Harlem Township

Delaware County, Ohio

Comprehensive Plan, 2007

Prepared by
Delaware County Regional Planning Commission
Delaware County, Ohio

Adopted January 23, 2008

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Background information in this Comprehensive Plan was compiled and presented between March, 2005 and February, 2006. Most data was current as of the date it was presented, although some tables have been updated throughout the process.

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Executive Summary

According to the U.S. Bureau of Census, Delaware County ranked 34th among all other counties in percent of growth for the period July '04 through July '05. The county ranks 12th nationally for the five-year period of July '00 through July '05. The highest growth areas have been 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, Harlem Township, without sanitary sewer service, grew modestly by 371, from a population of 3,391 in 1990 to 3,762 in 2000, an increase of 10.94%.

Between 2000 and 2005, 156 new homes were built in Harlem Township, an average of about 31 per year. Harlem Township remains a large lot, rural community without the production-builder neighborhoods like those in Concord, Liberty, and Orange Townships.

A. Harlem Township 2006: Land Use Facts and Issues

1. 291 new home building permits were issued from 1995-2005.
2. Population is projected to continue to grow to about 4,302 by 2010 (14% for the decade) and 4,808 by 2020 (12% for 2010-2020).
3. From 1995 to 2005, 57 new lots were platted. In 2006, Keller Pines received Final Approval to plat 31 lots.
4. From January 1998 to December 2005, 56 new lots were created via the no-plat subdivision process.
5. Agricultural acreage is still 59% of the township, and the number one land use by acreage. Loss of farmland is a concern of residents.
6. The local farm-to-market roads were not built to sustain their potential functional roles as collector and arterial streets. All township collector roads may need to be improved, but some narrow roads are considered part of the scenic character.
7. Harlem Township has significant natural beauty in the western part of the township with streams and ravines that need protection.
8. There is a limited variety of housing for different income levels in the township and 95% of all housing is new, or in very good condition.
9. There were 1,183 housing units within Harlem Township in May, 2005, and 79% are single family homes. Manufactured homes make up 20% of the housing stock.
10. The regional economy has been somewhat sluggish, but has shown ongoing strength. The Census 2000 unemployment rate was 2.8%. The current inflation rate is less than 2%. The strong economy, good

public schools and proximity to jobs create strong demand for new housing. Economically, the Harlem Township Comprehensive Plan stands a good chance of being realized.

11. There is adequate potable water supplied in some areas by DelCo Water Company, but summertime lawn watering taxes its ability to maintain treatment and pressure. A year-round alternate-day watering ban was instituted in July 1999.

12. Delaware County does not currently provide sanitary sewer service to the township except for a small area (Keller Pines Subdivision) on Harlem Road which accesses sewer from Genoa Township. By agreement with Columbus, Delaware County can serve land south of Center Village Road and discharge wastewater to the city without annexation.

13. The Big Walnut and Johnstown-Monroe School Districts serve the township.

14. Fire protection is provided by the Harlem Township Fire Department, staffed by on-call paid volunteers.

15. Harlem Township police protection is provided by the Delaware County Sheriff. Harlem Township generated 842 sheriff's complaints out of 19,556 within the entire county in 2004. The township accounted for 4.3% of the complaints.

16. The township is blessed with parks and open space. The township operates its own 7.4-acre park with recreational fields and walking paths west of the Township Hall/Fire Station. Other private ventures, including the Overbrook Nature Preserve, Royal American Golf Course, Treehaven Campground and Rainbow Lake provide additional green space in the township. With growth there will be a need for more active recreation such as baseball and soccer fields, tennis and basketball courts and perhaps a public swimming pool.

Vision Statement

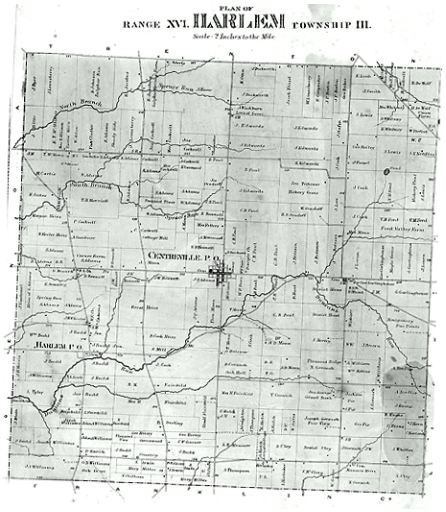
Harlem Township will preserve open space
and acknowledge the importance of natural and cultural
resources by implementing high quality design standards and codes.

Harlem Township will be a low-density community
which provides a well-planned balance of land use,
a variety of housing options, and community services.

B. Recommendations of the Harlem Township Comprehensive Plan-

- Please see Chapter 15 for and the foldout 2007 Comprehensive Plan Map for complete text and map recommendations.

Chapter 1
Introduction



"THIS township was organized in September, 1810, from territory that at that time belonged to Sunbury Township. The name of "Harlem" is the name of an opulent city in the Netherlands, in Europe, of great antiquity, and from its vicinity there was in the latter part of the seventeenth century, a great flow of emigration to America. These immigrants established the first colony on the island of Manhattan . . . in the Empire State. Since the white population took possession of this township, Harlem furnishes but little material for the historian. The major part of the history of all nations, both in the Old and the New Worlds, seems to be made up of recitals of wars and commotions, earthquakes and inundations, floods and fires. These calamities Harlem Township has escaped. Indeed, most happy is that nation, or that country, whose annals are brief. A prosperous and contented people pass peacefully along the sequestered vale of life, but little observed. The first families, who commenced in the wilderness nearly three-quarters of a century ago . . . were noted for their industry, intelligence and morality . . . deeply impressed with the convictions that to be good citizens, they must respect law and order. Their lives were so regular and orderly, they furnish but little to condemn, but much to approve."

-History of Delaware and Ohio, O.L. Baskins Co, 1880 *(www.heritagepursuit.com)*

"Make no small plans; they have no magic to stir men's blood and probably will not be realized. Make big plans; aim high in hope and work, remember that a noble logical diagram once recorded will never die, but long after we are gone will be a living thing, asserting itself with ever growing insistency. Remember that our sons and grandsons are going to do things that would stagger us. Let your watchword be order and your beacon beauty."

- Daniel Hudson Burnham, Father of the American City Planning Movement

1.1 Why Plan?

City and community planning in the United States is a fairly recent effort, with a foundation in the City Beautiful movement at the turn of the 20th Century. At that time, open space was seen as a deliverance from the stuffy, overcrowded and disease-filled tenements of American cities in the late 1800s. The City Beautiful movement used parks and public open spaces as centerpieces of the future city, oases of respite from the typical hustle and bustle. After the First World War, the movement evolved from its landscape architecture revitalization roots to a legal instrument for planning for orderly future growth.

The intent of the city planning movement was to plan for the future. At first this was done by the creation of zones with separate land use regulations attached to each zone. In some communities, there was a plan, which was the basis for the zoning map and resolution. However, in most communities, zoning itself was seen to be the plan. Zoning was tested immediately, and found to be an appropriate legislative power.

Ohio has never taken the additional step to *require* land use planning as a mandatory underpinning of zoning or other land use controls. It is recommended by the American Planning Association, and the American Institute of Certified Planners. It is suggested by the Ohio Revised Code, and it is bolstered by Ohio and United States Supreme Court cases that a comprehensive plan strengthens a community's police power to zone and control its growth.

1.2 How Planning relates to zoning and the community vision

The comprehensive plan is a set of policies, goals and a recommended land use map for the future development of the township. However, as a plan, it has no direct power under Ohio law. The township must adopt zoning, which implements these policies and visions. Zoning is the police power that guides and enforces the township's development. It is the intention of the township to adopt a comprehensive plan that is descriptive of its vision of the future. The township must subsequently amend its zoning to implement these policies and visions. The Harlem Township Comprehensive Plan Steering Committee convened on March 14, 2005 for the purpose of initiating a 2007 Harlem Township Comprehensive Plan.

The Zoning Commission is responsible (Ohio Revised Code 519.05) for the submission of a plan to the Township Trustees to achieve the purposes of land use regulation under zoning powers (ORC 519.02). At-large residents and landowners of the township were encouraged to participate in the planning process.

The 2007 Harlem Township Comprehensive Land Use Plan is intended to:

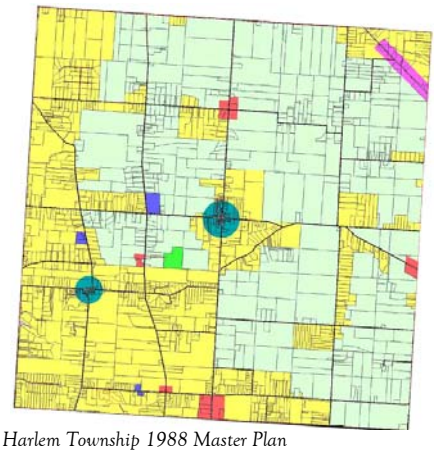
1.) Review the changes in land use, population, utility services, roads, and boundaries that have occurred from 1988 (the year of the current Master Plan) to 2007.
2.) Review the changes in economic, legislative, judicial and regulatory conditions that have occurred from 1988 to 2007.
3.) Review the goals and policies in the township plan of 1988; judge whether they are still representative of the community's values and visions of its future, and if the goals and policies conform to current federal and state land use legislation and court decisions.
4.) Amend the goals and objectives for the growth in the ensuing five to ten years.
5.) Create a revised 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 when it is "built-out", the township will reflect the vision of the comprehensive plan.

The 2007 Comprehensive Plan will be site-specific, with land use and/or density classification attached to each parcel, and viewed from an environmental standpoint with policies to protect critical resource areas.

- **Previous Master Plans -The Effect on the Township**

In 1988 the township contracted with Stratford Associates to prepare a township Master Plan. The plan included a map and related detail of the physical characteristics, utility availability, and goals to guide future development.

In 1991, DCRPC contracted with Frank Elmer and Associates, Wilbur Smith and the SWA Group to prepare a Regional Comprehensive Plan for the entire Delaware County Planning Area. The plan included a map which, in conjunction with development policies for each planning area represents the best guidelines possible at the macro scale of the study. It was suggestive, not prescriptive. The 2007 Harlem Township Comprehensive Plan will be the new vision, goals and objectives of the Township, fully replacing the 1988 and 1991 plans.



Harlem Township 1988 Master Plan

- **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. The DALIS (Delaware Appraisal Land Information System) is a computer mapping system that offers both tabular and graphic real estate data relating to over 72,000 separate parcels.

This mapping system consists of over 60 data layers including all cadastral-related layers (property line, rights-of-way, political boundaries, road centerline, etc.) and topography layers. Topography is available in 2', 5', and 10' contours depending upon which area of the county is viewed. In addition, the Auditor has created numerous layers of natural features, including soil maps, municipal boundaries, roads and digital orthophotos. RPC staff has added layers that detail current zoning data, proposed zoning projects, active subdivisions, lot splits, and others.

DALIS mapping is used as the base map for the 2007 Harlem Township Comprehensive Plan. The software used is Arc/Info and ArcView, by ESRI. Planners may now view each parcel in a site-specific manner. This allows the Comprehensive Land Use Plan to be site-specific.

Chapter 2
Population/Demographics

2.1 Regional Population

To put Central Ohio and Harlem Township's growth rate into general perspective, consider the state and national annual growth rates in Figure 2.1. This figure also indicates population changes in townships and municipalities surrounding Harlem Township to indicate a true comparison of growth rates from 1990 to 2000.

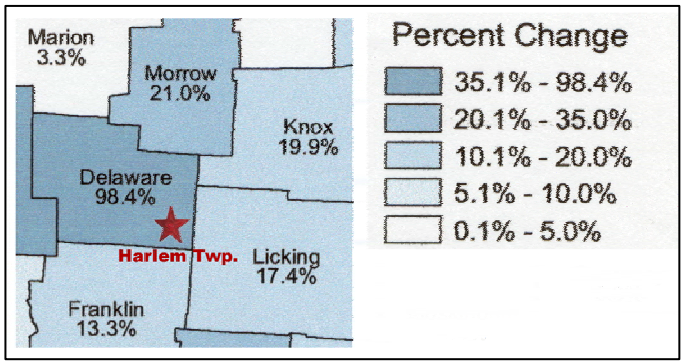
Figure 2.1 Regional/Local Growth Rates

Nation/State/Region/Counties	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 %
Delaware Co.	66,929	109,989	64.34 %
Franklin Co.	961,437	1,068,978	11.19 %
Licking Co.	128,300	145,491	13.40 %
Area Townships			
Berkshire Twp. (Delaware)	1,713	1,946	13.60 %
Blendon Twp. (Franklin)	11,194	9,193	-17.88 %
Genoa Twp. (Delaware)	4,053	11,293	178.63 %
Harlem Twp. (Delaware)	3,391	3,762	10.94 %
Hartford Twp. (Licking)	1,197	1,290	7.77 %
Jersey Twp. (Licking)	2,432	2,841	16.82 %
Monroe Twp. (Licking)	1,914	2,083	8.83 %
Plain Twp. (Franklin)	2,745	2,215	-19.31 %
Trenton Twp. (Delaware)	1,906	2,137	12.12 %
Area Municipalities			
Columbus	632,910	711,470	12.41 %
Delaware	20,030	25,243	26.03 %
Galena (Delaware)	361	305	-15.51 %
Johnstown (Licking)	3,237	3,440	6.27 %
New Albany (Franklin)	1,621	3,711	128.93 %
Newark (Licking)	44,389	46,279	4.26 %
Pataskala (Licking)	3,046	10,249	236.47 %
Powell (Delaware)	2,154	6,247	190.02 %
Sunbury (Delaware)	2,046	2,630	28.54 %
Westerville	30,269	35,318	16.68 %

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

While Ohio experienced a growth rate at one third that of the national average, the Central Ohio regional growth rate was much more comparable to the national trend. Delaware County, as the fastest growing county in Ohio, received the majority of the growth at a rate of 64.34%. Likewise, Licking County saw a growth rate of 13.40%. Within Licking County, population in the City of Pataskala grew by 236.47% from 3,046 in 1990 to 10,249 in 2000, partially as a result of annexations. In examining the varied growth rates surrounding Harlem Township, the generalization can be made that growth pressures are mostly eminent from the south.

Figure 2.2 County Population Changes 1990-2003



The Delaware County growth rate has continued to increase as people push north from Franklin County (Columbus) into the "country" for larger lots with more "rural character". Adjacent Licking County is experiencing a slower rate of growth than Delaware County. Figure 2.2 depicts population growth for area counties between 1990 and 2003. While Franklin County is losing population to out-migration, Delaware and Licking counties are growing by in-migration.

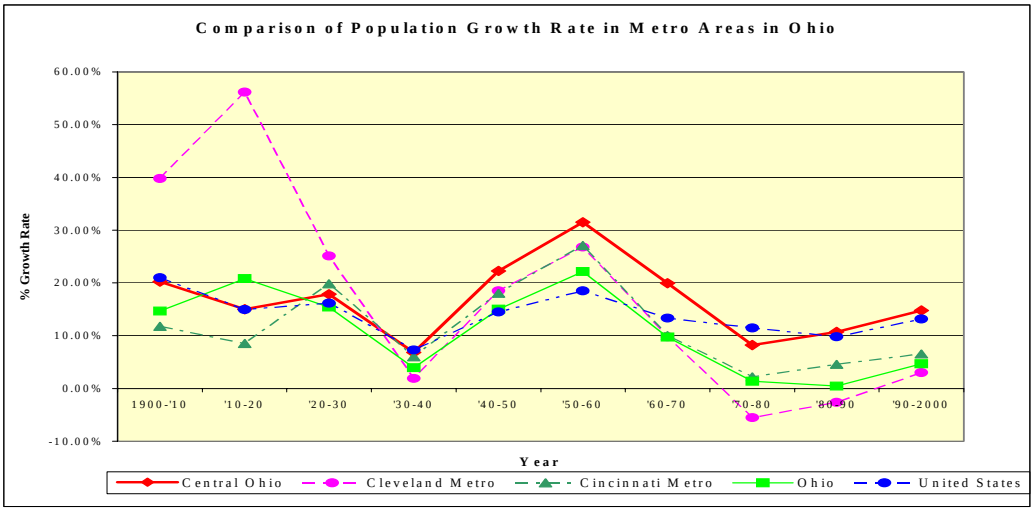
Delaware and Licking counties are growing largely by domestic in-migration with a combined 33,450 new residents moving into these counties from 1990 to 1999. Births minus deaths represented 11,471 additional residents in this same time span. By contrast, Franklin County experienced an outward migration of -21,749 from 1990-99. Delaware County received 62% of the domestic migration in Central Ohio from 1990-99, while Licking County received 20%. To illustrate these statistics, see Figure 2.3 & 2.4.

Figure 2.3 Central Ohio Growth Rates

Area.	1990 /2000 Census	Percentage / Numerical Change in Population	Births/Deaths (1990-1999)	International Migration	Domestic Migration
Delaware Co.	66,929/109,989	+64.34%/+43,060	+9,856/-4,515	+440	+25,347
Franklin Co.	961,437/1,068,978	+11.19%/+107,541	+149,925/-70,377	+11,089	-21,749
Licking Co.	128,300/145,491	+13.40%/+17,191	+17,230/-11,100	+285	+8,103
Central Ohio	1,377,419/1,581,066	+14.78%/+203,647	+206,375/-103,259	+12,295	+41,146
Ohio	10,847,115/11,353,140	+4.67%/+506,025	+1,454,713/-957,171	+52,922	-166,200
United States	248,709,873/281,421,906	+13.15/32,712,033	+36,820,132/-20,934,303	+7,478,078	n/a

(Data Source Census 2000)

Figure 2.4 Central Ohio Growth Rates



(Data Source Census 2000)

Delaware County's growth should be thoroughly reviewed as an indicator of future growth pressures in Harlem Township. 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 15th fastest growing county in the nation. Delaware County's population is 50% male and 50% female, over 93% White, with 80% residing in owner-occupied homes. Figure 2.5 indicates the significant rate of growth within Delaware County compared to other counties.

Figure 2.5 Area Counties in Context with Nation's Fastest-Growing Counties: April 1, 2000 to July 1, 2003

County Name	State	Percent Increase	Numerical Increase	July 2003 Est. Population	National Rank (by Percentage Growth)	National Rank (by Numerical Growth)
Delaware	Ohio	20.7	22,808	132,797	16	92
Franklin	Ohio	1.9	20,075	1,088,944	NR	NR
Licking	Ohio	3.4	5,015	150,634	NR	NR
Warren	Ohio	14.7	23,257	181,743	52	88
Five Fastest Growing Counties in U.S., by percentage growth						
Loudoun	Virginia	30.7	52,147	221,746	1	30
Chattahoochee	Georgia	29.9	4,451	19,333	2	NR
Douglas	Colorado	27.1	47,705	223,471	3	37
Rockwall	Texas	26.8	11,550	54,630	4	NR
Forsyth	Georgia	25.8	25,404	123,811	5	80
Five Fastest Growing Counties in U.S., by numerical growth						
Los Angeles	California	3.7	352,176	9,871,506	NR	1
Maricopa	Arizona	10.3	317,111	3,389,260	NR	2
Riverside	California	15.4	237,263	1,782,650	44	3
Clark	Nevada	14.6	200,803	1,576,541	53	4
Harris	Texas	5.7	195,508	3,596,086	NR	5

NR= not ranked in the top 100. (Source, US Bureau of Census, April 8, 2004 Press Release CBO4-57; Washington DC, (301) 457-2422)

Detailed census information released in 2002 uses sampling to create details on population at the township level. The following census page depicts Harlem's demographic information such as ethnic background, household type and ownership.

2.2 Harlem Township Population/Demographics

For the past 40 years, Harlem Township has had varied rates of growth. After a large 95.2% population increase in the 1970s, growth rates since have returned to much more moderate patterns, as illustrated in Figure 2.6.

Figure 2.6 Census Population Figures, Harlem Township 1960-2000

	Census Population	Population change from last Census	Percent change from last Census
1960	1,141	_____	_____
1970	1,527	+386	+33.8%
1980	2,981	+1,454	+95.2%
1990	3,391	+410	+13.8%
2000	3,762	+371	+10.9%

(Source Census 2000)

Figure 2.7 shows a breakdown of the demographic data of Harlem Township residents.

Figure 2.7 2000 General Demographic Profile of Harlem Township, Delaware County Ohio

Subject	Number	Percent
Total population	**3,762**	**100.0**
SEX AND AGE		
Male	1,851	49.2
Female	1,911	50.8
Under 5 years	230	6.1
5 to 9 years	297	7.9
10 to 14 years	318	8.5
15 to 19 years	296	7.9
20 to 24 years	145	3.9
25 to 34 years	353	9.4
35 to 44 years	735	19.5
45 to 54 years	638	17.0
55 to 59 years	210	5.6
60 to 64 years	175	4.7
65 to 74 years	229	6.1
75 to 84 years	115	3.1
85 years and over	21	0.6
Median age (years)	38.5	(X)
18 years and over	2,716	72.2
Male	1,325	35.2
Female	1,391	37.0
21 years and over	2,589	68.8
62 years and over	462	12.3
65 years and over	365	9.7
Male	170	4.5
Female	195	5.2
RACE		
One race	3,725	99.0
White	3,680	97.8
Black or African American	20	0.5
American Indian and Alaska Native	9	0.2
Asian	10	0.3
Asian Indian	-	-
Chinese	1	-
Filipino	2	0.1
Japanese	1	-
Korean	1	-
Vietnamese	-	-
Other Asian [1]	5	0.1
Native Hawaiian and Other Pacific Islander	-	-
Native Hawaiian	-	-
Guamanian or Chamorro	-	-
Samoan	-	-
Other Pacific Islander [2]	-	-
Some other race	6	0.2
Two or more races	37	1.0
Race alone or in combination with one or more other races: [3]		
White	3,715	98.8
Black or African American	32	0.9
American Indian and Alaska Native	26	0.7
Asian	18	0.5
Native Hawaiian and Other Pacific Islander	-	-
Some other race	11	0.3

Subject	Number	Percent
HISPANIC OR LATINO AND RACE		
Total population	**3,762**	**100.0**
Hispanic or Latino (of any race)	27	0.7
Mexican	13	0.3
Puerto Rican	4	0.1
Cuban	-	-
Other Hispanic or Latino	10	0.3
Not Hispanic or Latino	3,735	99.3
White alone	3,663	97.4
RELATIONSHIP		
Total population	**3,762**	**100.0**
In households	3,762	100.0
Householder	1,339	35.6
Spouse	941	25.0
Child	1,208	32.1
Own child under 18 years	960	25.5
Other relatives	148	3.9
Under 18 years	66	1.8
Nonrelatives	126	3.3
Unmarried partner	47	1.2
In group quarters	-	-
Institutionalized population	-	-
Noninstitutionalized population	-	-
HOUSEHOLD BY TYPE		
Total households	**1,339**	**100.0**
Family households (families)	1,108	82.7
With own children under 18 years	520	38.8
Married-couple family	941	70.3
With own children under 18 years	428	32.0
Female householder, no husband present	113	8.4
With own children under 18 years	59	4.4
Nonfamily households	231	17.3
Householder living alone	182	13.6
Householder 65 years and over	66	4.9
Households with individuals under 18 years	564	42.1
Households with individuals 65 years and over	262	19.6
Average household size	2.81	(X)
Average family size	3.07	(X)
HOUSING OCCUPANCY		
Total housing units	**1,382**	**100.0**
Occupied housing units	1,339	96.9
Vacant housing units	43	3.1
For seasonal, recreational, or occasional use	5	0.4
Homeowner vacancy rate (percent)	1.2	(X)
Rental vacancy rate (percent)	7.5	(X)
HOUSING TENURE		
Occupied housing units	**1,339**	**100.0**
Owner-occupied housing units	1,265	94.5
Renter-occupied housing units	74	5.5
Average household size of owner-occupied units	2.82	(X)
Average household size of renter-occupied units	2.58	(X)

- Represents zero or rounds to zero. (X) Not applicable.
[1] Other Asian alone, or two or more Asian categories.
[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.
[3] 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.

2.3 Population Projections using Building Permits

Building permit figures tell more than the Census does regarding growth in Harlem Township. The township had a high of 47 new building permits issued in 2004. Since 1990, the township has averaged 27 building permits each year with above average permits issued the past two years. Figure 2.8 lists the number of permits issued for all Delaware County townships and municipalities from 1990 to 2004. Note that Harlem Township had the sixth highest number of building permits of all townships in Delaware County during 2004, behind Orange, Genoa, Concord, Liberty and Berlin townships.

Traditionally, homes in the township have been built one-at-a-time on individual acreage lots with on-lot sewage treatment systems. Such conditions do not lend themselves to large production builders and accounts for the modest growth compared to neighboring Genoa Township which has availability of centralized sewer.

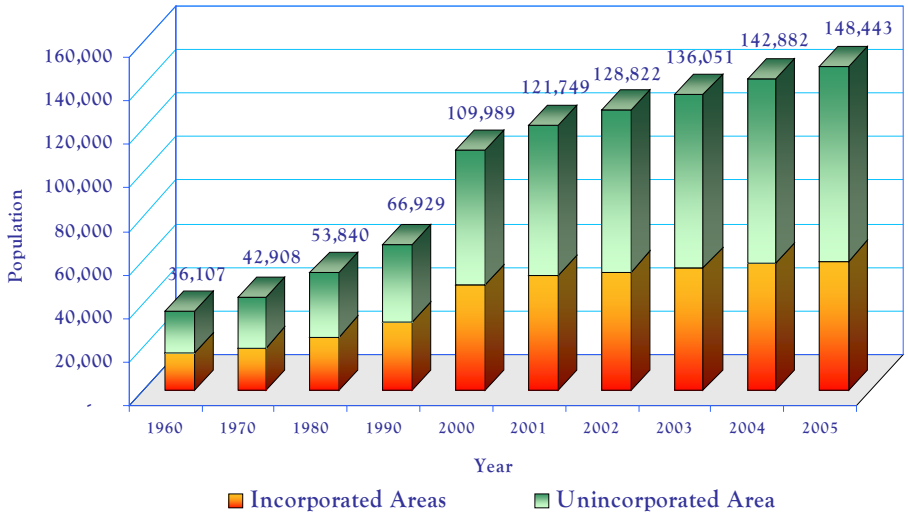
Figure 2.8 Building Permits issued per Delaware County Township/Municipality (1990 to 2005)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Townships											
Berkshire	21	22	16	17	34	16	16	13	15	32	28
Berlin	65	66	54	98	117	128	182	156	123	104	84
Brown	11	17	9	10	8	17	10	14	11	9	4
Concord	35	30	43	96	103	235	355	294	410	249	167
Delaware	3	4	12	25	11	31	49	46	50	21	19
Genoa	243	363	342	622	507	651	667	716	643	503	305
Harlem	25	30	30	23	27	16	18	26	29	47	20
Kingston	19	18	19	24	37	30	37	34	35	17	14
Liberty	164	202	231	262	322	276	198	238	175	201	168
Marlboro	1	1	0	1	1	1	10	4	4	0	2
Orange	188	268	352	378	637	410	532	558	601	750	420
Oxford	3	6	6	4	9	10	11	11	8	9	4
Porter	12	13	16	17	11	12	9	11	18	14	8
Radnor	13	11	9	13	11	12	5	15	16	15	16
Scioto	33	26	20	27	37	21	9	18	20	20	25
Thompson	0	3	4	4	4	2	11	8	6	3	4
Trenton	11	25	17	13	12	10	11	12	11	14	14
Troy	9	15	13	12	6	7	14	24	10	15	9
Sub Total	**856**	**1,120**	**1,193**	**1,646**	**1,894**	**1,885**	**2,144**	**2,198**	**2,185**	**2,023**	**1,311**
Incorporated Areas											
Delaware	305	465	248	355	790	318	368	313	510	381	
Galena	0	2	0	2	2	1	0	1	1	24	
Sunbury	17	40	30	33	19	47	75	72	54	4	
Shawnee Hills	7	1	2	1	0	4	5	17	15	29	
Powell	103	130	163	217	141	103	105	127	370	429	
Ashley	3	0	2	0	0	1	0	3	3	1	
Ostrander	9	7	1	0	1	0	0	1	1	1	
Dublin	-	-	-	-	4	9	1	3	4	3	
Westerville	-	-	-	-	-	140	122	58	17	27	
Columbus	83	121	546	184	774	146	97	236	251	197	
Sub Total	**527**	**766**	**992**	**792**	**1731**	**769**	**773**	**831**	**1,226**	**1,096**	
Total County	**1,383**	**1,886**	**2,185**	**2,438**	**3,625**	**2,654**	**2,917**	**3,029**	**3,411**	**3,119**	

(Source DCRPC, 2005)

Figure 2.9 demonstrates the projected population for Delaware County in 2005, based on the building permit projection method.

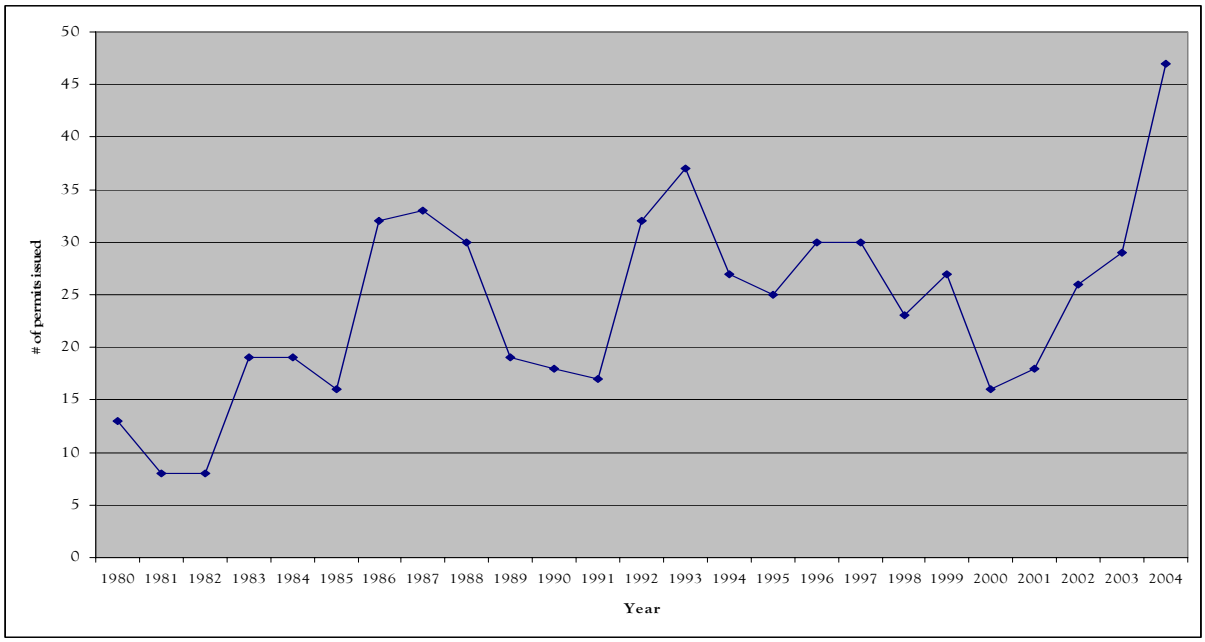
Figure 2.9 Population Projections for Delaware County to 2005 using building permit data



(Source DCRPC, 2005)

Figure 2.10 depicts Harlem Township's building permit history. The number of building permits issued in 2004 was unprecedented and most-likely indicates that growth pressures have reached Harlem Township.

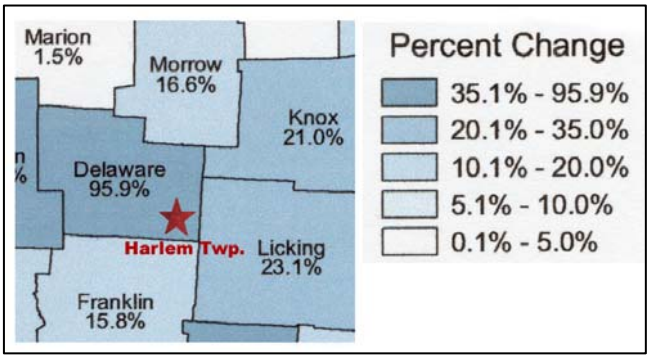
Figure 2.10 Harlem Township Building Permit History (1980 to 2004)



(Source DCRPC, 2005)

Figure 2.11 demonstrates the large increase in population that Delaware County is forecasted to see between 2000 and 2020. The 95.9% increase projected by the Ohio Department of Development indicates that Delaware County will continue to be the fastest growing county in Ohio through 2020.

Figure 2.11 County Population Projections to 2020



(Source ODOD, 2005)

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 used from the last Census (2.82 for Harlem 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 (average eight-month construction time).
6.) New population added to last census data to create projected population.

The *Population by Housing Unit Method Projections* table (Table 2.12) contains population projections for area townships and municipalities of Delaware County through the year 2020. This table indicates that 4,808 people will reside in Harlem Township by 2020. This represents a 27.8% increase (1,046 people) in township residency from 2000 to 2020. This figure is likely to increase if areas of the township are annexed.

Figure 2.12 Population by Housing Unit Method Projections for Area Townships/Municipalities

	Census Data				Projections				Growth Rates		
	1990	2000	Pop. Index	Vacancy Rate	2005	2010	2015	2020	Annually 1990 to 2000	2000 to 2010	2010 to 2020
Berkshire Twp.	1,713	1,946	2.81	4.5%	2,167	2,311	2,454	2,600	1.56%	17.06%	12.53%
Galena Village	361	305	2.61	7.6%	376	385	395	405	-0.14%	26.18%	5.07%
Genoa Twp.	4,053	11,293	2.93	5.0%	20,561	25,295	28,454	28,454	13.69%	107.6%	12.49%
Harlem Twp.	3,391	3,762	2.82	3.1%	4,051	4,302	4,551	4,808	0.80%	13.98%	11.77%
Sunbury Village	2,046	2,630	2.55	3.9%	3,230	3,720	4,207	4,707	5.19%	38.17%	26.53%
Trenton Twp.	1,906	2,137	2.92	3.0%	2,250	2,323	2,396	2,471	0.88%	8.42%	6.35%
Westerville City	1,177	5,900	2.82	3.7%	7,462	7,846	8,228	8,621	4.12%	16.27%	9.87%
Delaware County	**66,929**	**109,989**	**2.70**	**6.4%**	**146,713**	**166,993**	**187,159**	**207,903**	**5.09%**	**44.98%**	**24.50%**

2.4 Harlem Township Growth Summary

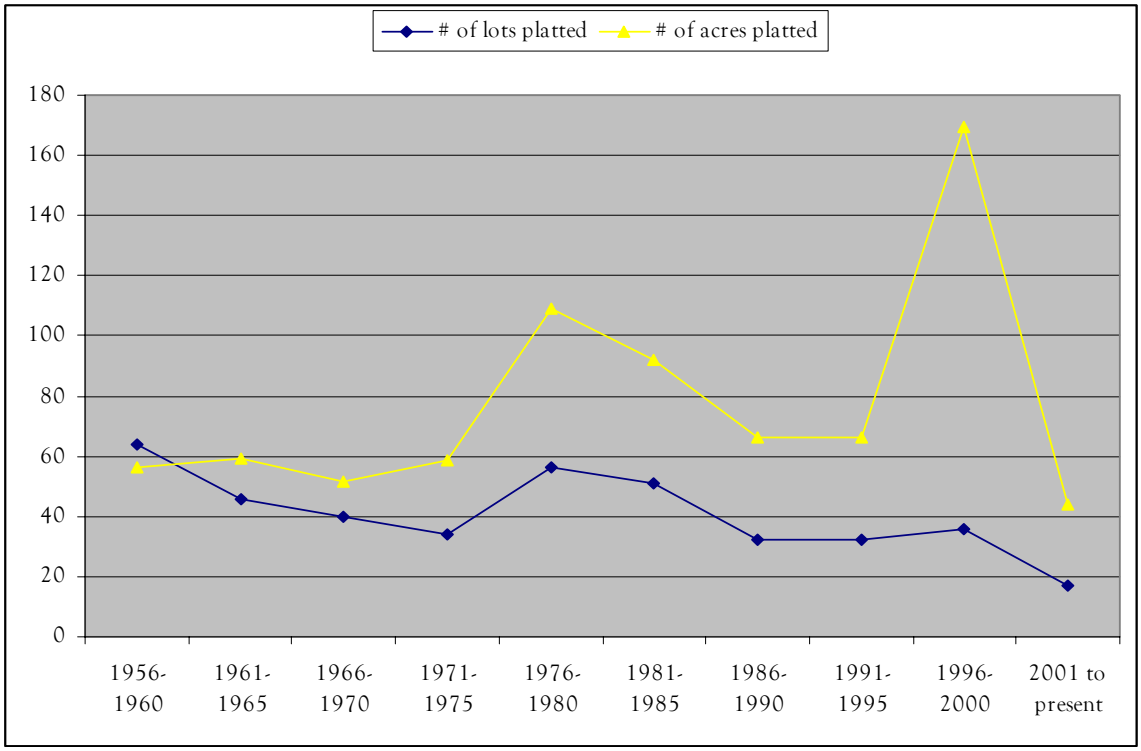
According to the U.S. Bureau of Census, Delaware County is the fastest growing county in Ohio by percentage of growth (64.3 % increase from 1990-2000) and the 16th fastest growing county in the USA from 2000-2003. The highest growth areas were in Orange Township (229%), Genoa Township (178.7%) and Liberty Township (142.3%). Those three townships have county sewer service, which permits higher densities. Centralized sanitary sewer can lead to responsible growth and yield development options that are less land consumptive. The future development pressures in Harlem Township are largely dependent on the availability of sewer service and/or whether annexations consume land within the township.

Chapter 3
Development and Change

3.1 Harlem Township Development Activity

Platting activity for new subdivisions is one of the best indicators of future growth, since this precedes building permits. After Center Village was platted in 1848, Harlem Township has seen limited subdivision platting activity. In the late 1950s platting activity in the township was reborn with small subdivisions averaging 5 lots on 10 acres at a density of 1 dwelling unit per 2 acres. Based on its platting history, Harlem has seen limited development pressures. Figure 3.1 illustrates amount of subdivision activity in Harlem Township over the past 50 years, by number of lots and acreage platted during five year periods.

Figure 3.1 Platting History, by acreage, in Harlem Township



The Delaware County Regional Planning Commission (DCRPC) approves platting for the county (exclusive of incorporated villages and cities). The county development trends over the past fifteen years demonstrate that growth in the rest of the "southern tier" is different than growth in Harlem. Harlem Township does not currently have centralized sewer, resulting in developments with low densities. Figure 3.2 lists each single-family development that has been platted in Harlem Township. The development trend indicates a decrease in density over time.

Figure 3.2 Recorded Subdivisions, by date recorded, in Harlem Township

Subdivision Name	LOTS	BUILT	DATE RECORDED	ACRES	DENSITY
Center Village Town Plat	10	4	3/03/1848	1.860	5.38
Harlem Town Plat	22	5	8/07/1849	8.505	2.59
Center Village Addition	37	0	1/19/1853	4.530	8.17
Feazel Addition, Nos. 1 & 2	29	22	2/1/54, 4/9/57	14.720	1.97
Del-Edge Subdivision, Nos. 1 & 2	25	18	2/8/54, 8/2/56	58.712	0.43
Duncan Glen Addition, Nos. 1 & 2	21	20	10/8/56, 6/21/71	15.660	1.34
Bungalow Orchard Subdivision	6	4	6/3/1957	4.934	1.22
Richardson Acres	9	8	6/19/1958	14.336	0.63
Lakeview Acerage Subdivision	5	2	8/31/1960	4.834	1.03
Green Acres	19	16	7/13/1964	45.663	0.42
Plesia Subdivision	2	2	4/26/1965	3.591	0.56
Tibbs Subdivision	25	9	10/4/1965	10.152	2.46
Good Acres	6	3	2/6/1968	5.520	1.09
Del-Woods, Nos. 1 & 2	19	16	11/12/68, 2/10/70	24.240	0.78
Baughman Subdivision, No. 1	2	1	7/8/1969	5.837	0.34
Dun-Ridge, No. 1	4	4	8/11/1969	8.000	0.50
Shepherd Subdivision	3	2	6/12/1970	2.751	1.09
Duncan Plains Subdivision	3	2	2/1/1971	6.580	0.46
Modacres	4	4	4/1/1971	4.940	0.81
Joseph Subdivision	4	3	11/22/1971	9.190	0.44
Barrows Parcels	2	2	12/13/1971	3.080	0.65
Gatchell Subdivision	3	3	10/24/1972	6.430	0.47
Dawsons Parcels Subdivision	4	4	11/28/1972	7.060	0.57
Bruce Subdivision	5	5	1/10/1973	4.780	1.05
Scarborough Addition	2	1	3/19/1973	6.030	0.33
McCaughey Subdivision	3	2	6/6/1973	5.070	0.59
Kimberly Colony	4	4	2/23/1976	5.000	0.80
Buxton Subdivision	4	3	6/2/1976	9.500	0.42
Songbird Acres	2	2	6/21/1976	4.290	0.47
Tall Timbers Subdivision, No. 1	4	3	8/23/1976	5.660	0.71
Jeffer's Subdivision	2	2	5/16/1977	4.773	0.42
Young Trees Subdivision	4	2	7/12/1977	8.600	0.47
Holobaugh Subdivision	4	5	7/12/1977	6.500	0.62
Batey Subdivision	2	2	6/28/1978	3.780	0.53
Nichol's Subdivision	2	2	7/24/1978	4.110	0.49
Farm Estates, Nos. 1 to 10	46	45	8/28/78 to 4/30/93	92.990	0.49
Dottie G. Subdivision	4	4	10/10/1978	9.210	0.43
Kauderer Subdivision	3	2	3/9/1981	4.970	0.60
Forest Farm Estates	2	2	2/16/1982	5.710	0.35
Vanishing Pines, Nos. 1 & 2	7	6	6/1/82, 9/1/83	10.080	0.69
Cook Blamer Meadows, Nos. 1 & 2	8	7	8/23/84, 3/12/85	11.440	0.70
Jodi Dawn	2	2	12/22/1987	5.770	0.35
Lucas Subdivision	2	2	3/11/1988	5.770	0.35
Fitak Acres	2	2	4/22/1988	5.770	0.35
Lloyd T. West, Jr. Subdivision	2	2	6/28/1988	4.970	0.40
Wild Cherry Acres	2	2	8/5/1988	5.420	0.37
Duncan Estates	10	10	1/24/1989	11.920	0.84
Odette Subdivision	4	3	5/7/1990	9.730	0.41
Neitzel Subdivision, Nos. 1 & 2	7	7	11/5/90, 3/4/91	15.400	0.45
Thomas E. Akers Subdivision	2	2	8/13/1991	5.460	0.37
Fancher Road Subdivision	4	3	11/18/1991	8.080	0.50
Harlem Acres	2	2	1/19/1994	3.530	0.57
Candel Subdivision	2	2	9/7/1994	3.070	0.65
Thousand Pines at Red Bank	7	5	12/14/1994	13.930	0.50
Willin Acres Subdivision	2	0	12/12/1995	6.000	0.33
Watts Subdivision (CAD)	9	6	1/23/1996	22.000	0.41
Bakers Acres	1	0	4/17/1996	4.040	0.25
Turandot Subdivision	8	8	8/21/1996	15.000	0.53
Red Bank Woods Subdivision (CAD)	5	1	7/28/1997	72.030	0.07
Lilac Hill Farm (CAD)	2	1	9/19/1997	5.000	0.40
The Pearl Fishers Subdivision	4	4	12/2/1997	8.410	0.48
Schybal Subdivision (CAD)	4	1	8/3/1999	26.690	0.15
Roswell Ellis Subdivision (CAD)	3	3	10/12/1999	16.100	0.19
Treemonisha Subdivision	15	12	7/30/2002	32.175	0.47
Netzorg Subdivision (CAD)	2	2	8/6/2003	11.830	0.17
Keller Pines Subdivision	31	0	Final approved 4/06	22.400	1.38
Forest Trail Subdivision (CAD)	2	0	2/22/2005	5.005	0.40

(Source DALIS October 2006)

A noticeable trend in Harlem Township's platting history is the significant percentage of Common Access Drive (CAD) subdivisions in recent history. The Delaware County Subdivision Regulations allow for CADs to be developed under certain site-specific conditions and when public/private roads are not feasible, in the Commission's determination. CADs can preserve rural character by eliminating the need for multiple driveways.

The no-plat process is another indicator of development history. The Ohio Revised Code (ORC) permits a division of a parcel of land along a public street not involving the opening, widening or extension of any street or road, and involving no more than five lots after the original tract has been completely subdivided. These subdivisions are known as "lot splits." An application for a lot split is approved by the RPC without a plat. The "No-Plat" subdivision procedure is required for lots 5 acres or less. These splits are exempt from platting according to ORC 711.131.

Figure 3.3 indicates no-plat activity in the entire county in 2005 while Figure 3.4 indicated the relatively modest amount of no-plat activity in Harlem Township since 1998.

Figure 3.3 Delaware County No-Plat Lot Split Statistics, 2005

Township	Total Lots	Total Acreage	Vacant Lots
Berkshire	5	13.938	4
Berlin	12	23.506	10
Brown	6	17.411	4
Concord	4	10.01	2
Delaware	5	7.935	4
Genoa	5	15.323	2
Harlem	11	28.268	8
Kingston	2	6.357	2
Liberty	4	6.806	4
Marlboro	0	0	0
Orange	15	53.229	13
Oxford	0	0	0
Porter	1	2.02	0
Radnor	2	4.998	1
Scioto	3	10.844	3
Thompson	3	7.771	2
Trenton	2	6.003	2
Troy	4	11.929	4
TOTAL	**84**	**226.348**	**65**

Figure 3.4 Harlem Township Lot Split Statistics, 1998-2005

YEAR	Total Lots	Total Acreage	Vacant Lots	Vacant Acreage
1998	8	12.979	7	9.879
1999	10	20.973	4	8.824
2000	1	1.513	0	0
2001	11	17.414	8	11.755
2002	5	13.51	3	7.486
2003	5	18.105	4	13.393
2004	5	13.558	3	7.869
2005	11	28.268	8	__

Subdivision platting and no-plat activity does not account for divisions that result in lots that are greater than five acres. From 1998 to 2005, 37 new vacant building lots were created using the no-plat lot split process and 24 subdivision lots were platted. During the same period, 186 new home permits were issued. The 133 other permits were either for lots created prior to 1998 or on lots that were 5 acres or greater and exempt from review. As of 4/15/2005, changes to the Ohio Revised Code authorize counties to increase the size limit on no-plat reviews to 20 acres in size. DCRPC is currently in the process of amending its Subdivision Regulations to define the process for review. The process will likely mirror the current process for lots less than 5 acres, but with different review periods.

Another indicator of development and change in the township is rezoning activity. Out of a total of 47 rezoning cases in the past 10 years, Harlem Township has had 43 AR-1 to FR-1 requests, 1 FR-1 to AR-1 request, 2 AR-1 to PRD requests and 1 FR-1 to PCD request. Figure 3.5 indicates the individual rezoning cases that were heard by the Harlem Township Zoning Commission.

Figure 3.5 Approved Rezonings, 1995 to 2004, in Harlem Township

Applicant's Name(s)	Acreage	Lots	Twp Date	From	To
W. & L. Richardson (Willin Acres Sub)	5.85	2	6/29/1995	AR-1	FR-1
Jerry D. Paul	2.50	1	7/27/1995	AR-1	FR-1
CADD Partnership (Wurm Sub)	15.20	8	8/24/1995	AR-1	FR-1
Barbara Neitzel	38.66	6	8/24/1995	AR-1	FR-1
Allen & Dwight Piper	1.25	1	2/21/1996	AR-1	FR-1
Carey & William Paul	0.83	1	4/22/1996	FR-1	AR-1
John & Geraldine May	10.51	2	6/27/1996	AR-1	FR-1
Melvin & Mildred Irwin	1.17	1	8/22/1996	AR-1	FR-1
Theodore Wurm	1.48	1	8/22/1996	AR-1	FR-1
Fredie & Judith Basham	1.09	0	9/30/1996	AR-1	FR-1
Steven & Teri Farina	6.00	1	12/19/1996	AR-1	FR-1
Jack & Barbara Lindsey	5.01	1	6/23/1997	AR-1	FR-1
Gail & Lucille Jacobus	1.98	1	6/23/1997	AR-1	FR-1
CADD Partnership	17.44	3	7/31/1997	AR-1	FR-1
Gary & Jaculine Russell	5.00	2	3/27/1998	AR-1	FR-1
J. Parrish & C. Ferguson	1.47	1	12/23/1998	AR-1	FR-1
J. & N. McCann	1.31	1	12/23/1998	AR-1	FR-1
Bill & Janice Lemaster	5.01	3	5/12/1999	AR-1	FR-1
Joseph & Beverly Schybal	5.00	2	6/2/1999	AR-1	FR-1
Vera Bachman	1.99	1	5/12/1999	AR-1	FR-1
Vera Bachman	2.99	1	5/12/1999	AR-1	FR-1
Margaret & William Clark	7.30	1	6/2/1999	AR-1	FR-1
Joseph & Beverly Schybal	1.50	1	6/9/1999	AR-1	FR-1
Joseph & Beverly Schybal	2.00	1	6/9/1999	AR-1	FR-1
Hazel Burnett	2.17	1	6/28/1999	AR-1	FR-1
Thomas & Linda Paul	1.51	1	1/31/2000	AR-1	FR-1
Elwyn Campbell	7.67	2	5/10/2000	AR-1	FR-1
Meredith Martin (Gallery / Studio)	0.20	0	10/11/2000	FR-1	PCD
Kenneth & Barbara Buell	5.41	1	11/15/2000	AR-1	FR-1
Don & Patricia Bishop	1.51	2	11/15/2000	AR-1	FR-1
Edward Hursey	0.64	1	7/25/2001	AR-1	FR-1
Bonnie Sewell	6.85	1	8/29/2001	AR-1	FR-1
LLD Properties & Tim Dickens	5.00	1	8/29/2001	AR-1	FR-1
Anna Lehner	6.40	1	7/10/2002	AR-1	FR-1
Harlem Church of Christ (Church)	3.14	0	9/11/2002	FR-1	PRD
Jeannette & James Howard	5.50	1	10/9/2002	AR-1	FR-1
William Fling	10.01	1	4/30/2003	AR-1	FR-1
Lisa Thompson	15.38	1	4/30/2003	AR-1	FR-1
Fredrick and Luella Sereles	2.13	1	6/3/2003	AR-1	FR-1
CRV-1 Brice Point Ltd.	22.24	31	9/10/2003	AR-1	PRD
William and Robin Doss	6.44	2	1/1/2004	AR-1	FR-1
Mary Keller	5.00	1	2/18/2004	AR-1	FR-1
Beverly Ryder	3.00	1	3/1/2004	AR-1	FR-1
Thomas Marcum	5.00	1	5/14/2004	AR-1	FR-1
Scott Haines	5.01	1	5/14/2004	AR-1	FR-1
Augusta Roth	8.71	3	7/1/2004	AR-1	FR-1
Ralph Haegele Trust	4.31	2	10/5/2004	AR-1	FR-1
Totals	**275.77**	**100**			

(Source DCRPC, Jan. 2005)

Harlem Township has experienced modest growth in the last 10 years. Its growth pales in comparison to other townships in southern Delaware County and municipalities in Delaware, Franklin and Licking Counties due to a lack of sanitary sewer or other large-scale wastewater treatment option.

3.2 Regional Development Activity

To understand future growth pressures for Harlem Township, the recent development pressures of the region must also be considered.

Subdivision lots follow a process that includes an informal sketch plan review, preliminary plan review, final plat review and approval and finally, recording. Developers often pause in the platting process, based on market demand or development and engineering issues. The DCRPC continually tracks the progress of subdivisions. Figure 3.6 demonstrates the status of each lot reviewed by DCRPC.

Figure 3.6 Total Number of Available Lots and Multi-Family Units in Delaware County Townships

All Delaware County Townships Combined, end of	*2003*	*2004*	*2005*
• Single-family zoning approved (not platted)	734	1,474	1,496
• Single-family zoning pending (not platted)	361	1,422	780
• Sketch plan reviewed	262	836	550
• Overall preliminary subdivisions approved	88	41	47
• Expired subdivision lots (can be restored)	763	765	727
• Preliminary approved subdivisions	2,615	2,388	2,443
• Final subdivision approved (not recorded)	471	360	182
• Unbuilt, recorded lots	3,349	2,592	1,925
Total	**9,714***	**11,573***	**11,809***

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

This table indicates that 11,809 lots were in the platting "pipeline" at the end of 2005. This means that these lots are somewhere in the development process and have a strong likelihood of being completed in the next few years. Based on the average number of building permits that have been issued in Delaware County (1,942 annually) these lots in the "pipeline" represent 6.08 years of supply for development.

There are some observed trends that merit concern for the townships in Delaware County. Significant zoning and subdivision activity has led to a buildup of supply in subdivision lots available for development. A three-year supply is considered normal. Despite this significant increase in platting and zoning, subdivision activity has remained strong. DCRPC reviewed 2,500 lots for rezoning and 3,414 lots for subdivision in 2004.

Harlem Township has not experienced the rapid pace of growth seen in Berlin, Genoa, Orange, and Liberty Townships, but increased growth pressures are likely in Harlem's near future. The comprehensive plan needs to address how this growth can best be managed.

Chapter 4
Issues and Opportunities

The Comprehensive Planning process is a forum for the development issues (forces) pushing and pulling at the township. The issues were 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.

4.1 Citizen Participation in the Decision Making Process

A. Need for Citizen Participation

The Comprehensive Plan typically looks 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 Harlem Township Zoning Commission took steps to open the discussion to the community by:

1. Posting legal advertisements for the public meetings to discuss the plan.
2. Requesting a core group of citizens to join a Comprehensive Plan Steering Committee, which would work on the plan update and forward the final draft to the Zoning Commission for consideration. The Steering Committee was organized during the initial presentation. This core group agreed to meet on a monthly basis until the plan was completed.

C. Commencement of the Planning Process

A group of approximately 77 Harlem Township residents and landowners attended the initial meeting of March 15, 2005, at which time DCRPC staff presented an introduction to the planning process. The presentation sought to answer the question, "why do we need a Comprehensive Plan for future land use?" Staff also explained the process needed to achieve the complete draft of the plan.

4.2 Citizens' Likes and Dislikes Regarding Current Development of Harlem Township

DCRPC staff conducted a nominal group process where a master list of "likes" and a master list of "dislikes" were developed. The complete list is included in Figure 4.1.

Figure 4.1

Likes- 2005		Dislikes-2005
Quiet	Soccer Complex at Souders	Lack of a Town Center
Duncan Run	Local Businesses	Threat of Annexation
Prime Agricultural Land	Historic Buildings	Dangerous Intersections
Low Density	Active Farming	Flooding Areas/Drainage
Clean Air	Local Organizations	Large Tracts/Flag Lots
Community Events	Small Town Atmosphere	Lack of Sanitary Sewer
Rural Atmosphere but Accessible	Diverse Demographics	Overcrowding of Schools
Local Elementary School	Golf Course	No Pedestrian Facilities
Healthy Tree Development	Interaction of School System	Spot Zoning
Township Park/Centrally Located	People Care About the Community	Inconsistent Utilities
Fire Service	Dark Skies	Threat of Sprawl
		Loss of Natural Habitat
		Urban Crime
		Trespassing

During the same meeting, those in attendance used stickers to vote for the three items in each list that they felt the most strongly toward. The following list shows the items that received votes from those present.

Figure 4.2

LIKES	VOTES	DISLIKES	VOTES
1. Quiet	20	1. Threat of Annexation	24
2. Rural Atmosphere but Accessible	18	2. Loss of Natural Habitat	22
3. Duncan Run	11	3. Flooding Areas	14
4. Low Density	10	4. Threat of Sprawl	10
5. Active Farming	9	5. Lack of Town Center	8
6. Dark Skies	8	Dangerous Intersections	8
7. Local Businesses	7	Lack of Sanitary Sewer	8
8. Prime Agricultural Land	6	6. Urban Crime	7

4.3 Issues and Opportunities

The people in attendance were provided with a survey, which was completed by 28 attendees. The full responses provided are shown here.

Age range: 26 to 81. Average age: 58. Gender: 12 female and 16 male. Average household size: 2.4 persons. Average length of time living in the township: 20 yrs. Range: 2 yrs. to 71 yrs. Location of workplace: 10 indicated they are retired, 8 work in the township, 7 work in Columbus, and 1 works in Westerville.

Question 1 and 2 – What do you value most about your township? Why do you like living here?

• The fact that it has, so far, maintained its rural identity and there are no major housing developments in the township. • Privacy(2), not crowded(4). • Sense of community, no city crowds, low traffic(2), low crime rate(3), etc. • Countryside(2) • Wildlife(5) • Rural atmosphere(7) • Rural life. • Quiet(7). • Rural nature(2). • The openness. • Open Space(9) • Country atmosphere(3). • Serenity(2). • Farming atmosphere. • Farm land(3).	• Large lots for housing(2). • Low density housing(3).Space to grow. • Peaceful(2). • Clean air. • Dark. • Watching the moon at night. • Clean(2) and private community. • Community. • Friendly people(2). • Good neighbors(3). • Our neighbors and the safety. • Can still speak on a regular basis to neighbors, but want our privacy from them, too. • Nice neighborhood. • I have no close neighbors – thus much privacy.	• Away from people. • Good schools. • Schools are acceptable. • Trees along roadways. • Trees. • My word means something and concern is addressed. • Close to Columbus. • Everything. • Ability for families to do the things they enjoy in their yard. • Born and raised on a farm. • It's home. • Like living in the country. • It is quiet and lots for houses permit space for children to play. • Diversity of housing stock • Minimal changes (so far).

Question 3 – Has there been a time when you were inspired by living in your community?

• The township summer picnics are a great time with lots of neighbors. Also, after the ice storm all our neighbors were very supportive. Working with Helping Hands. • Yes, because it was in the country. • My first drive down Duncan Run Road. • Historic buildings. • Always wanted to live away from the congestion of a city. • HTCA President, working on community involvement, Harlem Tree Commission, Harlem Garden Club. • Community stepped up to block an additional trailer park development even though Zoning Board approved request based on bad advice from County Prosecutor's Office. • Harlem Twp Civic Association rallying to stop the cement plant. • There was a time when it was "real" country – area to move around in – taxes were low.

Question 4 – What's the best use of land in the township?

- Yards or parkland.
- Agriculture, parks, and residential housing on lots larger than 5 acres.
- Conservation housing together vs. sprawl, organic farming.
- 5/10 acre minifarms.
- Agriculture, homes.
- Planning, not hodge-podge.
- Open space(2).
- Continue rural/single residence lifestyle.
- Homes and farmland.
- Large properties(2), rural areas.
- Farming(6).
- Farm land, large residential properties.
- Limited residential development, preserving open space/farms.
- Single family housing.
- Residential/farms/small businesses.
- Develop a town center, create plan for preservation of green space, create architectural [detail criteria?].
- "Mixed" based on "services" available in the area.
- Orderly development of residential areas.

Question 5 – What first drew you (or your ancestors) to your township?

- The quiet, lower population, big properties.
- No zoning.
- Large properties, being away from city atmosphere.
- Out and away from suburban sprawl but also close to urban sprawl to shop, gas, medical needs, entertainment.
- Wanted a small farm.
- Trees, privacy, grass, farms.
- Beautiful spot on Duncan Run.
- Farming.
- Business.
- Large lots in a rural environment.
- No neighbors.
- Rural character(2).
- Seeking less noise/light/poor city planning.
- Land available.
- Built new home on acreage.
- Duncan Run.
- Availability of property/rural setting.
- Peace and quiet/beautiful home site.
- Parents moved us here.
- Wide open area – quiet – lack of traffic congestion, low taxes, country atmosphere, general store and small restaurant in Center Village.

Question 6 – What 3 wishes do you have for the future of your township?

- Keep commercial development out/Keep big developments out/Use land to create park land/wild areas.
- Plan how we use our land to stop developers who want to build "crackerjack" houses right next to each other/Develop a community center.
- Environmental conservation/save wildlife habitat/encourage organic farming.
- Maintain character/not too much development/maintain a realistic tax structure.
- Smart growth.
- Manage growth.
- Smart growth/maintain "rural landscape" along roadways not yet spoiled with multiple "curb cuts"/control our own destiny.
- Organized planning/minimal development.
- To stay country.
- Accommodate people, not cars and trucks.
- Keep Columbus out/keep big developers out/keep rural feel and look of township.
- Subtle improvements/limited growth.
- Keep it from turning into Genoa Twp/keep it from turning into Orange Twp/keep it from turning into Liberty Twp.
- Grows at a slow pace/no high-density housing developments/keep property taxes down.
- Retain working farmland/develop area and village with shops/plan housing areas that are blended into the landscape/low profile, tucked away.
- Planned housing projects/the right to sell

• No trailers/no landfills, junk yards/trashy houses. • Careful planning. • No commercial development/keep a rural area feeling. • Small community development. • No annexation/no high density.	your land as needed for the family. • What seems impossible now – there is what is called progress – people need homes – thus we will lose what we have had. This progress must be orderly but flexible. Do not allow sprawl with no central area. Need public transportation.

Question 7 – What are some issues that you feel need to be addressed by the township?

• We can no longer require five acre plots for home sites. It is destructive to land use – many persons cannot care for such large plots. • Too restrictive zoning. • Commercial sites. • Developers and tract housing. • Size of building sites, unrestricted 4-wheelers, dirt bikes, paintball ranges, noise. • Control urban sprawl. • Over development, wildlife destruction, saving wetlands. • The fact that some people in this township who have been here for a while do realize that people are coming this way and we need to plan for it.	• Keeping the area from becoming over-crowded. • Better master plan. • Zoning consistency, less politics. • Keeping the roads in good repair, keeping property from being "junk yards". • Noise ordinance, firearm discharge regulations. • Utilities, traffic, development. • Keep annexation under control. • Controlling industrial development. • Random development. • Keep big development out, build houses on larger lots, not crowded neighborhoods, keep the environment safe and clean. • Growth.

Question 8 – How can we make the township the best community it can be?

• If it represents the needs of the people/ families here – not trying to expand if it's not necessary. • Future plan with ways to control sprawl. • Keep density under control. • Keep development under control. • Be certain growth is planned. • Planning – we will continue to grow, want residents to take interest in their community not just here to make money. • Keep its friendly (and concerned about each other) atmosphere – with community events.	• Plan the land use to respect the rural and farming history with a vision of the people who are looking to move here. • Not looking for a community/neighborhood setting. Want ruralness idea kept. • Formulate a plan and have a realistic plan for enforcement. • Have master plan for development and adhere to it. • Plan, plan, plan. • Copy the model. • Make more like towns in film. • Planning for future orderly growth.

.

Question 9 – Please list 3-5 strengths of the township (only listed here if not represented in Figure 4.1).

• Good township trustees. • Eating plan/grocery store/Grange hall. • EMS station. • Some late 19th Century/early 20th Century character. • Pleasant views.	• Conservative environment. • A place that could develop into a full-service village. • Park area for future development. • Building inspections always comply to current laws. • Helping Hands organization.

Question 10 – Please list 3-5 weaknesses or threats to the township (only listed here if not represented in Figure 4.1).

• Sirens go off too much. • Not enough wildlife habitat. • Lack of minorities. • Loss of architectural style. • Growth from New Albany and Columbus. • Litter. • Few city slickers disregard the peace and quiet, especially visitors of landowners. • Zoning restricts many small things that people need (storage buildings).	• Conflict of interest with Council/planning. • Poor management of aerobic septic systems. • Poor soil for ground absorption septic. • Overcrowding of schools. • Poor control of cell tower installations. • No tree-lined streets. • Lack of natural gas. • Setback from road is too far. • Need more police (sheriff protection).

The like and dislike rankings, along with the full survey responses, will continually serve as a guide for the planning process. Many of the final recommendations and implementation notes will relate to the initial concerns taken from this public input.

4.4 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 were 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)

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.

Harlem Township has not experienced the rapid pace of growth that is seen in Genoa, Orange, and Liberty Townships. More growth is likely in the near future. The comprehensive plan needs to address how this growth can best be managed.

Chapter 5
Existing Land Use

5.1 Land Use Maps

DCRPC staff has prepared several land use maps and related tables. Each tells a story of how land is being used.

I. **Existing Land Use Map** The existing land use map *(see Harlem Township Existing Land Use map)* 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 5.1.

Table 5.1 Harlem Township Land Use by Acreage, County Auditor's Data

	DALIS parcel data 3/2005*	% Land
Residential (SF +MF)	**total - 4,298.08**	**total - 25%**
Single-Family	4,205.45	24.74
Multi-Family	92.63	.54%
Commercial	**36.37**	**.21%**
Institutions	**160.34**	**.94%**
Industrial	**1.58**	**.01%**
Agriculture	**10,106.47**	**59.46%**
Rivers, pond, streams**	**188.24**	**1.11%**
Roads***	**335.62**	**1.97%**
Parks/open space		
Open Space	217.32	1.28%
Vacant agricultural land	39.27	.23%
Vacant commercial land	42.19	.25%
Vacant residential land	1,571.32	9.24%
Acreage in Township	**16,996.81**	**100%**

Due to rounding, figures may not add exactly to 100%.
* Calculations based on DALIS parcel data dated 3/2005 – uses entire parcel area.
** Rivers/ponds/streams includes seasonal swales given a width of 20 feet.
*** Right-of-way.

II. Windshield survey- DCRPC staff recorded land uses on 2002 aerial photos with current lot lines. Structural uses are noted, making this more accurate than the existing land use acreage map *(see Table 5.2).*

Table 5.2 Existing Land Use by Windshield Survey, DCRPC staff, 2005

Existing Land Use (unit count) in Harlem Township													
May, 2005													
Section	**Single-Family**	**Two-Family**		**Multi-Family**		**MH**	**Housing Conditions***					**Commercial**	**Institutional**
	Units	Structures	Units	Structures	Units		1	2	3	4	5		
Totals	1183	0	0	0	0	303	797	603	70	14	2	20	16

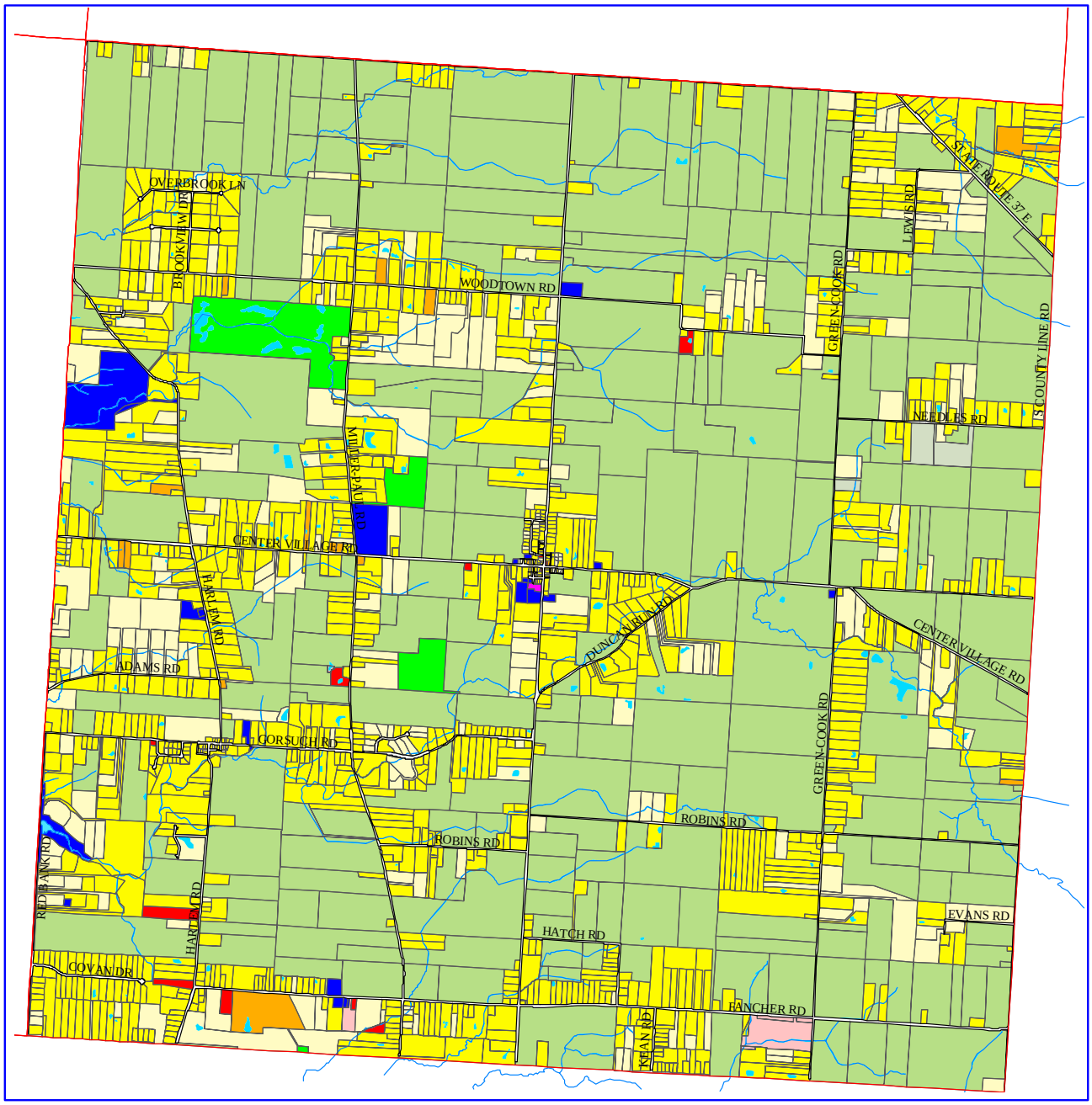
Source- Field Survey completed, checked and compiled by DCRPC.

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

III. Development Pattern Map- Another type of land use survey (map or table) displays the progress of anticipated development. The development pattern map tracks the size and location of zonings and subdivisions. Harlem's Development Pattern Map, May 2005, depicts these various characteristics. The red color depicts recorded subdivisions, discussed in Chapter 3 and detailed in Figure 3.2. The green areas indicate rezonings, also covered in Chapter 3. The yellow color indicates active subdivisions. Forest Trail (5.005 acres) is a two-lot subdivision that has received final approval but is not yet recorded. Keller Pines (22.4 acres) has received a preliminary approval and is under construction. The application for the Jody Parks subdivision (13 acres) was received in May, 2005. Adams Creek (18.8 acres) and Hatch (64.95 acres) have applied for a sketch plan review and have been involved in a site walk within the past two years.

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. *(See the Development Pattern Map)*



Existing Land Use

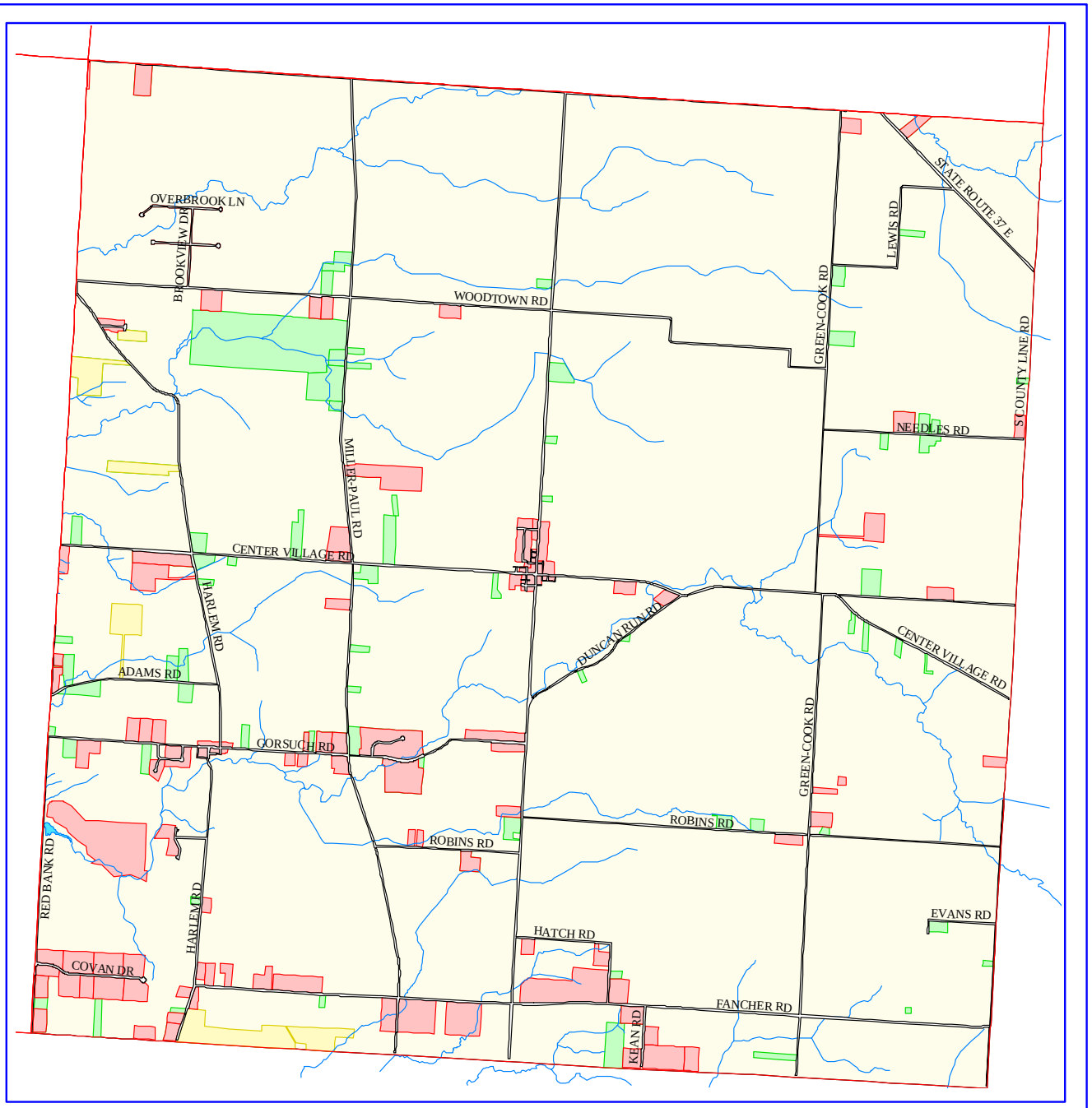
Harlem Township, Delaware County, Ohio

Prepared By Delaware County Regional Planning Commission
GIS Data Provided by the Delaware County Auditor's DALIS Project
(Township Boundaries, Hydrology and Road ROW, Parcels.)

N
W E
S

0 2000 4000 Feet

Existing Land Use 3/2005
- Single Family
- Multi Family
- Commercial
- Industrial
- Institution
- Agricultural
- Residential Vacant Land
- Commercial Vacant Land
- Agricultural Vacant Land
- Ponds/Lakes/Streams
- Open Space
- Road Right of Way



Development Pattern

Harlem Township, Delaware County, Ohio

Prepared By Delaware County Regional Planning Commission
GIS Data Provided by the Delaware County Auditor's DALIS Project
(Township Boundaries, Hydrology and Road ROW, Recorded Subdivision)

N
W E
S

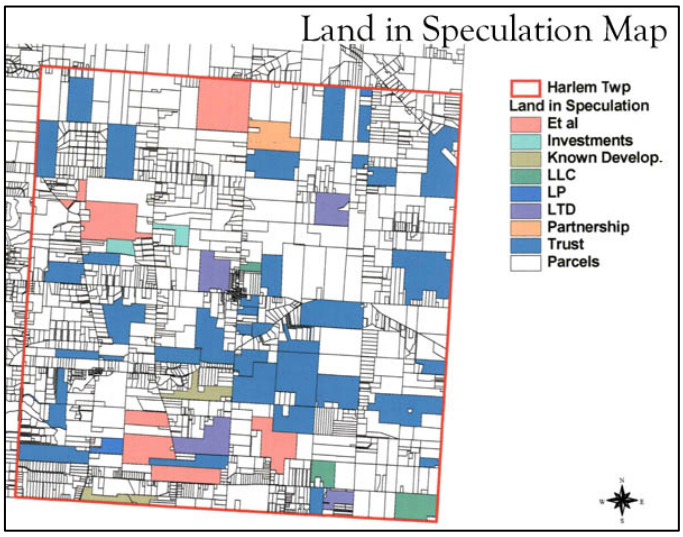
0 2000 4000 6000 Feet

- Township Boundaries
- Road Right-of-Way
- Streams
- Rivers/Ponds/Lakes
- Recorded Subdivision
- Proposed Subdivision
- Rezoning Subdivision

IV. Land in Speculation – A map based upon land ownership and adjacency to known development sites is called the Land in Speculation map. Using the DALIS, staff can query parcels for lands that are owned by:

- Known land developers and subdividers
- Known homebuilding and investment companies
- Limited liability corporations (LLC) and partnerships (LP)
- Trusts and ownership showing "et al"
- Incorporated entities (including Inc., Co. and Ltd.)

Parcels 5 acres in size or smaller have been deleted. 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 *(see the Land in Speculation Map).*



V. Observations on Existing Land Use, and Current Development Patterns in 2005:

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

1.) The township comprises approximately 17,000 acres.

2.) Rivers and streams comprise 188 acres or 1% of the land area.

3.) Recreational areas comprise 217 acres or less than 1.5% of the land area (golf course, campground)

4.) Roads and utility rights of way comprise 336 acres, or 2% of the land area.

5.) Of the acreage remaining after subtraction of lakes/rivers, parks/recreation and roads/utilities, 10,106 acres are open agricultural land, or 59% of the total acreage in the township. This makes Agricultural use the largest land use in the township.

6.) Single-family residential use accounts for over 25% of land use or 4,205 acres.

7.) Residential land use is spread throughout the township, but is concentrated along existing road frontage. The township has four or five small subdivisions, none of which fit the typical "suburban" model.

8.) Portions of the township are a "blank canvas" of open land. Topographical features, such as streams and river valleys, define "neighborhoods", which share certain common attributes.

9.) Multi-family housing is limited to 92 acres, most of which is in the Continental Invest. mobile home park.

10.) Industrial use is limited to the concrete plant in Center Village (1.58 acres).

11.) Commercial areas appear to be at 23 locations throughout the township. A complete inventory will be compiled in *Chapter 8, General Economic Conditions*.

12.) Institutional uses include eight cemeteries, the Township Hall/Fire Station, Township Park, Souder Elementary School site, Overbrook Nature Center, and the EMS station. The number also includes several quasi-institutional uses, including churches, a theater and utility structures. A more complete survey will be provided in *Chapter 11, Community Facilities*.

13.) The Development Pattern Map shows 124 acres with "active" subdivision activity. Of those, 40 acres are being developed and 84 acres have been reviewed in the Sketch Plan phase.

14.) There appear to be 4,800 acres of land on the speculation map. Some of this land could be held in trust or corporate title but without development intentions.

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

Harlem 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.

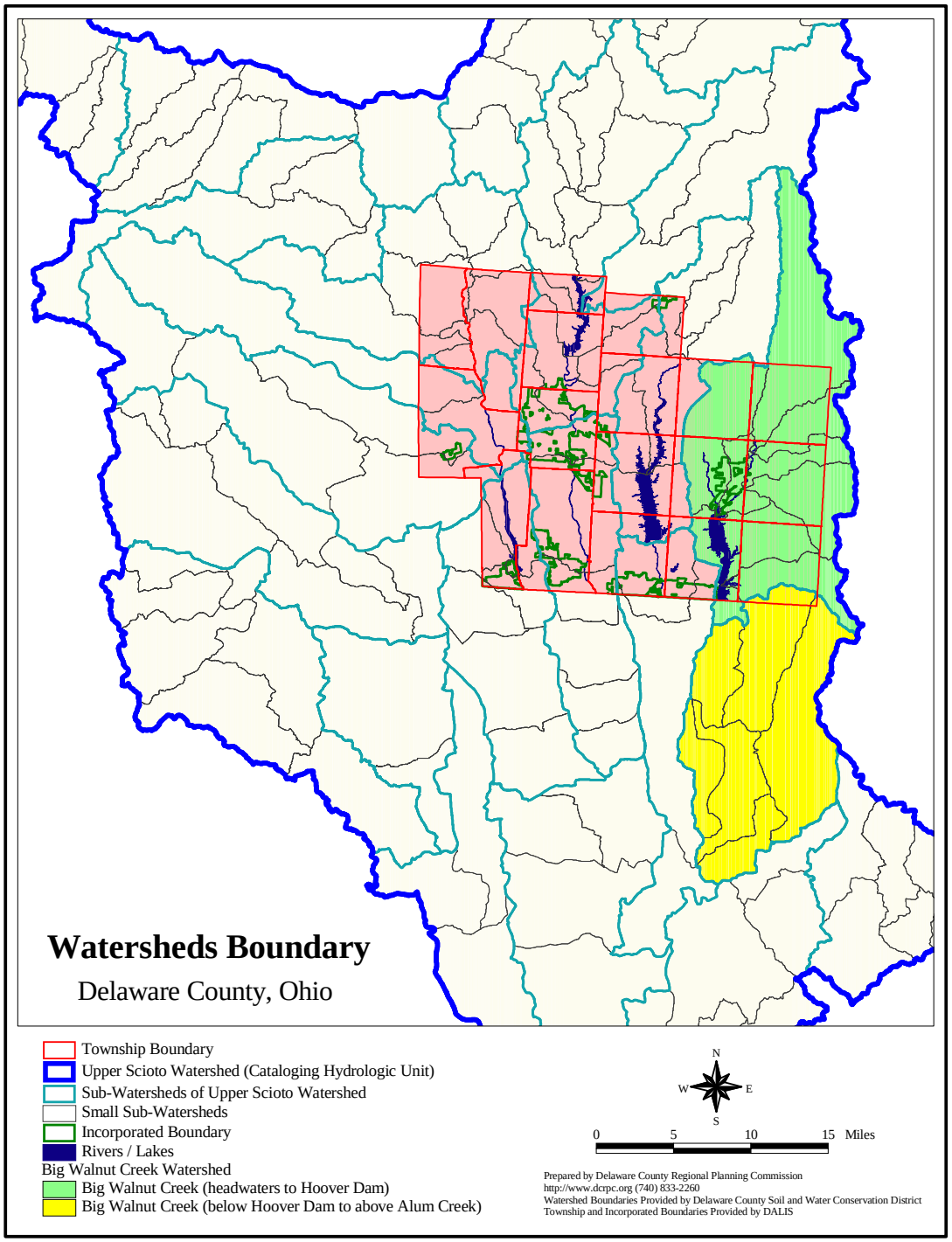
The book *Rural by Design*, by Randall Arendt (Planners Press, American Planning Association) is one guide to other development patterns that may augment the large lot and conventional development patterns the township has already experienced.

Chapter 6

Natural Resources and Conservation

All of Delaware County lies in the Upper Scioto Watershed. Within that watershed are numerous sub-watersheds, including the Big Walnut. The Big Walnut Watershed is further divided into an area above the Hoover Dam (14,520 acres of Harlem Township) and below the dam to Alum Creek (2,481 acres in the township).

Figure 6.1 Delaware County Watersheds

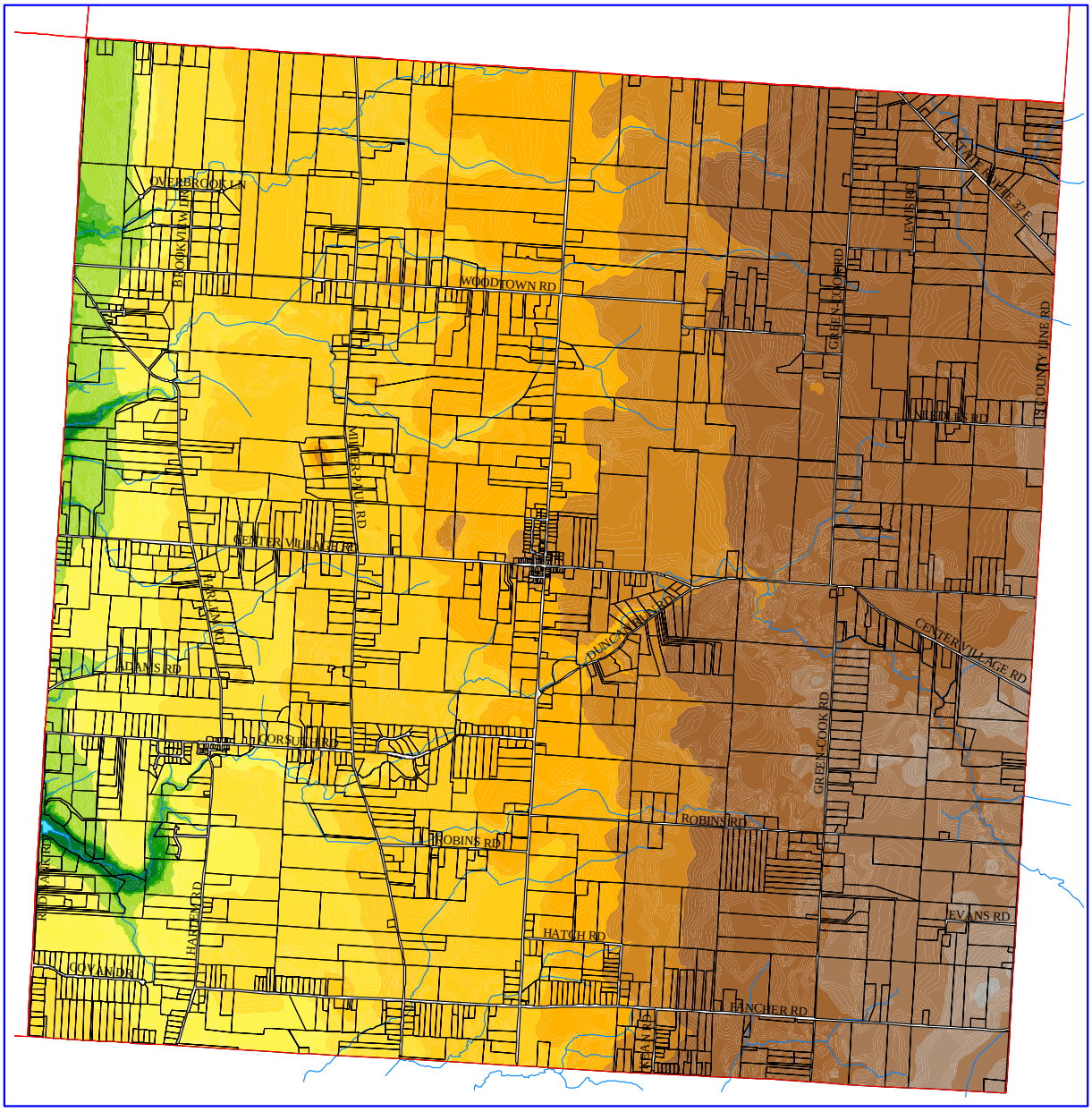


The Big Walnut Creek rises in Morrow County, flows southerly through Kingston Township, continuing through Trenton into Berkshire and into the Hoover Reservoir. Within Harlem Township, two named creeks cross from east to west, both feeding into the reservoir. The two branches of Spruce Run cross the northern area of the township. Duncan Run crosses near the center of the township, also leading to the Hoover Reservoir. The south branch of Rattlesnake Creek also passes briefly through the northeastern corner of the township. Big Walnut Creek continues to travel south, eventually merging with the Scioto River in southern Franklin County, then through Pickaway, Ross, Pike and Scioto Counties to its confluence with the Ohio River at Portsmouth.

Harlem Township also has floodplains, wetlands, farmed fertile soils, forests, and abundant wildlife. These natural resources are most frequently cited as the foundation of "rural character" noted in Chapter Four. These resources should be conserved wherever practical as the township develops.

6.1 Elevation - (DALIS contours)

Harlem Township's topography consists of a plateau, gently sloping from east to west. Highest elevation of 1140 feet above mean sea level is located in an area north of Fancher Road just west of the Licking County line. The low elevation is 894 feet above mean sea level where Duncan Run flows into the Hoover Reservoir and into Genoa Township. *(See Elevation Map)*



Elevation Map

Harlem Township, Delaware County, Ohio

Prepared By Delaware County Regional Planning Commission
GIS Data Provided by the Delaware County Auditor's DALIS Project
(Township Boundaries, Hydrology and Road ROW, Topo.)

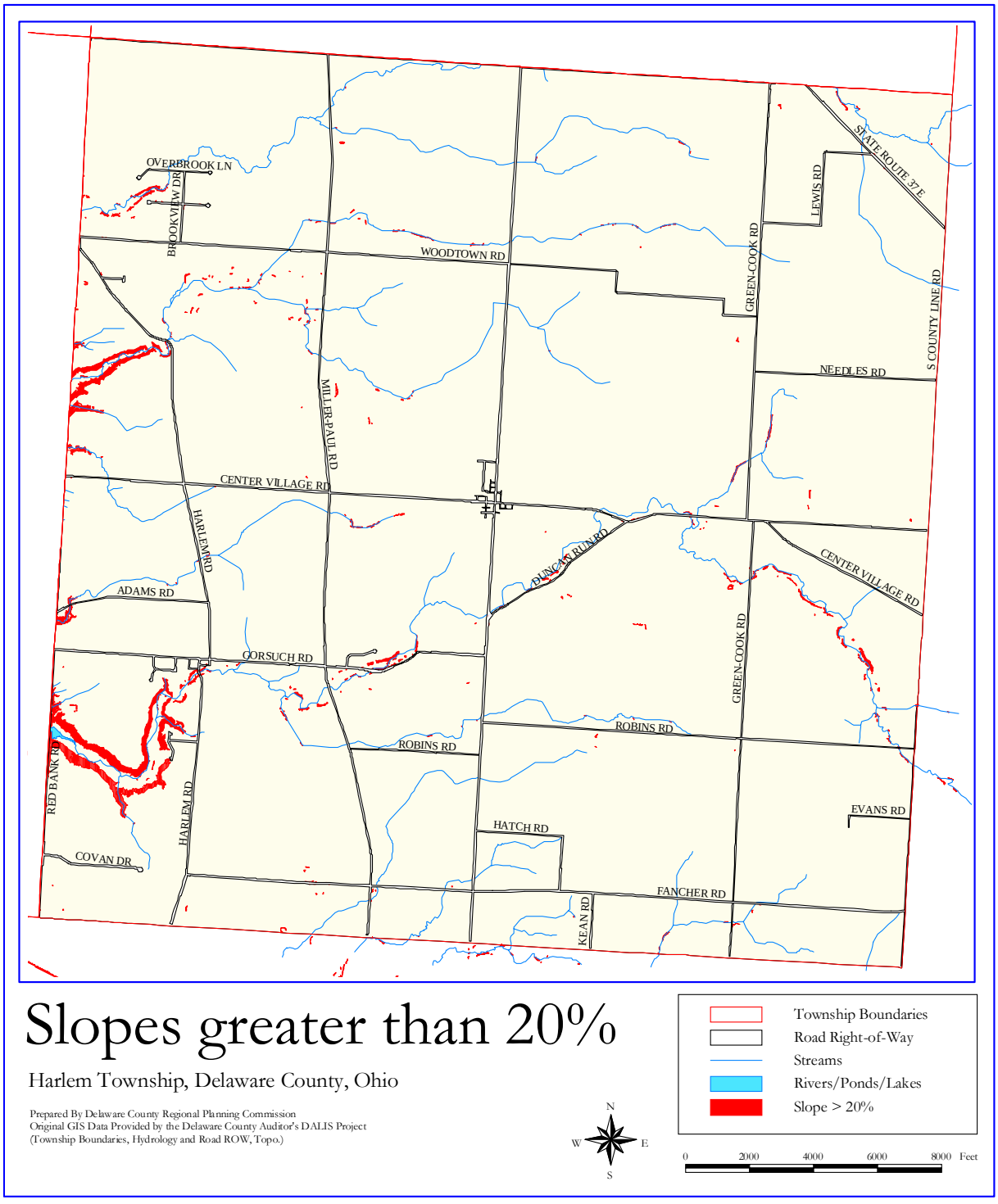
N
W E
S

0 2000 4000 6000 8000 Feet

Digital Elevation	
894 - 910	1016 - 1030
911 - 925	1031 - 1045
926 - 940	1046 - 1060
941 - 955	1061 - 1075
956 - 970	1076 - 1090
971 - 985	1091 - 1105
986 - 1000	1106 - 1120
1001 - 1015	1121 - 1135
	1136 - 1150

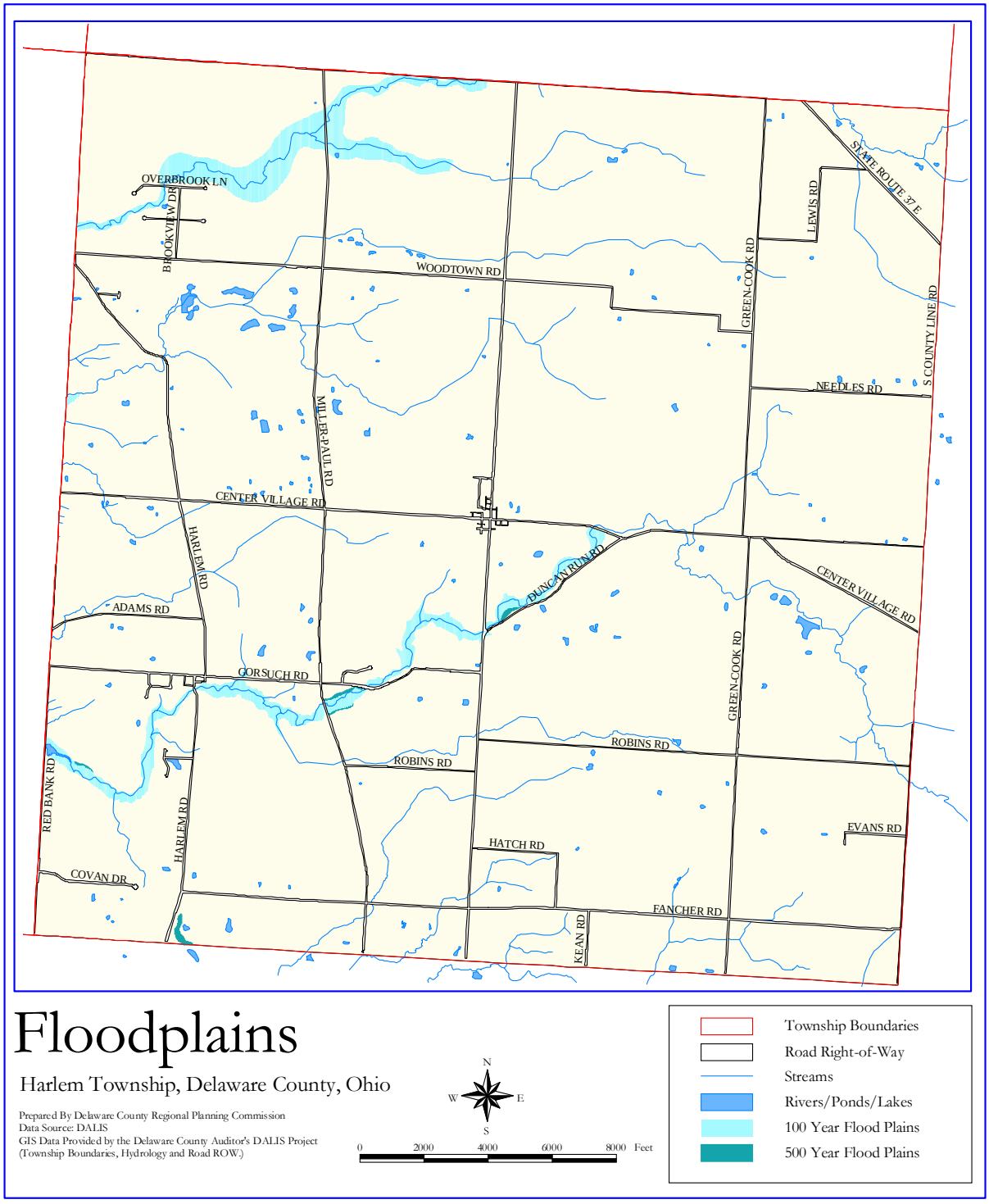
6.2 Slopes Greater than 20%

Preserving rural character can include protecting ravines and slopes greater than 20% as public or privately owned open space as the township develops. The Slope Map indicates slopes over 20%. Generally, roads do not exceed 10% slope. Houses with walkout basements can typically be built on slopes up to 20%. *(See Slope Map)*



6.3 Floodplains, bodies of water

As development encroaches along the creeks that feed the reservoir, there is a potential for surface and groundwater pollution, most notably from failed septic systems in rural areas. For this reason, the Ohio EPA has asked the Delaware General Health District to consider a minimum three-acre lot size in areas without public water and sewer. Since Del Co water is generally available throughout most of the township, this 3-acre standard lot size may be reduced. Where lands include ravines or floodplains that flow directly to the reservoir, and no



centralized sewer is available, the township may wish to use lower densities to preserve water quality, especially in rural areas where some houses still rely on well water.

There are small floodplains along Duncan Run and Spruce Run. The National Flood Insurance Program discourages development in the 100-year floodplain and prohibits development in the 100-year floodway, areas which are mapped by the Federal Emergency Management Agency (FEMA). The floodplain map 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). *(See Floodplain Map).*

According to *Protecting Floodplain Resources* (FEMA, 1996) undisturbed floodplains perform several critical functions:

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

Water Quality Maintenance – Filter nutrients and impurities from runoff; process organic wastes; moderate temperature fluctuations;

Groundwater Recharge – Reduce frequency and duration of low surface flows;

Biological Resources – Rich, alluvial soils promote vegetative growth; maintain bio diversity, 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 aqua culture; restore and enhance forest lands;

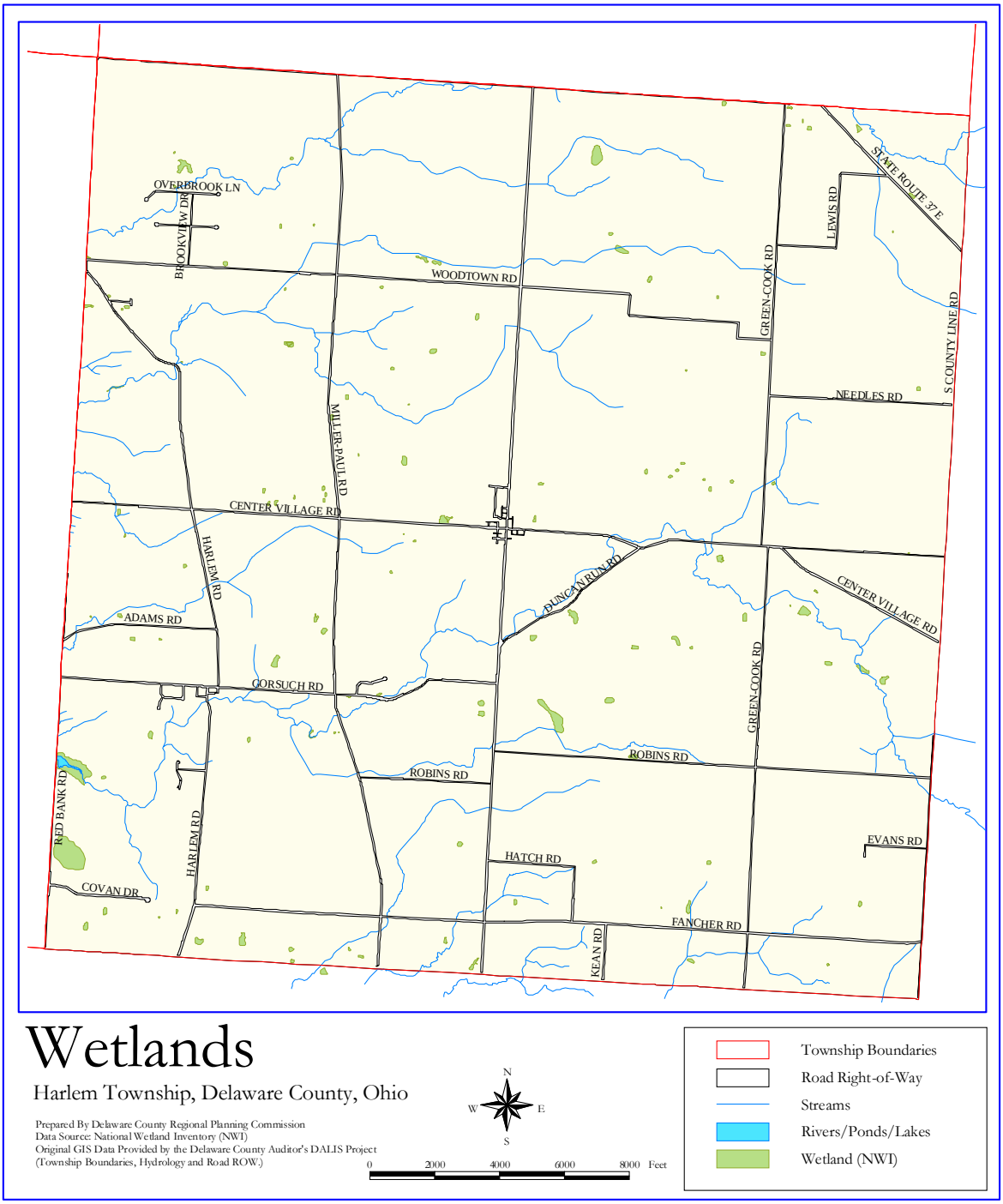
Recreation – Provide areas for passive and active uses, provide open space and provide aesthetic pleasure;

Scientific Study/Outdoor Education – Contain cultural resources (historic and archeological sites) and environmental studies.

The Delaware County FEMA floodplain maps were revised in 1999. One-hundred-year floodplain elevations have risen in some areas. New development is a contributing factor to this rise.

With floodplains rising and with all the natural benefits of floodplains listed previously, it is unwise to permit residential development in the 100-year floodplains of Delaware County. The subsidy for low-cost flood insurance sold under National Flood Insurance Program comes from federal taxes. Each land use decision to permit development in the 100-year floodplain 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.

For all these reasons, the 100-year floodplains and riparian zones of streams in Harlem Township should be protected. Some counties have flat floodplains that 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 filling 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 that are drinking water and recreational resources (Alum Creek, Big Walnut, Olentangy, and Scioto). It is critically important to protect the floodplains of these four rivers.



6.4 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, Mississippi. The wetlands map shows the location of potential wetlands from OCAP satellite imaging. They may indicate the locations of potential jurisdictional wetlands. *(See Wetlands Map)*

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

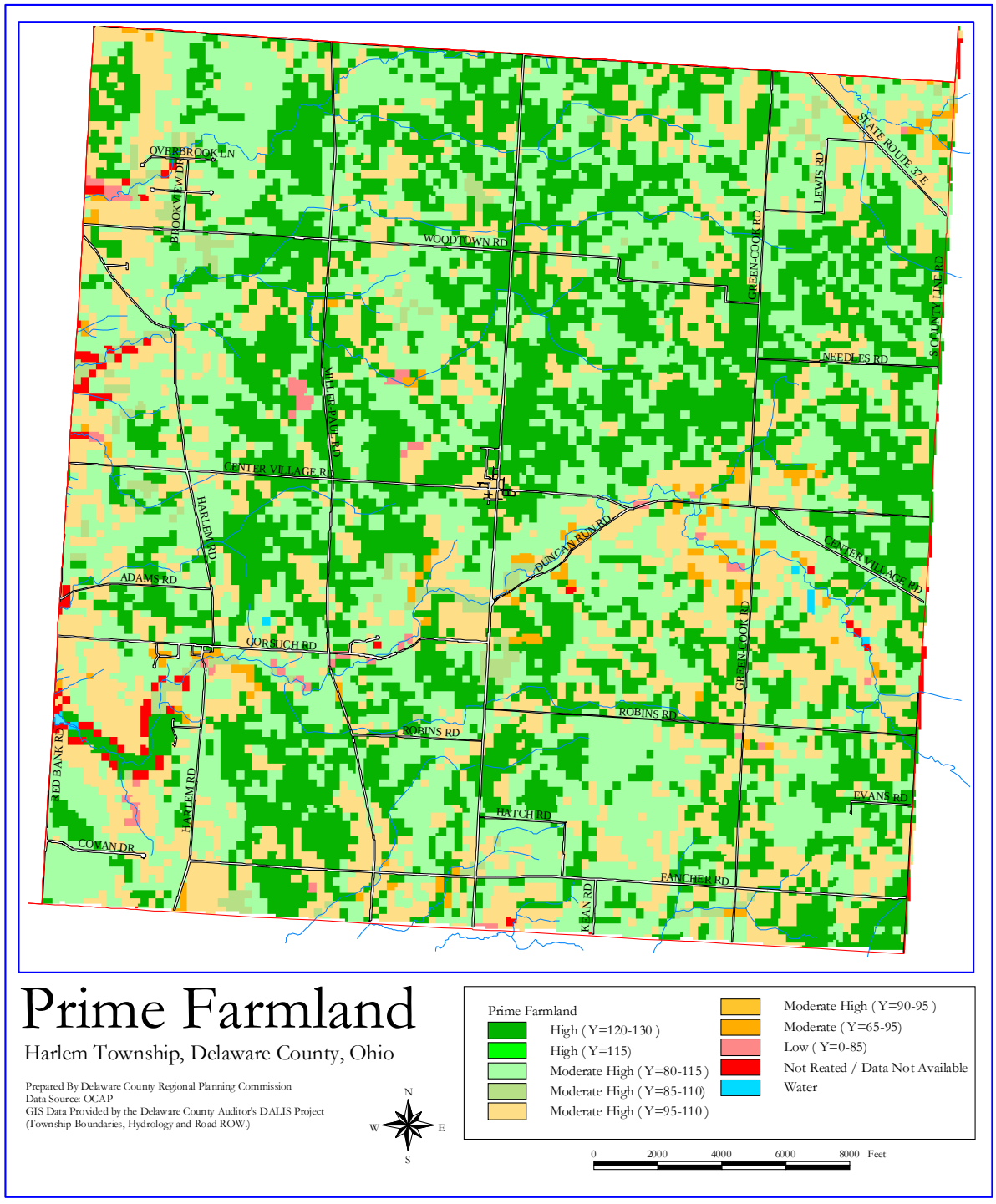
1.) hydric soils,
2.) hydrophytic vegetation,
3.) wetland hydrology (this means they support more than 50% wetland vegetation, are poorly drained, and are periodically inundated or saturated).

Wetlands serve many of the same functions as floodplains, and similarly deserve protection. Wetlands are natural storm water detention systems that trap, filter and break down surface runoff. Most Harlem Township wetlands are tiled fields. If tiled before 1985, they are exempt from regulation unless they revert to their natural state.

6.5 Prime Agricultural Soils

The Prime Agriculture Soils map shows the location of soils suited to high yields in Harlem Township. Agriculture is still an important land use in Harlem 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 are most valuable to 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 was 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. *(see Prime Soil Map)*



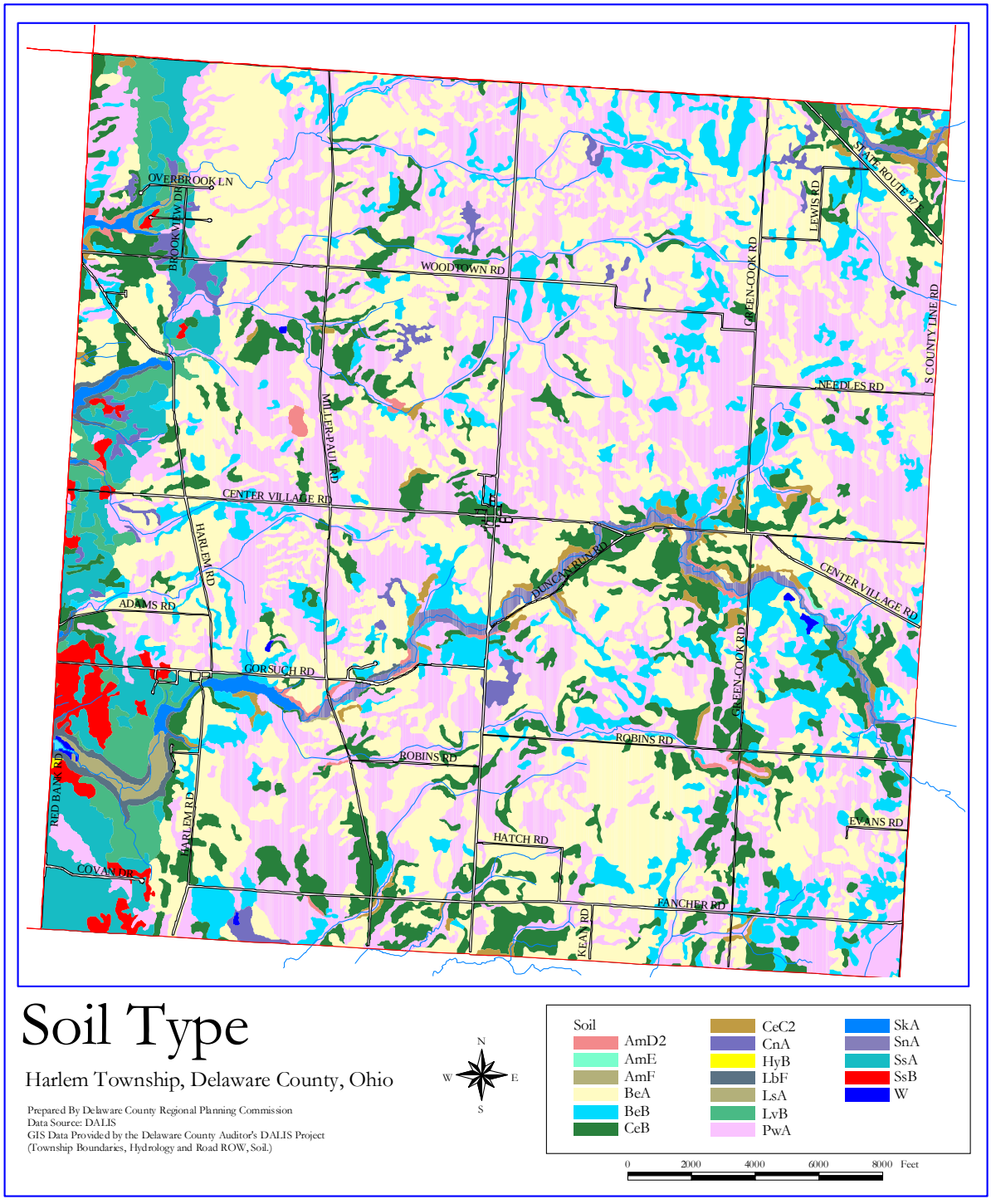
Prime Farmland

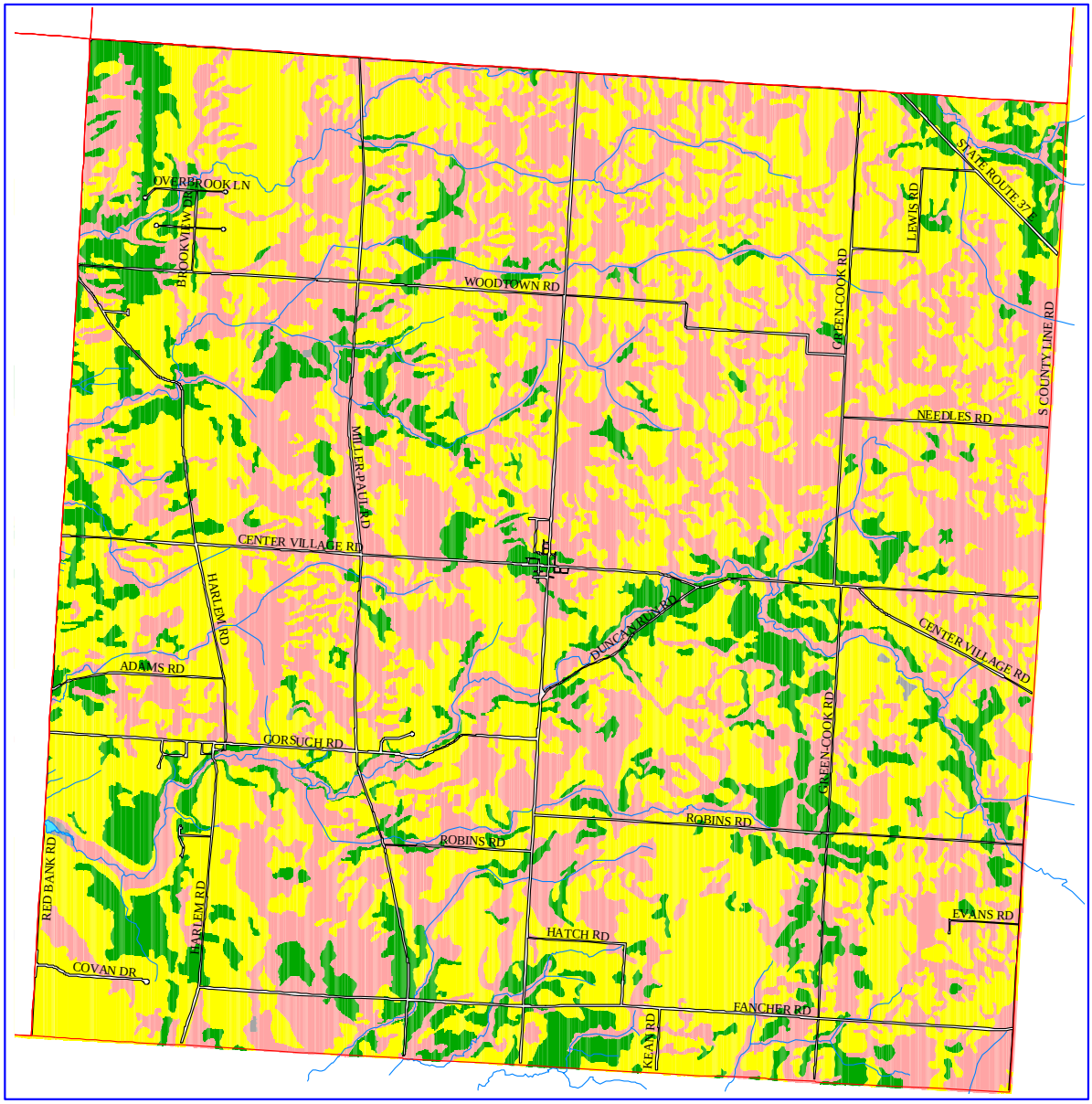
Harlem Township, Delaware County, Ohio

Prepared By Delaware County Regional Planning Commission
Data Source: OCAP
GIS Data Provided by the Delaware County Auditor's DALIS Project
(Township Boundaries, Hydrology and Road ROW.)

6.6 Soil Suitability for Septic Systems

Since sanitary sewer service is not available to a large portion of the township, it is useful to evaluate the soil capability for septic systems. Land with very poor suitability for septic systems should be served by centralized sanitary sewer or alternative sewage disposal systems. The Soil Suitability for Septic Systems Maps displays this information. *(see Soil and Soil Suitability maps)*





Soil Suitability for On-site Treatment

Harlem Township, Delaware County, Ohio

Prepared By Delaware County Regional Planning Commission
GIS Data Provided by the Delaware County Auditor's DALIS Project
(Township Boundaries, Hydrology and Road ROW, Soil.)

N
W E
S

Soil Suitability for Septic System
- Suited for Traditional Leach Lines Systems or Mound Systems
- Suited for Mound Systems
- Suited for Mound Systems, May be Subject to Flooding
- Not Suited for Soil-based Treatment, May be Suited for Irrigation
- Not Suited for Soil-based Treatment (Hydric Soils)
- Urbanized Area / Other Soils

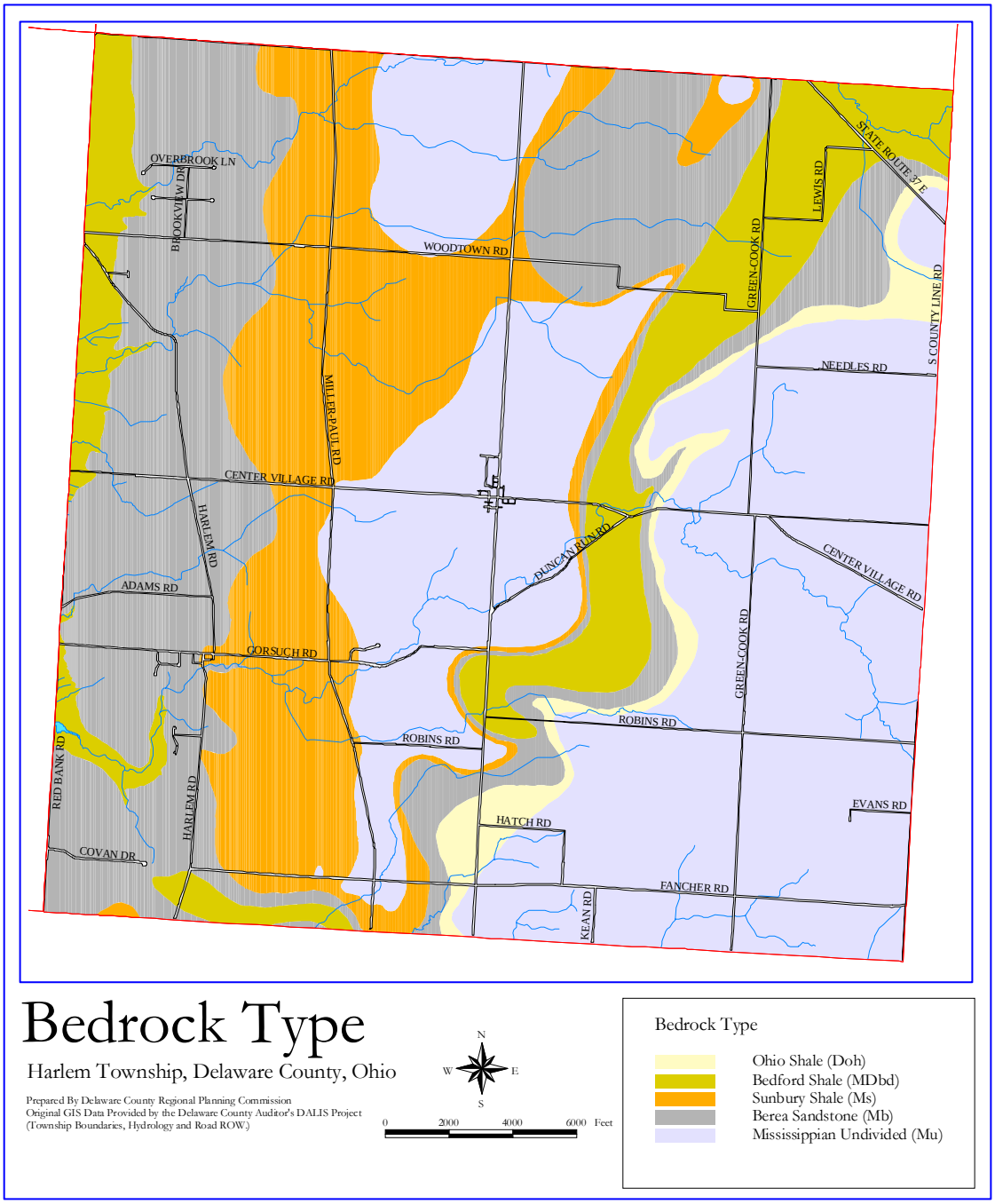
0 2000 4000 6000 8000 Feet

6.7 Critical Resources

The combined Critical Resources map 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. *(see Critical Resources Map)*

6.8 Development or Harvesting of Natural Resources

Commercial mineral extraction is not a major land use in Harlem Township. However, prime agricultural soil is a natural resource harvested every year through agriculture, or it could be harvested as topsoil or sod. The township may consider a policy that permits the fair development of quarrying within other zoning districts 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 should only be permitted within the 100-year floodplain with strict environmental controls to prevent water pollution, flotation of equipment and other related hazards. *(see Bedrock Type map)*



Chapter 7
Housing

Housing has been the primary index of growth in Harlem Township. The township is a rural community that has maintained low residential densities because of its lack of urban services and reliance on septic systems.

Providing a range of housing in a developing rural community is a complex planning issue. Harlem Township's zoning provides for a relatively small variety of housing types, (single-family detached, single-family attached, modular and cluster homes). Minimum square footage permitted by zoning for single family houses is 1,500 square feet.

As the township works through the planning process, consideration should be given to the appropriate timing and location of housing types based upon the inventory of existing housing, conditions and relationship to the housing needs of the area.

7.1 Existing housing stock

A house-to-house windshield survey (based on exterior observation from an automobile) was conducted in 1999 and updated in May, 2005. The exterior condition of each house was determined based on five criteria. The housing survey results are in Table 7.1.

Table 7.1 Harlem Township Housing Survey Results, May 2005, field survey

Housing Survey in Harlem Township								
May, 2005								
Section	**Single-Family**	**Multi-Family**	**Mobile Homes**	**Housing Condition**				
	Units	Units		No defects	Slight defects	Sound, but deteriorated	Dilapidated	Uninhabitable
Totals	1183	0	303	797	603	70	14	2
% Totals	79%		20%	54%	41%	5%	1%	~

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

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

- There is no significant problem with deteriorated housing stock in Harlem Township.
  1.) 95% of all housing is either new or maintained like new (sound, no or slight defects).
  2.) 5% of all housing is in good condition. (sound, but deteriorated)
  3.) Less than 1% appeared to be somewhat dilapidated.
  4.) The number of uninhabitable homes was negligible.

- The township is almost entirely single-family residential. This is largely due to the lack of sanitary sewers and other services that multi-family housing demand.

- Mobile homes make up 20% of the housing stock, 289 of which are in a single mobile home park. Mobile homes are sometimes counted as multi-family because each unit is not on an individual parcel.

- Harlem Township has not adopted a housing code to assure the constant maintenance of its housing stock, to retain property values and stable neighborhoods.

7.2 Housing Status

Harlem Township is the 9th largest provider of housing stock of the 18 townships and 10 municipalities in Delaware County as of April 2000. Harlem Township has provided just 2.05% 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) collectively have provided 69.26% of all the housing in Delaware County in the last 20 years. They all have centralized sewer service.

Table 7.2 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	.8 %
Concord Township	1,374	10	5.8 %	958	4.1 %
Delaware Township	373	22	7.0 %	180	.77 %
Genoa Township	4,058	3	5.0 %	3,702	15.8 %
Harlem Township	1,382	9	3.1 %	479	2.05 %
Kingston Township	554	18	3.1 %	327	1.39 %
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	.41 %
Porter Township	597	17	3.0 %	266	1.13 %
Radnor Township	511	19	4.3 %	169	.72 %
Scioto Township	864	14	4.7 %	430	1.84 %
Thompson Township	220	24	8.2 %	51	.21 %
Trenton Township	769	15	3.0 %	241	1.03 %
Troy Township	1,210	12	8.5 %	203	.86 %
Total Townships	**23,273**		**5.3 %**	**14,622**	**62.59 %**

Table 7.2 continued

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
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	.042 %
Sunbury	1,057	13	3.9 %	272	1.16 %
Shawnee Hills	199	25	9.0 %	18	.077 %
Powell	2,032	6	2.8 %	2,131	9.12 %
Ashley	500	20	6.2 %	10	.042 %
Ostrander	156	27	5.1 %	36	.15 %
Dublin	1,501	8	6.9 %	13**	.055%
Westerville	2,311	5	3.7 %	140***	.59 %
Total Incorporated areas	**19,756**		**5.0 %**	**8,736**	**37.4 %**
Total All Reporting Incorp. & Unincorp. areas in County	**43,029**			**23,358**	**100 %**

Source: U.S. Census 2000 and Delaware County Building Permit Data
* Data available from 1995-2000 only ** Data from 1999- 2000 only *** Data from 2000 only

Table 7.2 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.

7.3 Open Space ("Golf Course") Developments

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, if under county zoning).

This change in sewer policy 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. 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 under construction, Concord Township issued 350 building permits in 2001. This has changed the character of the Township and has increased resident demands for companion commercial development, neighborhood parks, traffic lights and road improvements.

Table 7.3 Local Developments Approved/Proposed with Alternative Centralized Sanitary Sewage Disposal

Name	Location	Township	Acres	# Units Approved	# Units Proposed	Density	Status
Tartan Fields	Concord Rd.	Concord	302	455		1.49/acre	Building
Dornoch	US 23	Liberty/Delaware	282	393		1.39/acre	Building
Scioto Reserve	Home Road, Riverside Drive	Concord	695	1259		1.8/acre	Building
North Star	N. Galena Road	Berkshire	522	654		1.25/acre	Approved
North Star	N. Galena Road	Kingston	867		723	.84/acre	Zoning Pending
Totals				**2,761**	**723**		

7.4 Land Application Systems- Opportunity or Threat to Planning?

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 existing public treatment plant. This may be a benefit.

- **Opportunity #2** – Agricultural (non-urban service) areas can use ***properly worded*** cluster or conservation developments (such as the Farm Village Concept described in Chapter 13) 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 minimum gross density). Homes in such areas may be tightly clustered on smaller lots, and the Land Application System can be used as irrigation on appropriate set-aside areas for agriculture and managed open space, thus preserving farmland. The lower the gross density, the more farmland is preserved.

- **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.

- **Threat #1 –** Ohio townships should be cautious when using alternative 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 suburban density development may exceed the benefits and adversely alter the "rural character" people sought in the first place.

- **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.

- **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 has historically been strong demand for county sewer, so tap fees should be collected regardless of Land Application System developments.

- **Threat #4 –** If a public entity (i.e. city, county, township) does not maintain the Land Application System and treatment plant, it may be prone to failure, and a costly public take-over. Delaware County prefers county ownership of the plant (by dedication) to assure proper design and maintenance. Homeowners associations may be under-financed and ill equipped to maintain or oversee maintenance of a sewage treatment plant.

7.5 Recommendations for "Land Application Systems"

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

1. Adopt up-to-date land use plans with recommended densities as the basis for their zoning.
2. Consider Land Application Systems as accommodations to development:
    - When the use and density conform to the Comprehensive Plan and Zoning Resolutions.
    - When there is (preferably) public dedication (ownership) and maintenance of the system.
3. Avoid gross tract densities greater than one unit per acre in truly rural areas. Even lower gross densities are appropriate in prime agricultural areas to save farmland or open space.
4. Consider land application systems as a tool to permit low density, Conservation Subdivisions based on net developable acreage (see definition in Chapter 13 of this document) in rural areas without sewer service. Conservation subdivisions protect primary conservation areas (unbuildable wetlands, floodplain, river valleys, and steep slopes) and secondary conservation areas (unique scenic views, cultural or historic attributes). Farm Villages are a form of Conservation Subdivisions.

7.6 Future Housing Needs

In order to make future housing projections, a community might anticipate what services they can provide, then anticipate their share of the future area population and allocate the distribution of housing types.

Few communities attempt such an analysis, leaving the housing mix up to the traditional power of zoning, which is seldom so analytical. In a high-growth area such as Delaware County, 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.

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 with superior services may annex land and provide housing at a higher density. A more pragmatic approach to housing distribution is for the township to:

1.) determine how the community wants to look when it is all built out (vision).
2.) determine what services it can and should provide and what densities can therefore be provided service.
3.) anticipate its fair share of the county's projected population.
4.) permit a variety of housing that relates to 1, 2, and 3.

7.7 Affordable Housing Market Study

"Affordable housing" refers to housing that is constructed for those who cannot afford to live in the average residential unit. These individuals have household incomes that are defined by the U.S. Department of Housing and Urban Development (H.U.D.) as "extremely low," "very low," or simply "low" on the American Management Index. Table 7.4 shows H.U.D.'s classifications for Affordable Housing qualification.

Table 7.4

Section 8 Income Guidelines

Household Size:	1	2	3	4	5	6	7	8
30% of AMI Extremely low	$13,300	$15,200	$17,100	$19,000	$20,550	$22,050	$23,600	$25,100
50% of AMI Very low	$22,200	$25,350	$28,550	$31,700	$34,250	$36,750	$39,300	$41,850
80% of AMI Low	$35,500	$40,600	$45,650	$50,000	$54,800	$58,850	$62,900	$66,950

Source: U.S. Department of Housing and Urban Development

Affordable housing is diminishing in the county, just as it is in the nation. National trends are showing an increasing population, while the number of all new housing units being built is constantly decreasing. This trend is accompanied by a decreasing household size and an increase in the market price for those units that are being built. H.U.D. offers assistance to those households that are paying more than 30% of their gross household income toward housing without a choice. The low-skilled job market is not raising salaries to meet the needs of those employees where there are significant increases in the cost of living.

Delaware County is currently experiencing rising property values and an increased cost of living. As high-growth development continues, travel costs will rise and the relative impact on schools, public facilities and infrastructure will increase as each new house is constructed. As these costs of living rise, many local residents face job markets that can not financially meet their needs. Low-skilled employees are forced into other market areas for housing that may meet their budget. If housing is unavailable, these individuals are forced to relocate. This can cause service sector unemployment to increase locally, adversely affecting the entire community.

Within Harlem Township many of these trends may not be completely evident. However, they exist locally just as they do nationally. A lack of affordable housing as population increases is unavoidable unless developers are encouraged and/or granted incentives to develop more reasonably priced units. The housing market is driven by developer's profits, which increase with housing market values.

Table 7.5

Projected Affordable Housing Needs in Delaware County

	2000	2005	2010	2015	2020
# of Housing Units	71,137	88,808	105,817	123,867	139,908
Affordable Units Needed	10,128	12,600	15,000	17,600	19,900

Source: Del. Co. Affordable Housing Market Study

The *Delaware County Affordable Housing Market Study (2002)* produced the projections illustrated in Table 7.5 to demonstrate the need for affordable housing through 2020. The study estimated that the City of Delaware has 5,000 homes in the planning and construction stages, while the County has 16,000 homes. The need will

increase to 19,900 units countywide by 2020. Affordable housing is needed in Harlem Township to make the local economy stronger and to house local residents filling lower-income jobs. Affordable housing should be considered a necessary type of development in Harlem's future.

Source: Delaware County Affordable Housing Market Study: Draft Copy, Kirkland, Washington: Poggemeyer Design Group, Inc., September 5th, 2002.

7.8 Housing Policies

The issue of waste treatment and the township's desire to maintain a sense of rural character limit Harlem Township's density and housing mix. Cities and Villages such as Columbus, Delaware and Sunbury are the primary multi-family apartment providers in the Delaware County housing market. They offer higher densities than the townships.

In the last several years, condominiums have become a component in many housing proposals within areas that have sewer service. In 2005, 85 building permits were issued for multi-family units; in 2004, 304 were issued; in 2003, 253 were issued; and in 2002, 200 were issued.

Because condominiums have a smaller footprint than an individual house, they can be used to preserve open space and are sometimes used to gain increased density when a major public improvement, such as an arterial road is proposed. Condominiums serve a population that does not want the maintenance issues that are associated with single-family homes. This population includes, but is not limited to, older "empty-nesters" that have a lesser impact on the school system and generate fewer auto trips per day. Both condominiums and apartments can be used to generate the density needed for a walkable community that includes a mix of commercial and residential uses. *For more detail, see the DCRPC presentation "Density vs. Design".*

In areas with access to arterial roads or as part of large planned developments, multi-family housing can potentially occur in the townships. Harlem Township must evaluate its housing mix in light of all state and federal housing laws, and binding court decisions.

Chapter 8
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, Union, Licking and Delaware Counties) impact Harlem Township's economy.

Center Village business

In March 2001, the United States economy slipped into a national recession, ending the long period of expansion since 1991. The effects of the September 11, 2001 terrorist attacks on the United States deepened the economic downturn. However, productivity has trended upward at a 2.6% annual rate over the past seven years. The strong trend has persisted over the last two years, despite the recession. *(Dept. of Commerce website).*

Other signs of the economy:

- U.S. unemployment rate rose from 5.7% in November, 2001 to 6% in November, 2002 but decreased to 5.1% in May of 2005. *(Department of Labor website)*
- Central Ohio unemployment stands at about 5.7% as of May, 2005 (*Ohio Dept. of Job and Family Services*)
- Central Ohio Labor Force counted unemployed Ohio workers at 922,900 in September of 2003 out of a workforce of 5.9 million (*Business First*, 9/19/03).
- Delaware Co. unemployment rose from 3.4% in September, 2003 to 4.1% in April, 2005 (*Ohio Dept. of Job and Family Services website*), but still remains one of the lowest unemployment rates in Ohio.
- Ohio unemployment rose to 5.9% in April, 2005 from 5.4% in August 2003. (*Business First and Ohio Dept. of Job and Family Services*)
- Central Ohio jobless level hit 4.5% in August 2003, compared to 4.8% in July 2003 and 5.4% in June 2003. (*Business First*, 9/18/03)
- The average price of homes hit $153,911 in April, up 2.1 percent from $150,762 in April 2004.
- Central Ohio home sales dipped 1.4 percent in April, 2005, and are off 0.6 percent for the first four months of the year after a record-breaking 2004. (*Columbus Board of Realtors*)

Although some economic data from the 2000 U.S. Census are not yet available, there are local indicators that show a re-emergence of the strong Delaware County economy. Signs of economic strength:

- Delaware County Per Capita Income was $35,042 in 1999, a 14.7% increase from 1995-'99, 52nd in the USA, the fastest growing per capita income of any county in Ohio. (*Ohio Development Department web site*)

- Delaware County's housing market has been strong for two decades. 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.
- While new platting activity in the Delaware County townships slowed in 2003 and 2004, new construction continued, fed by cheap mortgage rates of less than 6% for fixed 30-year loans. More than 1,900 new building permits were issued in each of the last three years.
- Kroger built a $69 million, 750,000 square foot food distribution warehouse on U.S. 36 at Glenn Road in the city of Delaware. The facility was to 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 ten years. (*Business First*, January 25, 2002)
- Polaris Fashion Place Mall opened in 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.
- Bank One Corporate Office Center is the largest office building in Central Ohio at 2 million square feet.

8.1 Other Economic Indicators

The 2000 US Census provides economic information by township and municipality.

Table 8.1 Social Economic Census 3 (Census 2000)
(Source: U.S. Census Bureau 2000)

Political Jurisdictions	EDUCATION		EMPLOYMENT STATUS						INCOME IN 1999			POVERTY STATUS IN 1999			
	Percent High School Graduate or Higher	Percent Bachelor's Degree or Higher	Population 16 Yrs & Over		* Civilian Labor Force Employed		* Civilian Labor Force Unemployed		Median Household Income (dollars)	Median Family Income (dollars)	Per Capita Income (dollars)	Families Below Poverty Level		Individuals Below Poverty Level	
			Number	Percent	Number	Percent	Number	Percent				Number	Percent	Number	Percent
Delaware County	**92.9%**	**41.0%**	**82,043**	**100.0%**	**58,580**	**71.4%**	**2,293**	**2.8%**	**67,258**	**76,453**	**31,600**	**883**	**2.9%**	**4,118**	**3.8%**
Township:															
Berkshire	93.7%	43.8%	1,488	100.0%	1,097	73.7%	6	0.4%	70,663	71,744	31,496	0	0.0%	12	0.6%
Berlin	91.7%	31.0%	2,342	100.0%	1,735	74.1%	40	1.7%	69,028	77,788	23,765	37	4.1%	182	5.5%
Brown	92.9%	35.1%	955	100.0%	675	70.7%	0	0.0%	63,456	59,922	24,557	9	2.4%	39	3.2%
Concord	94.6%	41.6%	3,006	100.0%	1,969	65.5%	95	3.2%	79,169	83,671	28,851	28	2.6%	83	2.5%
Delaware	86.1%	33.4%	1,272	100.0%	946	74.4%	10	0.8%	60,372	74,844	26,052	15	3.4%	39	2.7%
Genoa	95.9%	49.8%	8,263	100.0%	6,210	75.2%	59	0.7%	94,167	97,113	39,905	18	0.5%	71	0.6%
Harlem	90.1%	23.6%	2,752	100.0%	1,978	71.9%	30	1.1%	55,080	58,375	24,151	35	3.1%	136	3.7%
Kingston	91.4%	22.9%	1,248	100.0%	921	73.8%	0	0.0%	68,750	70,679	22,829	0	0.0%	44	2.6%
Liberty	96.3%	58.6%	6,908	100.0%	4,989	72.2%	27	0.4%	89,787	103,903	46,654	27	1.0%	181	2.0%
Marlboro	81.9%	15.1%	245	100.0%	145	59.2%	0	0.0%	29,514	36,750	16,851	13	18.8%	62	22.8%
Orange	97.2%	54.1%	8,852	100.0%	7,103	80.2%	141	1.6%	74,612	83,996	33,240	184	5.3%	626	5.1%
Oxford	86.9%	17.5%	644	100.0%	392	60.9%	11	1.7%	47,100	52,727	20,247	2	0.8%	4	0.5%
Porter	92.6%	24.9%	1,271	100.0%	942	74.1%	16	1.3%	70,949	71,359	25,301	24	4.9%	76	4.8%
Radnor	94.3%	20.5%	1,029	100.0%	701	68.1%	6	0.6%	55,089	56,607	35,456	8	1.9%	23	1.7%
Scioto	74.4%	24.5%	1,542	100.0%	1,117	72.4%	54	3.5%	54,706	64,196	25,440	20	3.3%	112	5.5%
Thompson	91.4%	28.8%	491	100.0%	356	72.5%	11	2.2%	57,639	61,080	22,985	0	0.0%	24	3.9%
Trenton	90.3%	26.3%	1,633	100.0%	1,191	72.9%	17	1.0%	62,500	68,676	24,792	12	1.9%	57	2.7%
Troy	65.9%	15.1%	1,674	100.0%	1,168	69.8%	16	1.0%	51,951	60,938	23,421	12	1.8%	75	3.6%
Total Township	**93.9%**	**42.4%**	**45,615**	**100.0%**	**33,635**	**73.7%**	**539**	**1.2%**				**444**	**2.5%**	**1,846**	**3.8%**
City & Village:															
Delaware	87.7%	26.8%	19,516	100.0%	12,737	65.3%	1,514	7.8%	46,030	54,463	20,633	304	4.8%	1,704	7.3%
Galena	84.0%	20.4%	236	100.0%	162	68.6%	6	2.5%	46,250	49,500	20,163	4	4.8%	29	9.6%
Sunbury	83.3%	18.2%	2,018	100.0%	1,296	64.2%	19	0.9%	46,477	50,750	18,861	32	4.1%	122	4.7%
Shawnee Hills	87.8%	29.3%	333	100.0%	242	72.7%	4	1.2%	52,222	70,179	25,266	6	5.4%	32	7.8%
Powell	98.8%	68.6%	4,093	100.0%	2,999	73.3%	62	1.5%	115,904	117,801	46,257	8	0.4%	24	0.4%
Ashley	80.2%	8.0%	881	100.0%	598	67.9%	21	2.4%	39,239	42,312	15,513	33	10.2%	155	12.7%
Ostrander	66.1%	11.3%	272	100.0%	223	82.0%	3	1.1%	49,583	49,375	27,751	6	6.3%	21	5.8%
Dublin	96.4%	69.3%	3,251	100.0%	2,121	65.2%	56	1.7%	127,820	135,545	58,462	21	1.6%	81	1.8%
Westerville	93.1%	56.3%	4,170	100.0%	3,070	73.6%	58	1.4%	104,250	108,582	38,280	25	1.5%	104	1.8%
Columbus	89.8%	49.1%	1,658	100.0%	1,497	90.3%	11	0.7%	58,696	71,250	30,964	0	0.0%	0	0.0%
Total Incorporated	**91.5%**	**39.3%**	**36,428**	**100.0%**	**24,945**	**68.5%**	**1,754**	**4.8%**				**439**	**3.3%**	**2,272**	**3.9%**

NOTE: 1. All demographic and social economic statistics are from 2000 U.S. Census, adjusted by DCRPC to exclude incorporated statistics from township totals.
2. For detailed Table DP-1 to DP-4 for each jurisdiction, please check DCRPC web site at www.dcrpc.org .
* Civilian labor force consists of all civilians 16 years or older who are either employed, or seeking employment.

Census Facts:

- Delaware County's poverty rate was 2.9% in 1999, Harlem Township's poverty rate was 3.7%
- Delaware County has the highest educational attainment rate of any central Ohio county. 91.5% of the population is a high school graduate. 39.3% of the population has a Bachelor's or higher college degree. By comparison, combined college level attainment in other counties is: Franklin: 26.6%; Fairfield: 15.5%; Licking:13%; Madison: 9%; Pickaway: 9%; and Union: 12%. *(Business First, 12/11/98).*
- In Harlem Township, 90% of adults have a high school degree, and 24% have a Bachelor's degree or higher.
- The April 2000 unemployment rate in Harlem Township was 1.1%.
- The median family income in 1999 in Harlem Township was $55,080.
- The per capita income in Harlem Township in 1999 was $24,151.
- Delaware county ranked 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. (*Business First*).

8.2 Employment by Industry in Delaware County

Delaware County has a broad-based economy, as described by employment sectors in Table 8.2.

Table 8.2 Employment by (covered) Industry in Delaware County, 2001

Employment Category*	2001 Employees	% of total
1. Wholesale and Retail Trade	7,820	20.4%
2. Government	5,185	13.5%
3. Manufacturing	5,007	13.1%
4. Information and technical, professional and educational services	3,576	9.3%
5. Finance, Insurance Real Estate	3,536	9.2%
6. Accommodation and food service	3,054	7.9%
7. Construction	2,863	7.4%
8. Health care and social assistance	2,499	6.5%
9. Arts, entertainment, recreation	1,387	3.6%
10. Administrative and waste service	1,221	3.2%
11. Management of companies and enterprises	639	1.7%
12. Transportation/Utilities	526	1.4%
13. Agriculture, forestry, fishing and hunting	138	.4%

Ohio Development Department, Office of Strategic Research
**This does not include all employment. Percentage of total is based on total covered employment of 38,325.*
Some categories combined by RPC staff

Table 8.3 Major Employers, Delaware County

Employer	Employment Sector	# Employees
Advance Auto Parts	Vehicle Parts	304
American Showa	Manufacturing (vehicle suspensions)	703 (2004)
Chase Financial	Finance	6,000 (2004)

CIGNA Corp.	Insurance	423 (2004)
Delaware City Bd. of Education	Government	526 (2004)
Delaware County	Government	1,010 (2005)
General Castings	Manufacturing	425 (1998)
Grady Memorial Hospital	Service (medical)	523 (2004)
Kroger	Retail and Service (distribution)	1,257 (2004)
Liebert	Manufacturer, cooling systems	300 (1998)
Meijer Inc.	Retail	
Mid West Acoust-A-Fiber	Manufacturing	160 (1998)
Nippert	Manufacturing (copper processing)	300 (1998)
Ohio Wesleyan University	Service (higher education)	498 (2004)
Olentangy Local Bd. of Education	Education	1,131 (2004)
PPG Industries	Manufacturing (paint)	563
Showa Corp/American Showa Inc.	Manufacturing	480
State of Ohio	Government	891 (1998)
Wal Mart	Retail	795 (2004)
Western Auto	Trade (vehicle parts)	400

Delaware County Chamber of Commerce (1998 and 2004)

8.3 Harlem Township Economy

Harlem Township's economy is historically based on agriculture. Some commercial land uses are scattered throughout the township.

Table 8. 4 Businesses in Harlem Township, by Windshield Survey, October 2003:

Business Name	Business Type
Bachman Agricultural Service	Service – Agricultural
Buckeye Ready Mix	Industrial – Concrete plant
Bell Electric	Utility
Mark Cantrell Plumbing	Service – Plumbing
Chalet Pizza and Carryout	Commercial – Food
Curtain Players	Entertainment – Theater
Custom Building Storage	Service – Storage
DelCar Automotive	Service – Auto parts
Delaware County EMS Station 9	EMS station
Dennis McCann Auto Storage and Ferrari Parts	Service – Auto storage, parts
Edwards Auto Service	Service – Auto
Eclipse Design Studio	
Eric Robinson Vending	Service – Vending service
Fracasso's Pizza	Commercial – Food

Facemyer Backhoe and Landscaping	Service – Landscaping
First Impressions Lawn and Landscape	Service – Landscaping
Motorsport Promotions	Service – Auto
NJV Automotive	Service – Auto
Piper Trucking	Service – Trucking
Rainbow Lake Fishing	Recreation - Fishing
Reichle Brothers Landscape	Service – Landscaping
Sunbear Studios	Commercial – Art/Gifts
Treehaven Campground	Recreation – Campground
Whistlestop Store	Commercial – General store

Harlem Township has the possibility for additional economic development on or with its access to S.R. 37 and S.R. 605. Access management (limiting left turn movements and combining curb cuts) is important for safe traffic flow. Because there is currently no county sanitary sewer service in the township, commercial and industrial development is initially likely to be limited to uses that do not need sewer.

If lands could be served 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.

8.4 Agricultural Component of the Delaware County Economy

Agricultural services were a major employer in the county during the late 19th Century. However, the category now employs only 1.5% of the county's population. Agriculture is still the largest land use (by acreage) in Delaware County. It is also still a significant land use in Harlem Township. Delaware County Commissioners in 1998 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:

Robins Road farm

"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 8.5 Amount of Agricultural Land in Delaware County

Delaware County – Total Acreage	293,700
Delaware Co. Agricultural Acres (1998-Ohio Dept. Dev.)	175,000
Percent of Delaware County Acres in Agriculture	60%
Ohio Acreage in Agriculture, 1998	14,900,000 acres
Delaware County's Share of Total Ohio Agricultural Acres	1.2 %

Source: Ohio Department of Development 2000

Table 8.6 Loss of Farmland in Delaware County

Period	Land in Farms
1987-92	-5%
1982-92	-10 %
1974-92	-11 %
1964-92	-18 %
1954-92	-31 %
1945-92	-39 %

1995 Ohio Department of Agriculture Annual Report

The county leads the state in decreasing agricultural employment. In 1997, the total value of all non-farm sector sales/receipts/shipments in Delaware County was $3,506,597,000. Total cash receipts for all agricultural production in Delaware County in 2000 was $49,475,000. This represented 1.15% of the total sales/receipts for the county. Although it remains a large land use, agriculture is becoming a smaller portion of the local economy.

Source: Delaware County Economic Development/US Census Bureau County Business Patterns and Economic Conditions

As development and change occur in a farming community, many pressures begin to affect what is often referred to as the "Impermanence Syndrome of Agriculture. These pressures include 1.) the proximity of residential land, 2.) the density of surrounding residential land, 3.) access to public water, 4.) access to public sewer, 5.) proximity to a four-lane road, 6.) demand for developable land, 7.) width of roads, and 8.) distance from support services. Other influences include inheritance tax that encourages splitting farms into smaller parcels, loss of critical mass of land, nuisance complaints and traffic congestion, among others. These pressures combine to make farming less and less viable for the farmer to continue to make a living.

8.5 Local Housing and Real Estate Market

Delaware County's housing market has been strong for two decades. 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 11,573 single-family lots in the subdivision "pipeline" for approval as of December 31, 2004. Based upon a five-year average absorption of 2,057 lots in the townships, the lots represent a 5.63-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.

8.6 Township Receipts of County Tax Revenue

Townships receive a portion of the commercial and industrial taxes collected by the county. Tax rates within townships can be different based on the school district boundaries. Harlem Township is mostly within the Big Walnut district, which suggests that the tax rate is the same throughout most of the township. For example, the portion of Concord Township that falls within the Olentangy School District receives 21.3% of commercial/industrial. Orange Township receives 22% and the portion of Genoa Township which is in the Westerville District receives 21.3%. To apply this to one commercial example, the Meijer on US 23 paid a total of $196,373.00 in real estate taxes for 2002, of which Orange Township would receive roughly $43,200.

The County Auditor tracks real estate and personal property values in the county. Harlem Township's residential property is valued at $81,522,650 while commercial and industrial is valued at $3,422,500. Adding farm uses, utilities and personal tangible value, the total for the township is $94,686,810, which is sixth highest behind Orange, Genoa, Liberty, Concord and Berlin. The County Treasurer maintains a list of all mills levied on each dollar of property within the county. Within the Big Walnut School District, Harlem Township's tax rates include 5.61 mills for county, 7.96 for township, 33.87 for schools, and 3.20 for JVS for a total of 50.64, or an effective rate of 40.6078 for residential and 40.4961 for commercial. The Johnstown-Monroe portion of Harlem includes .09 mills for library, 5.61 for the county, 7.96 for the township, 39.30 for schools, 3.00 for JVS for a total of 55.96 or effective rate of 37.3340 for residential and 40.7945 for commercial. *Source: Delaware County Treasurer 2004 Rates of Taxation*

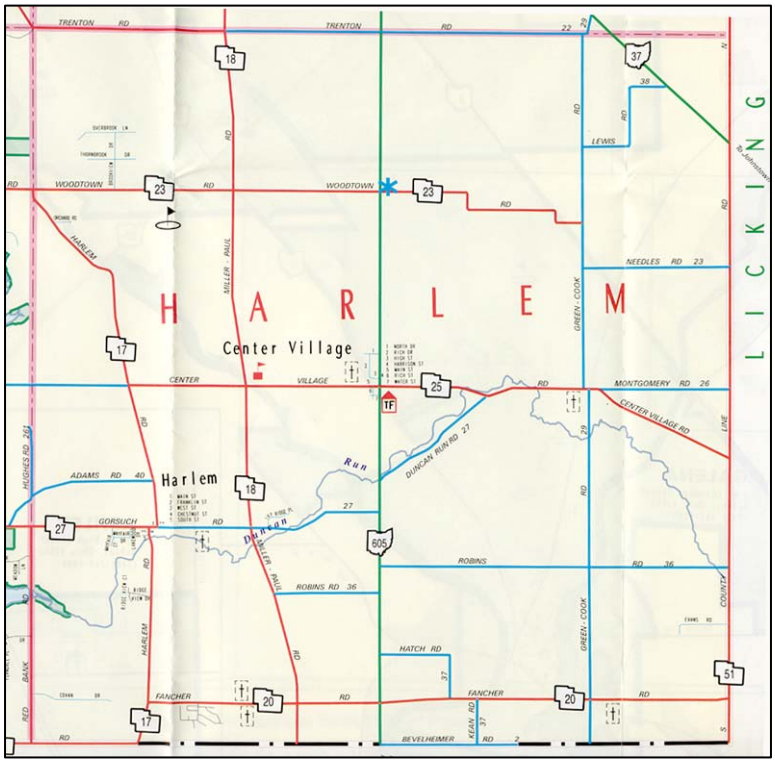
8.7 Harlem Township Future Economic Development

Harlem Township could:

- Consider future commercial development as one component in an appropriate mix of uses.
- Plan and approve uses that serve the surrounding residential development, rather than large, regional uses that generate heavy traffic.
- 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 9
Roads and Transportation

Map 9.1 Harlem Township Roads



Source: Delaware County Engineer 2002 Highway Map.

9.1 General Information

Harlem Township's original road network was laid out in the Nineteenth Century. Roads were typically built within a fifty to sixty foot wide easement. Today most of these roads have been paved and generally range in width from 14'-20'. All development in the township has taken place along these original farm roads. Depending upon the character of the future development, the function of some of these original roads may change from farm-to-market roads to collector or arterial streets. As traffic counts increase, roadway improvements will be needed. According to the Delaware County Engineer, all local and collector roads should ideally have 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 "idealized" standard.

The need for road improvements represents one of the most difficult planning issues facing the Township, and their partner Delaware County. As the County has experienced unprecedented growth, the old road network that worked well for the last century now is becoming overloaded with traffic. Improvements will have to be made,

but skinny roads are part of the cherished rural character; township residents often want to keep the old fence lines and street trees that would be removed in widening.

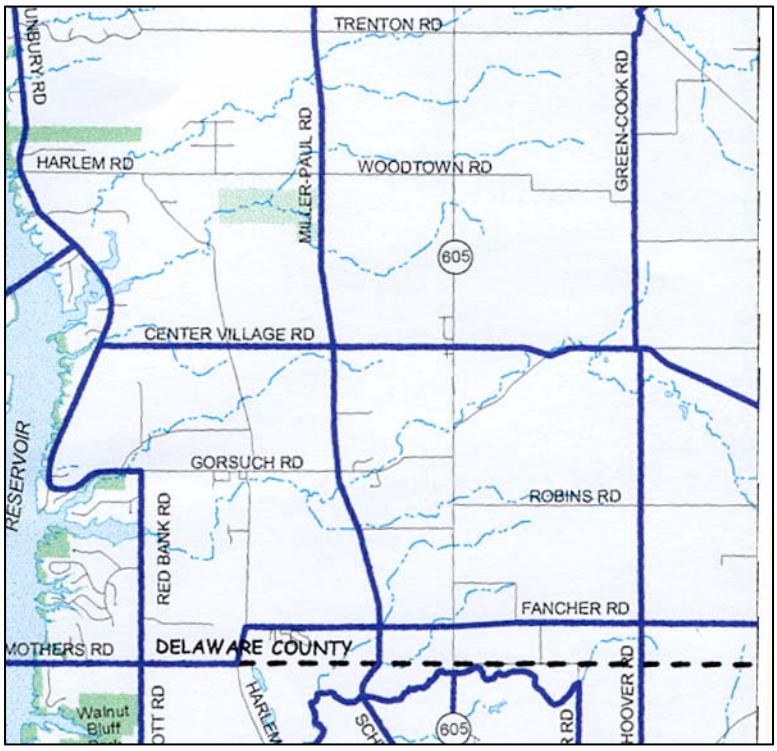
9.2 Bus Service

While automobiles are the primary means of transportation in Harlem 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 linkage from Crosswoods in northern Franklin County connects riders to any COTA stop in Franklin County. As the township grows, new transportation options should be considered.

9.3 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 facilities for bikes along several roads in Harlem Township. These routes include east-west routes along Fancher Road, Smothers Road and Center Village Road. North-south routes are recommended along Green-Cook Road, Miller-Paul Road and Red Bank Road. These routes were recommended as part of a regional plan to comply with the goals of the Transportation Equity Act for the 21st Century (TEA-21). These routes can be planned as part of new road cross-sections and may be either a dedicated lane along a street or separated from traffic with a grass- or tree-lawn.

Map 9.2 MORPC Regional Bikeway Plan for Harlem Township



Source: MORPC Bikeway Plan Update, 2003

9.4 Road Maintenance

Harlem 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.
- The Township maintains township roads.
- Homeowner associations maintain private subdivision roads.
- Common Access Driveways (CADs) are shared private roads serving 2-5 lots, maintained by the lot owners.

9.5 Federal and State Roads

a.) S.R. 37 – 1.19 miles of S.R. 37 passes through Harlem Township. The highway connects Delaware to Johnstown in Licking County. This road is heavily traveled with trucks and passenger vehicles.

b.) S.R. 605 – State Route 605 bisects the township at slightly more than 5 miles, serving north/south traffic. The road picks up traffic from S.R. 37 and also from U.S. 36 farther to the north. It continues south toward New Albany in Franklin County.

9.6 County Roads

The Delaware County Engineer maintains ten county roads in Harlem Township for a total of 5.49 miles (see Table 9.1).

Table 9.1 County Roads and Conditions in Harlem Township, 2004

Source: ODOT Road Inventory 1/2004

Route #	Road Name	Surface Width	Road Width	Surface Type*
3	Smothers	17	23	I
17	Harlem Road**	20	24	I
18	Miller-Paul Road	20	22	E2
20	Fancher Road**	21	25	I
22	Trenton Road	16	24	H2
23	Woodtown Road	18	20	H2
25	Center Village Road**	21	25	I
27	Gorsuch Road	18	24	H2
51	S. County Line Road**	17, 18	24, 25	G2, H2
51	N. County Line Road**	16, 18, 20	24, 26, 28	G2, H2

**Key included with Table 9.4 **Minor Arterial*

9.7 Township Roads

The Township currently maintains 29 roads, plus three alleys at a total of 23.17 miles. Of these, only one is designated as major or minor collector. According to the Delaware County Engineer, all township and county local and collector roads should have 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' right-of-way provided that there are no more than 15 homes served, and no possibility of future connection.

Table 9.2 Harlem Township Roads 2004

Source: ODOT Road Inventory 1/2004

Route #	Road Name	Surface Width	Road Width	Surface Type*
0002	Bevelheimer**	16	22	I
0022	Trenton Road	16, 18	24, 26	H2
0023	Needles Road	16	22	E2
0025	Center Village (W of Harlem)	16	22	E2
0026	Montgomery Road	18	22	H2
0027	Gorsuch Road	15, 16, 17	19, 20, 25	I
0027	Duncan Road	11	15	C, E2
0029	Green-Cook Road	16	22	G2, H2, F
0036	Robins Road	12, 14, 16	18, 20	E2, H2
0037	Kean Road	12	16	E2
0037	Hatch Road	8, 12	8, 18	C, E2
0038	Lewis Road	10	10, 14	C, E2
0040	Adams Road	8, 10, 12	8, 14, 16	B, E2
0261	Hughes Road	14	18	I
0269	Evans Road	14	20	E2
0328	Lakewood Drive	17	29	E2
0328	Mayfair Drive	18	28	G2
0328A	Mayfair Court	16	28	G2
0329	Orchard Drive	10	16	E2
0330	High Street	16	24	H1
0341	North Drive	16	24	H1
0393	Covan Drive	20	30	I
0405	Brookview Drive	20	30	I
0406	Thornbrook Drive	20	30	I
0407	Overbrook Lane	20	30	I
1027	Rich Drive	12, 18	20, 26	H2
1029	South Street	12	20	E2
1069	alley	8	10	E2
1070	alley	8	12	E2
1098	Water Street (alley)	8	12	E2
1356	Ivy Ridge Place	18	28	I

E2 Gravel or stone road
F Bituminous surface treated road
H1 Bituminous Penetration combined base under 7"
H2 Bituminous penetration combined base 7" or over
I Bituminous concrete sheet asphalt or rock asphalt road
G1 Mixed bituminous combined base with surface under 7"
G2 Mixed bituminous combined base with surface 7" or more
* major collectors
** minor collectors

9.8 Private Roads

Duncan Run Road

Harlem Township zoning and Delaware County subdivision regulations also allow for frontage to be provided on a Common Access Driveway (CAD). The CAD is a 12-foot-wide gravel surface driveway within a 60-foot-wide easement. The CAD may serve 3 lots, or up to 5 lots if two frontage lots satisfy the frontage requirement on an adjacent public road, but take access from the CAD. The CAD is intended to be a relief valve for odd shaped or environmentally constrained land where a regular road or an LVLD would be economically unfeasible. The Subdivision Regulations may be amended in 2007. The new CAD cross-section will include a layer of geotechnical material for longer roadway life. *Source: 1997 Delaware County Subdivision Regulations/2007 Proposed Regulations*

Private roads in Harlem Township include Champaign Avenue, Champaign Court, Erie Avenue, Erie Court, Hoover Court, Huron Road, Michigan Court, Ontario Court, Ridge View Drive, Ridge View Court, St. Clair Avenue and Superior Court. West Street appears in the DALIS system as a private street but is not fully constructed as a street.

9.9 Road Carrying Capacity

Road carrying capacity is determined by the width of the paved surface, the number of lanes and the geometry of intersections. 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. The amount of traffic placed on a specific road can be graded by Level of Service (LOS) from Level A (excellent flow) to F (failure, serious delays and congestion). Level of Service C is considered acceptable. Future land development will lower the LOS of county roads and upgrades will be needed to keep pace with the increased traffic counts. Population density has a direct relationship to trip generation on roads. Table 9.2 shows the relationship between minimum lot size (units/acre) and population per square mile.

Table 9.3 Dwelling Unit Density Per Acre and the Equivalent Population per Square Mile

# Units/acre multiplied by	#Persons/unit multiplied by	% Developable/ac multiplied by	Acres/ Square Mile equals	Population per Square Mile
.2 (5 acres lots)	2.7	95 %	640	328
.5 (2 acre lots)	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

Engineers 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 9.4. When densities remain less than 1 dwelling unit per acre, two-lane arterial roads with 38 feet of pavement (2 twelve-foot lanes and 2 seven-foot paved breakdown lanes) can handle traffic at level of service Level C or better. When average densities reach three dwelling units per acre, four-lane arterial roads are needed to maintain Level of Service C.

Table 9.4 Road Size and Type Needed to Serve Specific Population Density/Square Mile
(Source: Delaware County Engineer's Office)

Density (Units/ acre)	Average Annual Daily Trips/ Square Mile	Directional Design Hour Traffic	Level of Service	Road Class Required	Calculation # lanes each direction	Actual # of lanes	Width Needed (feet) *
.2	1,220	139	A C	Local	0.24 0.11	2 2	38' 38'
.5	2,880	328	A C	Collector	0.56 0.27	2 2	38' 38'
1	5,760	655	A C	Arterial	1.12 0.54	2 2	38' 38'
1.25	6,800	774	A C	Arterial	1.32 0.64	4 2	62' 38'
1.5	8,160	928	A C	Arterial	1.58 0.76	4 2	62' 38'
2	10,880	1,238	A C	Arterial	2.11 1.02	4 2	62' 38'
4	20,480	2,330	A C	Arterial	3.97 1.91	8 4	110' 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)

9.10 Functional classification

The Delaware County Engineer's 1999 **Design Standards** identify definitions for road functional classifications. The 2001 Delaware County Thoroughfare Plan identifies arterial and collector streets (*see* ***Functional Classification*** *of Roadways Map*).

Arterial Roads 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. They are usually a continuous route carrying heavy loads and Average Daily Traffic (ADT) in excess of 3,500 vehicles.

From the Thoroughfare Plan Functional Classification Map:

- Major arterial roads in Harlem Township: S.R. 605, S.R. 37.
- Minor arterial roads in Harlem Township: Harlem Road, Center Village Road, Fancher Road, Bevelheimer Road, N. County Line Road and S. County Line Road.

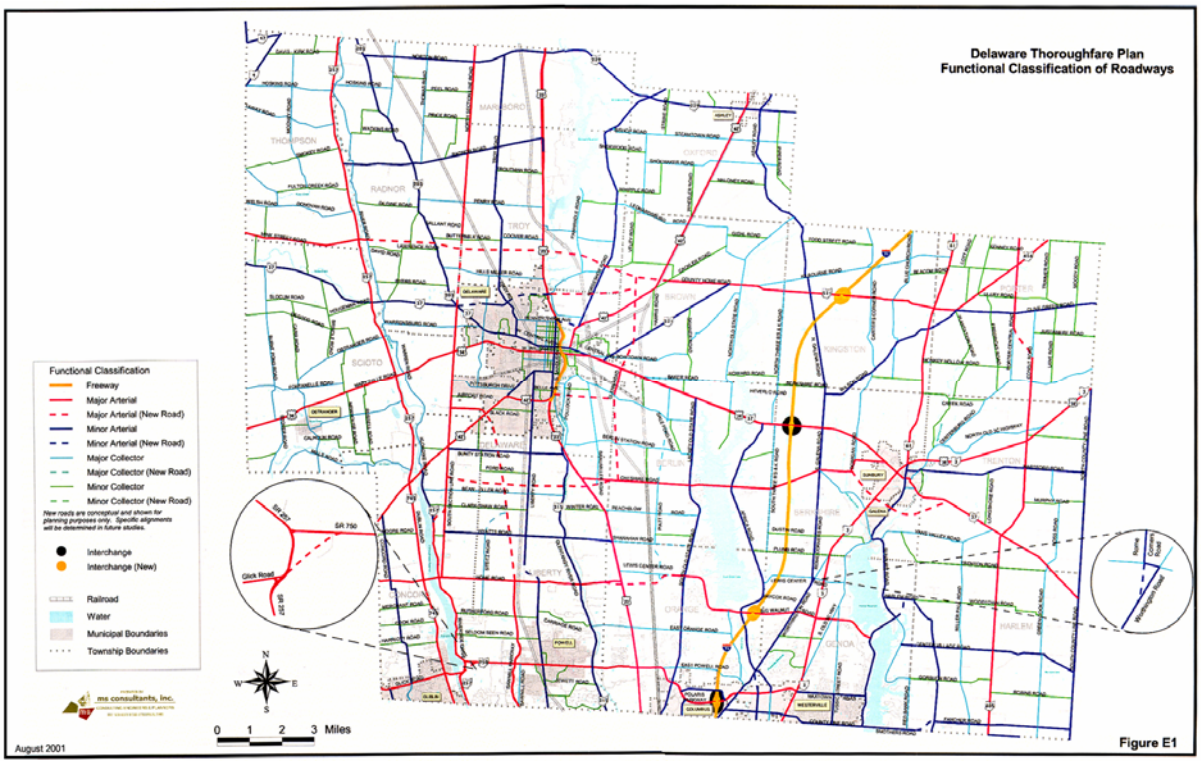
Collector Roads have the primary purpose of intercepting traffic from intersecting local streets and handling this movement to the nearest major collector or arterial street. Average Daily Traffic typically range from 1,500 to 3,500 vehicles, with AM peak hour traffic about 7-8% and PM peak hour of 10%.

From the Thoroughfare Plan Functional Classification Map:

- Major collector roads in Harlem Township: Miller-Paul Road, Green-Cook Road, Red Bank Road.
- Minor collector roads in Harlem Township: Trenton Road, Woodtown Road, Gorsuch Road and Robins Road.

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.
Local street examples: Hatch Road, Thornbrook Road and Mayfair Road.

Map 9.3 Functional Classification of Roadways
Source: 2001 Delaware County Thoroughfare Plan

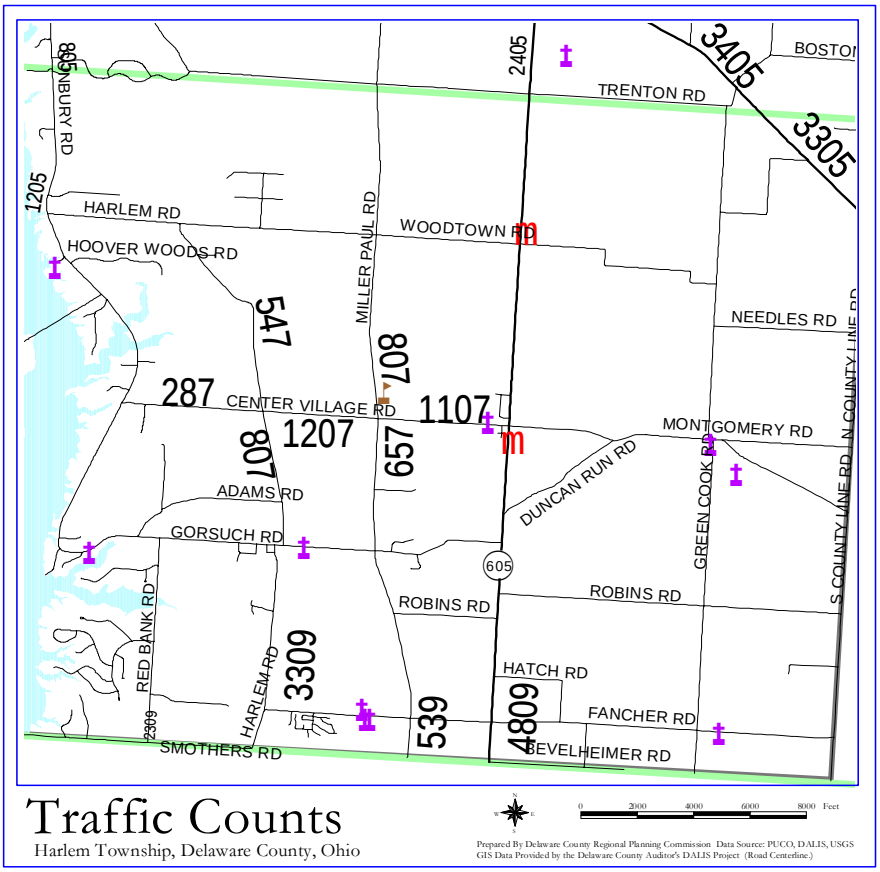


9.11 Traffic Counts

Traffic counts by the Mid Ohio Regional Planning Commission, ODOT and the Delaware County Engineer show the more heavily-traveled roads in Harlem Township. In the future, additional traffic on narrow roads becomes both a congestion and safety issue to the point that the road needs to be upgraded. The township, the County Engineer and ODOT should expect to upgrade certain roads as growth continues. Some local roads are narrow and tree lined; to widen and upgrade them would diminish the rural character prized by the township. There must be a balance of improvement and restraint on a road-by-road basis.

The Mid Ohio Regional Planning Commission has taken traffic counts and makes traffic projections for the region based on locally-adopted comprehensive plans. Map 9.4 shows traffic counts taken on arterial and collector roads in 2003. To read the map, the last digit references the year the count was taken. For example, 5 means 1995. The other numbers are rounded off to the nearest 100 trips. For example 807 on Miller-Paul Road between Woodtown and Center Village Road means 800 trips per day in 1997.

Map 9.4 Harlem Township 2003 Traffic Counts



Source: MORPC

9.12 Access Management

Access management is the practice of limiting curb cuts to 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 so they do not interact with each other.
- Restrict driveways to fewer than 30 per mile (every 350 lineal feet maximum).
- Prohibit some turns in critical areas; relocate that activity to a less conflicted point.
- Provide adequate sight distance for driveways.
- Provide turn lanes to separate conflict points for acceleration, deceleration, & storage lanes.
- Encourage internal access to out-parcels, or backage roads as rear access roads connecting uses.
- Use feeder roads to relocate critical movements and to handle short trips parallel to the main road.
- Use frontage roads to connect commercial traffic, and keep it parallel to the main road.
- Use right in, right out drives to prevent unwanted left turns across traffic.
- Use medians to separate traffic flows.
- Use appropriate curve radius, lane widths, driveway angle.
- Connect parking lots; share driveways.
- Avoid individual, closely spaced curb cuts to "bowling alley" lots.
- Avoid disconnected street systems.
- Minimize the number of traffic signals. Two per mile is ideal (half mile spaced).
- Coordinate access permit review between ODOT, local zoning and building departments

State and County highway corridors offer potential commercial tax base to Harlem Township. When new sites are zoned for commercial use, access management is imperative. Access management practices are appropriate for driveway cuts on all arterial roads. This practice of limiting curb cuts to major roads prevents conflicting turning movements and maintains safe traffic flow. The recent passage of Ohio House Bill 366 empowers Counties and Townships to regulate driveway access points after creating access management standards.

9.13 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. The cost of upgrading "original" county and township roads to collector or arterial standards can be factors in land use decisions, although excess traffic by itself is not considered grounds in Ohio to deny a zoning change.

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."

In December 2001, the Delaware County Thoroughfare Plan was adopted by the Delaware County Commissioners. The Thoroughfare Plan recommends various road improvements and one "new" road, which is the direct connection of Fancher Road to realign with Smothers Road. Although this project is located as a western extension of Fancher Road, the actual location would be determined at a future time. This was identified as a Medium Priority.

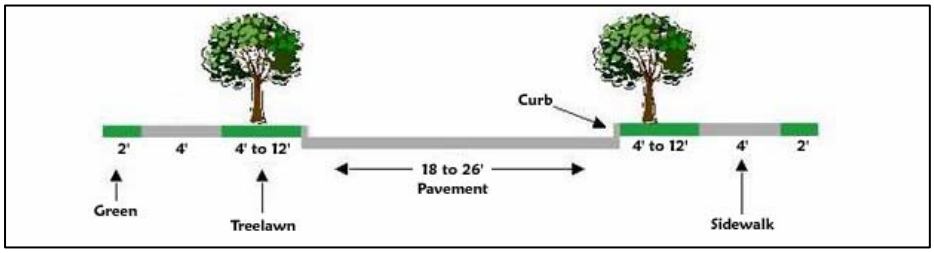
9.14 Other Road-Related Issues

Increase in population yields increased traffic flow on local roads. The following considerations should be made when reviewing rezoning requests:

Patterns of Development – Traffic can be reduced by the design of 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 may be given to neo-traditional development patterns (see Chapter 13) for planned developments with densities greater than one unit per acre. These may occur near existing village centers or as greenfield development. 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 while condominiums generate approximately seven 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. As a general rule, if the trip generation is more than 1000 vehicles per day, a 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. If LOS is predicted to drop below level C, remediation should be part of the development project, cost shared on a "fair share" basis.

Streetscapes – Streets are a strong part of the look of a community. Every community needs a streetscape standard. For suburban streets with lot widths less than 100 feet, the following is a desirable streetscape cross section. Street pavement widths may range from 18-26 feet depending on the need to provide on-street parking.



Residential Streetscape *(not the current township standard)*

Alternative Street Designs – The Roundabout

Intersections typically require stop signs and traffic signals when traffic counts warrant. However, another alternative is useful under certain conditions. Modern low speed (11 mph) roundabouts can reduce crashes, flow more traffic than traffic signals, cost less and require less pavement than signalized

intersections. The British have constructed 11,000 of them to increase safety, save money and improve traffic flow. Not all intersections are candidates, but the roundabout is a viable traffic management tool.

Modern, low-speed roundabout. Pedestrian crosswalks are behind the pause line for traffic. Safe design speed is 11 miles per hour. Location: Michigan, design by DLZ Engineers.

Bike/Pedestrian Policy - As the subdivision authority, the Regional Planning Commission seeks connections between subdivisions by often requiring new subdivision streets to connect to vacant adjacent parcels of land. The main benefits to connectivity are shorter trips, greater travel choice and savings in infrastructure. Township zoning may also provide a policy of neighborhood-to-neighborhood street connections, provided safety and quality of life impacts from the connection are mitigated.

The staff recommends that townships create a policy for roads as they change from local to collector status. When a street exceeds 1,500 vehicle trips per day it should be classified as a minor collector, and the township should budget for the construction of a pedestrian path or bikeway along at least one side of the street. Minor collector streets within platted subdivisions should also be considered for traffic calming devices. Major collectors should consider the construction of bike paths on both sides of the street when traffic warrants it. Subdivisions that are platted along existing collector streets may stipulate that bike paths or sidewalks be constructed as part of a regional system.

Impact Fees to Pay for Road Improvements - 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. 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
e.) voluntary restrictions on travel with staggered work hours, etc.

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 evaluated and recommended 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 10
Utilities

The character of Harlem Township's future development depends largely on the availability of public utilities. As centralized sewer and water become available, development pressure will increase as landowners and speculative developers see the potential of increased densities and land use options. In preparing the recommended land use and density map, the steering committee needs to know where anticipated new service areas will be, what densities should be permitted and what is the capacity for any future facilities.

10.1 Water

The Del-Co Water Company, a cooperatively owned private water company established in 1973, serves most of Harlem 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.

A. Supply

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 State Route 315 prior to treatment. The Alum Creek Reservoir covers about 3,400 surface acres. Del-Co also has a groundwater supply from four wells rated at 1,300 gallons per minute each. An average of 38 inches of rainfall and snowmelt annually refills the watershed.

Del-Co Water Headquarters and Up-Ground Reservoirs on State Route 315, Liberty Township. A 1 billion gallon reservoir has been added since this photograph was taken.

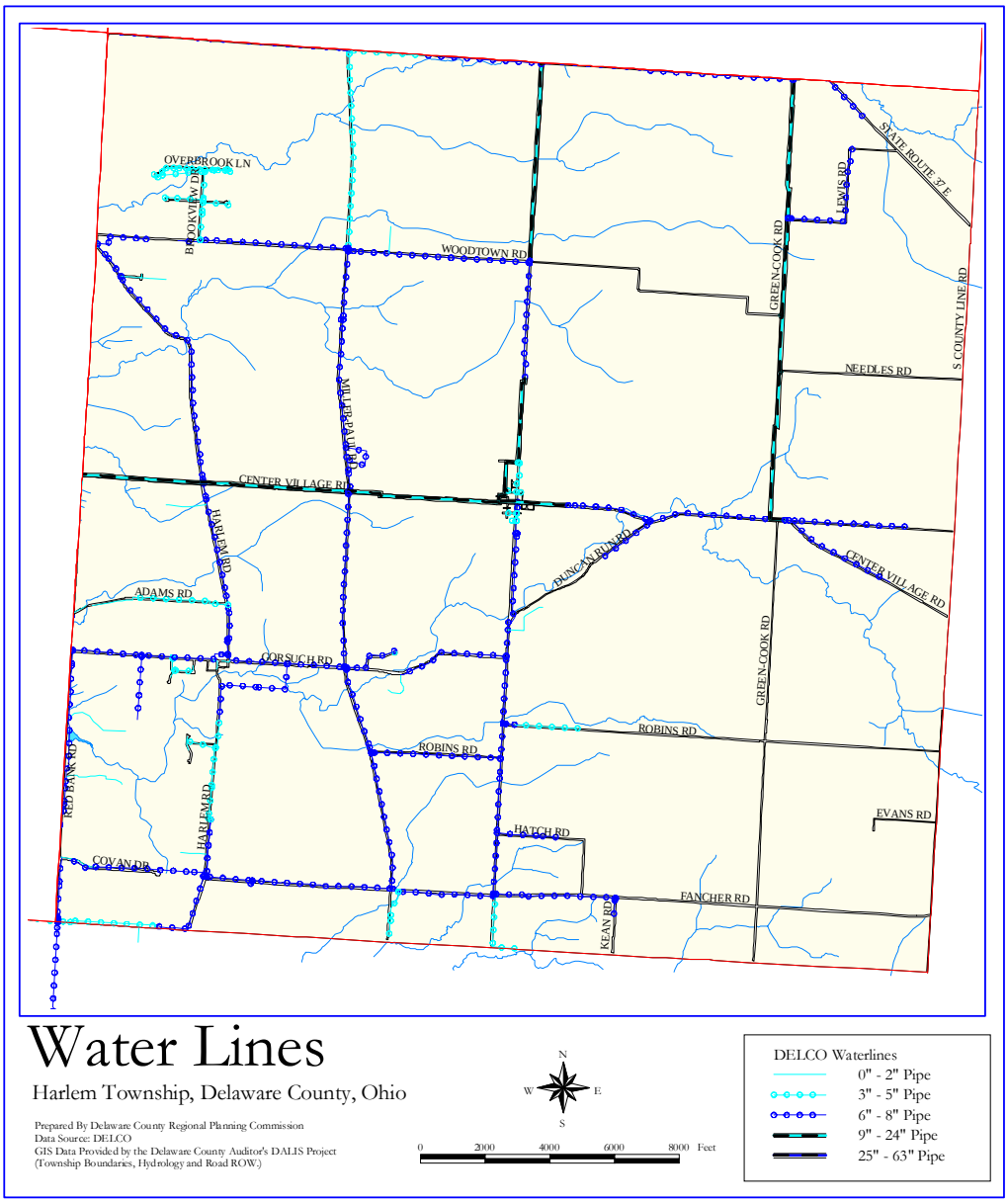
Del-Co has expanded its water supply to keep pace with growth of the county, adding an average of 2,000 additional customers and 65 miles of new water lines each year. In addition to a million-gallon storage tank in Morrow County and a second water treatment plant on S. Old State Road in Orange Township, a new billion-gallon up-ground reservoir has been constructed to bring total storage capacity to 1,660,000,000 gallons. The Olentangy plant now has a daily treatment and pumping capacity of 19.2 mgd. The rapid growth of Delaware County strains water treatment capabilities during summer months. Del-Co regularly issues sprinkling regulations during dry summer periods.

Three future supply locations are planned at the Whetstone River, northwest of Ashley and 400 acres on the Scioto River at SR257 and Donovon Road. With these new facilities, a total of 38 mgd is Del-Co's long term pumping and treatment capacity. The 1998 service population for Del-Co was approximately 50,000. 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.

B. Water Lines in Harlem Township

Map 10.1 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 10.1 Current Water Lines in Harlem Township



10.2 Sanitary Sewer

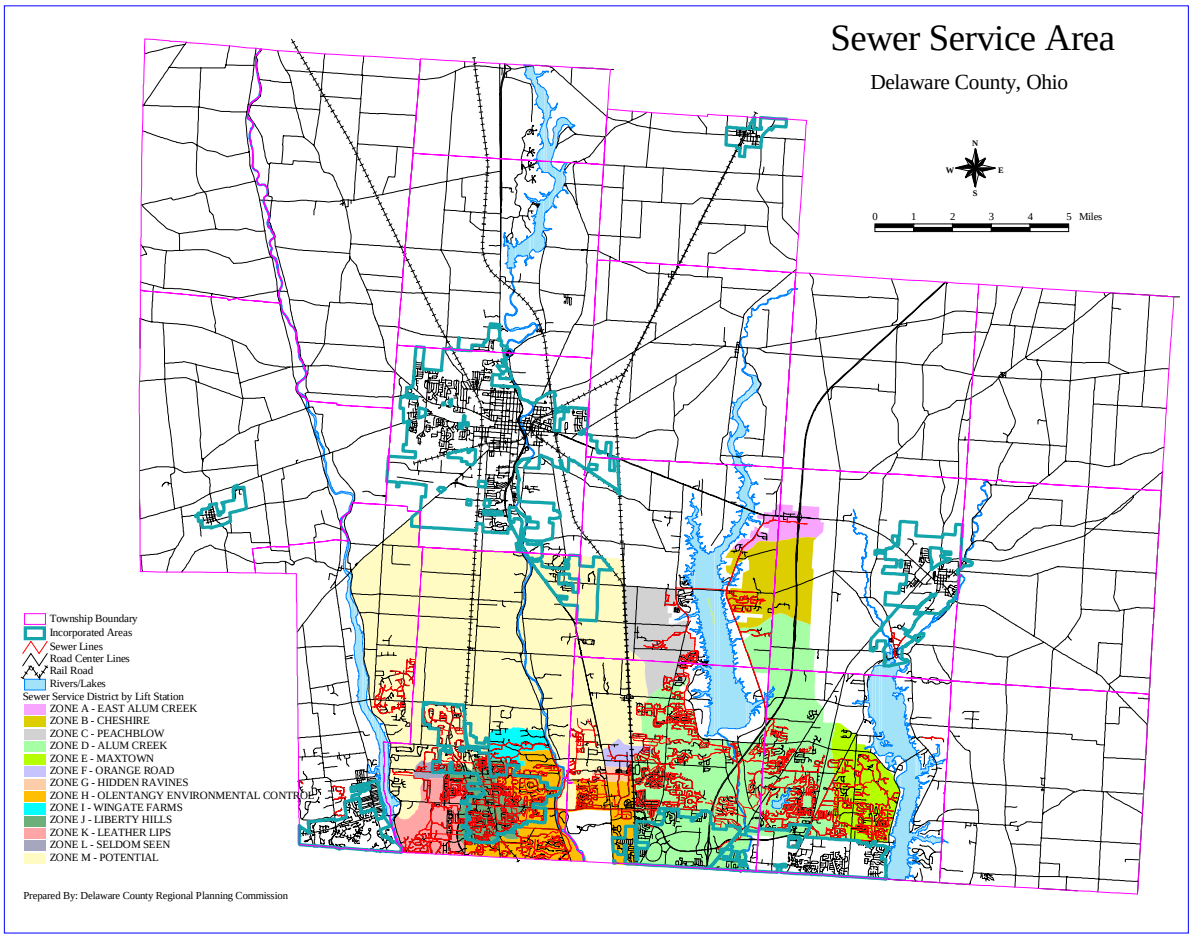
A. Facts about Existing Sanitary Service

1. The Delaware County Sanitary Sewer Department currently does not service Harlem Township. Most homes in Harlem Township utilize on-site sewage disposal systems.

2. Neither the Olentangy Environmental Control Center (6 mgd treatment capacity) nor the Alum Creek Treatment Plant (10 mgd treatment capacity) would service Harlem Township.

3. For the purpose of allocating land use density based upon sewer capacity, the following assumptions are made: a.) Pump station capacities can be upgraded; b.) The pipe that discharges to the pump station is not expected to be upgraded; and c.) The ultimate capacity limitation is the treatment plant capacity. See Map 10.2 for current sewer areas.

Map 10.2 Current Sewer Service Areas



4. The County Commissioners' sewer user policy is "first come, first served". The County Sanitary Engineer does not police the densities of land uses with sewer extension. However, the Engineer uses existing and planned township densities when planning future sewer extension.

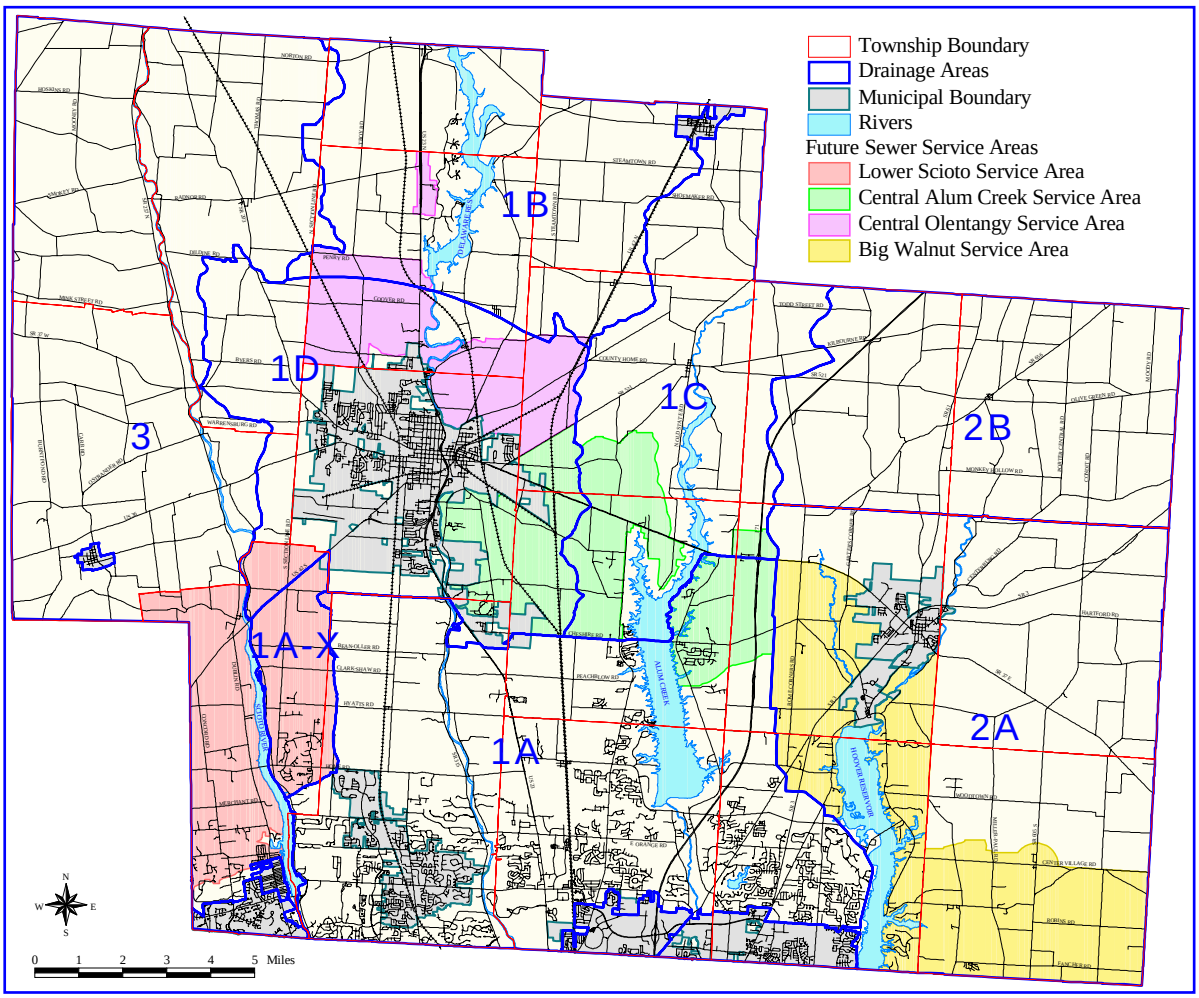
5. It is up to the township to determine the density of population by zoning. If the township zones land in sewer service areas for densities higher than the average density based upon residual sewer capacity, there will be "holes" in the sewer service area without sewer capacity.

B. Future Sewer Service Areas – the Delaware County Regional Facilities Plan

1. The Delaware County Sanitary Engineer is updating the county's 208 Water Quality Plan. Because of poor soils, *(see Soil Suitability map, Chapter 6)*, additional sewer expansion is necessary for the preservation of surface water quality and the public health since growth is expected to continue.

2. As part of the 2004 Sewer Master Plan Update, Harlem Township indicated an interest in sewer service. Map 10.3 shows that southern Harlem Township will be in a future sewer planning area.

Map 10.3 Future Sewer Service Areas



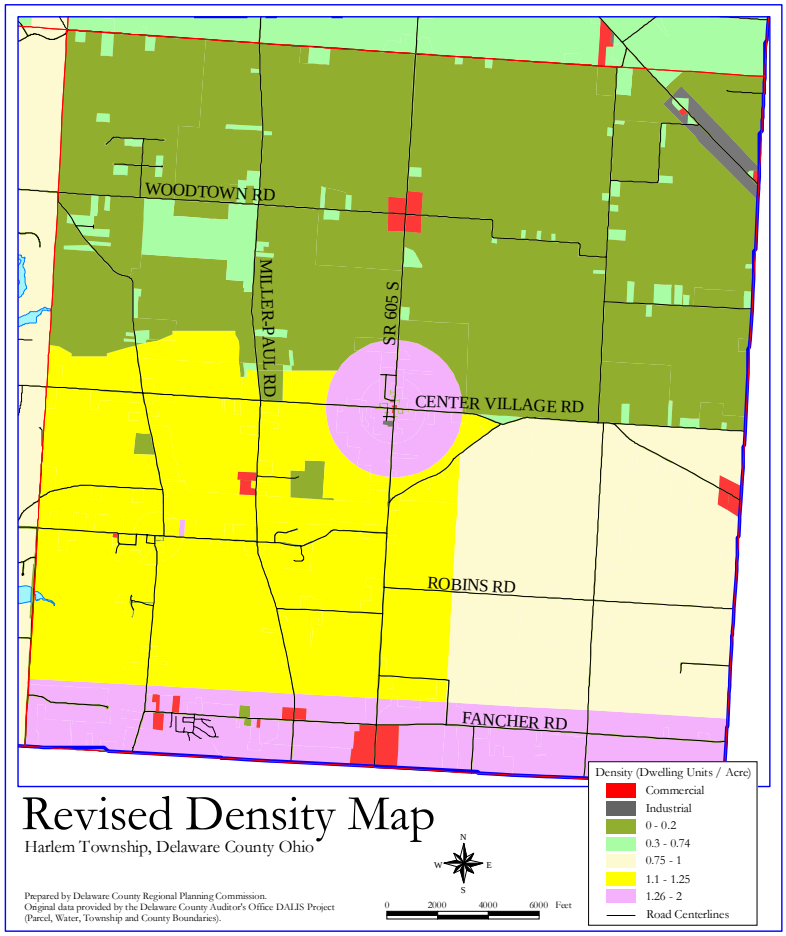
3. The Sewer Master Plan analyzes the feasibility of sewer service at densities planned by locally adopted comprehensive plans. If local comprehensive plans did not recommend densities that

are cost-effective for a local sewer system, the jurisdiction was given the opportunity to propose higher densities in order to obtain future sewer service. The result is several sewage treatment options, and multiple sewer service areas recommended within the county.

4. The sewer planning process included an evaluation of current "Areas of Existing Need", which weighted on-lot systems by number of complaints, age of systems, lot size, soil type, and sampling results. Of 24 Areas of Need in the county, Center Village ranked 5th, Harlem Village ranked 14th and Covan Drive ranked 18th.

5. During the Public Participation phase of the Sewer Master Plan, representatives of Harlem Township stated their desire to retain the rural, low-density nature of the township but understood the need to allow for higher densities along the county line as a tool to avoid annexation. As part of the Facilities Plan update, Township representatives identified areas they would envision as appropriate for higher densities. These densities, merged with the proposed land use from the 1988 Master Plan (which was current at the time) are shown on Map 10.4.

Map 10.4 Revised Density Map (Harlem Township detail, using the 1988 Master Plan land use)



6. By agreement with Columbus, either Delaware County or Columbus could serve land south of S.R. 37 by discharging into existing Columbus sewer lines. The service contract prescribes an overall gross density of 4 persons per acre (approximately 1.25 units per acre) for the area south of S.R. 37. The service agreement allows the County to discharge wastewater from the contract area to the City of Columbus, provided there is adequate capacity in the accepting sewer network, the Big Walnut Interceptor. Changes since the original agreement have resulted in a revised capacity at the prescribed 4 persons per acre (gross) for the area generally south of Duncan Run (stream).

7. Harlem Township must use its planning and zoning to carefully allocate any sewer capacity, should it become available.

C. Sewer Policy – Zero Discharge Centralized Sewer Systems

Building a centralized sewer system 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 OEPA changed its anti-degradation requirements for surface discharge from a wastewater treatment plant, prompting "zero discharge" centralized sewage disposal systems, such as on-site treatment plants that use the treated effluent to irrigate a golf course. This action allows an opportunity for cluster development in rural areas with lot sizes smaller than would have been possible without centralized sewers.

2. For Harlem Township, 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. 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.

4. Harlem Township must use its vision of the future, its recommended land use plan and zoning potentially to permit zero discharge centralized sewer systems as accommodations to development ***only*** when the use and density conform to this plan.

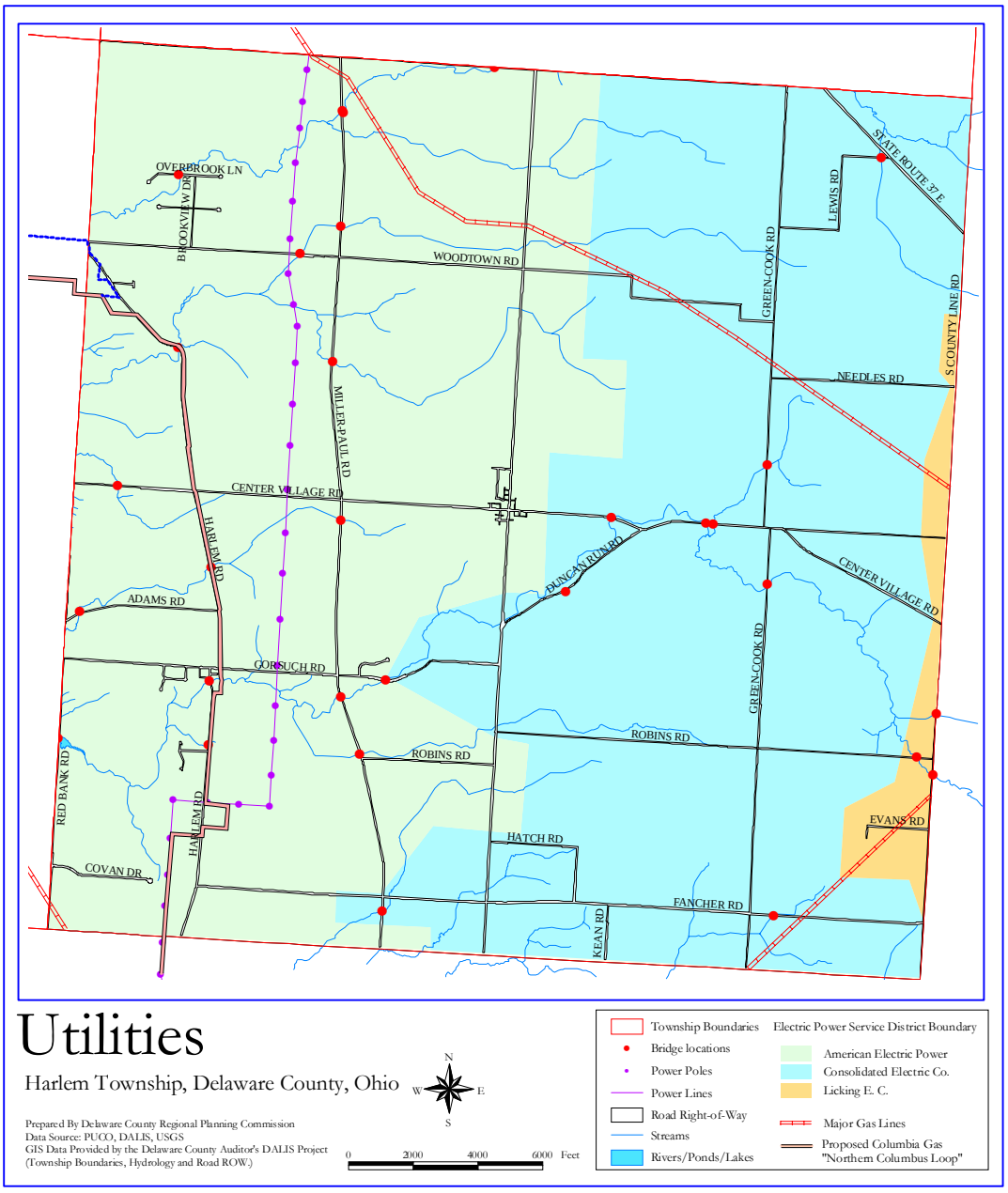
10.3 Electric

American Electric, Consolidated Electric and Licking Electric Company provide electric service to Harlem Township. The Utilities Map shows the service areas. A major electric transmission line crosses Harlem Township. No structures are permitted within the rights of way for major transmission lines. The location of this line is shown on the Utilities Map.

10.4 Natural Gas

Harlem Township is in the service area of Columbia Gas, the largest natural gas utility in the state. Existing gas lines are shown on the Utilities map. On August 3, 2005, Columbia Gas received approval for and later built a new, 25-mile distribution pipeline to serve southern Delaware County. Approximate location of the line is shown on the Utilities Map.

Map 10.5 Utilities Map



10.5 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. In 2005, RPC staff developed new model language for townships based on recent case law.

10.6 Storm Water Management

Storm water management is reviewed by the Delaware County Engineer's office for subdivisions and road construction. In February 1998, the Delaware County Engineer & County Commissioners, in mutual agreement with the Delaware Soil and Water Conservation District, transferred Delaware County ditch maintenance responsibilities to the District. Projects on maintenance include those ditches improved since 1957 and subdivisions platted since July 1998, petitioned to and accepted by the County Commissioners for maintenance. As of December 31, 2004 there were 245 projects on county ditch maintenance (221 subdivisions), representing more than $29,000,000 in infrastructure.

Table 10.1 Drainage Structures on Maintenance

Open Ditch	**40.23 miles**
Tile drains	**114.83 miles**
Surface Drains	**.62 miles**
Retention/Detention Basins	**173**

10.7 Upper Big Walnut Creek CREP

Managed by the Soil and Water Conservation District, the Conservation Reserve Enhancement Program is a local, state, federal and private partnership to create 3,500 acres of filter strips, riparian buffers, wildlife habitat, wetlands and tree plantings to reduce chemical and sediment runoff in Hoover Reservoir and its watersheds. Landowners enrolling cropland will receive 15 annual payments and cost share from USDA and a local supplemental payment to establish associated conservation practices. Payments for voluntary easements are also available.

Key Program Options include 1.) Grass filter strips along ditches or streams; 2.) Wildlife habitat plantings along ditches or streams; 3.) Wetland restoration; and 4.) Tree planting and riparian buffer strips in suitable areas.

Many farmers in the Upper Big Walnut Creek watershed have adopted conservation tillage and other practices to such an extent that agricultural field runoff has been reduced. Chemical and sediment loadings into Hoover Reservoir and tributary streams are still a problem, due in part to the fine clay nature of the soils and their erodibility. Also, wildlife habitat is scarce due to the intensive land use of these highly productive soils and land use change to residential and commercial development.

The Conservation Reserve Enhancement Program compensates qualified landowners who voluntarily take cropland out of production and establish conservation practices, such as filter strips, riparian buffers and tree plantings. The different "look" means less chemical and sediment runoff is entering ditches, streams and Hoover Reservoir, aquatic and upland wildlife areas are improved, and a productive farm community will continue to prosper. Additional information is available through the Soil and Water Conservation District Offices at 740-368-1921.

Chapter 11
Community Facilities

Good community facilities contribute to the quality of life and help establish community identity. Schools, libraries, public safety and governmental services all play a role in determining property value and local real estate demand.

11.1 Education

Harlem Township's primary education needs are served by Big Walnut and Johnstown-Monroe Local School Districts. Several secondary education campuses are located in the vicinity, including The Ohio State University, Ohio Wesleyan University, and Otterbein College.

Souders Elementary

Harlem Township is predominantly served by the Big Walnut Local School District. The Big Walnut (BW) district currently operates with three (3) elementary schools, one (1) middle school and one (1) high school. Harlem Township students primarily attend Hylen Souders Elementary School, which is located in the township, at 4121 Miller-Paul Road. *(See Community Facilities map)*

The elementary school building was constructed in 1974 and named in honor of a former district teacher/ superintendent. The BW district's middle and high school facilities are both located in the Village of Sunbury.

The BW district has an effective tax millage rate of 25.01 of which 20.00 is operating and 5.01 is bond. An additional millage of 8.50 is approved but not effective. A bond (1.66 mill) was passed in 2005 to perform necessary improvements to the current facilities, add 13 high school classrooms, provide funds to purchase land for future use and establish a centralized bus storage and maintenance site.

Table 11.1 Big Walnut Local School District 2002-03 Building Enrollments

Grade	Big Walnut Elementary	Harrison St. Elementary	Souders Elementary	Middle School	High School	Total
PS*	17	-	17	-	-	34
K**	59	45	69	-	-	173
1	68	46	78	-	-	192
2	67	36	67	-	-	170
3	80	52	70	-	-	202
4	53	57	80	-	-	190
5	70	46	72	-	-	188
6	-	-	-	218	-	218

7	-	-	-	204	-	204
8	-	-	-	215	-	215
9	-	-	-	-	250	250
10	-	-	-	-	207	207
11	-	-	-	-	232	232
12	-	-	-	-	234	234
Total	**414**	**282**	**453**	**637**	**923**	**2,709**

(Source: Big Walnut Local School District, 2002)
* PS – Preschool, ** K- Kindergarten

Enrollment over the last 10 years grew 3.12% with an typical increase of .68% per year. Projections performed by Planning Advocates in 2001 indicate that the enrollments may increase at higher rates over the next eight years.

Table 11.4 Most Likely Enrollment Projections, Big Walnut Local School District

Grade	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
K– 5	1,254	1,327	1,338	1,368	1,383	1,421
6 – 8	643	651	665	648	683	738
9 – 12	858	837	841	890	866	884
K - 12	2,755	2,815	2,844	2,906	2,932	3,043

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

A small area of the township is served by the Johnstown-Monroe Local School District. Nearly 600 acres (including 16 single-family homes) in the southeastern corner of Harlem Township is served by this district.

School Performance

The Ohio Department of Education evaluates each school district in the State of Ohio annually, based on 27 standards and an associated ranking. These report cards use multiple measures to determine each district's designation on a scale of Excellent, Effective, Continuous Improvement, Academic Watch or Academic Emergency. With a listed enrollment of 2,535 students in 2004-2005, Big Walnut met 19 out of 23 State Indicators and received a Performance Index Score of 97.4 out of 120 points. This resulted in a designation of "Effective", the Adequate Yearly Progress was "Not Met" and the Improvement Status was listed as "At Risk".

In Johnstown-Monroe, average daily student enrollment for 2004-2005 was 1,485. The district met 15 out of 23 State Indicators and received a Performance Index Score of 92.4 out of 120 points. This district also resulted in a designation of "Effective", the Adequate Yearly Progress was "Not Met" and the Improvement Status was listed as "At Risk". *(Source: Ohio Department of Education 2004-2005 Report Cards)*

Delaware Area Career Center

The city and county boards of education established the Delaware Joint Vocational School in 1974, a career/technical school, to offer specific career training to Delaware County residents. Renamed the Delaware Area Career Center, it 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. The DACC serves the Delaware area school districts: Big Walnut, Buckeye Valley, Delaware City, Olentangy and open-enrolled

students from Westerville and Worthington districts. The Delaware Area Career Center offers two campuses: North Campus, 1610 SR 521, Delaware, and South Campus, 4565 Columbus Pike, Delaware.

Effect of Land Use Planning on School Planning

When schools become overcrowded due to rapid growth, there may be call for growth controls, or limitations on residential building permits (moratoriums). A series of 1970s cases regarding growth rate limitations, the most famous of which is Golden v. Ramapo (409 US 1003, 93 S. Ct. 440 34 L. Ed. 2d 294 (1972)) which suggested that communities could control growth to allow new infrastructure to be built at a reasonable, attainable rate. Where upheld, moratoriums have been temporary, based on a critical shortage of a basic community service. The community must work to provide that service, at which time the moratorium must be removed. Ohio law does not provide for moratoriums in townships (see *Ohio Planning and Zoning Law*, Meck and Pearlman, The West Group, Section 11.27-11.28). Cities and villages in Ohio have home rule authority which "provides the flexibility to experiment with…planning programs to respond to the issues of rapid growth" *(Meck and Pearlman)*.

Townships in Ohio also don't have the authority to impose impact fees. House Bill 299, introduced in June, 2005, is an effort to give townships that power. Under Rep. Jon Peterson's bill, counties, townships and school districts would have the power to levy a one-time fee to pay for infrastructure and capital projects if they are able to demonstrate that the improvements are needed as a direct result of that development. The improvements must be consistent with existing land use and capital improvement plans and the body levying the fee must show a direct relationship with the amount of the fee and the cost of the improvements. The fees cannot be used to remedy existing problems.

Impact fees are seen by some as a temporary fix that might make developers less likely to make other concessions to a community, such as dedicating land for schools or parks. Until such legislation is passed, townships see their only recourse to overly rapid growth as controlling the timing of zoning. Harlem Township may wish to use the schools as one additional indicator of critical facilities that need to be monitored in making zoning decisions.

11.2 Archeological and Historic Sites

The Ohio Historic Preservation Office (OHPO) maintains the state's official record of historic properties listed in the National Register of Historic Places. These properties are recognized by the federal government as being worthy of preservation for their ability to help us better understand American history, architecture, archaeology, engineering, or culture. Harlem Township has one property listed in the National Register – the John Cook Farm – at 12040 Gorsuch Road. It is possible that other historic properties

John Cook Farm (historical photo taken from the OHS National Register website).

in the township are eligible for listing, but have yet to be nominated. The OHPO lists the following benefits to listing in the National Register:

- The listing of a building, structure, site, object or district in the National Register of Historic Places accords it a certain prestige, which can raise the property owner's and community's awareness and pride.
- Income-producing (depreciable) properties which are listed in the National Register individually or as part of a historic district may be aided by federal tax incentives which allow for a 20% investment tax credit for certified rehabilitation.
- National Register listing is often a prerequisite for funding applications for restoration work through various private, nonprofit organizations, such as the National Trust for Historic Preservation.

The OHPO also maintains the Ohio Historic Inventory (OHI), which is a record of buildings and structures which may have architectural or historical significance. There are over 90,000 properties recorded in the OHI for the state. According to the OHPO, the Ohio Historic Inventory form is an important reference for organizing community preservation efforts and can be used as a guide for safeguarding the historical and architectural resources of Ohio. Harlem Township has only a single property recorded in the OHI – DEL-9-18 – for the John Cook Farm. Properties may be recorded in the OHI without undergoing evaluation for listing in the National Register. For example, many of the buildings that are shown on the 1905 USGS 15' Westerville topographic quadrangle still exist and could be included in the Ohio Historic Inventory.

The Ohio Historic Preservation Office maintains the Ohio Archaeological Inventory (OAI), the official record of archaeological site locations and information on such sites in Ohio. There are over 2200 archaeological sites recorded within Delaware County. Harlem Township has had ten archaeological sites recorded in the OAI. These sites include finds dated from the Early Archaic period through the Late Woodland period, or from about 8000 BC to about AD 1000. Very little effort has gone into locating and reporting archaeological sites in Harlem Township. For example, none of the burial mounds shown in William C. Mills' (1914) *Archaeological Atlas of Ohio* have been included in the OAI. Given the large number of sites found in those parts of Delaware County which have received more extensive survey, it is considered highly likely that additional archaeological sites exist within Harlem Township. Archaeological sites are finite, fragile, and non-renewable resources that can be nominated to the National Register and should also be taken into consideration when planning for development. (see Archeological Sites, Cemeteries and Historical Sites Map)

11.3 Churches and Cemeteries

Three churches were observed within Harlem Township during the existing land use survey. Additional churches may operate in the township, but were not identifiable. The three churches observed are:

- **Center Village Church of Christ**, 13699 Center Village Road, east of Center Village
- **Harlem Church of Christ in Christian Union**, 11229 Gorsuch Road, east of Harlem Village
- **New Hope United Methodist Church**, 5520 Harlem Road

Eight cemeteries are located within Harlem Township. *Source: Guide to the Cemeteries of Delaware County, Ohio, Marilyn and George Cryder.*

- **Center Village Cemetery**: northwest of Center Village.
- **Cockrell Cemetery**: north side of Woodtown, west of 605.
- **Fancher Cemetery**: north side of Fancher Road, east of trailer park.
- **Hanover Cemetery** (a.k.a. Snipetown): south side of Fancher Road, east of Green-Cook Road.
- **Harlem Cemetery**: south side of Gorsuch Road, east of Harlem Village.
- **Hunt Cemetery**: southwest corner of Green-Cook and Duncan Run Roads.
- **Maple Grove Cemetery**: south side of Fancher Road, east of trailer park.
- **Wickhieser (Wickiser) Cemetery**: east of Green-Cook, along Duncan Run stream.

11.4 Libraries

The State of Ohio funds some public libraries through state income tax. The libraries receive respective cuts of 5.7% of the state income tax that is allocated for public libraries. Residents can obtain a library card at any of the following libraries.

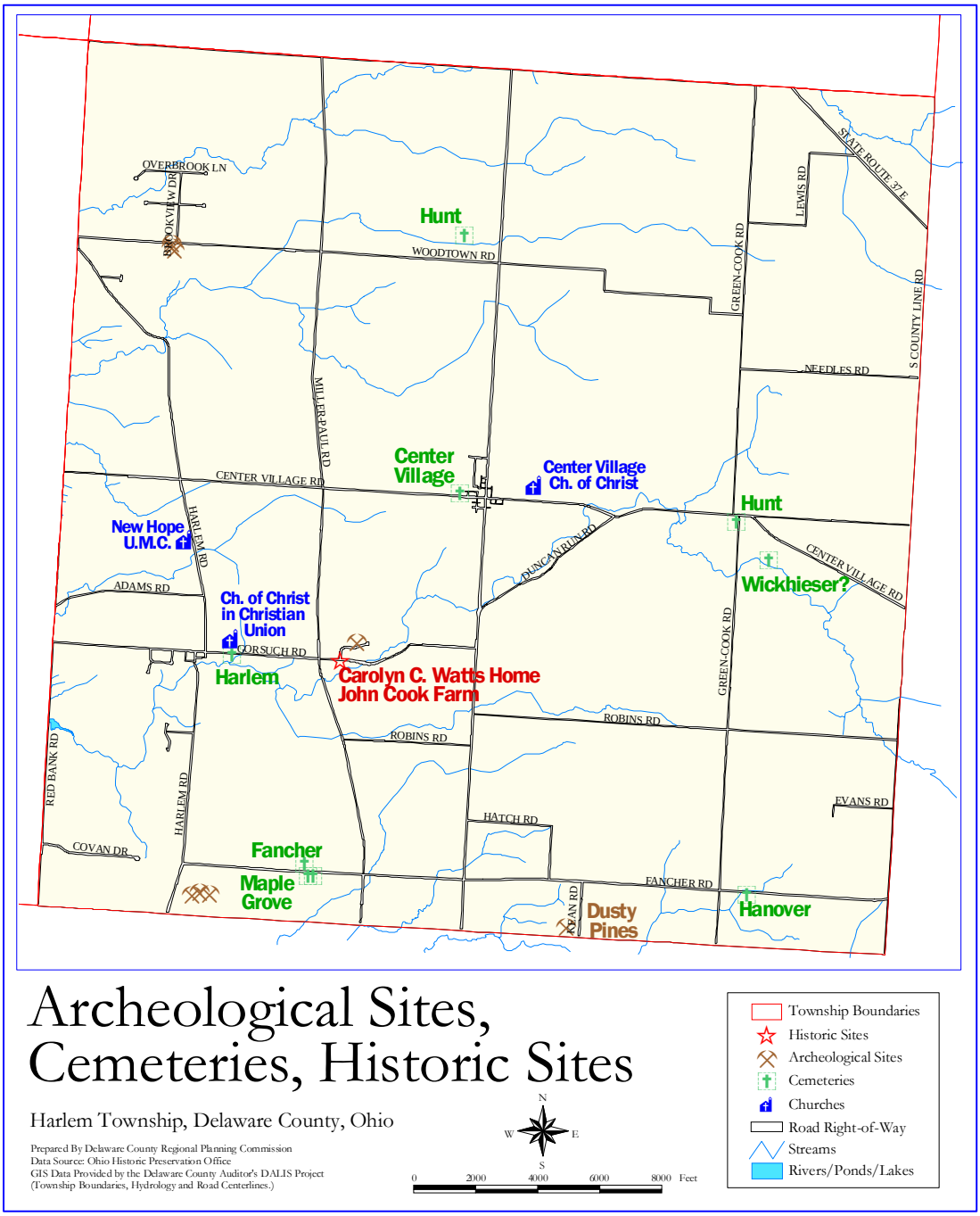
The closest library for Harlem Township residents is the Sunbury Community Library. This 14,000 square foot library provides circulation services to individuals within the Big Walnut Local School District's boundaries. With cooperation from the Columbus Metropolitan Public Library, the Community Library circulated 252,936 volumes in 2001 (including books, audios, videos, DVDs, CDs and 293 subscriptions).

The Delaware County District Library has its downtown library at 84 East Winter Street, Delaware, and branch libraries in Ostrander at 75 North 4th Street and the City of Powell at 460 S. Liberty 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. Of the total budget, 94% 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 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 (in Delaware County). Currently, the District has 145,000 volumes. The "old" rule of thumb is that there should be three 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.

Ashley Wornstaff Library is located at 302 E. High St., Ashley. Ohio Wesleyan University's Beeghley Library located at 43 University Ave., Delaware extends borrowing privileges to all residents of Delaware County.

Methodist Theological Library is located at 3081 Columbus Pike, in the City of Delaware. As the population of Harlem Township and the eastern Delaware County area increases, there may be a need for expanded library service.



11.5 Hospitals

There are no hospitals located within Harlem Township. Grady Memorial Hospital, affiliated with Ohio's largest healthcare system, OhioHealth, 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 flights. Expansion plans include a relocation to a site along U.S. 23 south of the city of Delaware near Peachblow Road.

Grady competes with northern Franklin County Hospitals such as Riverside Methodist Hospital, Olentangy River Road in Columbus, and St. Ann's in Westerville. Eight outpatient facilities are located within Delaware County. Numerous similar facilities are located in northern Franklin County, including the Westerville area. Such centers provide medical services that do not require an overnight stay.

11.6 Fire Protection

Fire Protection is provided by the Harlem Township Fire Department (740-965-2661). The Fire Station is located at 3883 S. St. Rt. 605, on the south side of Center Village. The building is also used as the Township Hall, with office and meeting space. (see Community Facilities map)

Harlem Township Fire Station and Township Hall.

11.7 Police Protection

Harlem Township is policed by the Delaware County Sheriff's Office, (DCSO) which is headquartered in Delaware on State Route 42. The Patrol Division provides law enforcement service to all jurisdictions within Delaware County. Ostrander and Galena are primarily patrolled by DCSO along with every township in the County except Genoa, which has its own patrol department. DCSO is on call 24 hours a day, 365 days a year with a patrol staff including 1 Lieutenant, 4 Sergeants, and 41 Deputies. Operating under three regular work shifts, patrol offers investigation of criminal offenses, crime prevention, traffic enforcement and service of civil process. DCSO also has a division for detective services, support services, youth education and specialty units. The Delaware County Jail housed 3,588 inmates in 2004 with an average daily population of 142 inmates and an average stay of 28 days.

Table 11.3 Sheriff's Calls

Sheriff's Calls for 2004 by Township/Municipality			
Jurisdictions without an independent patrol department		Jurisdictions with an independent patrol department	
Orange Township	5406	Delaware City	425
Liberty Township	3339	Genoa Township	242
Concord Township	1346	Ashley Village	145
Berkshire Township	1317	Shawnee Hills Village	124
Berlin Township	1149	Columbus City	48
Harlem Township	842	Sunbury Village	45
Troy Township	723	Out of County	44
Delaware Township	629	Alum Creek State Park	35
Scioto Township	481	Powell City	20
Trenton Township	454	Westerville City	15
Brown Township	388	Delaware State Park	10

Kingston Township	353	**Dublin City**	6
Porter Township	288		
Radnor Township	269	***Total Sheriff Calls in 2004***	***19,556***
Oxford Township	228		
Marlboro Township	134	***Total calls for jurisdictions***	
Thompson Township	101	***without independent patrols***	*17,497*
Village of Ostrander	44	***Total calls for jurisdictions***	
Village of Galena	6	***with independent patrols***	*1,159*

Source: Delaware County Sheriff Office web page www.delawarecountysheriff.com/statistics/2004twp.htm.

According to Table 11.3, Harlem Township represented approximately 4.3% of the Sheriff's complaints in 2004. With 2.7% of the county's population residing in Harlem Township this rate appears slightly higher than average, but does not appear higher when considering that most of the county's municipalities have their own independent patrol divisions.

11.8 Other Community Facilities

Among the "official" community facilities listed in this chapter, the township has a number of facilities that are civic in nature but private, including the Grange Hall and the Curtain Players. In addition, the community has several organizations that do not necessarily have permanent land or facilities. It is not the intent of the Comprehensive Land Use Plan to make recommendations for the future growth or development of these community facilities. Instead, the plan locates major community assets for reference by the township in future land use reviews.
(See Community Facilities map)

Home of the Curtain Players.


OVERBROOK LN
BROOKVIEW DR
WOODTOWN RD
EMS
Royal American Golf Course
Overbrook Nature Preserve
MILLER PAUL RD
Souders Elementary
CENTER VILLAGE RD
HARLEM RD
Grange Hall
Twp. Park
Township Hall
Fire Station
DUNCAN RD
Treehaven Campground
Curtain Players
ADAMS RD
GORSUCH RD
Hoover Res./ Columbus
RED BANK RD
ROBINS RD
COVAN DR
HATCH RD
FANCHER RD
KHAN RD
GREEN-COOK RD
LEWIS RD
STATE ROUTE 37 E
S COUNTY LINE RD
NEEDLES RD
Rainbow Lake Fishing
EVANS RD
Community Facilities
Harlem Township, Delaware County, Ohio
Prepared By Delaware County Regional Planning Commission
Data Source: Ohio Historic Preservation Office
GIS Data Provided by the Delaware County Auditor's DALIS Project
(Township Boundaries, Hydrology and Road Centerlines.)
N
W
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S
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2000
4000
6000
8000
Feet
Township Boundaries
Community Facilities
Churches
Parks/Open Space
Road Right-of-Way
Streams
Rivers/Ponds/Lakes

Chapter 12
Open Space and Recreation

12.1 Introduction

The Ohio Revised Code 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 John Beltz Retreat Center is an example of open space within the township.

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. Many desirable communities in America have a significant park and recreation system as one of their 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. These are services that society would have to pay for otherwise. Natural open space provides these services for free.

- 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
- Increases project amenity
- Helps create quality developments with lasting value

The economic benefits of open space cannot be understated. Undeveloped land demands fewer community services and requires less infrastructure than suburban-style development. There is an old adage that says "cows do not send their children to school," which emphasizes the fact that farms and other types of open lands generate more in property taxes than the services they demand. And given the evidence that single-family housing rarely

"pays its own way" through additional property tax revenues, open space becomes an important part of a local government's economic outlook. *(Source: The Economic Benefits of Parks and Open Space, TPL, 1999)*

12.2 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."

The south branch of Spruce Run: natural open space on private property along Harlem Road.

"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."

12.3 Land Area Guidelines

The National Recreation and Park Association (NRPA) has developed a set of standards for local developed open space. Although these standards have been promoted as goals, they are not universally applicable. Recreational needs vary from community to community, and desires for recreation vary also. *(Listokin and Walker NRPA model is found at the end of this chapter.)*

Listokin and Walker note 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."

12.4 Location of Open Space Parcels

The authors note what has been the subject of many debates in the developing parts of the 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. The authors suggest that "No general standard can specify the amount of open space that should remain undeveloped: a determination will depend on the particular development site."

12.5 Existing Parkland within the Township

Harlem Township maintains a 7.4-acre park within the Township boundaries across from the Township Hall and Fire Station. This park includes baseball fields and walking paths throughout its mostly open site. Souders Elementary sits on a 30-acre site which includes soccer fields. The township values this open space and residents consider it part of their park facilities. *(See Community Facilities map)*

Harlem Township Park.

Within Harlem Township, several privately-owned or commercial ventures qualify as open space. The township may state a goal of maintaining these areas as open space, but should be careful not to reduce the value of these areas by banning future development.

The Overbrook Nature Preserve/John Beltz Retreat Center is 102 acres of open space, of which 77 acres are in Harlem Township. Although owned by the Overbrook Presbyterian Church of Columbus, this is an attractive natural area with a major ravine through which the south branch of Spruce Run flows. There is a nominal charge for non-members. Rainbow Lake is a 60-acre natural area on private property east of Center Village that is used as a "pay lake" for fishing. The privately-owned 167-acre Royal American Golf Course is the only course in the township. Although it will likely remain a commercial golf course for some time, the steering committee may wish to note the area as open space in its recommendations. (*See Community Facilities map)*

The club house at Royal American Golf Course.

Future Metro Park Zone

The Rocky Fork-Blacklick Accord is an initiative of the city of Columbus and the village of New Albany to establish long range planning guidelines to manage future growth and development within the defined planning area of Plain Township, north of 161 in Franklin County. That study proposes a Columbus Metro Park to be located somewhere in a 2800-acre "Park Zone", with a current goal of 1200 acres for the eventual park site. The zone is north of Walnut Street to the county line. Residential development that would take place within this zone

but outside the eventual park land would follow the regulations of the Rural Residential district at a maximum of 1 unit per acre.

12.6 Future Recreational Needs

As Harlem 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."

Undeveloped Open Space - Regional and Township – The Harlem Township Park and potential future Metro Park in Franklin County help fulfill the need for undeveloped (passive) open space. The township may wish to identify other lands throughout the township for future public recreation areas.

Undeveloped Open Space – Neighborhood – The open space requirement for new Planned Residential Developments or Conservation Subdivisions could be used to provide centrally located undeveloped and developed open space within residential neighborhoods where individual lot sizes are less than 1 acre.

Developed Open Space – Township-wide – The township should provide active recreational areas for its ultimate population, using the NRPA Standards as a guide.

Recommendations at Build–Out

- Overall active recreational area - NRPA recommends 6.25-10.5 acres/1000 population.
- Establish mini-parks of one acre or less within neighborhoods, serving the population within ¼ mile radius (these should be developer dedications as part of a PRD zoning).
- Establish neighborhood parks of 15 acres, with field games, playground apparatus, serving the population within ¼ to ½ mile radius.
- Establish a community park of 25-50 acres (when the township is all built out) with an athletic complex, large swimming pool, and recreational fields.
- Seek opportunities to allow greater access to parks by providing linkages between residential development and parkland. Parks should also form a network whereby they are linked with walkways and greenways.

  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 /walking track
  - swimming pool (large enough to accommodate 100-200 people).

  Delaware County voters approved a ballot initiative for a parks levy in November 1999. Preservation Parks now receives a .4 mill 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. Townships can apply for a share of this money.

12.7 Greenways

An inexpensive way to provide undeveloped open space is to assure the linkage of neighborhoods by greenways, or corridors of natural or man made landscaped paths, and trails. These can be placed easily 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.

12.8 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.

Table 12.1 NRPA Recommended Standards for Local Developed Open Space

Component	*Use*	*Service Area*	*Desirable Size*	*Acres / 1,000 Population*	*Desirable Site Characteristics*
LOCAL / CLOSE-TO-HOME SPACE					
Mini-Park	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 neighbor-hoods and in close proximity to apart-ment complexes, townhouse developments, or housing for the elderly.
Neighbor-hood Park / Playground	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
Community Park	Area of diverse environ-mental 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 develop-ment. Easily accessible to neighborhood served.
TOTAL CLOSE-TO-HOME SPACE = 6.25-10.5 acres / 1,000 population					

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

This classification system is intended to serve as a *guide* to planning – not as a blueprint. Sometimes more than one component may occur within the same site, 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.

Activity / Facility	Recommended Space Requirements	Recommended Size and Dimensions	Recommended orientation	No. of 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. bad-minton, basketball, etc.)
Baseball Official Little League	 3.0 – 3.85 acre minimum 1.2 acre minimum	• Baselines-90' • Pitching distance-60 ½' • Foul lines-min. 320' • Center field – 400'+ • Baselines-60' • Pitching distance – 46' • Foul lines – 200' • Center field – 200'-250'	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	No. of 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.
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 *primary* 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 - 45º	1 per 50,000	30 minutes travel time	Part of a regional / metro park complex

Activity / Facility	Recommended Space Requirements	Recommended Size and Dimensions	Recommended Orientation	No. of units per Population	Service Radius	Location Notes
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) 9 Hole standard 18 hole standard	 50-60 A Minimum 50 A Minimum 110 A	 Average length –vary 600-2700 yards Average length – 2250 yards Average length – 6500 yards	Majority of holes on north-south axis	 1/25,000 1/50,000	½ to 1 hour travel time	9 hole course can accommodate 350 people/day. 18 hole course can accommodate 500-550 people/day. Course may be located in community or district park, but should not be over 20 miles from population center.

Chapter 13
Development Patterns

13.1 Preserving Rural Character- Community Choices

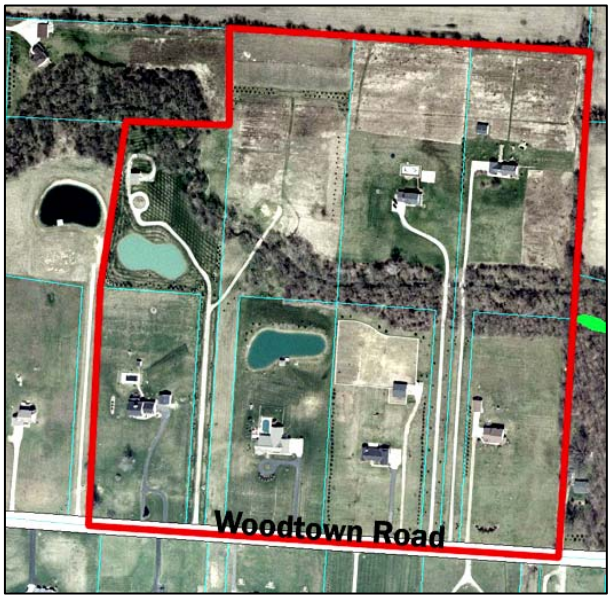
One of Harlem Township's goals is to preserve its rural character. This rural character is expressed as an overall low density, with the preservation of open space and natural lands such as a stream valley, a wooded ravine, wetlands area or patch of woods.

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 the area. Harlem Township is still a rural community with 60% of its acreage in agriculture. However, when agriculture changes to other land uses, this rural character might be lost unless conservation areas are preserved by future development patterns.

Harlem's vision to remain a low-density (average one unit per two acres) residential community seems defensible for the scope of this comprehensive plan (2007-2017) in areas that are not serviced by public centralized sanitary sewer and are not anticipating public sewer service in the next ten years. However, given the possible introduction of sanitary sewer as discussed in Chapter 10 (Utilities), the township must be familiar with a number of development pattern options.

13.2 Rural Large-Lot Development

Most residential development has taken place along existing township and county roads. Many of these splits result in lots that are larger than 5 acres and simply recorded with the county with no review process. When land is split resulting in parcels that are smaller than 5 acres, a process called a "No Plat" or "minor" subdivision is required. These NPA subdivisions may be used to create no more than 4 lots from an original parcel (5 including the residue, if smaller than 5 acres), and where there is no creation of a new streets or easements of access. The Ohio Revised Code now allows review of lots up to 20 acres in size. The RPC will amend its regulations in 2007 to add a process for reviewing these lots.

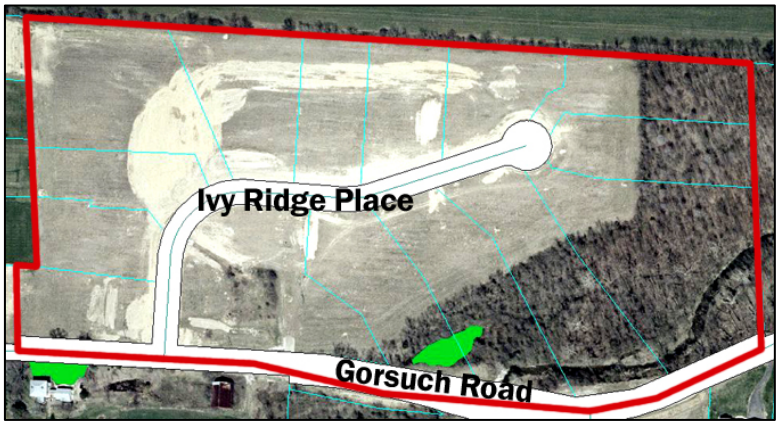


Lot splits where all lots have frontage on an existing street.

Large-lot development also occurs on Common Access Drives, or CAD subdivisions which are 3-5 lots on a 12-foot wide gravel drive approved by the Delaware County Regional Planning Commission. CAD subdivisions follow the same procedure as any other "major" subdivision, including a Sketch Plan, Preliminary Plan and Final Plat steps. CAD standards are defined by the RPC and include a maximum grade of 10%, passing areas every 350 feet, tree and shrub removal specifications, and an easement width of 60 feet along the CAD. A private maintenance agreement must be recorded with the county as well. In 2005, the RPC is working to revise these CAD design standards to add a maximum length of 1500 feet, an improved cross-section including a layer of asphalt and maintenance warranty required of the developer. CADs will allow 6 lots in the "back" with an additional two lots on existing frontage for a total of 8 lots.

Common Access Drive Subdivision with three lots gaining frontage on the CAD.

In addition to small CADs, larger subdivisions that include paved private or public streets built to county standards can be developed as long as the lots conform to local zoning. Such larger scale subdivisions follow the same process as Common Access Drive developments. The developer or consulting engineer takes each project through an approval process with the Regional Planning Commission staff as well as an engineering process with the oversight of the County Engineering staff.



Treemonisha Subdivision, developed in 2002 under FR-1 zoning.

Large acreage development, surrounded by woods and farm fields, has been generally accepted as helping retain rural character. However, township residents may find that if *all* rural lands were developed for two- or five-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".

13.3 Alternative Development Patterns

A. PRD Subdivisions

For thirty years, cluster subdivisions, or "Planned Residential Developments" have been touted as an improved alternative to the conventional subdivision. Harlem Township's PR District calls for a density of 1.5 dwelling units per gross acre. In addition, a minimum of fifteen thousandths (.015) of an acre per dwelling unit shall be provided as designated open space. The active subdivision Keller Pines is the only PRD in Harlem Township.

Scioto Reserve PRD subdivision, both sides of Home Road.

In PRDs, greater design flexibility is obtained by reducing lot size, and width. However, the absence of comprehensive standards for quantity, quality and configuration of open space has permitted uninspired designs, which are reduced-scale conventional subdivisions.

Typical Delaware County Planned Residential Development (2.4 units/acre)

The typical Delaware County PRD has often resulted in developments that do not fulfill community expectations for:

- **Open Space** - PRD ordinances usually include an open space requirement. Environmentally sensitive areas or unbuildable areas (wetlands, steep slopes, floodplains, storm water detention basins and utility easements) do not have to be delineated.

- **Useable Open Space** - PRD subdivisions with small (7,200-10,000 square feet) lots have been created without any *useable* common open space. Scioto Reserve has little common or public open space. The golf course is private open space, for members only.

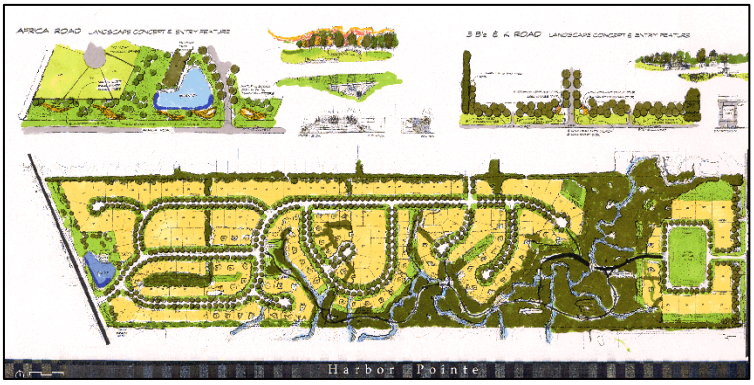
- **Density** – The typical PRD ordinance defines a maximum density based on gross acreage. In townships throughout the county, this can be anywhere from 1 unit per gross acre to 2.2 du/gross acre or more. When undevelopable land such as powerline easements and road right-of-way are included in the allowable density, it has the effect of creating a much higher "net" density, and smaller lot sizes.

- **Design** - large (300 units or more) Planned Unit Developments need a local pedestrian-oriented design, with a possible local commercial and service core, active recreation area, and sidewalks/bike paths.

Scioto Reserve looking west toward the Scioto River

- **Architectural Standards** - to make higher density cluster subdivisions work, considerable thought needs to be given to the architecture, materials, facades, detailing, colors and landscape features that will bind the neighborhood into a cohesive unit. Although such criteria are generally required, seldom does a land developer, who intends to sell the subdivision to a builder, bother to provide significant criteria. The result is either a jarring hodge-podge of different builders' standard production houses with no continuity of material or architectural syntax or a blandness that results from a single builder using a limited number of home design options. Without specific standard criteria, the zoning commission must negotiate these details on an individual (and therefore, inconsistent) basis. Cluster housing demands greater advance planning and significant landscape architecture and architectural design elements.

Harbor Pointe is a Berlin Township planned residential development on 154 acres designed to modern standards of open space and environmental protection. With an overall density of 1.25 units per acre, Harbor Pointe saves sensitive areas, preserves useable open space, and connects neighborhoods with trails. Overall open space is 46 acres.



Looking east at Harbor Pointe, under construction, Meadows of Cheshire on the left, Berlin Township, Delaware County, Ohio.

Note the preserved tree lines and open space at the entrance and distributed throughout the site.

B. Conservation Subdivisions

Conservation Subdivisions are a form of rural cluster subdivision where natural features and environmentally sensitive areas (conservation areas) are excluded from development and preserved. Homes are clustered in the remaining areas.

The term "Conservation Subdivision," as coined by author Randall Arendt (*Conservation Design for Subdivisions*, 1996, Island Press) requires the following elements:

- 50% or more of the buildable land area is designated as undivided permanent open space.
- The design is density-neutral. The overall number of dwellings allowed is the same as would be permitted in a conventional subdivision layout based on an alternative "yield plan".
- Primary Conservation Areas are protected as open space and may be deducted from the total parcel acreage, to determine the number of units allowed by zoning on the remaining parts of the site. Primary conservation areas are highly sensitive resources that are normally unusable, such as wetlands, steep slopes, and floodplains.
- Secondary Conservation Areas are preserved to the greatest extent possible. Secondary conservation areas are natural resources of lesser value such as woodlands; prime farmland; significant wildlife habitats; historic, archaeological, or cultural features; and views into, or out from the site.
- Compact house lots are grouped adjacent to the open space.
- Streets are interconnected to avoid dead ends wherever possible.
- Open space is interconnected and accessible by trails or walkways.

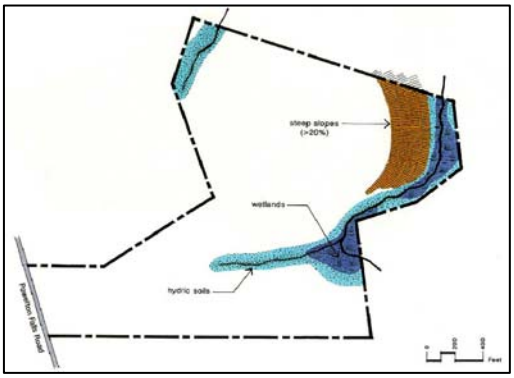
In areas without sanitary sewer service, conservation subdivisions are recommended at densities of less than one unit per acre. For areas with central sewer, conservation subdivisions with densities greater than one unit per acre and 25-35% open space may be more appropriate. Primary conservation areas should still be preserved.

The following graphics are presented with permission of Randall Arendt, from his book *Conservation Design for Subdivisions* (1996, Island Press).

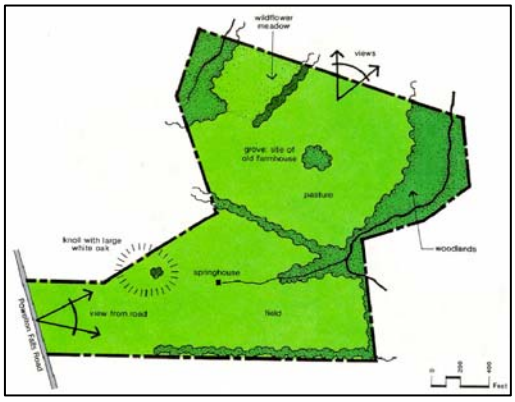
Site before development

Traditional subdivision of large lots, leaving no common open space – Yield Plan

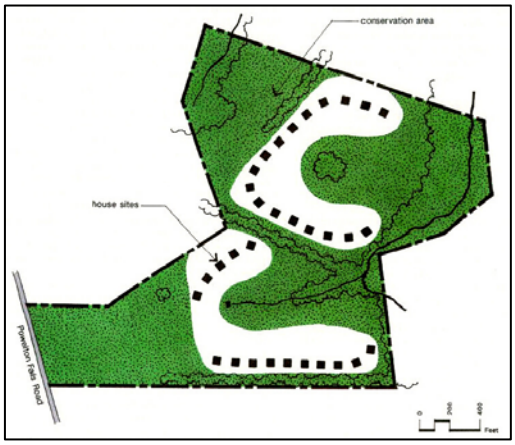
Site with conventional subdivision



Identifying primary conservation areas

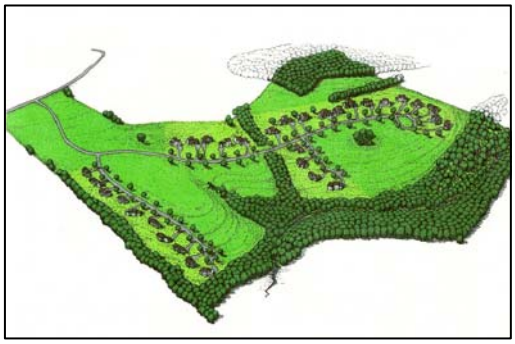


Identifying the secondary conservation areas



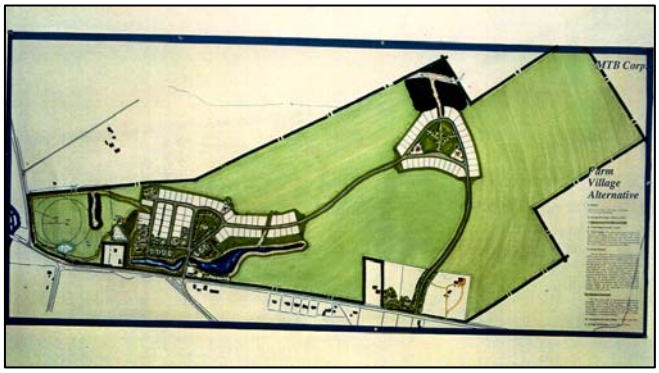
Siting of potential buildings

Drawing streets and lot lines



Site build-out with conservation design

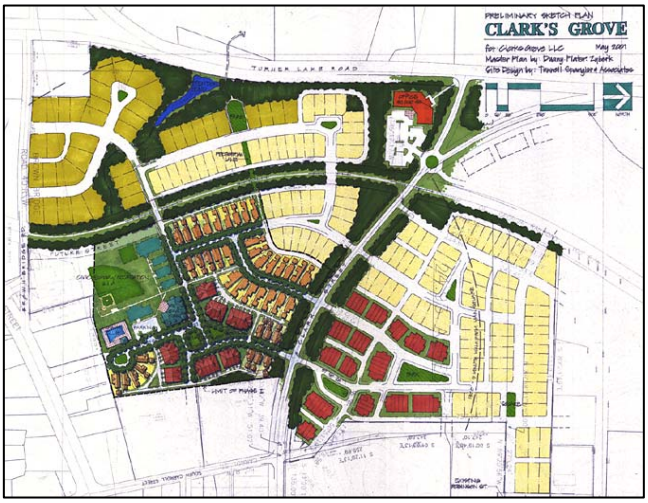
Conservation Subdivisions offer tremendous potential for retaining rural character and maintaining an overall low density in Harlem Township. The Farm Village is another form of Conservation Subdivision that is intended to save useable farmland for lease back to area farmers. The main differences include the way the open space is used (farming) and the allowance for a small farm market commercial area.



(right) Farm Village, 1 unit/3 acres = 120 lots (including 15% bonus for doing a Farm Village) in cluster, 240 acres in permanent easement for open space/farmland, 320 acres total.

C. Traditional Neighborhood Design (TND)

Traditional Neighborhood Design is a trend that is a reaction to conventional suburban "sprawl". Andres Duany, Elizabeth Plater-Zyberk, Peter Calthorpe and others are part of a school of architects and planners *(The New Urbanism, Toward an Architecture of Community, Peter Katz, 1994, McGraw Hill)* who advocate a return to TND. These leaders, and a growing group of other architects, planners, and developers make up "The New Urbanism" a movement based on principles of planning and architecture that work together to create human-scale, walkable communities similar to neighborhoods that were typical in the United States before World War II, such as Delaware's north end historic district and old Sunbury. Benefits of this type of development include reduced auto trips, more compact infrastructure and improved land-consumption.



Clark's Grove, a TND with a mixture of lot sizes, surrounding a school and park site.

The heart of the New Urbanism can be defined by 13 elements, according to town planners Andres Duany and Elizabeth Plater-Zyberk, two of the founders of the Congress for the New Urbanism. An authentic neighborhood contains most of these elements:

- The neighborhood has a discernible center. This is often a square or a green and sometimes a busy or memorable street corner. A transit stop would be located at this center.
- Most of the dwellings are within a five-minute walk of the center, an average of roughly 2,000 feet (also expressed as a five-minute walk).
- There is a variety of dwelling types — houses, townhouses and apartments — so that younger and older people, singles and families, the poor and the wealthy may find places to live.

- At the edge of the neighborhood, there are shops and offices of sufficiently varied types to supply the weekly needs of a household.
- A small ancillary building is permitted within the backyard of each house. It may be used as a rental unit or place to work (e.g., office or craft workshop).
- An elementary school is close enough so that most children can walk from their home.
- There are small playgrounds accessible to every dwelling – not more than a tenth of a mile away.
- Streets within the neighborhood form a connected network, which disperses traffic by providing a variety of pedestrian and vehicular routes to any destination.
- The streets are relatively narrow and shaded by rows of trees. This slows traffic, creating an environment suitable for pedestrians and bicycles.
- Buildings in the neighborhood center are placed close to the street, creating a well-defined outdoor room.
- Parking lots and garage doors rarely front the street. Parking is relegated to the rear of buildings, usually accessed by alleys.
- Certain prominent sites at the termination of street vistas or in the neighborhood center are reserved for civic buildings. These provide sites for community meetings, education, and religious or cultural activities.
- The neighborhood is organized to be self-governing. A formal association debates and decides matters of maintenance, security, and physical change. Taxation is the responsibility of the larger community.

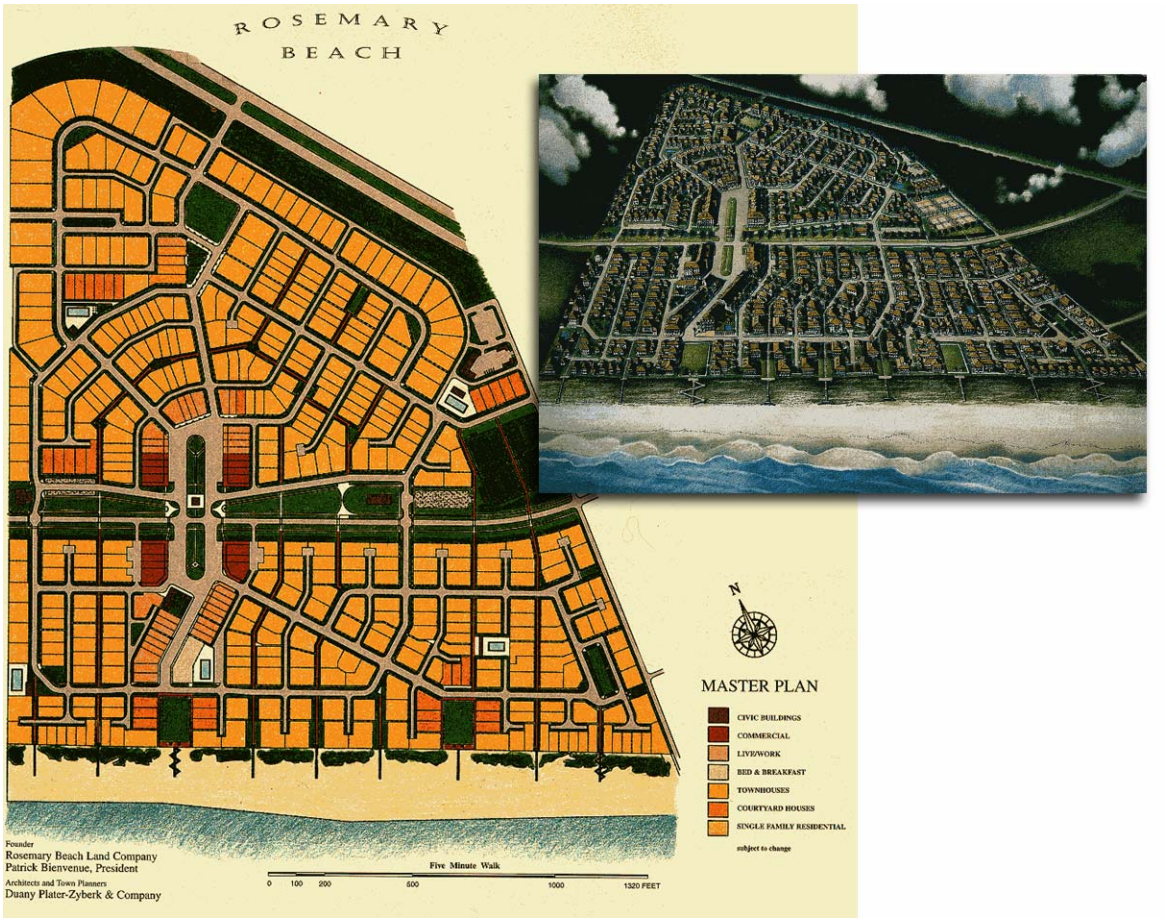

Streetscape at Easton.

These elements combine to form the ideal form of Traditional Neighborhood Design as promoted by the New Urbanists. However, commercial developers are currently incorporating some but not all of these elements in their designs. "Lifestyle Centers" are being promoted as the next generation of the shopping mall. These centers typically include an open-air layout and a mix of specialty stores. One local example of the Lifestyle Center is Easton Town Center in Northeast Columbus. Easton began with large indoor and outdoor privately-owned retail areas and now has added townhouse residential development across the street. Such "hybrid", retail-intense developments are often criticized because of their immense scale mixed with "artificial quaintness". Many lack a true mixture of uses and ownership and lack public open space and institutional uses.

Center Village, originally recorded in 1848, is traditionally designed with grid streets and shallow setbacks for houses on lots that generally are deeper than they are wide. New development adjacent to the village could utilize modern TND standards to expand the village with a development pattern that mimics the original village. In

general, TNDs require public sanitary sewer to support urban densities. Therefore, any development that included village-style lots would have to wait for sewer to come from the south.

Rosemary Beach is a beach-front TND located on the Florida panhandle, designed by Andres Duany and Elizabeth Plater-Zyberk. The following TND graphics are reproduced from Rosemary Beach sales literature.



Images of Rosemary Beach: site plan (left), and bird's eye view (right).

Images of Rosemary Beach: Downtown civic buildings and shops (left) beach house fronting a public green (right).

13.4 Farmland Preservation

With about 60% of Harlem Township land still in agriculture (Table 5.1), and with a primary goal to retain rural character, agricultural preservation is an issue. 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 four is to "Support and encourage any township that seeks to protect its agricultural industry through zoning codes."

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." The plan also recommends that the county "Provide redevelopment incentives for cities and villages with existing urban services to reduce cost of new services and unnecessary conversion of farmland."

13.5 Smart Growth

Maryland enacted "Smart Growth" legislation in 1997. Since then, Smart Growth has been a topic for planners nationwide. Maryland directs state growth related expenditures into locally designated compact growth areas.

The American Planning Association defines Smart Growth as "a collection of planning, regulatory, and development practices that use land resources more efficiently through compact building forms, in-fill development and moderation in street and parking standards." For APA, one of the purposes of Smart Growth "is to reduce the outward spread of urbanization, protect sensitive lands and in the process create true neighborhoods with a sense of community."

Smart Growth encourages the location of stores, offices, residences, schools and related public facilities within walking distance of each other in compact neighborhoods. The popularity of smart growth has captured the interest of the press as well, though some criticism has come from developers who see it as government controlling the market. Smart growth incorporates some of the concepts of conservation subdivisions in rural areas and TNDs in urban areas.

13.6 Which Development Pattern(s) for Harlem?

Harlem Township should consider the following patterns in its future land use.

- Identify critical resource areas that should be given primary or secondary conservation area status, and permit both conventional large lot and Conservation Subdivisions as a Conditional use in the FR-1 District.

- Consider using Conservation Subdivisions to preserve open space and/or farmland.
- Consider allowing higher density Conservation Subdivisions in areas where annexation is a possibility.
- Consider village-center development adjacent to existing villages, and also allow for new walkable centers in areas planned for eventual sewer service (RPC has a model code for such development).
- Commercial development should group buildings to share parking and access to arterial streets.
- Consider mixed uses of commercial and residential as part of a large-scale planned unit development that creates a sense of community rather than strip the commercial along arterial roads.

13.7 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, Harlem Township has the opportunity to develop a significant commercial and industrial property tax base on SR 37, within an expanded Center Village area, and perhaps in other commercial centers in the southwestern quadrant of the township. This commercial tax base could help pay for new services and support the school districts.

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 because of school costs for children. For example, a $150,000 single family house in the Olentangy School district that generates one school age child also generates a $5,100 negative fiscal impact (property taxes paid versus cost to educate the student) that must be made up by other sources of revenue, most importantly other property tax revenues. 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 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). The authors define development impact analysis as follows:

> "Development impact analysis is the process of estimating and reporting the effects of residential and nonresidential construction on a host political subdivision, usually a local community, school district, special district and/or county. The effects take several forms:
>
> a.) Physical; b.) Market; c.) Environmental; d.) Social; e.) Economic; f.) Fiscal and g.) Traffic.
>
> Development impact assessment may be either prospective or retrospective; it may be short term or long term; it may be an in-depth or abbreviated study."

Burchell, Listokin and Dolphin have created models to calculate fiscal development impacts. These models use derived multipliers from regional or national standards to gauge impacts. For example, a single family home with four bedrooms in Central Ohio would be expected to generate 1.428 school-age children. Local school districts use their own multipliers.

13.8 Other Development Issues

Communities regulate development details for a variety of reasons, from aesthetics to safety to the reduction of clutter. Much of the negative impact that commercial development has on a neighborhood can be related to the appearance of the development. This appearance can include signage, parking standards, lighting standards, and landscaping. The Comprehensive Plan does not allow an in-depth presentation of all possible design-related issues. This section merely provides an introduction to some of these concepts.

A. Signs

Each community must address sign control in a way that is appropriate to that community. Any regulation based on the police power must advance some public interest related to the public health, safety and morals. Although there are legal limitations to the extent of regulations (e.g. political signs and content in general), townships in Ohio commonly regulate the number of signs allowed, their location, their height, their size, and the materials used in their construction. Signs codes provide broad categories that determine what type of permitting is required, based on the content of the sign. Some signs are permitted with no permit required. These typically include "For Sale" signs, political signs, certain temporary signs, signs approved as part of planned districts, and farm signs. Although no permit is required, the size, number, and placement of these signs may be regulated.

Another type of sign defined in the code is one requiring a permit. This category generally includes billboards or off-premise signs and on-site commercial, industrial and office display signs. A sign code will also include a list of prohibited signs, which are usually based on the construction of the signs. Prohibited signs often include portable sign devices, sandwich boards, revolving or animated signs, and wall-painted signs. Finally, a sign code will define provisions for signs that already exist but do not conform to the standards when a code is adopted. Such provisions describe which "non-conforming" signs must be removed and which can continue. Typically, such signs cannot be improved or changed and, if a particular percentage of the sign is ever destroyed, the sign must be replaced in a way that conforms to the standards. If changes are made to a sign, other than routine maintenance, it should be brought into compliance with current regulations.

B. Landscaping and Buffering

Township zoning codes often include provisions for landscaping standards and buffering between incompatible uses, or may require establishment of tree cover or other foliage as may be necessary to achieve the purpose of the

open space standards. Such buffering usually includes a setback distance but will often go farther by requiring mounding, opaque fencing or a defined spacing of trees.

Zoning codes, such as the model code developed by the RPC, defines landscaping requirements in the Planned Commercial and Office zoning district in the following way:

> "All yards, front, side and rear, shall be landscaped, and all organized open spaces or non-residential use areas shall be landscaped and shall meet the landscaping requirements of this resolution, unless a variation from these standards is specifically approved as part of the final development plan. A landscape plan showing the caliper, height, numbers, name and placement of all material, prepared by a licensed landscape architect shall be approved as a part of the final development plan."

Example of buffering between condos and industrial uses.

C. Lighting

The lighting in commercial areas is often cited as a nuisance for adjacent residential uses. Lighting is recognized as a necessity for security and visibility purposes. However, the amount of light that is cast upon adjacent property is often regulated by township zoning codes. The trend among Delaware County townships is to require that all exterior lighting fixtures be a "cut-off" style where the glass does not extend below the bulb housing of the fixture, or shaded whenever necessary to avoid casting direct light upon any adjoining property. Sign codes can also stipulate that signs be internally lit, or that external lighting point down from above the sign and not on adjacent property.

D. Parking

Townships will often regulate aspects of commercial parking that have a direct impact on the appearance and quality of its commercial development. The code may include specifications on dimensions, paving, driveways, setbacks and landscaping. Commercial zoning text can also limit the percentage of the parcel that can be covered with impervious surfaces.

This parking in front of Kohl's seems excessive during all but the most busy shopping days of the year.

Commercial zoning can require a certain number of parking spaces per square footage of commercial space. In commercial developments with multiple tenants, this can result in an excessive amount of pavement leading to a "sea of asphalt". Retail parking requirements should be somewhere between 4 and 5 spaces per 1000 feet of gross leasable space. This amount can be reduced in multiple-tenant developments, where different uses demand different peak parking times and in retail buildings above a certain size threshold (i.e., "big box" stores).

E. Residential Garage Placement

One issue that often arises in Planned Residential reviews is streetscape. Sidewalks, street trees, and structure setbacks all contribute to the perception of a neighborhood's value. One factor that can impact the streetscape of a subdivision is the placement of the garage. On large lots with at least 90 feet of frontage, most garages are side-load or do not make up a large percentage of a house's front elevation. As lots become smaller and frontage decreases, such as in TNDs and some condominium developments, garages take up more and more of the frontage. In extreme cases, the garage projects fully in front of the house. Such residential structures have been termed "snout houses". The result is a streetscape that is not "friendly" to the pedestrian or driver, tending to devalue the neighborhood as a whole. Planned District regulations can require that garage protrusions be limited or that garages be flush with the front wall of the house or set back behind the front wall of the house. In TNDs and village centers, where lots may be 70 feet wide or smaller, garages can be accessed from a rear alley.

Examples of snout houses; two story houses on 75' frontage (top) and single-story houses on 50' frontage.

13.9 Conclusion – Other Development Issues

These Development Plan issues are zoning related and may go beyond the overall recommendations of land use and density usually emphasized in a Comprehensive Land Use Plan. However, recommendations related to these issues may be included in this plan for review by the Zoning Commission in future changes in the Zoning Resolution.

Chapter 14
Goals and Objectives

14.1 Vision Statement for Future Development of Harlem Township, 2007-2017

Now that the Steering Committee has studied the history of the township's recent growth, the forces that bear upon it for additional growth, the opportunities and constraints to such growth, they can develop a vision statement for development of the township in the next ten years:

Vision Statement

Harlem Township will preserve open space
and acknowledge the importance of natural and cultural
resources by implementing high quality design standards and codes.

Harlem Township will be a low-density community
which provides a well-planned balance of land use,
a variety of housing options, and community services.

14.2 Goals and Objectives for Future Development

Natural Resources	
Goals	Objectives
1. To preserve the rural character of Harlem Township as expressed in its openness, green areas, farms, natural resources (floodplains, wetlands, slopes >20%, ravines, creeks and rivers). 2. To retain wildlife cover and corridors. 3. To preserve the rural "look" along township roads via fencing and landscaping. 4. To preserve scenic views as open space with Planned Residential Districts and Conservation Subdivisions. 5. To preserve a high degree of environmental quality. 6. To link developments with green spaces and paths. 7. To protect surface and ground water integrity around the streams that feed into the Hoover Reservoir. 8. To retain archeological sites and historic and agricultural structures. 9. To retain tree-lines, especially along roads, and large trees including those identified by the Harlem Township Tree Commission.	1. Adopt regulations for Conservation Subdivisions in the FR-1 and AR-1 Districts as a Permitted use. 2. Amend the zoning resolution to reflect the net developable acreage rather than gross density in calculating the number of dwelling units in Conservation Subdivisions and PUDs. 3. Amend the zoning resolution to protect floodplains, jurisdictional wetlands, steep slopes, wildlife corridors, and roadside trees. 4. Retain wooded greenways along ravines, waterways and project perimeters as filter strips for surface water. 5. Establish a 120-foot structural setback from the natural streams of the township to preserve surface water quality. Such setback should include subsurface wastewater disposal systems. 6. Assure that development meets or exceeds the county standards for stormwater management and erosion control during and after development by utilizing the recommendations of the Upper Big Walnut Creek Watershed Water Quality Management Plan. 7. Set landscape and architectural design standards for subdivisions and/or developments, including provisions for the retention, replacement, and

	planting of trees. 8. Create a rural landscape entrance detail for developments, including the preservation of existing trees along current roads by placing improved ditches and utilities behind the treeline. 9. Amend the zoning text to require the appropriate landscaping buffer detail between and among residential and non-residential land uses. Retain natural vegetation and use existing topography as buffers. 10. Amend the township zoning resolution to protect 100-year floodplains and adopt local floodplain zoning. 11. Inventory historic structures and archeological sites and nominate eligible properties for listing in the National Register. 12. Mitigation of wetlands in the township will be limited to land located within the Big Walnut Watershed, preferably in the township.

Agriculture	
Goals	Objectives
1. To provide an opportunity for agriculture to continue through flexible/creative zoning. 2. To retain low residential density in agricultural areas.	1. Retain 2-acre lots as the minimum requirement in areas not served by centralized sanitary sewer. 2. Permit Conservation Subdivisions as a Permitted use in the FR-1 and AR-1 zoning districts. 3. Identify potential farmlands for Purchase of Agricultural Conservation Easements (PACE). Possibly use the Land Evaluation Site Assessment (LESA) system to evaluate lands. 4. Apply for state or federal funding for purchase of agricultural easements.

Residential Developments	
Goals	Objectives
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 and where no central sewer is available. 4. To retain a primarily single-family residential housing mix, but permit a diversity of housing types. 5. To assure the quality of all types of residential development.	1. Retain single family densities of no more than one unit per 2 acres where there is no centralized sanitary sewer provided. 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.

6. To avoid sprawling subdivisions that consist only of lots and streets, without local parks or green space, and where every human need results in an automobile trip, even a trip to a green space area. 7. To protect local real estate values.	4. Establish an Architectural Review Board and a set of basic criteria for residential development. 5. Adopt a Conservation Subdivision zoning text that separates non-developable lands (floodplains, water, slopes greater than 20%, jurisdictional wetlands) from density calculations. 6. Encourage a Traditional Neighborhood Development (town center) as an expansion of Center Village if public sewer can be provided. 7. Establish a cross-section for new residential streets that requires sidewalks and street trees. 8. Obtain and promote the linkage of subdivisions by streets, bike paths, or greenway trails so neighborhoods are connected and pedestrian oriented. 9. Create a landscape detail for greenway trails.

Commercial and Industrial Development	
Goals	Objectives
1. To encourage commercial and light industrial development in planned districts to broaden the jobs and tax base, and to prevent property tax rates from being increased as a response to township residential growth. 2. To provide for dense landscape buffering between Commercial/Industrial and residential uses when integrated, mixed-use centers are not planned. 3. To encourage a Traditional Neighborhood Development (town center) as an expansion of Center Village if public sewer can be provided.	1. Encourage commercial, office and light industrial development at certain locations in the S.R. 37 corridor. 2. Create development guidelines for planned commercial development including appropriate lighting, signage, and landscaping standards. 3. Use parallel frontage or backage roads to service commercial uses and control access points onto arterial roads. 4. Provide for transitional land uses and dense landscape buffering between incompatible land uses. 5. Encourage neighborhood commercial centers to develop in a town center atmosphere, where retail uses have pedestrian connections between uses and parking lots can be shared. 6. Establish an Architectural Review Board and a set of basic criteria for residential development. 7. Create a district that expands the existing village with mixed uses, grid streets, parks and recreation, single-family (attached or detached) at 2 units per acre with sanitary sewer. 8. Establish a cross-section for new streets that requires sidewalks and street trees.

Recreation	
Goals	Objectives
1. To provide both passive and active recreational areas as the township grows. 2. To develop a township parks program. 3. To link new development with green spaces and walking/biking paths.	1. Create a series of parks as development occurs. 2. Work with existing owners of private recreational areas to retain them as open space.

Township Services	
Goals	Objectives
1. To recognize and maintain those services needed for a predominantly rural/low density community. 2. To expand township services at a rate to ensure and encourage public health and safety. 3. To acquire suitable land for the township's future needs (fire stations, parks, etc.).	1. Acquire new sites for township facilities, including fire, police, road maintenance, etc., as needed. 2. Determine the services the township can provide as a suburban community with a sense of rural character. 3. Work with elected officials to increase services as needed, but not as a way to compete with urban development, so as to retain a rural community. 4. Use the Comprehensive Plan as the guideline in zoning.

Planning and Zoning	
Goals	Objectives
1. To determine and implement an appropriate land use mix. 2. To implement and maintain the land use plan. 3. To enforce zoning regulations.	1. Revise the zoning text and map in accordance with the comprehensive plan. 2. Develop policies for service provision that relate to the comprehensive plan. 3. Provide for updates and revisions to the plan at no more than 5-year increments.

Transportation	
Goals	Objectives
1. To promote safety and avoid congestion on local, county and state roads. 2. To retain the character of township roads where possible as part of the rural feel. 3. To improve the road network without destroying the rural character and plan for new roads by using context-sensitive design. 4. To seek developer mitigation of development impacts on roads adjacent to their projects.	1. Cooperate with ODOT on preventing unnecessary commercial curb cuts on S.R. 605 and S.R. 37. 2. Require commercial parallel access roads and connections between planned commercial developments along major arterial roads, particularly state and county routes. 3. Adopt the appropriate ODOT Access Management recommendations; work with the county and ODOT to prevent the deterioration of S.R. 37 and S.R. 605. 4. Encourage construction of new roads on the Comprehensive Plan as part of new developments.

	5. Work with ODOT and the County Engineer to improve dangerous intersections in the township. 6. To promote low speeds and safety, new roads should be designed with a curvilinear pattern (except within the Town Center) and be lined with trees selected by the Harlem Township Tree Committee. 7. Seek replacement of existing trees that are destroyed as roads are improved. 8. Create a rural landscape entrance detail for developments, including the preservation of existing trees along current roads by placing improved ditches and utilities behind the treeline. 9. Bikepaths/sidewalks should be developed along new roads and incorporated along existing roads as development occurs.

Citizen Participation	
Goals 1. To ensure significant and diverse citizen input into the planning process.	Objectives 1. Use the steering committee as the primary citizen input to the Zoning Commission in creating and amending the Comprehensive Plan. 2. Advertise open informational meetings to discuss and review the recommendations of the plan prior to public hearings. 3. Make a copy of the plan available to the citizens of the township. 4. Encourage active citizen participation in future comprehensive plan updates.

Chapter 15
Recommendations

Intent of the Harlem Township Comprehensive Land Use Plan

The 2007 Harlem Township Comprehensive Plan is the sum of all the background chapters and the Comprehensive Land Use Plan Map. Additionally, this plan is created with the following expectations for development: The comprehensive plan allows for commercial and office uses throughout the township where appropriate and a planned district is utilized. When a planned district is utilized it shall be in a manner that avoids isolated development. Any proposed development shall include plans for necessary infrastructure improvements and shall have minimal negative impact on existing residential areas. Infrastructure improvements include, but are not limited to, adequate roadways, and central water and sewer. The preservation of open spaces, township roadscapes, cultural resources, and existing natural features, as well as provision for present and future connectivity between neighboring developments and pedestrian access to any development, shall be priorities when considering a development plan. *(amended 12/07)*

15.1 Sub-Area A – Southern Flank

Boundaries: North: northern property line of parcels on Fancher Road; South and East: Delaware County line; West: Harlem Road. **Land Area:** Approximately 1,561 acres.

General Facts and Findings

The Southern Flank is defined by its relationship to Franklin County, New Albany and Columbus, all to the south. State Route 605 is a major feature in the center of the Sub-Area. No sanitary sewer is currently available but this is within a future county sewer planning area. If sewer arrives in Harlem Township as part of the sewer service agreement with Columbus, this is the first area that will be served no sooner than 2010. Public water is available (Del-Co).

The terrain is relatively flat with some small ravines along streams and waterways. Existing residential development is characterized by large road-frontage splits with some smaller lots at intersections. In an effort to retain land in the township rather than lose it to annexation and control the character of the area, suburban development would be appropriate in this area at a somewhat higher density.

Sub-Area A Recommendations

1. Retain current minimum lot size of 2 acres in areas rezoned to Farm Residential.
2. Allow development at a maximum density of 2 units per Net Developable Acre in Conservation Subdivisions or applicable Planned Districts where significant open space is required and where sewer is available. A minimum lot size should be specified.
3. As development occurs, seek connections between subdivisions, particularly a direct connection from Fancher Road to the intersection of County Line and Harlem Road (Road A on the Comprehensive Plan Map). This

route does not represent an exact alignment of a future road, but a connection between two points.

4. Support any improvements made by ODOT along S.R. 605, to discourage direct access to and negative impacts on this roadway.
5. Remove the package sewer treatment plant at the Fancher Road mobile home park as soon as county sewer becomes available.

15.2 Sub-Area B – Gateway

Boundaries: North: north property line of the parcels on Center Village Road; East: Sub-Area E and approximately 3,000' east of S.R. 605; South: northern property line of parcels on Fancher Road, County Line Road; West: township line (Red Bank Road). **Land Area:** Approximately 4,591 acres.

General Facts and Findings

Most of the Gateway Sub-Area is generally flat. The original Harlem Town plat from 1849 and its small lots are located in the center of the Sub-Area. Duncan Run and its floodplain is a major natural feature of the Sub-Area and its preservation is of great importance to the township. The soils are fairly high-yield agricultural soils, but the location of the Sub-Area does not make it likely to remain in agriculture if infrastructure is extended. Public water is available to this sub-area (Del-Co). No sanitary sewer is currently available but this is part of a future county sewer service area. If sewer arrives in Harlem Township as part of the sewer service agreement with Columbus, this is one of the first areas that likely will be served.

There are several large parcels within this area that could be assembled into sizeable developments and several roads provide good access. Most land is owned by individual owners, but some parcels are owned by potential developers.

Sub-Area B Recommendations

6. Retain current minimum lot size of 2 acres in areas rezoned to Farm Residential.
7. To protect surface water sources and give landowners an incentive to remain low density, permit Conservation Subdivisions at the underlying FR-1 density (1 unit/2 net acres) when not connected to sewer. Permit Conservation Subdivisions at a density of 1 unit per net developable acre where sewer is available. A typical lot size of 1/3–acre within Conservation Subdivisions would conserve open space.
8. As development occurs, seek connections between subdivisions to reduce impact on existing roads.
9. Support any improvements made by ODOT along S.R. 605, to discourage direct access to and negative impacts on this roadway.
10. Encourage the Treehaven Campground to be retained as open space, should it cease its current operation.
11. Protect the 100-year floodplain by prohibiting new residential structures within it through zoning.

15.3 Sub-Area C – Eastern Plains

Boundaries: North: Montgomery Road/Center Village Road; East: County line; approx. 1700' north of Fancher Road; West: 2700' east of S.R. 605. **Land Area:** Approximately 2,510 acres.

General Facts and Findings

Most of the Eastern Plains Sub-Area is generally flat. Duncan Run and its floodplain is a major natural feature of the Sub-Area and its preservation is of great importance to the township. The soils are fairly high-yield agricultural soils, but the location of the Sub-Area does not make it likely to remain in agriculture if infrastructure is extended.

Public (Del-Co) water is available, but limited. There currently is no county sewer service provided within this Sub-Area. Although the area south of Duncan Run is part of the sewer service agreement with Columbus, this area will likely not be one of the first areas to receive sewer service. However, it is conceivable that sewer service could extend here within the next 10-15 years.

Sub-Area C Recommendations

12. Retain current minimum lot size of 2 acres in areas rezoned to Farm Residential.
13. To protect surface water sources and give landowners an incentive to remain low density, permit Conservation Subdivisions at the underlying FR-1 density (1 unit/2 acres) when not connected to sewer. Permit Conservation Subdivisions at a density of .75 unit per net developable acre where sewer is available. A typical lot size of 1/3–acre within Conservation Subdivisions would conserve open space.
14. As development occurs, seek connections between subdivisions to reduce impact on existing roads.
15. Encourage the Rainbow Lake Fishing area to be retained as open space, should it cease its current operation.

15.4 Sub-Area D – Agricultural Acres

Boundaries: North, East and West: Township line; South: Montgomery Road/Center Village Road on the east side of the village and 1000' north of Center Village Road on the west side of the village.

Land Area: Approximately 7,969 acres.

General Facts and Findings

Sub-Area D is comprised of the northern half of the township. Much of the land is still in agricultural production with high-yielding soils. A major natural feature is the north and south branch of Spring Run. The south branch includes a steep ravine along the western edge of the township and the northern branch includes a wide floodplain. A Delaware County EMS station on Woodtown Road and the Royal American Golf Course are located here.

There currently is no county sewer service provided, and none planned for Sub Area D during the planning period 2007-2017.

Sub-Area D Recommendations

16. Retain current minimum lot size of 2 acres in areas rezoned to Farm Residential.
17. Protect the 100-year floodplain by prohibiting new residential structures within it through zoning.
18. To protect surface water sources and give landowners an incentive to remain low density, permit Conservation Subdivisions at a density of .5 units per gross acre in the underlying FR-1 district. A typical lot size of 1/3–acre within Conservation Subdivisions would conserve open space.
19. As development occurs, seek connections between subdivisions to reduce impact on existing roads.
20. Provide for an area of commercial/industrial along S.R. 37 at the eastern edge of the township. This could be developed as Community Business, Planned Commercial and Limited Industrial uses that pay significant property taxes and generate sales taxes. These could be restaurants, offices, highway service such as gas stations, or even regional commercial uses such as major grocery stores and retailers. Except for some limited industrial (storage warehouses, etc.), commercial uses would require sanitary sewer. Extensive landscaping should be required to buffer such uses from residential and agricultural uses.
21. Support any improvements made by ODOT along U.S. 37 and S.R. 605, including access management.
22. Encourage the Royal American golf course and John Overbrook Retreat Center to be retained as open space, should either cease its current operations.

11x17 Comprehensive Plan Map should be inserted after this page

15.5 Sub-Area E – Center Village

Boundaries: Sub-Area E is an area around Center Village. North: 1500' north of the crossroads of Center Village and S.R. 605; East: 1000' east of the crossroads; South: 1200' south of the crossroads; West: 1700' west of the crossroads. **Land Area:** Approximately 370 acres.

General Facts and Findings

This Sub Area is defined by historic Center Village, with portions platted in the 1800s. This is the traditional heart of the township and includes the fire hall, township hall, township park, and commercial buildings. The undeveloped area within this Sub-Area is generally flat and some road frontage lot splits have been developed.

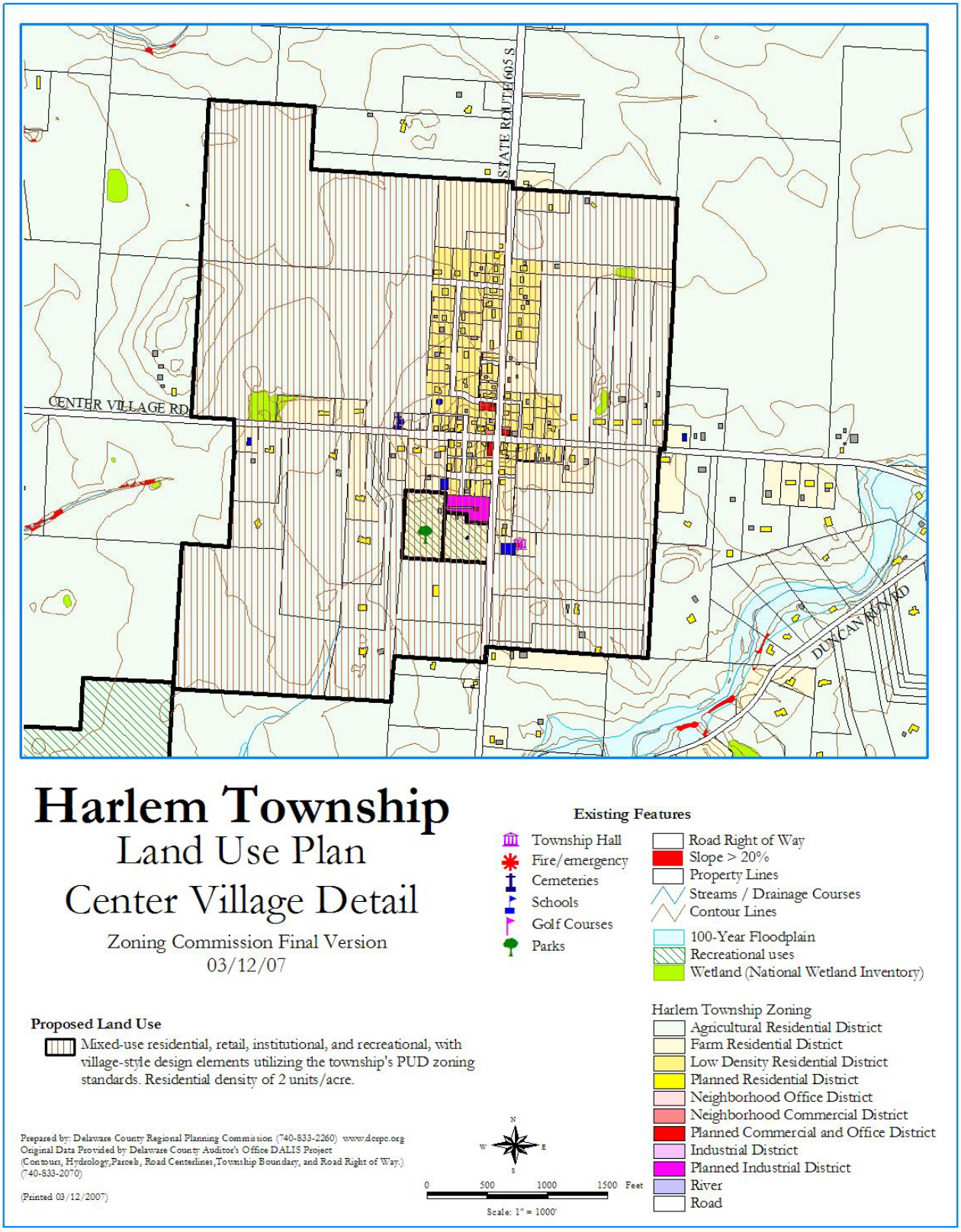
Public (Del-Co) water is available. There currently is no county sewer service provided within this Sub-Area. However, if service is provided as part of the Sewer Service Agreement with the city of Columbus, this area should be a priority area to be connected to service.

Sub-Area E Recommendations

23. Retain current minimum lot size of 2 acres in areas rezoned to Farm Residential.
24. Create a district that expands the existing village with mixed uses, grid streets, parks and recreation, single-family (attached or detached) at 2 units per acre with sanitary sewer. Emulate a Traditional Neighborhood Development as discussed in Chapter 13 and the General Design Standards in 15.5(B).
25. Commercial parcels should have limited access to S.R. 605 and be linked with parallel rear access roads built in increments by developers. Left turn movements across traffic should be at controlled locations at least ¼ mile spaced (1/2 mile preferred), as approved by ODOT. Commercial uses should allow for public street connections to future adjacent residential development.
26. As development occurs, seek connections between subdivisions to reduce impact on existing roads.
27. Only low level, downward-cast lighting should be allowed to prevent glare on adjacent roadways and light pollution on adjacent properties.
28. To avoid sign clutter, ground signs should be the only sign type permitted along S.R. 605. Billboard and pole signs should be restricted. A Harlem Township architectural sign syntax should be developed.
29. Extensive landscaping should be required in parking lots to avoid excessive asphalt coverage and reduce runoff and temperatures. Use landscaping to divide parking areas by using islands at reasonable spacing, at ends of rows, and along 605 and Center Village Road frontage. A standard landscape detail should be adopted.
30. Link Souders Elementary School and the recreation fields to Center Village via a bike path or sidewalks as development occurs.

15.5 (A) Sub-Area E – Center Village Map Detail

Note: Boundary lines are suggestive in nature and may be modified to fit a particular proposed design.



15.5 (B) Center Village General Guidelines

Due to the intensity of uses and higher densities in town centers, good design is critical to the success of such centers. The following are general design guidelines that should be considered, should the township choose to develop a town center zoning district.

Building locations

For retail uses, buildings should be located along a "build-to" line, providing for a 30-foot setback with curb, street trees and sidewalk.

Office and residential uses may use a build-to line of 50 feet from curb.

Multi-tenant buildings are encouraged. Excessive gaps and non-useable spaces between buildings are discouraged.

Buildings should include architectural details on all exposed sides. Retail uses should have a minimum 80% "open" glazing (windows and doors) at street level.

Pedestrian connections to rear parking areas may be established between buildings. Such areas should be wide and buildings should include architectural details.

Buildings may have front and rear entrances whenever possible.

Multi-family uses in single-use structures should be townhouses with rear garages near parks.

Single-family lots with at least 80' of frontage may use front-load garages if the garages are at least 10' behind the front of the building. Lots with less frontage should utilize rear service roads.

Public Spaces

Common open spaces that are fronted by buildings are encouraged.

In residential areas, open space should be a combination of formal town squares, pocket parks and natural preservation areas.

Parking

Parking areas should be located behind or to the side of buildings rather than in front.

Diagonal or parallel on-street parking should be located in front of retail areas only and on local streets.

Parking ratios should be calculated for the overall development rather than for individual businesses.
Retail – 1 space per 250 gross square feet
Office – 1 space per 250 gross square feet
Residential – 2 spaces per unit

Parking areas should contain landscaped curbs and islands with deciduous trees.

Parking lots should be screened from public right-of-way by a four-foot evergreen hedge or masonry wall.

Landscaped buffers should be provided between dissimilar uses.

Bicycle parking should be provided at convenient intervals in safe locations near major entrances.

Streets

All streets should be two-way.

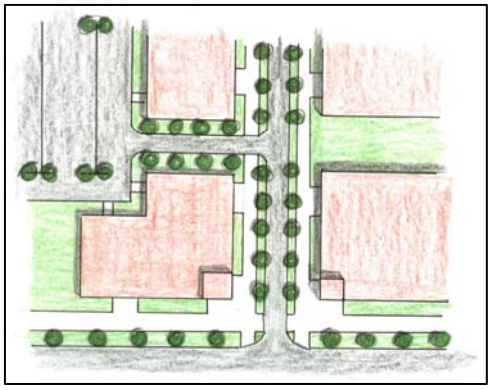
Sidewalks at least 4 feet wide should be provided throughout with a minimum 5' tree lawn between sidewalk and street. Retail uses may utilize tree wells instead of a tree lawn.

Street trees should be provided on both sides of the street at a minimum 40 feet on center.

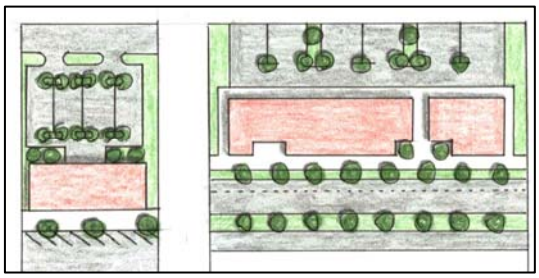
Street furnishings (benches or other seating areas) should be provided in retail areas and public spaces.

Streets should interconnect – cul-de-sacs should be discouraged.

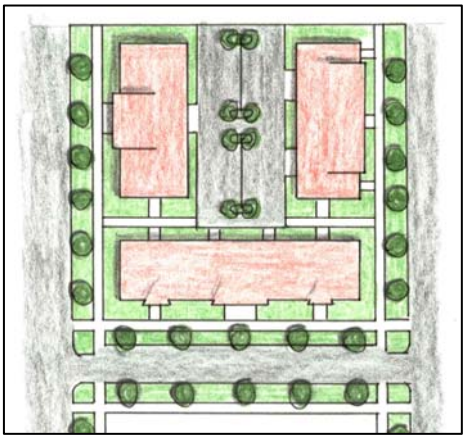
15.5 (C) Town Center Design Concepts



Design concept demonstrating basic retail and office design elements including rear parking, grid streets, sidewalks, street trees and building orientation.



Design concept demonstrating basic retail design elements including rear parking, angled and parallel on-street parking, sidewalks, street trees, building orientation and pedestrian access.



Design concept demonstrating office, civic, or residential use with campus-style building orientation, courtyard and on-street parking and pedestrian connections.

These images show how these design concepts could be applied to the area around the Township Hall and Fire Station with the development of a small cluster of shops around a town green, town-homes integrated into the site and single-family homes with both typical front-loading garages and garages from private rear service drives.

15.6 Future Harlem Township Population Projection

Table 15.1 shows the future land use mix of the township if the 2007 Comprehensive Plan were implemented and the township was totally built out. The estimated population of Harlem Township at the end of 2005 was 4,140. When calculating the township's future population, the following impacts were considered:

- Potential annexations (none);
- Trends in single-family building permits from the Building Department;
- Typical construction time of eight months after receiving a building permit;
- Annual death rate from the Census Bureau (.53%);
- Population index (2.8 persons per home) and housing unit vacancy rates (4.7%) from Census 2000;

	Sub Area A	Sub Area B	Sub Area C	Sub Area D	Sub Area E	Total
Census 2000	1,081	1,256	243	942	240	3,762
Estimated current population after adding Building Permit data	1,092	1,403	277	1,122	246	4,140
Vacant lot population	45	42	54	127	93	361
Net Developable Acreage	830	2,115	1,687	4,902	197	
Density	2/acre	1/acre	.75/acre	.5/acre	2/acre	
Population increase with density recommendations	4,649	5,924	3,543	6,863	1,103	22,082
Total Build-out Population	5,786	7,306	3,874	8,112	1,442	26,520

Table 15.1

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 2007 vision, the township will have to revisit its plan and its vision to consider whether changes need to be made.

Chapter 16
Implementation

16.1 Recommended Zoning Code Considerations

1. Adopt Conservation Subdivisions as permitted uses in Agricultural and FR-1 zones.
2. Adopt a Conservation Subdivision zoning code that allows higher densities if certain criteria are met and where sanitary sewer becomes feasible.
3. Revise sign code to restrict pole signs and billboards. Permit ground signs and fascia signs. Small pole/bracket signs are appropriate for village-style retained uses.
4. Confirm that the zoning code reference to construction of residential structures within the 100- year floodplain is consistent with any appropriate Delaware County floodplain regulations.
5. Require traffic studies for any use that generates more than 100 new trips per day, or as determined by the Delaware County Traffic Impact Standards. Require developers to mitigate traffic impact as necessary. Establish a level of service (LOS) C as the desired level of service.
6. Consult NRPA standards (Table 12.1) for recreational areas and secure the donation and/or construction of useable open space by developers of major new residential subdivisions (30 homes or more). These standards should be used when determining the amount of open space required in planned residential districts.
7. Require linkage of new neighborhoods by greenways along natural streams. Add greenway criteria to the zoning resolution, count its area as open space.
8. Amend the zoning resolution to show detail for standard buffer between incompatible land uses.
9. Review/revise Planned Residential Zoning district to provide for a significant amount of useable open space (separate from open space used for drainage structures).
10. Adopt a Traditional Neighborhood Design or Mixed-use PUD zoning district.
11. Consider hiring a certified town planner to create schematic concepts for Center Village build-out (similar to Chapter 15.5(B)).
12. Define "riparian areas" in the zoning code. Develop standard setbacks from riparian areas in PRD/Conservation Subdivision codes.

16.2 Non-zoning related actions

1. Consider access management policies for all township roads and require curb cut permits from township zoning officer or road superintendent.
2. Use the comprehensive plan to guide where new roads need to be built, and negotiate their provision as part of development of new superblocks of land. Secure the right-of-way as part of the subdivision plat or by acquisition.
3. Consider the adoption of Soil and Sediment regulations for new development pursuant to ORC §504.21 (House Bill 411, 2004).

Appendix A

A New Planner's History of Planning

Compiled by Philip Laurien, AICP

1189 England; required stone party walls 1 & 1/2 feet thick each side, 16' tall on houses.

1214 Magna Carta; King John of England, prevented the seizure of land by the King without compensation. First land use regulation, restricting forests for hunting**.**

1297 England- Front yards to be cleared and maintained

1400s England- all roofs in urban areas to be stone, lead or tile (fire protection)

1565 St. Augustine, Florida, first American planned city, Spanish Law of the Indies

1666 Great fire of London, England- An Act for the Rebuilding of the City of London, divided city housing into 4 classes, required uniform roof lines and balconies, established front setbacks, mandated 3 year reconstruction or seizure by the city for the public good.

1690 Annapolis, Maryland, Sir Francis Nicholson, designed it as a new town, with radial spokes

1692 Philadelphia, first major city built on land speculation, used grid pattern for the layout. 1st neighborhood park system.

1692 Boston ordinance restricted slaughter, still, curriers and tallow chandler houses to areas of the city less populous and offensive to the public.

1699 Williamsburg, Virginia, Sir Francis Nicholson, designed grid with green mall, central avenue.

1733 Savannah, Georgia, General James Ogelthorpe, 24 squares, 40 families per square, grid.

1777 Vermont, 1780 Massachusetts, 1789 North Carolina Constitutions prevent taking of land without compensation.

United States Constitution, Article V of the Amendments- "no person shall…be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use without just compensation."

Land Act of 1785- Established survey grid 36 square mile townships, North West territories, (includes Ohio)

1789 Washington D.C. plan, Pierre Charles L'Enfant combined the radial spokes of Annapolis and the green mall of Williamsburg.

1811 25 x 100 standard New York City lot

1856 Central Park, New York City, public green space, parks movement. Frederick Law Olmstead, Sr.

1860s Public health movement- New York, San Francisco, regulating tenements and slaughterhouses.

1869 Riverside, Illinois, English garden style city by Frederick Law Olmstead Sr. Used curving, tree-lined streets, deep setbacks, single family detached houses, exclusively residential neighborhoods. Became the standard for FHA in the 1930s, thus copied in virtually every major city and community in the US. Still the standard suburban style of land plan used today.

1871 Pumpelly V. Green Bay 80 US 166 (1871) - Established a taking by flooding of private property.

1890 Jacob Riss writes *How the Other Half Lives*, depicts slum conditions in New York.

1893 Chicago, Colombian Exposition, "White City", Daniel Hudson Burnham, beginning of City Beautiful movement.

1898 Ebenezer Howard writes *Tomorrow, a Peaceful Path to Real Reform*, beginning of Garden City movement.

1903 Cleveland Plan, Daniel Burnham, civic center, first master plan for an American city to be realized.

1904 San Francisco Plan, Daniel Burnham, based on City Beautiful principles.

1909 Chicago, first regional plan in US, by Daniel Burnham.

1909 Wisconsin passed first state enabling legislation permitting cities to plan

1909 Los Angeles, first zoning ordinance

1909 Harvard, first course in city planning

1915 Hadacheck V. Sebastian- 239 US 394 (1915) Determined that a local government can prohibit land uses in certain areas it deems inappropriate, even though this significantly reduces land value.

1916 New York adopts first comprehensive zoning ordinance, no mention of master plan.

1917 ACPI established, Kansas City

1919 Ohio Planning Conference, precursor of APA established, first citizen based planning organization in US.

1920s City Beautiful gives way to legalistic, "city efficient" emphasis on administration, lawyers, and engineers

1922 Standard State Zoning Enabling Act issued by the US Department of Commerce. Mentions a plan as a separate study, but most communities do not realize its importance. Zoning seen as planning. Flawed.

1922 Pennsylvania Coal v. Mahon, 260 US 393 (1922) Supreme Court rules that if a regulation goes too far, it will be recognized as a taking. The determination as to whether a taking has occurred rests on the facts of the case. Still the basic taking case today.

1925 Cincinnati, Ohio, first comprehensive city land use plan in America. Not the New York model. Alfred Bettman.

1926 First capital budget, Cincinnati, Ohio

1927 Village of Euclid (Ohio) V. Ambler Realty, 272 US 365 (1926)-upheld zoning as constitutional under the United States Constitution, as a police power of the state. If zoning classifications are reasonable, they will be upheld.

1928 Standard City Planning Enabling Act issued by the US Department of Commerce. Enter the modern planning age, where a comprehensive plan is the intended basis of zoning, the implementing tool. Act flawed, not largely followed; most major cities already regulating land use under standard zoning act.

1930s Greenbelt cities, including Greenhills, Ohio, Greenbelt, Maryland, Greendale, Wisconsin.

1935 Frank Lloyd Wright's *Broadacre City, A New Community Plan*, lot size varied with family. Did not consider the broad economic spectrum, elitist.

1941 Ladislas Segoe, Cincinnati, Ohio writes *Local Planning Administration*, (the "Green" book). The Planning "bible" still used and updated today as the basic manual for planners.

1961 Jane Jacobs writes *The Death and Life of Great American Cities*

1964 T.J. Kent writes *The Urban General Plan*. Noted Standard. City Planning Act of 1928 was faulty. Said the plan should be:

1.) long range and general

2.) one comprehensive document adopted at one time with all elements integrated

3.) focused on the physical development implications of socio-economic policies

4.) be identified as the city council's (elected official's) plan

1969 *Design with Nature*, Ian McHarg, brings environmental sensitivity to planning movement with overlay of land capability and critical resources.

1970s Citizen participation and advocacy planning movements bring power back to the people from the inception of the plan.

1970s-90s Land use law cases; Appellate and Supreme Court decisions regarding

- Growth management (Golden v. Planning Board of Ramapo, 30 NY 2d 339, 285 N.E. 2d (1972); also Construction Industry Association of Sonoma County (California) v. City of Petaluma, 522 F2nnd 897 (9th Cir., 1975), cert. Denied 424 US 934 (1976).
- Affordable Housing and the fair share analysis (Southern Burlington County NAACP v. Township of Mount Laurel, 67 N.J. 151, 336 A. 2d 713, 1975)
- Takings and exactions;

1. *Penn Central Transportation Company et al v. City of New York, 1978*. No taking occurred as a result of the Grand Central Station being placed in a Landmark Preservation District. The use of the terminal was unimpeded, and useful governmental purpose (landmark preservation) was vindicated. The fact that the landmark Preservation commission recommended denial of a 53 story tower over Grand Central Station did not in itself assure that the tower would be denied zoning, nor was it a taking.

a.) *First English Evangelical Lutheran Church v County of Los Angeles 482 US 304 (1987).* The court rejected as a full remedy the declaration of invalidity of the zoning ordinance. Plaintiff could be compensated for time the use of the land was lost due to zoning.

b.) *Nollan v. California Coastal Commission 483 US 825 (1987)* Court held that development exaction's are valid so long as there is a reasonable relationship between the imposed exaction and the impact on property. The requirement of an easement for public walkway along the beach was not related to the issuance of a building permit on private property.

c.) *Lucas v. South Carolina Coastal Council 505 US 1003 112 S. Ct. 2886 (1992)* Court held that when a regulation goes too far to deny all economic use of a property, it will be considered a taking.

d.) *Dolan v. Tigard 114 S. Ct. 2309, 2315 (1994)* City requirement to dedicate land in a floodplain for a bike path as a condition to approval of expansion of an existing hardware store was not reasonable. Must be an essential nexus between the exaction and the use. The benefit to the landowner must be roughly proportional to the impact of the development. The burden is on the community to create this nexus.

1990s Desktop geographic information systems (GIS) allow for inexpensive sophisticated land capability and land use analysis, court decisions relate to reasonableness of environmental preservation (aquifers, endangered species, floodplains, wetlands).

1990s New Urbanist Movement. Return to grid pattern of cities and mixed uses, high densities, mostly centered in the south and west. Slowly making inroads into central USA as a design alternative. Conservation subdivisions gain momentum in rural areas, as an environmentally sensitive replacement for nondescript cluster subdivisions.

Appendix B

Ohio Planning Enabling Legislation

Compiled by Philip C. Laurien, AICP and Scott B. Sanders, AICP

- **Ohio Enabling Legislation: Township Planning and Zoning (ORC 519)**

Current Ohio enabling legislation treats the need for a comprehensive plan the same in townships and counties. The ORC does not specify for Counties or Townships what must constitute a Comprehensive Plan. This stems from the 1922 Standard Zoning Enabling Act, which was passed prior to the Standard City Planning Enabling Act, both released in the 1920s by the US Department of Commerce. Ohio began planning by zoning, and has left the cart before the horse ever since.

> "...in the interest of **public health and safety**, the board of township trustees ***may*** regulate by resolution, *in accordance with a comprehensive plan*, the **location, height, bulk, number of stories, and size of buildings and other structures**, including tents, cabins, and trailer coaches, **percentages of lot areas which may be occupied, setback building lines, sizes of yards, courts, and other open spaces, the density of population, the uses of buildings** and other structures...and the uses of land for trade, industry, residence, recreation, or other purposes...and **may establish reasonable landscaping standards and architectural standards** excluding exterior building materials in the unincorporated territory of the township.
>
> ...in the interest of the **public convenience, comfort, prosperity, or general welfare**, the board may regulate by resolution, *in accordance with a comprehensive plan*, for **nonresidential property only, the height, bulk, number of stories, and size of buildings and other structures**, including tents, cabins, and trailer coaches, percentages of lot areas which may be occupied, setback building lines, sizes of yards, courts, and other open spaces, the density of population. For all these purposes, the board may divide all or any part of the unincorporated territory of the township into **districts or zones of such number, shape and area as the board determines**. All such regulations shall be uniform for each class or kind of building or other structure or use throughout any district or zone, but the regulations in one district or zone may differ from those in other districts or zones." (eff. 5-27-05)

Columbia Oldsmobile Inc v. City of Montgomery (1990, 56 Ohio St. 3d 60)

> "R.C. 303.02, regulating rural land use in counties and R.C. 519.02 regulating land use in townships *require* [court emphasis] that zoning regulations promulgated by counties and townships be in accordance with a comprehensive plan. However, there is no statutory requirement that cities such as Montgomery enact a comprehensive community plan pursuant to its power to zone under R.C 713.06 et seq." **Therefore, a comprehensive plan is required in Township and county zoning according to the Ohio Supreme Court.**

The voluntary (but recommended) nature of planning in municipalities in Ohio was stated in the case of City of Pepper Pike (Ohio App. 1979) 63 Ohio App. 2d 34, 409 N.E 2d 258, 13 O.O. 3d 347, 17 O.O. 3d 240). "Because Ohio law does not require a municipality to adopt a comprehensive zoning plan as a condition precedent to the enactment of zoning legislation, a municipality has the discretion as to whether it will adopt a comprehensive zoning plan; failure to have a zoning plan which is separate and distinct from a zoning ordinance does not render a zoning ordinance unconstitutional." It should be noted that this is for cities, which have greater authority than townships, but with regard to the lack of a requirement for planning, the resultant legal conclusion is the same.

- **Planned Unit Developments**

> [ORC 519.021] "A township zoning resolution or amendment adopted in accordance with this chapter may establish or modify **planned-unit developments**. [...] The planned-unit development shall further the purpose of promoting the **general public welfare, encouraging the efficient use of land and resources, promoting greater efficiency in providing public and utility services, and encouraging innovation in the planning and building** of all types of development. Within a planned-unit development, the **township zoning regulations**, where applicable, **need not be uniform**, but may vary in order to accommodate **unified development** and to **promote the public health, safety, morals**, and the other purposes of this section."

- **Township Authority**

Harlem Township has taken the authority given by Ohio Revised Code Section 519 to adopt and now revise a comprehensive plan as a basis for zoning, and to adopt township zoning. Township zoning was first adopted in November of 1988.

Appendix C

Common Elements of Great Communities

Compiled by Philip C. Laurien, AICP

Standard suburban development trends have created a physical, built environment that lacks a sense of community in its design. The following are common elements found in historic communities generally acknowledged as being well-designed and increasing in value. Often cited by the New Urbanists as vital to neighborhood design, these elements of "Traditional Neighborhood Design" can be incorporated into township zoning codes through ORC 519.021 planned districts.

1. Central public open spaces (park, square, greenbelt) in every neighborhood.

2. Variety of architectural styles, with compatible elements.

3. Retention of history through reinvestment and restoration of structures.

4. Fine-grained downtown or village centers:
    a.) Intimate, human scale;
    b.) Angle parking, with 2-3 lanes of traffic;
    c.) Street trees/planters;
    d.) Decorative/historic street lighting (at human scale);
    e.) High quality, permanent, natural materials (stone, brick, stucco, real wood);
    f.) Classic architectural elements: pillars, cornices quoins, deep overhangs. No plain boxes;
    g.) Wide sidewalks, with colored paver or brick accents;
    h.) Retention of public and cultural buildings as anchors;
    i.) Mixed uses (residential, commercial, office);
    j.) Compact blocks with no rapid through traffic. Block design purposefully interrupted. Where through streets exist, make treed boulevards;
    k.) Fine grained signage with theme. No pole signs. Extensive use of painted window signs, labeled awnings, fascia signs, none internally lit. Small hanging signs from buildings;
    l.) Large glass area on first floor to invite the outside in. Glass divided by vertical posts or pillars as support and as design element;
    m.) Narrow streets (only as wide as necessary for safety);
    n.) Restrained color palette. No clashing or garish colors;
    o.) Zero setbacks or minimal setbacks from the right of way. Commercial uses on ROW with paved sidewalk up to storefronts. House with 10-20' courtyards, fenced at ROW;
    p.) Grid pattern streets, short blocks, with low speeds, stop signs at intersections;
    q.) Wall graphics in classic style, restrained palette. Historic murals or advertising;
    r.) Small shops, narrow structures, with greater depth. Parking to rear and angle parking in street;
    s.) Landscape end islands to protect angle parking and provide location for street trees.

5. Highway Commercial Uses with the following attributes:
    a.) Greenbelts along roadway;
    b.) Access management, controlled access points, adequate setback for parallel access roads;
    c.) Ground signs rather than pole signs. High (100') pole signs only permitted within certain distance of major interstate interchanges for on-premise advertising of highway related services (motel, food, auto);
    d.) Prohibition of billboards;
    e.) Lush landscaping; end islands for parking stalls. Parking lot forested look;

f.) Signage restraint. Use of franchise type fonts and colors, but neutral backgrounds. No garish or florescent colors. Unified background color on shared signs;
g.) Avoidance of white, yellow and red plastic internally lit signs;
h.) Limit number, type and location of signs;
i.) Limit conversion to inappropriate uses such as flea markets from storage lockers;
j.) Parallel access roads or interconnecting parking lots to limit curb cuts to major highway;
k.) Community theme for greenbelt/landscape along road;
l.) Deep setbacks.

6. Residential Areas with the following attributes:
   a.) Narrow streets with either no on-street parking for streets with deep (more than 35' from ROW) setbacks, or on-street parking with landscaped end islands for streets with shallow (less than 35' from ROW) setbacks;
   b.) Traffic calming features (center islands with landscaping, eyebrow islands with landscaping), parks at block's end to divert traffic flow;
   c.) Separation of residential uses from all other uses, or alternatively, intentional mixture of residential and commercial as part of a town center or Traditional Neighborhood Development with strict architectural controls and elements;
   d.) Curvilinear roads to fit hilly topography and/or environmentally sensitive areas; grid streets in flat, or formal planned town centers or TNDs, low speeds.

7. Adopt a General Plan for overall road development.

8. Require development to "fit" and preserve natural features such as topography, wetlands, floodplains, water views, and trees. Encourage public space around such features.

9. Preserve rural areas with the following attributes:
   a.) Open vistas from the roads;
   b.) Save natural resources;
   c.) Retain agriculture where feasible;
   d.) Retain woods where feasible or replant;
   e.) Narrow roads, wide spacing of curb cuts;
   f.) Deep setbacks;
   g.) Low densities;
   h.) Retention of rural/historic structures, such as attractive wooden barns;
   i.) Retain tree lines along rural roads.

10. Industrial areas with the following attributes:
    a.) Ground or fascia signage, no pole signs;
    b.) Wide roads with large curve radii for heavy trucks;
    c.) Location in parks, not stripped out along highways;
    d.) Landscaped greenbelt around parking areas;
    e.) Signalized entrance to park areas for safe vehicular entry;
    f.) Landscaped buffer to residential uses;
    g.) Generous area for truck loading and turning.