994, and was constructed to be expandable. The library currently has books in circulation, reference materials, audio and video cassettes, and 8-10 public access computers with on-line Internet services. They employ 18 full and part time staff. Hours of operation are Monday –Thursday, 9:00 a.m. to 8:00 p.m., and 9:00 to 5:00 on Fridays and Saturdays.

*Ohio Wesleyan University, Beeghley Library* located at 43 University Ave., Delaware extends borrowing privileges to all residents of Delaware County.

*Ashley Wornstaff Library* is located at 302 E. High St., Ashley.

As the population of Kingston Township and Delaware County increases, there may be a need for expanded library service.

### **13.4 Hospitals**

There are no hospitals located within Kingston Township. Grady Memorial Hospital is located on Central Avenue in the City of Delaware. Grady Hospital provides 125 beds for general surgery, and orthopedics, urology and ophthalmology, as well as emergency care. Cardiac surgery and neuro surgery are referred to other hospitals. Grady recently expanded its emergency room and constructed a helicopter pad for incoming life flights.

Grady provides local hospital service. Northern Franklin County Hospitals such as Riverside Methodist Hospital, Olentangy River Road in Columbus, St. Ann's in Westerville, and the Ohio State University Medical Center provide expanded care with more specialties.

Two outpatient facilities serve southern Delaware County. Grady at Wedgewood and Mt. Carmel OutPatient, both on Sawmill Parkway in Liberty Township serve Liberty Township, Powell, and northern Franklin County. Both centers provide medical services that do not require an overnight stay.

### **13.5 Fire Protection**

The Porter/Kingston Township Fire Station is located at 12844 Olive Green Road in Porter Township. Presently the fire department operates with volunteer firemen and one paid daytime fire fighter. In May 1999, Delaware County started a 24-hour shift of EMS at the fire station. In addition, the department has mutual aid contracts with all adjoining township fire departments, including automatic response on all structure fire assignments.

The Fire Department has the following equipment for emergency responses:

- Light rescue-equipment truck
- 2 Engine/Tanker trucks
- Grassfighter
- Hose truck with 2700 feet of 4" hose
- 1800 Tanker
- Hazardous Materials Response trailer

The Insurance Services Office (ISO) grading in Kingston Township is Class 6 for areas within 1000-ft of a fire hydrant and Class 9 for areas outside of the 1000-ft radius. The rating is based on how well the department receives and handles fire alarms; fire department equipment, staff, and training; and water supply. ISO gradings determine fire insurance premiums. Higher gradings (lower the number) may result in lower insurance premiums.

### **13.6 Police**

Kingston Township is policed by the Delaware County Sheriff's Office, (DCSO) which is headquartered in Delaware on State Route 42. In 2002 the department was budgeted for 68 full-time deputies and 17 special deputies patrolling in 54 vehicles. Each vehicle is shared between two officers (two shifts) and travels around 100 miles a shift.

**Table 13.9 Sheriff's Complaints**

Sheriff's Complaints for 2004 by Geographic Code				
Orange Township	5,406		Delaware City	425
Liberty Township	3,339		Oxford Township	228
Concord Township	1,346		Ashley	145
Berkshire Township	1,317		Marlboro Township	134
Berlin Township	1,149		Shawnee Hills	124
Harlem Township	842		Thompson Township	101
Troy Township	743		Columbus	48
Delaware Township	629		Sunbury	45
Scioto Township	481		Ostrander	44
Trenton Township	454		Other (out of county)	44
Brown Township	388		Powell	20
Kingston Township	353		Westerville	15
Porter Township	288		Dublin	6
Radnor Township	269		Galena	6

Source: Delaware County Sheriff Office web page <http://www.delawarecountysheriff.com/patrol.htm>

Kingston Township represented 3.7% of the county population in 2001, but only 1.3% of the Sheriff's complaints. It should be noted that Genoa Township, the City of Delaware, Dublin, Columbus, Westerville and Powell provide their own police protection.

### **13.7 Cemeteries**

- **Blue Church Cemetery:** located at the southwest corner of State Route 521 and Blue Church Road. The Church was destroyed in 1974.
- **Stark (Olive Green) Cemetery:** located on the north side of State Route 656, 800 feet west of State Route 656. The western portion of this cemetery is in Kingston Township, the eastern portion is in Porter Township.

### **13.8 Other Township Facilities**

#### **Kingston Township Hall**

- The Kingston Township Hall is located at 9899 State Route 521. The building was the former Kingston Center School One room schoolhouse.

#### **Kingston Township Maintenance Building**

- The maintenance building is located on Blue Church Road just south of the Blue Church Cemetery.

# CHAPTER 14

## Open Space and Recreation

### **14.1 Introduction**

The Ohio Revised Code (ORC) acknowledges the importance of open space and recreation in both the zoning and subdivision enabling legislation. ORC 519.02 states that the trustees may regulate by [zoning] resolution “sizes of yards, courts, and other open spaces...the uses of land for...recreation.” ORC 711 states that “a county or regional planning commission shall adopt general rules [subdivision regulations]... to secure and provide for...adequate and convenient open spaces for...recreation, light, air, and for the avoidance of congestion of population.”

The importance of open space and recreation has long been recognized. In the 1850s the City Beautiful Movement advocated public parks as retreats from the congestion and overcrowding of city life. New York’s Central Park (1856, Frederick Law Olmstead, Sr.) is the best known American example. Every desirable community in America has a significant park and recreation system as one of its building blocks.

The Subdivision and Site Design Handbook (David Listokin and Carole Walker, 1989, Rutgers, State University of New Jersey, Center for Urban Policy Research) is considered a planner’s bible for many accepted standards in subdivision review. In their chapter on open space and recreation, they relate the following critical functions of open space:

- Preserves ecologically important natural environments
- Provides attractive views and visual relief from developed areas
- Provides sunlight and air
- Buffers other land uses
- Separates areas and controls densities
- Functions as a drainage detention area
- Serves as a wildlife preserve
- Provides opportunities for recreational activities
- Increase project amenity
- Helps create quality developments with lasting value

### **14.2 Open Space Defined**

Listokin and Walker define open space as: “Essentially unimproved land or water, or land that is relatively free of buildings or other physical structures, except for outdoor recreational facilities. In practice, this means that open space does not have streets, drives, parking lots, or pipeline or power easements on it, nor do walkways, schools, clubhouses and indoor recreational facilities count as open space. Private spaces such as rear yards or patios not available for general use are not included in the definition either.”

“Open space is usually classified as either developed or undeveloped. Developed open space is designed for recreational uses, both active and passive, whereas undeveloped open space preserves a site’s natural amenities.”

### **14.3 Land Area Required**

The National Recreation and Park Association (NRPA) has developed a set of standards for local developed open space (See Appendix). Although these standards have been promoted as goals, they are not universally accepted. Recreational needs vary from community to community, and desires for recreation vary also.

Listokin notes that: “Ideally, the [NRPA] national standards should stand the test in communities of all sizes. However, the reality often makes it difficult or inadvisable to apply national standards without question in specific locales. The uniqueness of every community, due to differing geographical, cultural, climatic, and socioeconomic characteristics, makes it imperative that every community develop its own standards for recreation, parks, and open space.” Listokin suggests that “No general standard can specify the amount of open space that should remain undeveloped: a determination will depend on the particular development site.”

### **14.4 Location of Open Space Parcels**

Listokin notes what has been the subject of many debates in Delaware County, namely that: “Open space parcels should be easily accessible by development residents. In smaller developments, one large, centrally located parcel may suffice; but a large development may require several parcels, equitably distributed. Linking open space parcels is a good strategy, because it enlarges the area available for recreation. Parcels containing noise generators, such as basketball courts or playgrounds, should be sited to minimize disturbance to residents.”

### **Recreation and Open Space in Kingston Township**

Ohio Wesleyan owns approximately 50 acres along the Alum Creek in Kingston and Brown Township. This area is used as a biological reserve for students at Ohio Wesleyan. It is not accessible to the general public.

There are no parks in Kingston Township. Many residents however, walk and bike along most of the Township roads. Other destinations for Kingston residents include:

**Hogback Ridge Preserve & Mary Barber McCoy Nature Center**--Located on Hogback Road, south of State Route 521, Brown Township, this preserve features 32 acres of untouched woods surrounded by a beautiful ravine system. Its centerpiece is the approximately 4000 square foot house, which has been converted to the Preservation Park District offices. The property was a gift to Preservation Parks from the estate of Mary Barber McCoy in 1998, and includes a nature education center with a classroom for use by all Delaware County schools, hiking trails, a picnic area, and several venues from which to observe the site's many birds and animals.



**Big Walnut Community Trail**--A gift from Walter and Kathy Sandel, this 0.6 mile surfaced trails in Sunbury follows an old railroad bed from a trestle across Old 3C Highway to Big Walnut Elementary School. The trail provides a walkway for people to enjoy a few pleasant, quiet moments free of traffic to stroll, bike, or cross-country ski.

**Alum Creek State Park**--Alum Creek State Park comprises 8,874 acres principally within Orange, Berlin, and Brown Townships and reaching into the northwestern corner of Kingston Township and parts of Genoa Township. There is access to the park in Brown Township from Hogback Road, Howard Road, State Route 521 and North Old State Road.

**Alum Creek Lake serves five purposes:**

- Flood control
- Water supply (40 million gallons per day)
- Fish and wildlife enhancement
- Water Quality
- Recreation



*Alum Creek Lake north of Howard Road*

**Recreational opportunities at Alum Creek State Park:**

**Land (entire park)**

- 5,213 acres
- Hiking Trails – 9.5 miles
- Bridle Trails- 50 miles
- Mountain Bike / Horse Trails-7 miles

### **Campground**

- 297 sites
- 5 rent-a- camp sites 5 rent-an-RV sites

### **Lake**

- 3,387 acres
- Boat Launching Ramps-5
- Unlimited horsepower for boats (speed limits enforced in designated areas)
- Swimming Beach- 3000 feet (largest inland beach in Ohio's state park system)
- Easement-239 acres
- Drainage Basin- 123.4 square miles

**Park personnel estimate that 4,000,000 annual visitors use the park.**

## **14.6 Future Recreational Needs**

As Kingston Township grows it may wish to use the NRPA model, "which surveys the service area population to determine demand for different activities. Demand is then converted to facilities needs and then to land requirements." (Listokin and Walker, *ibid*, Pg. 222.)

### **Undeveloped Open Space - Regional and Township**

**Suggestion:** The large amounts of undeveloped open space in the Alum Creek State Park should help fulfill the need for undeveloped (passive) open space and a portion of developed (active) open space. They do not replace the need for neighborhood parks and township-wide parks with athletic fields for organized sports. Consider preserving corridors along the Little Walnut Creek and Alum Creek.

### **Undeveloped Open Space - Neighborhood**

**Suggestion:** The open space requirement for new Planned Residential Developments should be used to provide centrally located undeveloped and developed open space within residential neighborhoods of suburban densities (generally greater than 1 unit per net acre). These would be either mini parks of one acre or less within a ¼ mile radius of all portions of such neighborhoods, or 15-acre joint neighborhood parks that provide athletic fields for neighborhoods within ½ mile radius. The open space requirement in the PRD zones may be inadequate unless undevelopable land (slopes greater than 20%, power line easements and storm water detention basins are either excluded, or reduced in their contribution to the open space requirement).

### **Developed Open Space - Township wide**

**Suggestion:** The Township should provide active recreational areas for its ultimate population. Use the NRPA Standards as a guide.



## NRPA Recreational Standards

Excerpted from The Subdivision and Site Plan Handbook, David Listokin and Carole Walker, copyright 1989, Rutgers, State University of New Jersey, Center for Urban Policy Research, New Brunswick, New Jersey.

### EXHIBIT 3-3

#### NRPA RECOMMENDED STANDARDS FOR LOCAL DEVELOPED OPEN SPACE

This classification system is intended to serve as a *guide* to planning – not as an absolute blueprint. Sometimes more than one component may occur within the same site (but not on the same parcel of land), particularly with respect to special uses within a regional park. Planners of park and recreation systems should be careful to provide adequate land for each functional component when this occurs.

NRPA suggests that a park system, at a minimum, be composed of a “core” system of parklands, with a total of 6.25 to 10.5 acres of developed open space per 1,000 population. The size and amount of “adjunct” parklands will vary from community to community, but *must* be taken into account when considering a total, well-rounded system of parks and recreation areas.

<i>Component</i>	<i>Use</i>	<i>Service Area</i>	<i>Desirable Size</i>	<i>Acres / 1,000 Population</i>	<i>Desirable Site Characteristics</i>
LOCAL / CLOSE-TO-HOME SPACE					
<b>Mini-Park</b>	Specialized facilities that serve a concentrated or limited population or specific group such as tots or senior citizens	Less than ¼ mile radius	1 acre or less	0.25 to 0.5 acres	Within neighborhoods and in close proximity to apartment complexes, townhouse developments, or housing for the elderly.
<b>Neighborhood Park / Playground</b>	Area for intense recreational activities, such as field games, craft, playground apparatus area, skating, picnicking, wading pools, etc.	¼ to ½ mile radius to serve a population up to 5,000 (a neighborhood).	15+ acres	1.0 to 2.0 acres	Suited for intense development. Easily accessible to neighborhood population – geographically centered with safe walking and bike access. May be developed as a school-park facility
<b>Community Park</b>	Area diverse environmental quality. May include areas suited for intense recreational facilities, such as athletic complexes, large swimming pools. May be an area of natural quality for outdoor recreation, such as walking, viewing, sitting, picnicking. May be any combination of the above, depending upon site suitability and community need.	Several neighborhoods. 1 to 2 mile radius	25 + acres	5.0 to 8.0 acres	May include natural features, such as water bodies, and areas suited for intense development. Easily accessible to neighborhood served.

TOTAL CLOSE-TO-HOME SPACE = 6.25-10.5 A / 1,000

*Source:* National Recreation and Park Association, *Recreation, Park and Open Space Standards and Guidelines*, p. 56. Copyright © 1983 by the National Recreation and Park Association, 3101 Park Center Drive, Alexandria, Virginia 22302.

Activity / Facility	Recommended Space Requirements	Recommended Size and Dimensions	Recommended Orientation	# Units Per Population	Service Radius	Location Notes
Badminton	1620 sq. ft.	Singles - 17' x 44' Doubles – 20' x 44' with 5' unobstructed are on all sides	Long axis north-south	1 per 5000	¼ - ½ mile	Usually in school, recreation center, or church facility. Safe walking or bike access
Basketball Youth High School Collegiate	2400-3036 sq. ft. 5040-7280 sq. ft. 5600-7980 sq. ft.	40'-50' x 84' 50' x 84' 50' x 94' with 5' unobstructed space on all sides	Long axis north-south	1 per 5000	¼ - ½ mile	Same as badminton. Outdoor courts in neighborhood and community parks, plus active recreation areas in other park settings
Handball (3-4 wall)	800 sq. ft. for 4-wall, 1000 sq.ft. for 3-wall	20' x 40' – minimum of 10' to rear of 3-wall court. Minimum 20' overhead clearance	Long axis north-south. Front wall at north end	1 per 20,000	15-30 minute travel time	4-wall usually indoor as part of multi-purpose facility. 3-wall usually outdoor in park or school setting
Ice Hockey	22,00 sq. ft. including support area	Rink 85' x 200' (minimum 85' x 185') Additional 5000 sq. ft. support area	Long axis north-south if indoor	Indoor – 1 per 100,000 Outdoor-depends on climate	½ - 1 hour travel time	Climate important consideration affecting no. of units. Best as part of multi-purpose facility.
Tennis	Minimum of 7,200 sq. ft. single court (2 acres for complex)	36' x 78' 12' clearance on both sides 21' clearance on both ends	Long axis north-south	1 court per 2000	¼ - ½ mile	Best in batteries of 2-4. Located in neighborhood/ community park or adjacent to school site

Volleyball	Minimum of 4,000 sq. ft.	30' x 60'. Minimum 6' clearance on all sides	Long axis north-south	1 court per 5,000	¼ - ½ mile	Same as other court activities (e.g. badminton, basketball, etc.)
Baseball Official  Little League	3.0 – 3.85 acre minimum  1.2 acre minimum	<ul style="list-style-type: none"> <li>• Baselines-90'</li> <li>• Pitching distance-60 ½'</li> <li>• Foul lines-min. 320'</li> <li>• Center field – 400'+</li> <li>• Baselines-60'</li> <li>• Pitching distance – 46'</li> <li>• Foul lines – 200'</li> <li>• Center field – 200'-250'</li> </ul>	Locate home plate so pitcher throwing across sun and batter not facing it. Line from home plate through pitcher's mound run east-north-east	1 per 5000  Lighted – 1 per 30,000	¼ - ½ mile	Part of neighborhood complex. Lighted fields part of community complex
Field Hockey	Minimum 1.5 acres	180' x 300' with a minimum of 10' clearance on all sides	Fall season – long axis northwest to southeast For longer periods, north to south	1 per 20,000	15 – 30 minute travel time	Usually part of baseball, football, soccer complex in community park or adjacent to high school
Football	Minimum 1.5 acres	160' x 360' with a minimum of 6' clearance on all sides.	Same as field hockey	1 per 20,000	15-30 minutes travel time	Same as field hockey
Soccer	1.7 to 2.1 acres	195' to 225' x 330' to 360' with a minimum clearance on all sides.	Same as field hockey	1 per 10,000	1-2 miles	Number of units depends on popularity. Youth soccer on smaller fields adjacent to schools or neighborhood parks.

Activity / Facility	Recommended Space Requirements	Recommended Size and Dimensions	Recommended Orientation	# Units Per Population	Service Radius	Location Notes
Golf – Driving Range	13.5 acres for minimum of 25 tees	900' x 680' wide. Add 12' width for each additional tee	Long axis south-west. Northeast with golfer driving toward north-east.	1 per 50,000	30 minutes travel time	Part of golf course complex. As a separate unit, may be privately operated.
¼ Mile Running Track	4.3 acres	Overall width – 276' Length – 600.02' Track width for 8 to 4 lanes is 32'.	Long axis in sector from north to south to north-west-south-east with finish line at northerly end	1 per 20,000	15-30 minutes travel time	Usually part of high school or in community park complex in combination with football, soccer, etc.
Softball	1.5 to 2.0 acres	Baselines – 60' Pitching distance – 46' min. 40' – women Fast pitch field radius from plate – 225' between foul lines. Slow pitch – 275' (men) 250' (women)	Same as baseball	1 per 5,000 (if also used for youth baseball)	¼ - ½ mile	Slight difference in dimension for 16" slow pitch. May also be used for youth baseball.
Multiple Recreation Court (baseball, volleyball, tennis)	9,840 sq. ft.	120' x 80'	Long axis of courts with <i>primary</i> use is north-south	1 per 10,000	1-2 miles	
Trails	N/A	Well defined head maximum 10' width, maximum average grade 5%, not to exceed 15%. Capacity rural trails – 40 hikers/day/mile. Urban trails – 90 hikers/day/mile.	N/A	1 system per region	N/A	
Archery Range	Minimum 0.55 acres	300' length x minimum 10' wide between targets. Roped clear space on sides of range minimum of 30', clear space behind targets minimum of 90' x 45' with bunker.	Archer facing north + or - 45°	1 per 50,000	30 minutes travel time	Part of a regional / metro park complex
Combination Skeet and Trap Field (8 station)	Minimum 30 acres	All walks and structures occur within an area approximately 130' wide by 115' deep. Minimum cleared area is contained within two superimposed segments with 100-yard radii (4 areas). Shot-fall danger zone is contained within two superimposed segments with 300-yard radii (36 acres)	Center line of length runs northeast-south-west with shooter facing northeast.	1 per 50,000	30 minutes travel time	Part of a regional / metro park complex

Golf						
Par 3 (18 hole)	50-60 A	Average length –vary 600-2700 yards	Majority of holes on north-south axis	1/25,000	½ to 1 hour travel time	9 hole course can accommodate 350 people/day.
9 Hole standard	Minimum 50 A	Average length – 2250 yards		1/50,000		18 hole course can accommodate 500-550 people/day.
18 hole standard	Minimum 110 A	Average length – 6500 yards				Course may be located in community or district park, but should not be over 20 miles from population center.

Activity / Facility	Recommended Space Requirements	Recommended Size and Dimensions	Recommended Orientation	# Units Per Population	Service Radius	Location Notes
Swimming Pools	Varies size of pool and amenities. Usually ½ to 2 A site	Teaching-minimum of 25 yards x 45' even depth of 3 to 4 feet. Competitive- minimum of 25m x 16m. Minimum of 27 sq. ft. of water surface per swimmer. Ratios of 2:1 deck vs. water.	None-although care must be taken in siting of lifeguard stations in relation to afternoon sun.	1 per 20,000 (Pools should accommodate 3 to 5% of total population at a time.)	15 to 30 minutes travel time	Pools for general community use should be planned for teaching, competitive, and recreational purposes with enough depth (3.4m) to accommodate 1m and 3m diving boards. Located in community park or school site.
Beach Areas	N/A	Beach area should have 50 sq. ft. of land and 50 sq. ft. of water per user. Turnover rate is 3. There should be 3.4 A supporting land per A of beach.	N/A	N/A	N/A	Should have sand bottom with slope a maximum of 5% (flat preferable). Boating areas completely segregated from swimming areas.

## **Recommendations at Build-Out**

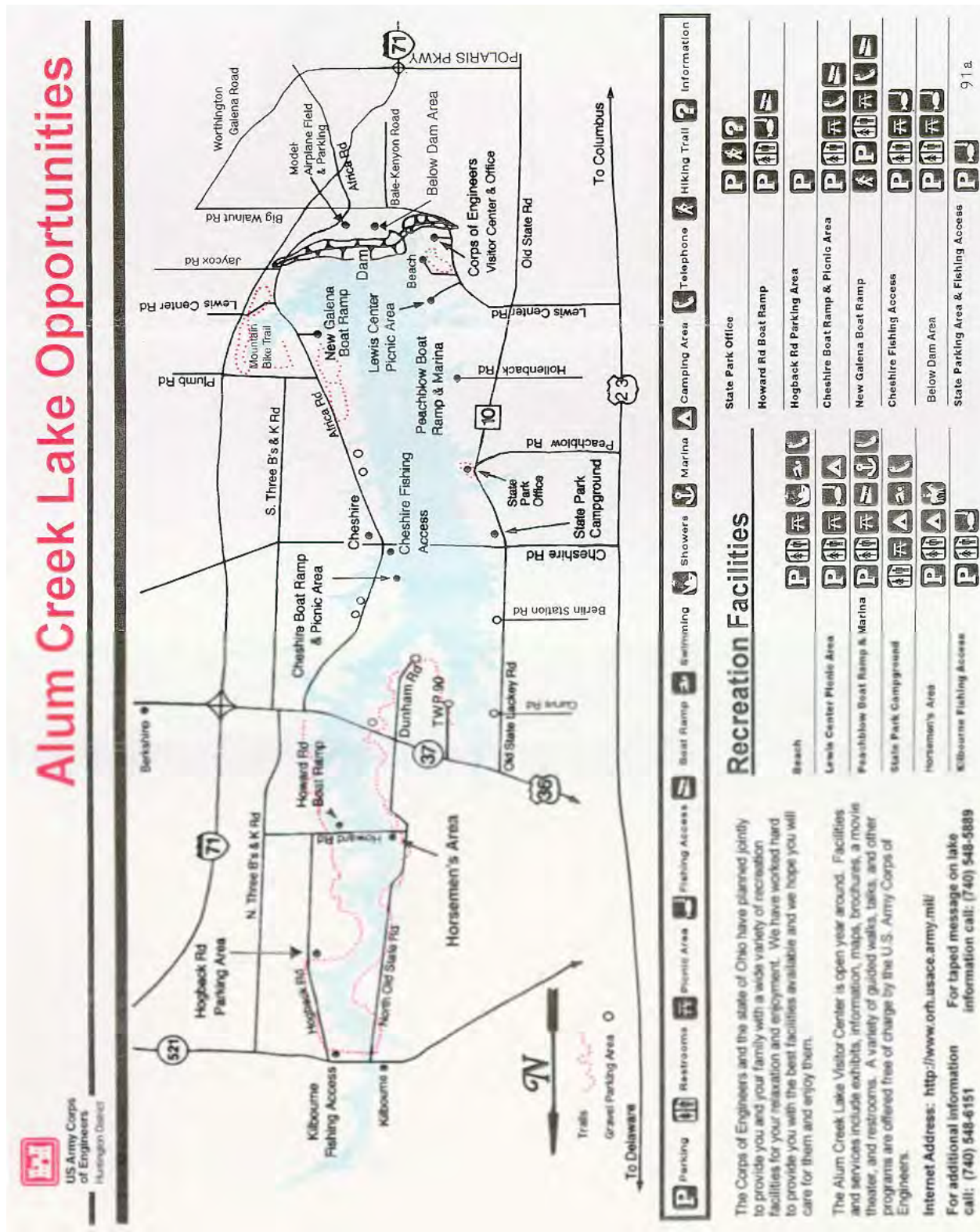
1. Overall active recreational area required - NRPA recommends 6.25-10.5 acres /1000 population. Use the lower ratio because of the existence of Alum Creek State Park, Hoover Reservoir and Big Walnut Creek.
2. Establish mini parks of one acre or less within neighborhoods: as in neighborhoods using clustered housing located in smaller lots as in neo-traditional or conservation type developments serving the population within ¼ mile radius (these should be developer dedications as part of the PRD zoning).
3. Establish neighborhood parks of up to 15 acres, with field games, playground apparatus, serving the population within ¼ to ½ mile radius.
4. Establish a community park of 25-50 acres (when built out) with an athletic complex, large swimming pool, and recreational fields.
5. Within these parks consider the following facilities:
  - tennis courts
  - basketball courts
  - volleyball courts
  - baseball fields (this may be reduced according to the popularity of baseball versus soccer)
  - softball fields
  - football fields
  - field hockey field
  - soccer fields (this number may rise according to the popularity of soccer versus baseball)
  - ¼ mile running track
  - “universal playground”
  - swimming pools large enough to accommodate 200 people

Delaware County voters approved a ballot initiative for a parks levy in November 1999. Preservation Parks now receives a .4 mills levy, which is expected to generate about \$900,000 per year for parks. Ten percent of that money is set aside for townships and municipalities to develop parks. Kingston Township can apply for a share of this money.

### **14.7 Greenways**

An inexpensive way to provide undeveloped open space is to assure the linkage of neighborhoods by green ways, or corridors of natural or man made landscaped paths, and trails. These can be easily placed along drainage ways, creeks, sewer easements and portions of the land that cannot be otherwise developed. These paths can maintain undisturbed wildlife habitat, or create new habitat through plantings and creative use of storm water retention and detention facilities. These areas of developments are often afterthoughts in the design and planning process. They should be viewed as opportunities to improve the value of the development and link developments. The Mid-Ohio Regional Planning Commission has developed a set of suggested standards for greenways that are available at the Delaware County Regional Planning Commission.

Map 14.1 Alum Creek Lake Opportunities



## Chapter 15

### Future Development Patterns



*Wilson Road and the southern edge of Kingston Township*

#### **15.1 Preserving Rural Character -The Community's Choice**

The number one goal of Kingston Township is to preserve its rural character. This rural character is expressed as an overall low density, and the preservation of natural resources including agriculture, ravines and trees as well as fence-lines, wildlife corridors and traditional and agricultural buildings.

Clearly, part of what makes the township desirable is the vision that there will always be some permanent, interconnected open space and natural lands throughout. When agriculture changes to other land uses, this rural character will be lost unless conservation areas are preserved by future development patterns.

Kingston Township is still a rural community with a little over 70% of its acreage in agriculture and undeveloped land. However, agricultural lands are converting to large-lot residential uses, which account for 18% of all acreage.

Kingston's vision to remain a low-density residential community seems understandable and defensible for the scope of this 2006 Comprehensive Plan because only limited areas are serviced by public centralized sanitary sewer.



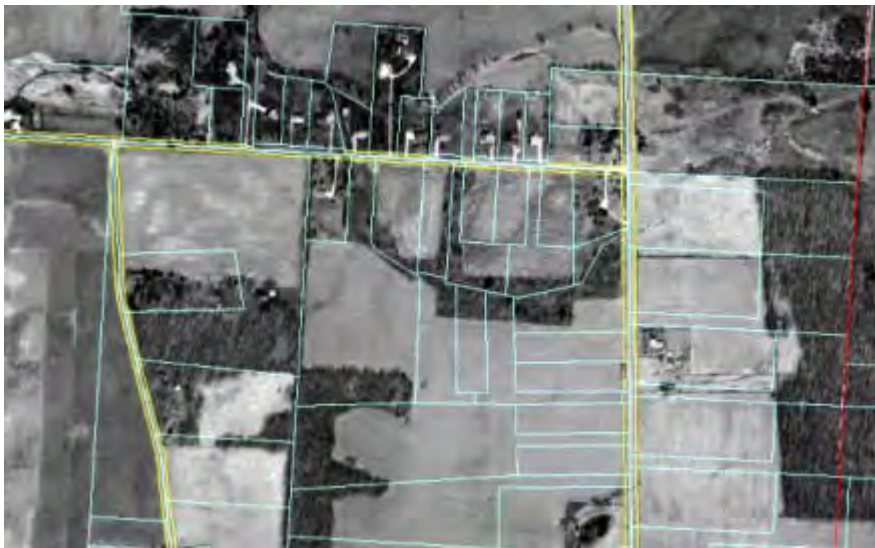


*Large lots and Common Access Drives are found throughout the county*

## **15.2 Development pattern options to consider**

### **Rural Large Lot Development**

Most residential development has taken place along township roads via lot splits (minor no plat subdivisions) on lots larger than one acre to accommodate an on-site sewage disposal system. This large lot development, as long as it is surrounded by open space, has been accepted as retaining rural character, but if all rural lands were developed for two-acre house lots, there would be no interconnecting open space, and the rural character would be destroyed. Development of large lots everywhere on township roads would actually lead to “rural sprawl”.



*Frontage splits and flag lots at Rosecrans and S.R. 61*

For Kingston Township, large lot splits along township roads will be a viable alternative so long as state law permits such “no plat” subdivisions, but they do not preserve connected open space.

## **Build-Out Map**

To picture how the township would look fully built out at today's zoning standards, a Build-Out Map was created. This map may be compared with the Existing Land Use, Development Pattern and Land in Speculation Maps from Chapter 7 to see how much land currently is available for development, and how the township would look fully built out under the current zoning and subdivision regulations.

The Build-Out Map suggests:

1. Opportunities for open space exist along the Little Walnut tributaries. However, the branches of this watershed cross many different pieces of property, posing a challenge for the acquisition of continuous open space.
2. Most of the development has occurred along road frontage with very little conventional new subdivisions.
3. There is no logical location for commercial or industrial development, except for major intersections. The Interstate interchange proposed in the 2002 County Thoroughfare Plan at S.R. 521 poses the only obvious location for such intense use.
4. There is no traditional "village" in the township, although the land surrounding the Township Hall presents a good possibility of creating one, as long as the lots are large enough to support on-site sanitary systems.
5. There are no schools in the northeast corner of the county. With complete build-out, a new school site(s) must be provided.
6. Few new road connections are guaranteed due to the repeated use of the Common Access Drive (CAD). However, much of the land is inaccessible without adding some new network connections.
7. As road frontage is used up by no-plat lot splits and CADs, some new "conventional" subdivision streets will be platted. Conventional subdivisions create only lots and streets. There are no public open spaces to walk to, no central green or woods, no riverbank or lakeshore because all the land has been parceled out to all landowners. Conventional subdivisions do not create permanent, interconnected open space. They do not preserve conservation areas. If all land were divided into conventional subdivisions, rural character would eventually be lost.
8. It should be noted that when the Build Out map was prepared, insufficient data was available to reflect the layout of the NorthStar PRD development, and the 605.78 acre land holding known as The Pastures at Blue Church had not yet been assembled.

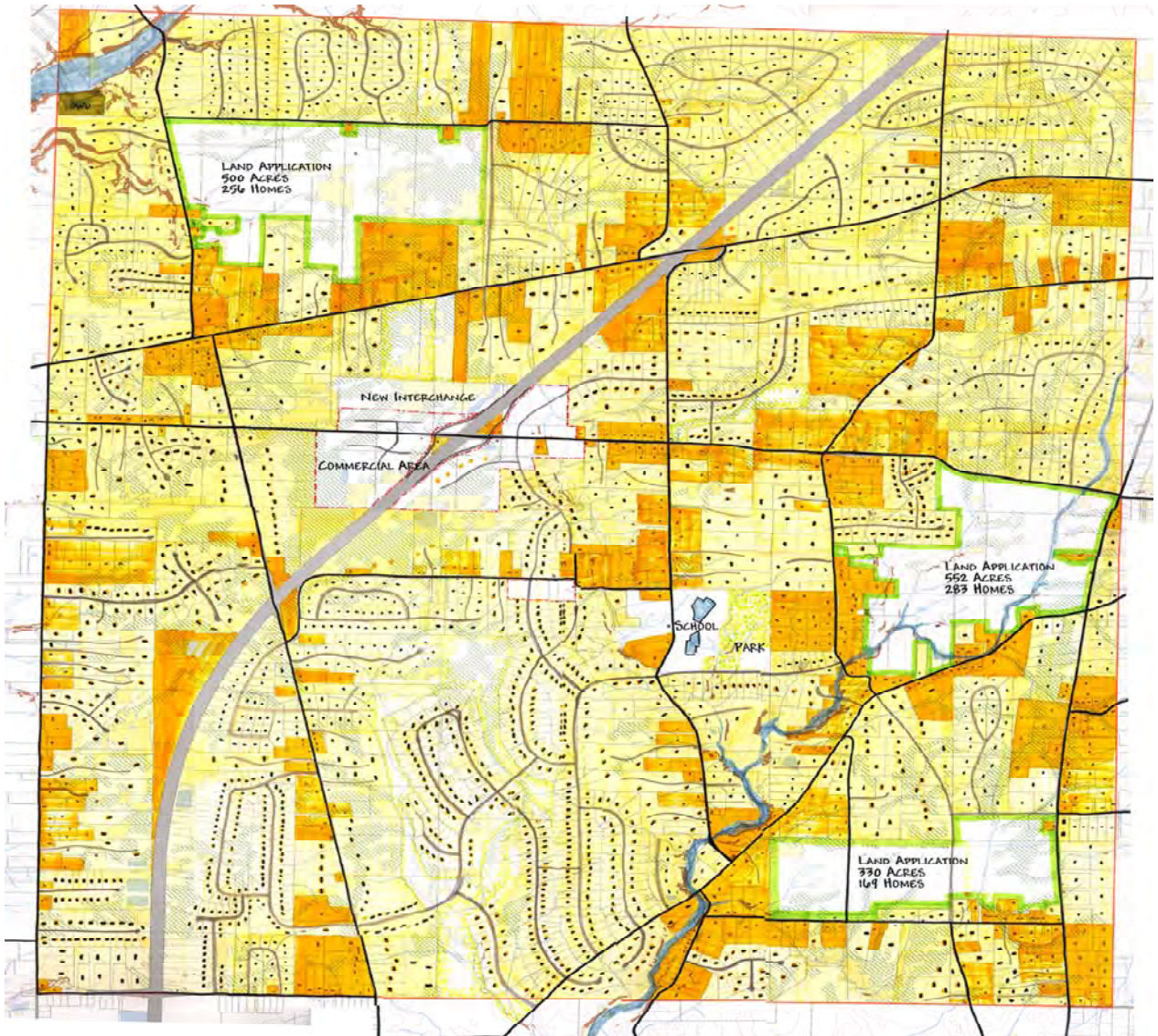
## **Conventional Subdivisions**

Kingston Township has no conventional subdivisions to date (only CAD subdivisions). Two Berlin Township conventional subdivisions are presented to illustrate rural, large lot subdivisions.

## Map 15.1 Kingston Township Build-out Map

### Kingston Township

# Build-out Map



Map uses existing zoning to create a possible build-out scenario:

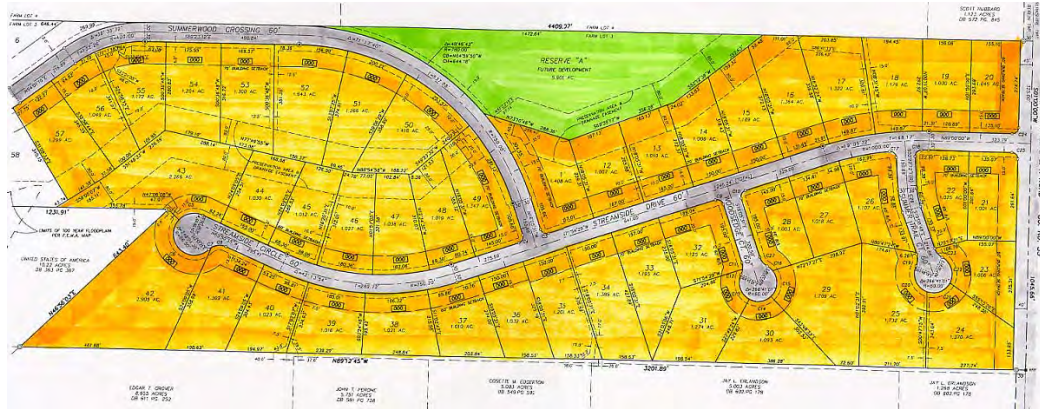
FR-1 at 1 du/1.95 acres

PRD at 1 du/1.95 acres

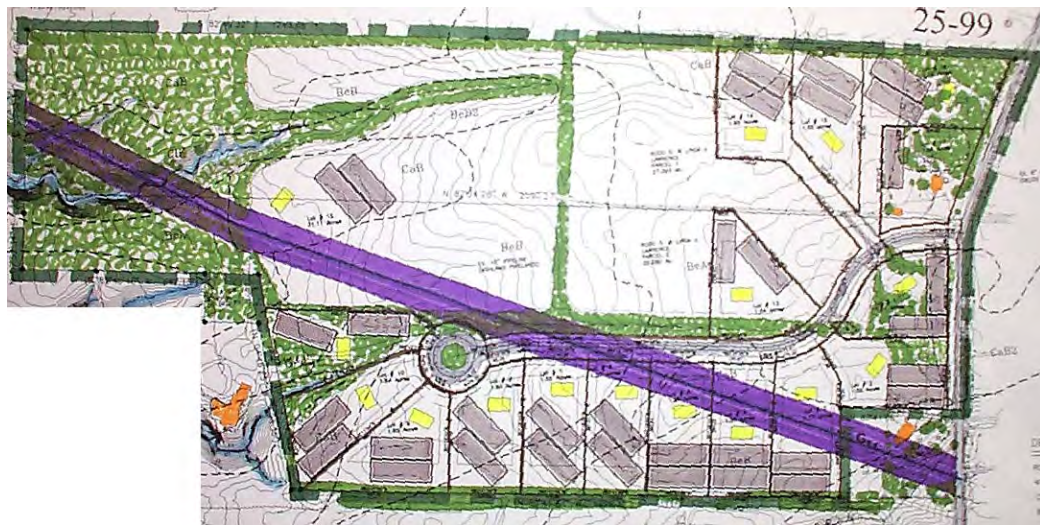
- **Orange** – land assumed to be already subdivided to smallest size under current code
- **Yellow** – land that could be subdivided further to serve as new house lots
- **Green bordered areas** – parcels that could be assembled to create Planned Residential Districts utilizing Land Application waste disposal systems.

DCRPC 3/11/2003





*A portion of Summerwood in Berlin Township*



*Twin Hickory Farms in Berlin Township*

## **Cluster Subdivisions**

For thirty years, cluster subdivisions, or “Planned Residential Developments” have been touted as an improved alternative to the conventional subdivision. In PRDs, greater design flexibility is obtained by reducing lot size, and width.

The absence of comprehensive standards for quantity, quality and configuration of open space has permitted many uninspired designs. The notable exception to the general failure of PRDs is the “golf course” development. However, the success of golf course developments only underscores the desire for people to live on or near permanent open space. Furthermore, golf course developments typically do not provide public open space. The open space is not available to non-golfers and young children.

The NorthStar development is a cluster or PRD subdivision, the first in Kingston Township. The PRD requires a minimum lot size as approved per the development plan, but not less than ½ acre. In 2007, the Township adopted a revised PRD Chapter in the Township Zoning Resolution.



*Typical Delaware County Planned Residential Development*

### **Farmland Preservation**

The Delaware County Commissioners appointed a Farmland Preservation Task Force in 1998. The Task Force issued a Farmland Preservation Plan in June 2000 with 12 recommendations for action. Recommendation number 4 is to “Support and encourage any township that seeks to protect its agricultural industry through zoning codes.”

With 71% of Kingston Township land still in agriculture/undeveloped land, and a goal to retain rural character, agricultural preservation strategies in zoning should be considered.

The following are some possibilities:

- A. Purchase of Agricultural Easements- (Quoting from the County Farmland Preservation Plan):  
“With the passage of Ohio Senate Bill 223 in 1998. Purchase of agricultural conservation easements (PACE), also known as purchase of development rights (PDR). Is now legal under Ohio law. The Ohio Department of Agriculture-Office of Farmland Preservation is currently drafting rules in anticipation that Ohio will be able to offer matching funds to local entities that have set up a program to retain and protect farmland.”

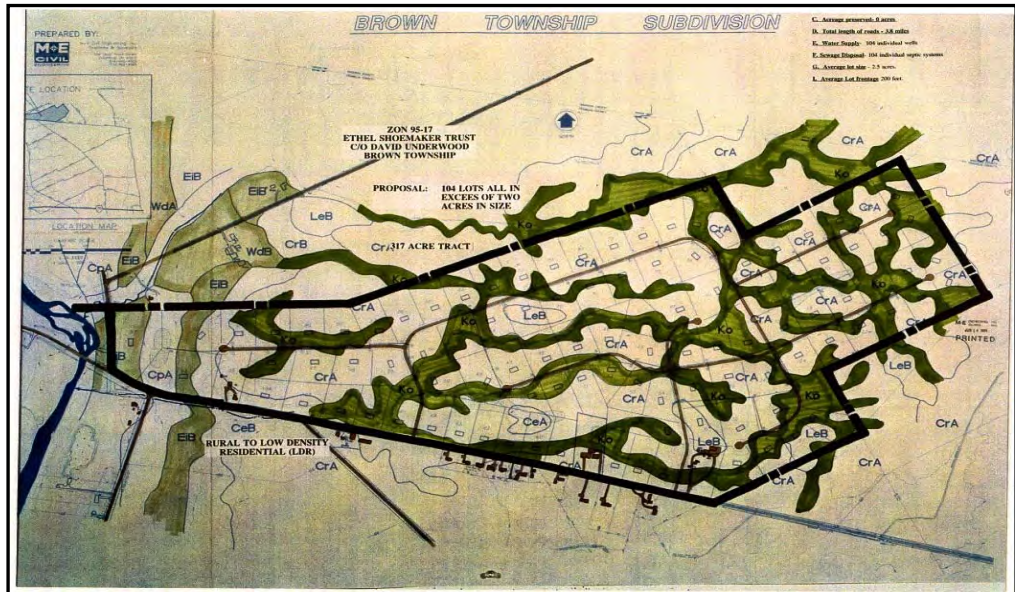
B. The Farm Village

The Farm Village is a conservation subdivision where the “secondary” conservation area is farmland. In the Kingston Township Farm Residential zone 1.95 acre lots are currently required. As an alternative, the Farm Village subdivision could be permitted at the same overall density, but with clustering of smaller lots to preserve large amounts of open space as agriculture.

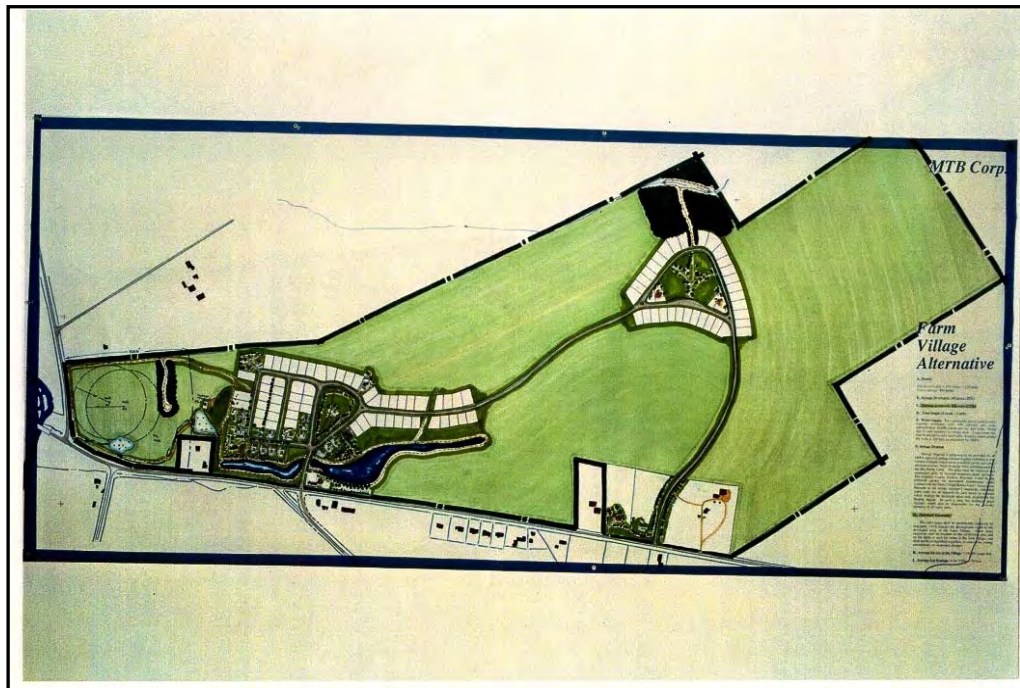
The township could delineate areas farmers wish to see remain agricultural, if any. The township should determine what densities can reasonably be served with roads, sewer, water, fire, schools, etc, and plan for only those densities.

The Township’s PRD zoning category has been drafted to allow designs that might be consistent with the Farm Village concept.





*Conventional subdivision 104 lots, 2.5 acres per lot, total 320 acres. Wet soils shown in green.*



*Farm Village, 120 lots in cluster, 240 acres in permanent easement for open space/farmland, 320 acres total*

### **15.3 Which Development Pattern for Kingston?**

Kingston Township should consider the benefits of some planning principles in its future land use.

1. Identify critical resource areas that should be given primary or secondary conservation area status.
2. In rural areas, permit a mixture of road frontage lot split development and PRD Subdivisions.
3. Permit and encourage Farm Village-style or Conservation Subdivision-style PRD developments to preserve farmland and natural features while allowing farmers to divide residential lots.
4. Subject to the applicable provisions of the Zoning Resolution, permit residential subdivisions that best utilize the available buildable land, protect the environmentally sensitive areas, retain open spaces maintain maximum vegetation and tree cover, and assure the protection of surface water and groundwater.

### **15.4 Development Patterns and Cost of Services**

Many growing communities struggle with the cost of providing new services, especially when their property tax base is primarily residential. Depending on the development pattern chosen, Kingston Township has the potential opportunity to develop some commercial property tax base on SR 521 and SR 61. This commercial tax base could help pay for new services and support the school district.

Every community must determine what land use mix provides an appropriate balance of commercial versus residential property tax base. Single family residential development is often suspected of not paying its fair share of its costs. In order to ascertain what land use mix might be optimal, it is necessary to analyze the fiscal impacts of development to determine the costs versus revenues to the community.

Models for estimating the fiscal impact of a new development were developed by Robert Burchell, David Listokin and William Dolphin in *The New Practitioner's Guide to Fiscal Impact Analysis*, (Center for Urban Policy Research, Rutgers University, 1985) and the *Development Assessment Handbook*, Urban Land Institute, 1994).

### **15.5 Impact Fees and Ohio Law**

The Community Vision for Kingston Township will be represented by its Comprehensive Plan. The potential fiscal impacts of this plan may wish to be determined on a project basis for projects of large magnitude.

Some states permit impact fees based upon a fair share allocation of the costs of new development. Ohio planning and zoning legislation does not currently empower townships to charge impact fees that offset costs of service expansion (roads, schools, parks, etc.). It has been generally held, however, that road improvements immediately adjacent to the development can be attributable to the project as part of the subdivision and zoning process. If large impact development proposals do not reasonably mitigate their impacts, they may impose an undue burden on the township. In such cases the rezoning may be premature, or not in conformance with the Comprehensive Plan.



An Ohio Supreme Court case (Home Builders Association of Dayton and the Miami Valley et al v. City of Beavercreek, 89 Ohio St 3d 121; decided June 14, 2000) held that a municipal impact fee imposed on real estate developers is constitutional if:

1. The impact fee bears a reasonable relationship between the city's interest in constructing new roads and the traffic generated by new developments, and
2. There is a reasonable relationship between the fee imposed and the benefits accruing to the developer as a result of the construction of new roads.

Clearly Ohio cities and villages may now adopt impact fees that conform to the Supreme Court's Beavercreek ruling in Ohio. Whether this power will extend to townships is unclear, and should be discussed with township legal counsel before a township attempts to legislate impact fees.

## **Chapter 16**

### **Implementation**

The Comprehensive Plan is intended to be the basis for township zoning. Zoning is the enforceable tool. The Comprehensive Plan is a guide. It should be consulted whenever there is a proposed rezoning.

#### **16.1 Recommended Zoning Amendments**

- 1. Maintain 1.95 acre minimum lot size in FR-1 district.**
- 2. Planned Residential Developments**
  - a. Maintain greater environmental protection for floodplains, wetlands, and steep slopes in PRDs.
  - b. Encourage conservation subdivisions in all planning sub-areas.
- 3. Signs**
  - a. Revise sign code to prohibit pole signs.
  - b. Permit ground signs and fascia signs.
- 4. Floodplains**
  - a. Prohibit filling of 100- year floodplain unless granted a conditional use for cause.
  - b. Create a zoning regulation for floodplain development that supplements the county floodplain regulations.
- 5. Traffic and Access Management**
  - a. Work with County Engineer to develop access policies and standards for county/township roads.
  - b. Coordinate developments along state roads with ODOT regarding access management standards.
  - c. Require access management compliance as condition of development plan approval for Planned Developments.
  - d. Require traffic studies for rezoning in accordance with Delaware County Engineer's standards. Require developers to mitigate their fair share of the traffic impact as part of PRD (within and reasonable proximity to) review and approval. Establish a level of service (LOS) C as the desired level of service.
- 6. New Roads**
  - a. Use the comprehensive plan as the guide where new roads need to be built.
  - b. Coordinate with County Engineer regarding corridor studies for such new roads.
  - c. Seek provision of right-of-way within super blocks of land developed as planned districts.

**7. Recreation**

- a. Use NRPA standards as a guide for recreational areas needed.
- b. Secure the provision and/or construction of useable open space by developers of major new Planned Residential Developments (30 homes or more).

**8. Green ways**

- a. Require green way linkage of new Planned Residential Developments (Conservation Subdivisions).
- b. Add green way criteria to the zoning resolution; count its area as open space.

**9. Buffer**

- a. Amend the zoning resolution to show a landscape detail buffer between incompatible land uses.

**10. Definitions**

- a. Add other definitions as needed to clarify the intention of the zoning resolution.

**16.2 Non zoning related actions**

- 1. Acquire additional lands for future township parks.**