Chester Township

Land Use Plan

Chester Township
Geauga County, Ohio
Land Use Plan

Prepared By:

The Geauga County Planning Commission

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Revised July, 1999
Revised August, 2003
Revised December, 2003
Revised January, 2004
Revised February, 2004
Revised November, 2004
Revised December, 2005

Adopted by the Chester Township Board of Trustees
on the 12th day of February, 2004

- **Revised August, 2008**

Adopted the August, 2008 Revision by the Chester Township Board of Trustees on the _____ day of _____, 2009

Replacement Page August, 2008

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CHAPTER I

INTRODUCTION

Purpose

The purpose of this plan is to provide a foundation for the zoning regulations of Chester Township. The plan represents a framework within which township officials may guide the future growth of the community in a balanced and orderly fashion.

Information contained in the plan was drawn from a variety of sources. For example, demographic material was obtained from the 1970, 1980, 1990, and 2000 Census reports. Opinions regarding land use and related matters were determined from the results of a township land use and zoning survey. Environmental data were gathered from The Soil Survey of Geauga County, Ohio (Ohio Department of Natural Resources and the United States Department of Agriculture, NRCS, 1982).

A New Approach To Planning

Land use planning in many communities primarily consists of providing the necessary service infrastructure for the appropriate development of real property. Short- and long-range planning analyses are sometimes directed toward determining the level of services and capital improvements required in order to accommodate present and expected future growth. However, existing environmental restrictions on development activity are often given a low priority or are entirely disregarded.

In urbanized areas, the concept of planning for the most cost-effective delivery of services and capital improvements may be valid. However, in a more semi-rural community, such as Chester Township, the existing and potential impact of development on the environment is a significant planning issue. More specifically, the protection of environmental quality is particularly warranted where on-site septic systems and water wells are utilized. The possible adverse impacts of development on the environment may be minimized if the ability of the land to support it is carefully considered.

A recognized method for determining the possible impact of development on the environment is through a land capability analysis. A land capability analysis is the detailed assessment of the environment in terms of its ability to support various types and intensities of land use. Certain segments of a planning area may be more compatible with specific types of land uses than others. A basic element of this approach is to guide new growth into the areas where it can be most reasonably supported. The Chester Township Land Use Plan includes a land capability analysis of the township. A thorough examination of such items as soil types, slope, ground water availability, and environmentally sensitive areas has been made. Various types of land uses have been rated with respect to their potential impact.

Plan Content

Chapter II represents an overview of background characteristics. Chapter III contains a thorough examination of the demographics for Chester Township. Chapter IV represents an inventory of the commercial and the shopping center zoning districts. Chapter V consists of a land capability analysis of the community. Chapter VI is the township survey results. Chapter VII includes recommendations on land use related topics.

CHAPTER II

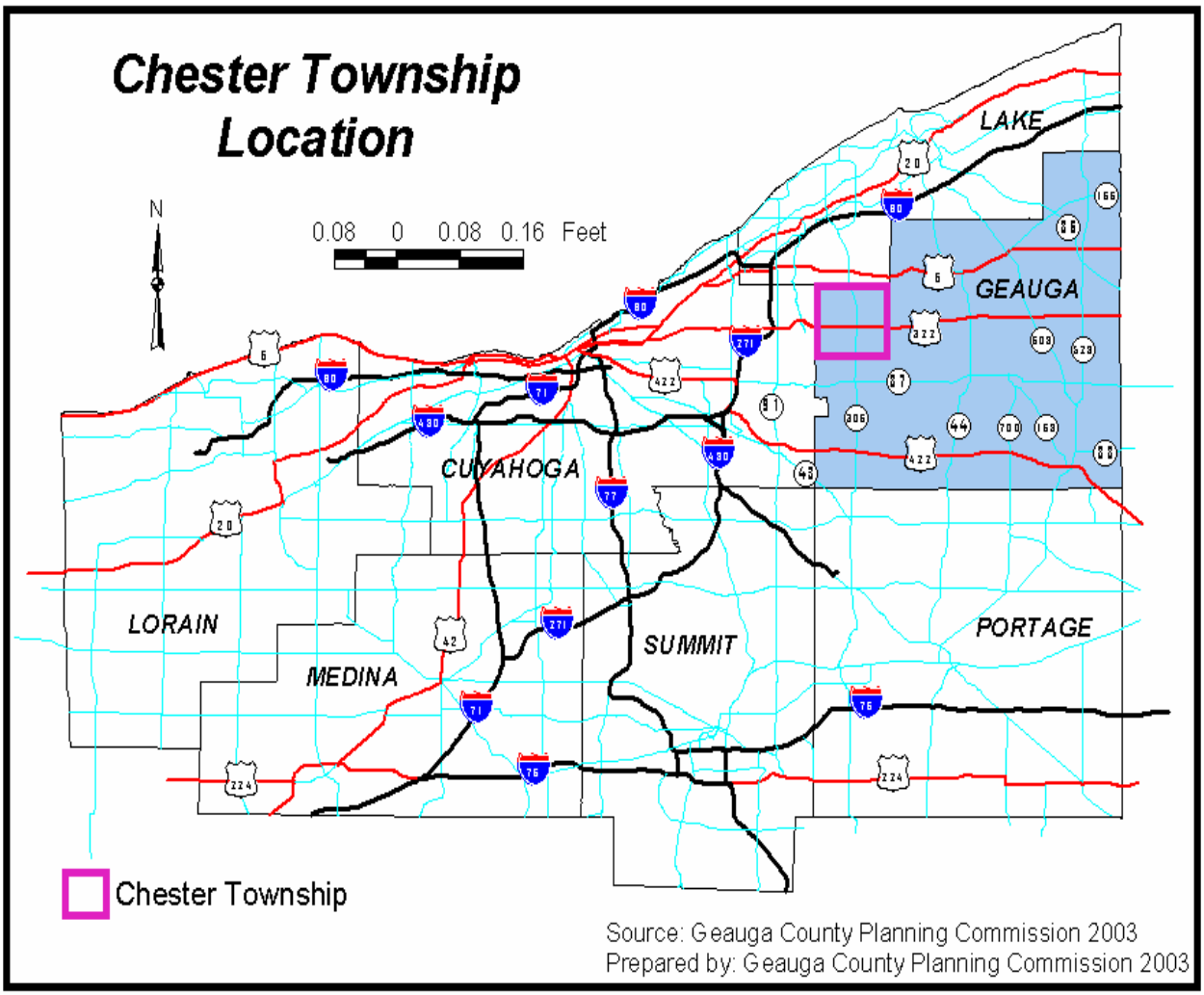
BACKGROUND

Location

Chester Township is comprised of about 15,077 acres covering 23.5 square miles. It is located in the northwest section of Geauga County. The City of Kirtland (Lake County) borders it to the north, the Village of Gates Mills (Cuyahoga County) to the west, Munson Township to the east, and Russell Township to the south (see Map 1).

Despite its semi-rural setting, Chester is relatively close to some large urban centers in the region. To the northwest, Cleveland is approximately 25 miles away. Akron is about 45 miles to the southwest and the Warren-Youngstown area is located roughly 60 miles to the southeast.

Map 1



Climate

The climatic system that influences the weather in Chester is known as humid continental. Higher than average levels of precipitation, especially snowfall, are due to Chester's close proximity to Lake Erie and its elevation. Air masses moving over the lake become saturated and often develop into snow squalls upon reaching the higher elevations. The Chester area receives about 42 to 48 inches of precipitation per year.

The average annual temperature is 49.5 degrees Fahrenheit. Temperatures range from an average yearly low of 35.5 degrees to an average high of 58.6 degrees. During the growing season the mean temperature is around 65 degrees Fahrenheit. The beginning of the season is signaled by the last frost, which typically occurs at the end of April. The first frost (about the middle of October) marks the end of the growing season, which averages approximately 167 days.

History

Chester Township was originally a part of the area known as the "Connecticut Western Reserve." The Colony of Connecticut, between the period of 1630 to 1662, claimed title to the land. On September 2, 1795, Connecticut sold 3,000,000 acres off of the easterly end of the Western Reserve to Joseph Howland, Oliver Phelps, Moses Cleveland and 45 other members of the Connecticut Land Company for $1,200,000. Joseph Howland and associates joined in a deed of trust on September 5, 1795, to John Caldwell, John Morgan, Jonathan Brace, and their heirs and assigns as trustees conveying to them the 3,000,000 acres with the power to survey, plat and sell the land. The officers of the land company decided on a method of subdividing their property in April of 1796. The adopted plan was to divide the region east of the Cuyahoga River into townships five miles square. Many of these townships were subsequently split into sections one mile square, while others were divided into tracts and each tract carved up into lots.

Chester Township was surveyed in 1796 and initially settled in 1801 by Justice Miner. It was the fourth settlement in Geauga County and was named "Chester" after Chester, Massachusetts because a number of settlers were originally from there. Farming, particularly dairying, was the primary activity in the township.

Originally the township was divided into quadrants by Chillicothe Road (S.R. 306) and Center (Sherman) Roads. Now the quadrants are defined by Mayfield (U.S. 322) and Chillicothe Roads (S.R. 306).

The first school building was established in 1810 and was known as the "Old Settlement." It was located on Mayfield Road west of Fullertown (Sperry) Road. In 1904, the township high school was established. Schools in Chester and Russell Townships were consolidated in 1948 forming the West Geauga School District.

After World War II, the township began to experience residential growth. Various businesses and some light industrial plants were established as well.

Transportation

Chester's public road system includes private, township, county, and state routes. According to the County Engineer's Office, there are approximately 100.7 miles of roadway in the township. More specifically, the township is responsible for the maintenance of 78.32 miles of roadway. The county maintains three roads covering 11.9 miles and there are 9.85 miles of state and federal highways (see Map 2).

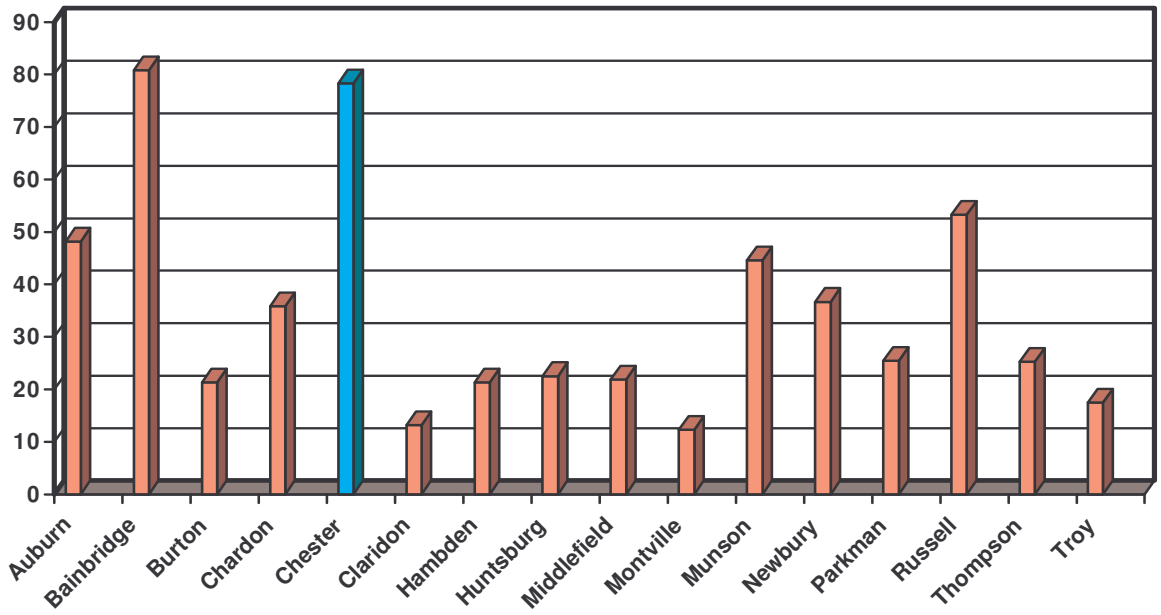
The state and county roads serve as the primary through traffic routes within the township. The township roads are utilized for access to the local residential and agricultural properties. Chester maintains the second highest total amount of road mileage (see Figure 1) among the townships within the county.

The Geauga County Transit Program offers the only available public transportation system in the township. Service is provided on a demand-responsive basis.

The nearest local airport open to the public is the Geauga County Airport located in Middlefield. Other airports include Cuyahoga County, Burke Lakefront, and Hopkins International. There are no active railroad lines in the township. Consequently, all freight must be handled by truck.

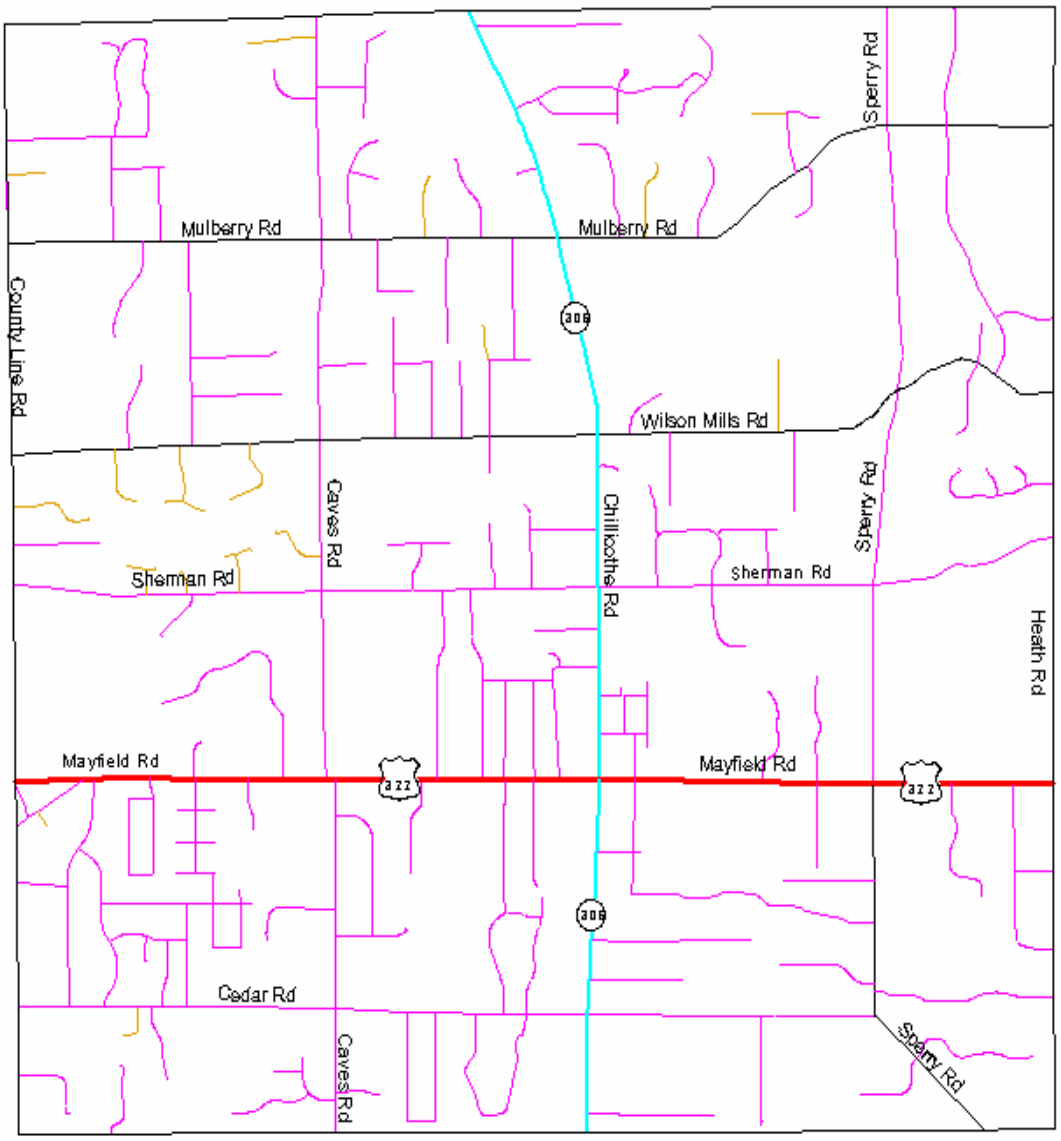
Figure 1

Road Mileage By Township
Geauga County



Source: Geauga County Engineer's Office (Jan. 2001)

Map 2



Chester Township Road Classification

Classification
- Township
- State
- Federal
- County
- Private

N

3000 0 3000 6000 Feet

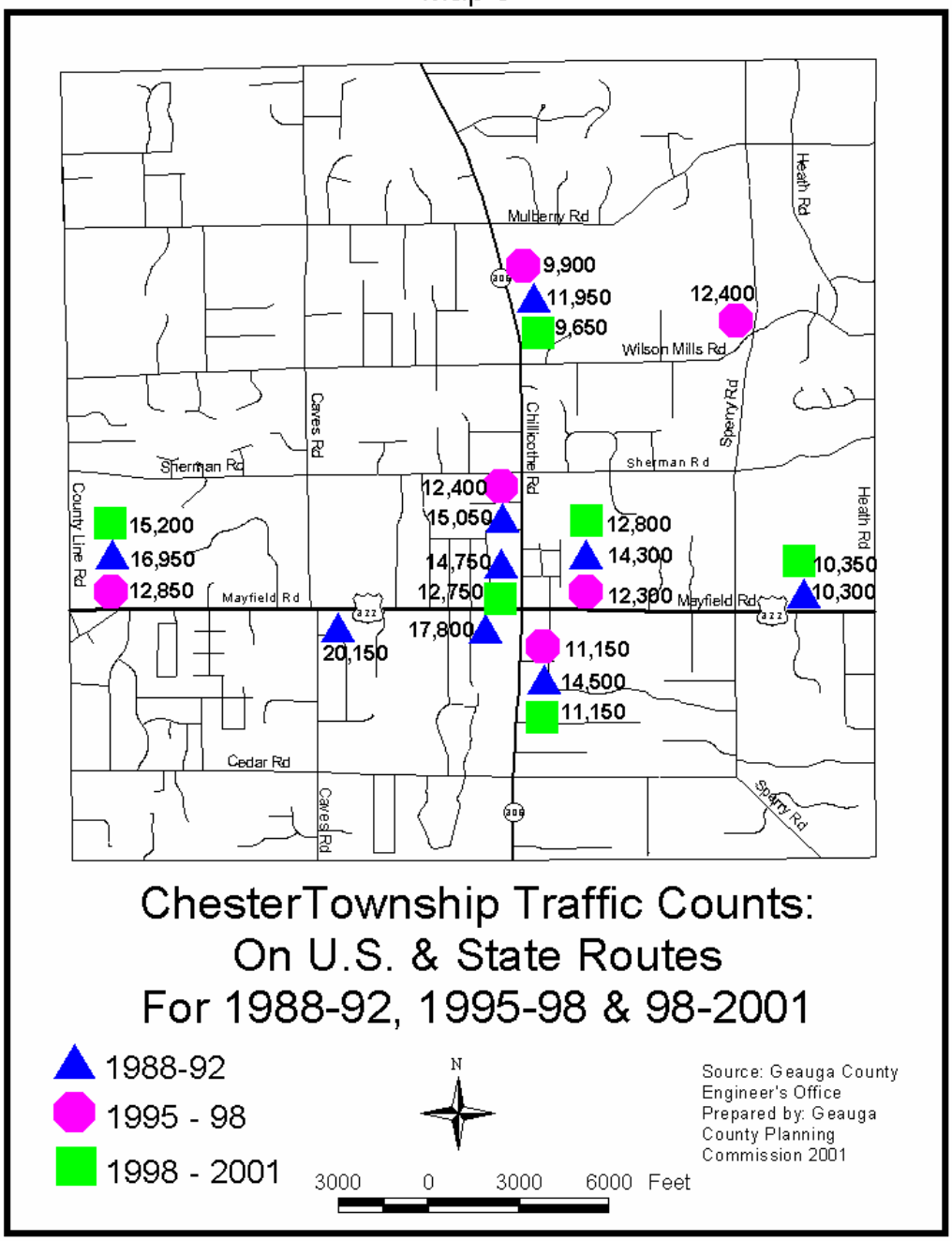
Source: Geauga County Engineer's Office
Prepared by: Geauga County Planning Commission 2001

Traffic Volume

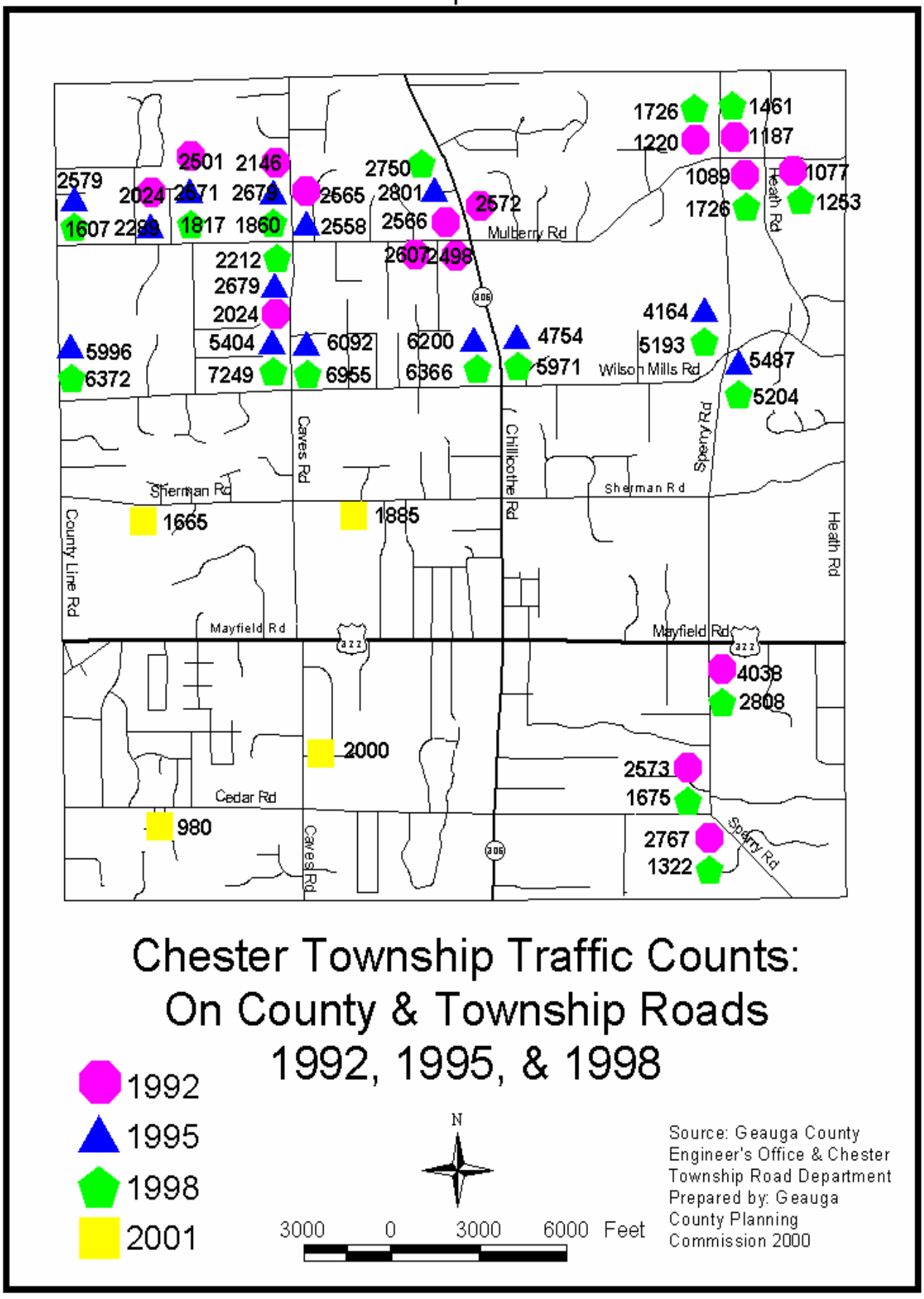
In selected years, traffic counts were taken by the County Engineer's Office and the Ohio Department of Transportation at various points throughout the township (see Maps 3 and 4). The figures shown on the maps represent the number of vehicles that passed the counting points within a 24-hour period.

A review of the counts, where comparisons can be made, reveals that overall traffic volume on the state routes within the township has decreased somewhat, while the traffic volume on the county roads has generally increased.

Map 3



Map 4



Chester Township Traffic Counts: On County & Township Roads 1992, 1995, & 1998

1992
1995
1998
2001

N

3000 0 3000 6000 Feet

Source: Geauga County Engineer's Office & Chester Township Road Department
Prepared by: Geauga County Planning Commission 2000

Accident Data

Table 1 details the township accident and fatality data for 1995 through 2000. This information has been obtained from the Ohio Department of Public Safety. The number of accidents in Chester during this period has remained somewhat constant, averaging 302 accidents per year. In a comparison of the accident totals over this time span (1995-2000) with other townships, Chester is second overall (see Table 2 and Figure 2).

Table 1

Number Of Accidents: 1995 To 2000
Chester Township

Year	Total Accidents	Fatal Crashes	Injury Crashes	Pedestrian Involvement In Crashes
1995	317	1	91	1
1996	337	2	91	0
1997	334	0	105	2
1998	268	1	81	2
1999	275	1	81	0
2000	283	0	70	0
Total	1,814	5	519	5

Source: Ohio Department of Public Safety

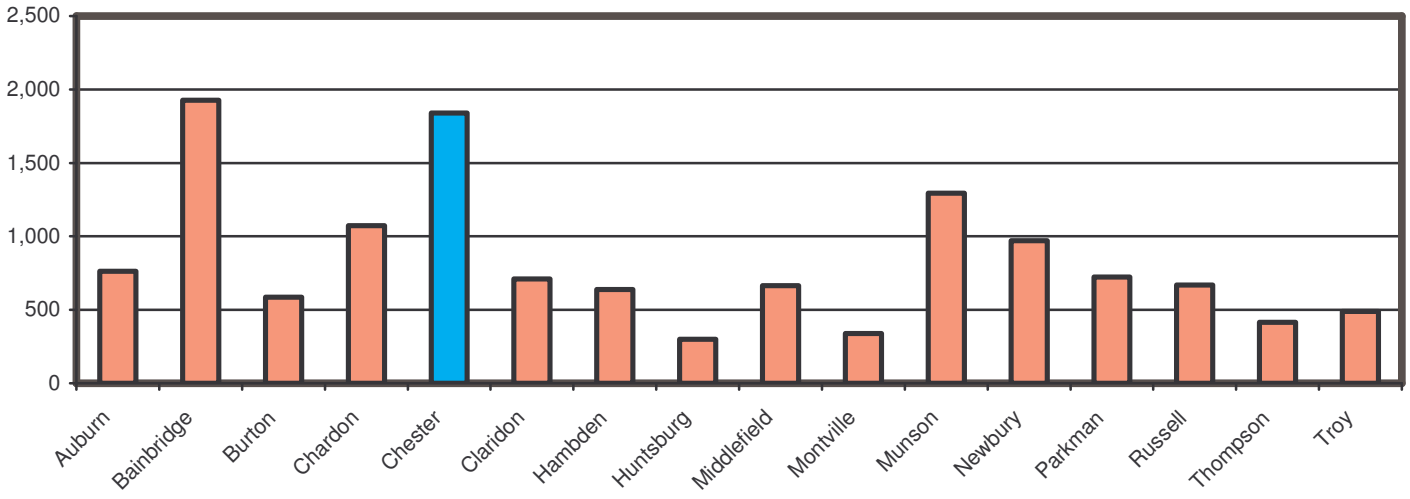
Table 2

Number Of Accidents By Township: 1995 To 2000
Geauga County

Community	1995	1996	1997	1998	1999	2000	6 Year Total	Ranking
Auburn	108	131	120	120	138	145	762	6
Bainbridge	325	335	324	309	342	293	1,928	1
Burton	99	84	98	92	100	113	586	12
Chardon	161	187	177	157	181	210	1,073	4
Chester	317	337	334	268	275	283	1,814	2
Claridon	124	138	118	115	105	110	710	8
Hambden	104	122	118	105	101	89	639	11
Huntsburg	43	34	44	43	65	70	299	16
Middlefield	120	86	114	108	110	127	665	10
Montville	55	43	69	60	54	57	338	15
Munson	224	197	217	199	217	239	1,293	3
Newbury	185	157	149	135	162	183	971	5
Parkman	118	107	115	113	147	124	724	7
Russell	97	120	110	89	130	122	668	9
Thompson	74	63	78	59	80	61	415	14
Troy	92	77	79	65	76	100	489	13
Total	2,246	2,218	2,264	2,037	2,283	2,326	13,374	

Figure 2

Number Of Accidents By Township: 1995 To 2000
Geauga County



Source: Geauga County Engineer's Office

Public Services

Fire protection for the township is provided by the Chester Fire Rescue Incorporated. The department's membership as of 2003 numbered 40 fire persons, 12 of whom are Registered Emergency Medical Technicians (EMT's), 4 advanced EMT's, and 10 paramedics. There are three rescue squad units. The fire equipment is kept in the main firehouse at the northeasterly intersection of Chillicothe Road and Mayfield Road, as well as at a satellite station located near the southeasterly intersection of Mulberry Road and Chillicothe Road. The department's equipment inventory includes three pumpers, four tankers, three rescue vehicles, one heavy rescue unit, one grass fire unit, one boat, and two administrative vehicles. The department's Ohio inspection rating is 'six'.

Police protection is provided by the Ohio State Highway Patrol and the Chester Township Police Department. The Highway Patrol is primarily concerned with traffic safety on the state routes. The township police department is responsible for law enforcement throughout the community. The department consists of the chief, one lieutenant, four sergeants, twelve patrolmen, three part-time patrolmen, and one full-time detective sergeant. The department has ten patrol cars (see Map 5).

The township owns twenty parcels of various sizes and maintains numerous structures (see Map 5). Some of the primary buildings include the firehouse (7,731 sq. ft.), the maintenance/storage garage (8,320 sq. ft.), the satellite fire station (3,499 sq. ft.), the town hall (3,528 sq. ft.), miscellaneous garage (1,752 sq. ft.) police station (2,328 sq. ft.) and garage (960 sq. ft.).

The maintenance of township roads is handled by the township's road department. The department's nine full-time employees are responsible for snow removal and general upkeep of township roads. They also have a full-time groundskeeper and building maintenance man. Designated federal and state routes are addressed by the Ohio Department of Transportation, District 12, and the county roads are maintained by the Geauga County Engineer's Department.

Education

Chester Township belongs to the West Geauga Local School District (which also includes Russell Township and a small portion of the western edge of Munson Township). There are two elementary schools (grades K-5) included in the district. Lindsey Elementary School is located on Caves Road in Chester Township and Westwood Elementary School (also located on Caves Road) is in Russell Township. Generally, students residing north of Mayfield Road attend Lindsey Elementary and those students who live south of Mayfield Road attend Westwood Elementary. The West Geauga Middle School accommodates students in grades 6 to 8 and is located on Cedar Road. West Geauga High School (grades 9-12) is situated on Chillicothe Road (see Map 5). Both the middle school and the high school are in Chester Township. Enrollment figures for the 2001/02 school year reveal that 518 students attended Lindsey Elementary, 535 were enrolled at Westwood Elementary, 653 attended West Geauga Middle School, and 842 went to West Geauga High School (see Table 3).

The staff at Lindsey Elementary School consists of one principal and 22 teachers; Westwood's staff includes one principal and 57 teachers; the middle school has one principal, one vice-principal and 55 teachers; and the high school staff consists of one principal, one vice-principal, and 60 teachers. The superintendent for West Geauga Schools is Tony Podojil and his office is located at the Middle School. Specialized personnel are provided throughout the various schools in the fields of learning disability, special education, speech and hearing therapy, library science, computers, and guidance counseling. A psychologist and registered nurse are also available to the students.

There are several private schools in Chester Township. These include Saint Anselm, Kaleidoscope Christian School, and Hawken School (see Map 5).

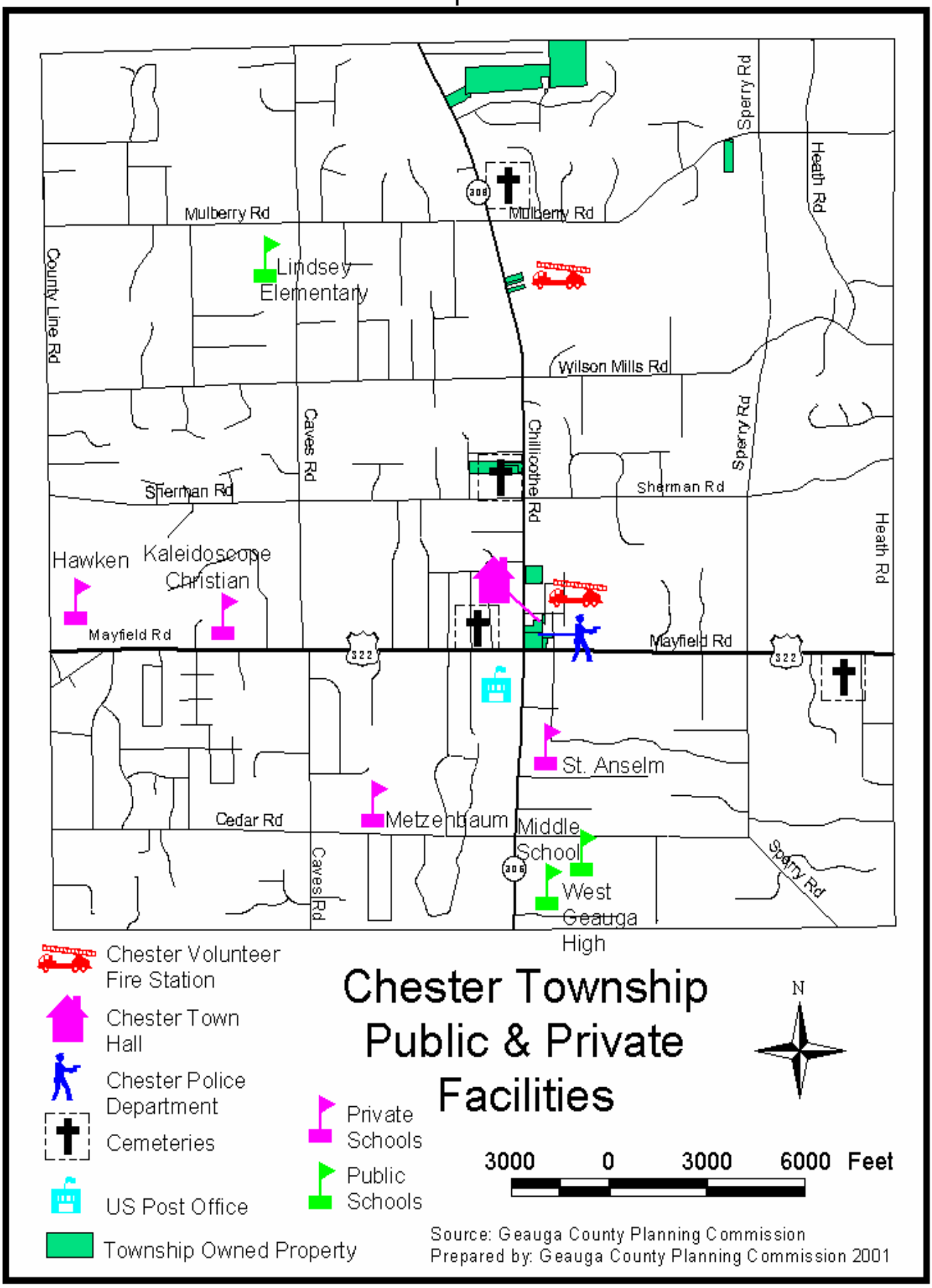
The Metzenbaum School, which offers specialized instruction and activities for the mentally challenged, is also situated in Chester. It is located on the north side of Cedar Road, west of Chillicothe Road (see Map 5).

Table 3

Public And Private Schools
Chester Township

Schools	Location	Enrollment 2001/02	Acres
Lindsey Elementary	11844 Caves Road	518	15.5
Westwood Elementary	13738 Caves Road	535	15.9
West Geauga Middle School	8611 Cedar Road	653	30.0
West Geauga High School	13401 Chillicothe Road	842	15.0
Saint Anselm	13013 Chillicothe Road	340	20.28
Kaleidoscope Christian School	7480 Mayfield Road	7	5.0
Hawken	12465 Mayfield Road	944	283.8
Metzenbaum	8200 Cedar Road	291	13.26

Map 5


Mulberry Rd
Mulberry Rd
Sperry Rd
Heath Rd
Lindsey Elementary
County Line Rd
Wilson Mills Rd
Caves Rd
Chillicothe Rd
Sperry Rd
Sherman Rd
Sherman Rd
Heath Rd
Hawken
Kaleidoscope Christian
Mayfield Rd
Mayfield Rd
322
322
St. Anselm
Cedar Rd
Metzenbaum
Middle School
West Geauga High
Caves Rd
306
Sperry Rd
Chester Volunteer Fire Station
Chester Town Hall
Chester Police Department
Cemeteries
US Post Office
Township Owned Property
Private Schools
Public Schools
Chester Township Public & Private Facilities
N
3000 0 3000 6000 Feet
Source: Geauga County Planning Commission
Prepared by: Geauga County Planning Commission 2001

Medical Services

Professional medical services are located in the township along U.S. 322 and the nearby communities of Mayfield Heights, Mentor, and the city of Chardon. Hospital care is provided by Hillcrest Hospital in Mayfield Heights and UHHS Geauga Regional Hospital in Claridon Township.

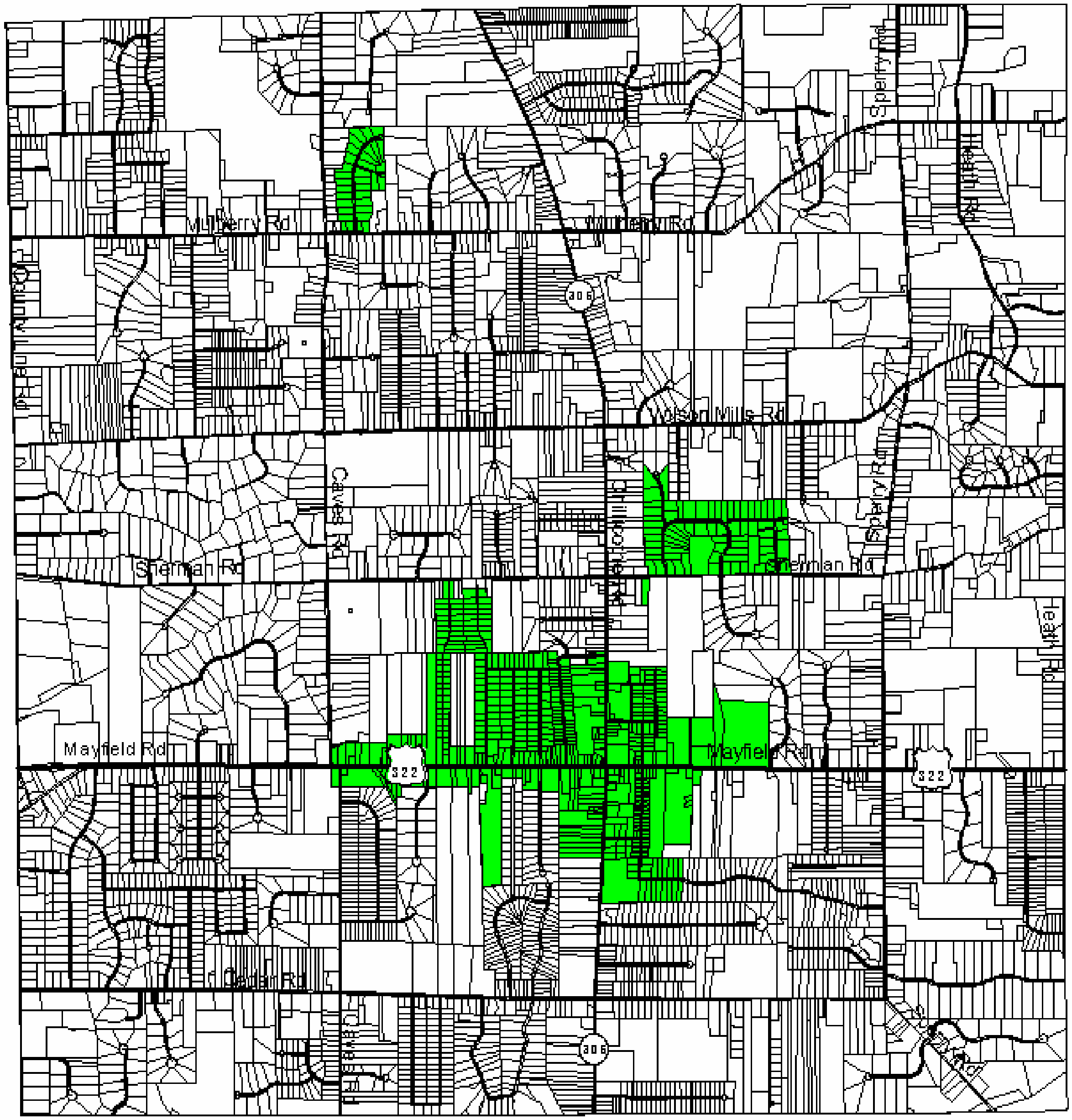
Utilities

Chester residents and businesses receive electrical power from the First Energy Company. However, the community does have a choice concerning electrical suppliers through NOPEC. Dominion East Ohio provides natural gas, along with other suppliers. The Ameritech Telephone Company furnishes telephone service and cable television is offered by Adelphia of Ohio. Solid waste disposal is handled by private haulers. The Geauga-Trumbull Solid Waste Management District has a recycling receptacle on Chillicothe Road, north of the township administration building.

Water for domestic and business use is generally obtained through private on-site wells. A significant portion of the sewage treatment needs are handled by individual on-site septic systems. These systems are privately maintained. Central sewage treatment facilities, which are owned and operated by the county, include: Opalocka at 12887 Opalocka Drive (.16 mgd capacity), Lindsey School at 11844 Caves Road (.02 mgd capacity), Sherman Hills at 12291 East Shiloh Drive (.04 mgd capacity), West Geauga School at 13401 Chillicothe Road (.06 mgd capacity), Willow Hill at 11370 Willow Hill Drive (.0125 mgd capacity) and Valley View at 8215 Mayfield Road (0.2 mgd capacity).

The Northeast Ohio Areawide Coordinating Agency (NOACA) was charged under Section 208 of the Federal Clean Water Act to prepare a regional water quality plan in conjunction with local officials known as Clean Water 2000. This plan addresses wastewater treatment issues and nonpoint source pollution management. As part of the Clean Water 2000 plan, a sewer service area has been designated in Chester (see Map 6). The plan was prepared by the County Water Resources Department based on input by Chester Township officials. It was subsequently adopted by the Board of County Commissioners and provided to NOACA and the Ohio EPA for approval. Sanitary sewer service is restricted to the areas within the boundaries shown on the map. All areas outside the service plan boundaries must be served by on-site treatment facilities, unless a documented health issue is found.

Map 6



Chester Township Service Area Plan

Service Areas

- No Service 14,112.83 Acres 93.6%
- Existing Sewers 962.7 Acres 6.4%

N

Approved by Chester Township Board of Trustees April 1st, 1999 &
The Board of County Commissioners April 27th, 1999

Source: Geauga County Water Resources Department
Prepared by: Geauga County Planning Commission 2001
Note: Public Sewer Service Areas Only

3000 0 3000 6000 Feet

Recreation

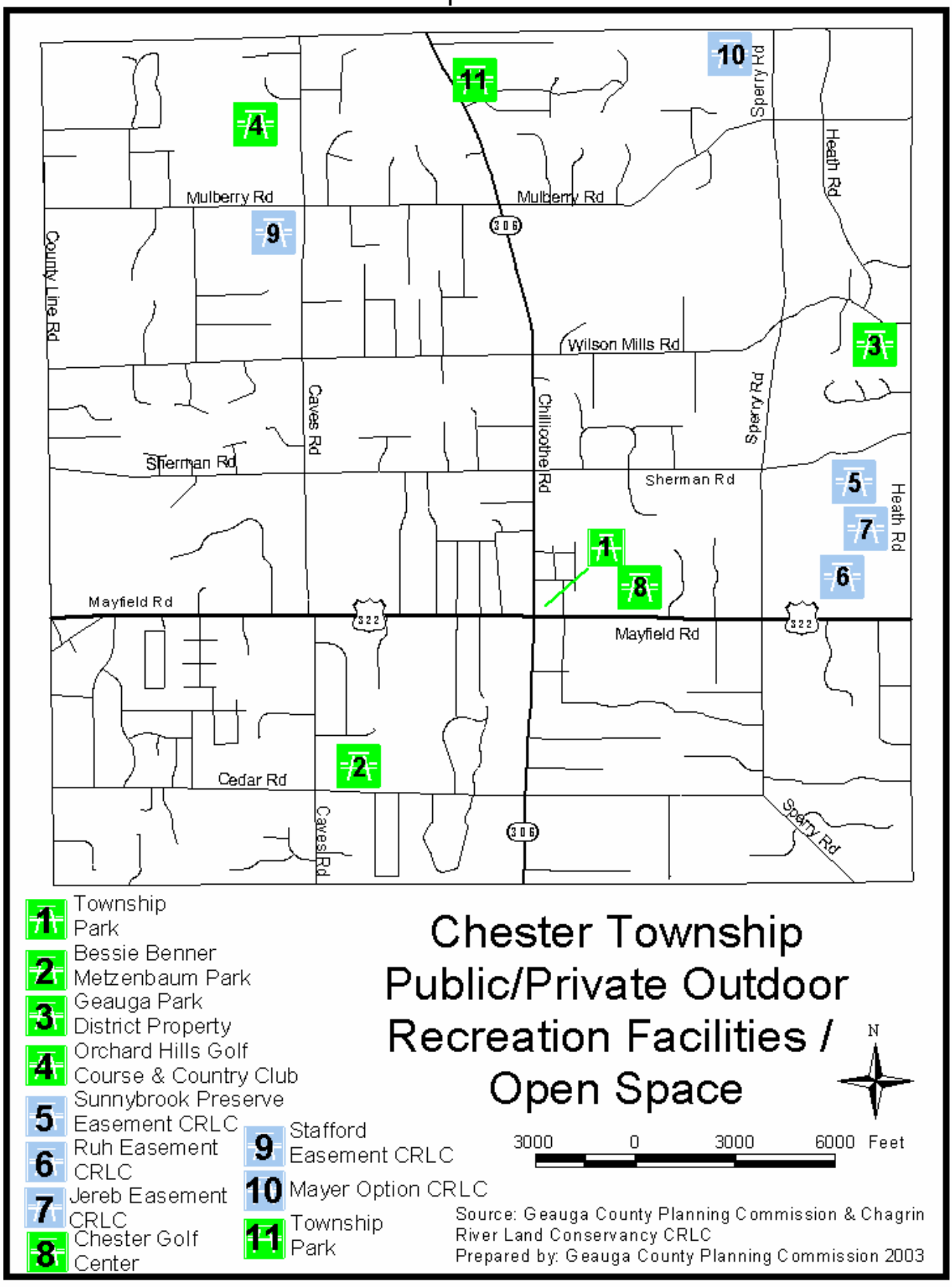
Outdoor public and private recreation sites within the community are shown on Table 4 and Map 7). There is a township park located at the northeast intersection of Mayfield and Chillicothe Roads. It contains a softball field, horseshoe pit, volleyball court, and picnic facilities. The township has acquired an additional 80 acres located on the east side of Chillicothe Road just south of the town's northern boundary line for future recreation purposes. The Geauga Park District operates the Bessie Benner Metzenbaum Park that contains approximately 68 acres and includes walking trails. It is located on the north side of Cedar Road just east of Caves Road. In addition, the Park District owns 27.81 acres situated south off Wilson Mills Road (west of the eastern township boundary line). Private outdoor recreational facilities include Orchard Hills golf course on Caves Road and the Chester Golf Center located on the north side of Mayfield Road and east of Chillicothe Road. The Chagrin River Land Conservancy (CRLC) is another private organization dealing in the preservation of land. They hold five easements throughout the township totaling about 338 acres.

Table 4

Outdoor Public And Private Recreation Facilities
Chester Township

Map Site	Facility	Location	Acres	Uses
1	Township Park	Northeast corner Mayfield Road and Chillicothe Road	5.0	Softball, Volleyball, Horseshoes, and Picnic Facilities
2	Bessie Benner Metzenbaum Park	7940 Cedar Road	67.6	Walking Trails
3	Geauga Park District Property	SW corner Wilson Mills Road and Heath Road	27.8	Open Space
4	Orchard Hills Golf & Country Club	11414 Caves Road	211.0	Golf Course
5	Sunnybrook Preserve Easement	West side of Heath Road, South of Sherman Road	73.0	Open Space / Easement
6	Ruh Easement	West side of Heath Road North of Mayfield Road (322)	84.4	Open Space / Easement
7	Jereb Easement	West side of Heath Road South of Sherman Road	10.0	Open Space / Easement
8	Chester Golf Center	7800 Mayfield Road	13.7	Driving Range
9	Stafford Easement	South of Mulberry Road West of Caves Road	35.6	Open Space / Easement
10	Maher Option	South of the northern township line West of Sperry Road	134.6	Open Space / Easement
11	Township Park	South of the northern township line East of Chillicothe Road (306)	80.0	Park

Map 7


Mulberry Rd
Mulberry Rd
Wilson Mills Rd
Sherman Rd
Sherman Rd
Mayfield Rd
Mayfield Rd
Cedar Rd
County Line Rd
Caves Rd
Caves Rd
Chillicothe Rd
Spaulding Rd
Spaulding Rd
Heath Rd
Heath Rd
Sperry Rd
306
306
322
322
1 Township Park
2 Bessie Benner Metzenbaum Park
3 Geauga Park District Property
4 Orchard Hills Golf Course & Country Club
5 Sunnybrook Preserve Easement CRLC
6 Ruh Easement CRLC
7 Jereb Easement CRLC
8 Chester Golf Center
9 Stafford Easement CRLC
10 Mayer Option CRLC
11 Township Park
Chester Township Public/Private Outdoor Recreation Facilities / Open Space
N
3000 0 3000 6000 Feet
Source: Geauga County Planning Commission & Chagrin River Land Conservancy CRLC
Prepared by: Geauga County Planning Commission 2003

Agricultural Land

A comparison of Ohio Department of Natural Resources (ODNR) generalized land use information from 1975 and 1996 indicates that active agricultural land decreased 54% or 897.71 acres during this time frame in the township. Chester is ranked last in the county in terms of land in agricultural use (758.87 acres) as of 1996 (see Table 5 and Figure 3). According to information from the Ohio State University (OSU) Extension Office, the actual number of farms in Chester increased from 43 in 1990 to 48 in 1997, representing a 12% change. The township is ranked fifth in the county regarding the total number of farms (see Table 6 and Figure 4).

Table 5

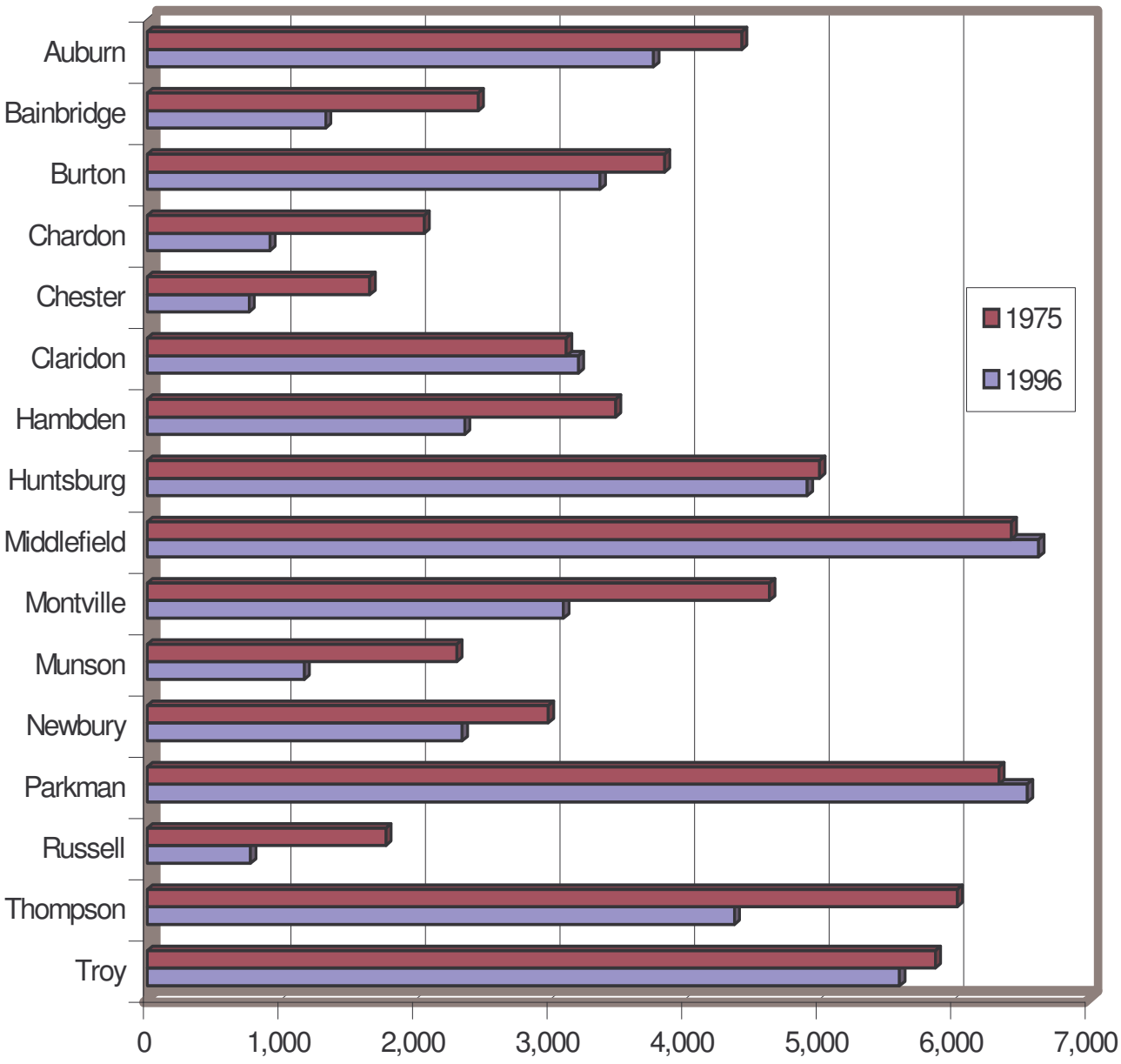
Acres In Agricultural Land By Township: 1975 And 1996
Geauga County

Township	1975 AG Acres	1996 AG Acres	No. Change 1975-1996	% of Change 1975-1996	1996 Rank By AG Acres
Auburn	4,419.65	3,764.66	-654.99	-15%	6
Bainbridge	2,462.36	1,328.11	-1,134.25	-46%	12
Burton	3,845.61	3,367.33	-478.28	-12%	7
Chardon	2,060.96	914.77	-1,146.19	-56%	14
Chester	1,656.58	758.87	-897.71	-54%	16
Claridon	3,115.48	3,206.61	91.13	3%	8
Hambden	3,482.43	2,359.37	-1,123.06	-32%	10
Huntsburg	4,998.08	4,905.63	-92.45	-2%	4
Middlefield	6,422.36	6,624.72	202.36	3%	1
Montville	4,625.29	3,095.06	-1,530.23	-33%	9
Munson	2,301.02	1,169.96	-1,131.06	-49%	13
Newbury	2,982.78	2,342.90	-639.88	-21%	11
Parkman	6,329.51	6,540.94	211.43	3%	2
Russell	1,775.21	769.71	-1,005.50	-57%	15
Thompson	6,020.72	4,365.26	-1,655.46	-27%	5
Troy	5,857.74	5,592.00	-265.74	-5%	3

Source: The Ohio Department of Natural Resources

Figure 3

Acres In Agricultural Land By Township: 1975 And 1996
Geauga County



Source: The Ohio Department of Natural Resources

Table 6

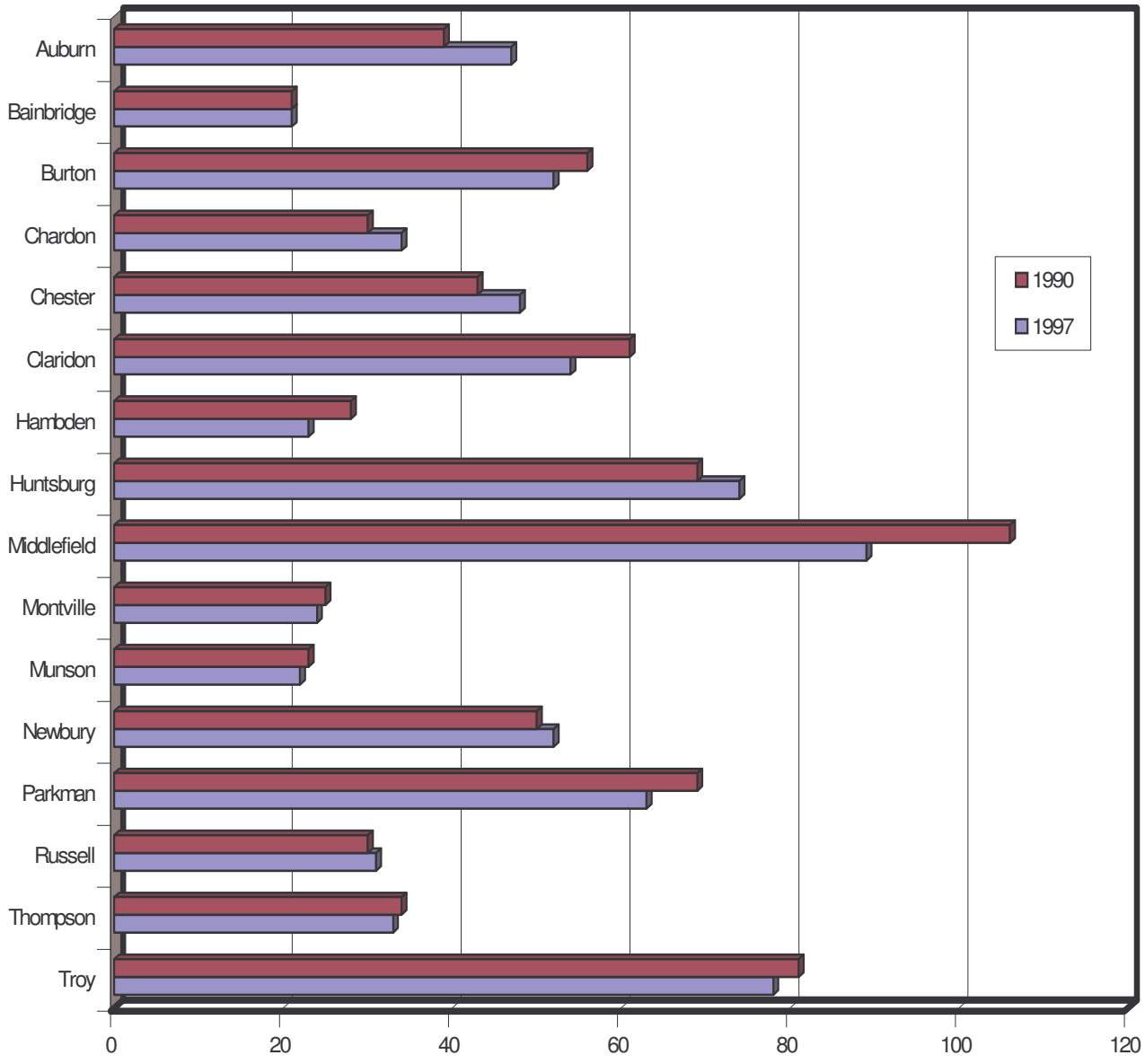
Number Of Farms By Township: 1990 And 1997
Geauga County

	# Farms				% of County's Farms			
Township	1990	1997	# Change 1990-1997	% Change 1990-1997	1990	1997	Rank 1990	Rank 1997
Auburn	39	47	8	21%	5%	6%	7	5
Bainbridge	21	21	0	0%	3%	3%	9	8
Burton	56	52	-4	-7%	7%	7%	5	4
Chardon	30	34	4	13%	4%	5%	8	6
Chester	43	48	5	12%	6%	7%	6	5
Claridon	61	54	-7	-11%	8%	7%	4	4
Hambden	28	23	-5	-18%	4%	3%	8	8
Huntsburg	69	74	5	7%	9%	10%	3	2
Middlefield	106	89	-17	-16%	14%	12%	1	1
Montville	25	24	-1	-4%	3%	3%	9	8
Munson	23	22	-1	-4%	3%	3%	9	8
Newbury	50	52	2	4%	7%	7%	5	4
Parkman	69	63	-6	-9%	8%	9%	3	3
Russell	30	31	1	3%	4%	4%	8	7
Thompson	34	33	-1	-3%	4%	4%	8	7
Troy	81	78	-3	-4%	11%	10%	2	2
Total	765	745	-20	-3%	100%	100%		

Source: "The Changing Agricultural Community in Geauga County," OSU Extension, 1997

Figure 4

Number Of Farms By Township: 1990 And 1997
Geauga County



Source: The Changing Agricultural Community in Geauga County, OSU Extension, 1997

CAUV Program

There are existing state laws and programs that are administered by the County Auditor's Office to assist the community in agricultural land preservation efforts. The Current Agricultural Use Value (CAUV) program offers a tax reduction on any tract of land containing 10 acres or more devoted exclusively to agricultural use for the last three years. A small tract of land may be included if it has produced an average income of $2,500 or more from sales of agriculture products during the previous three years or if there is anticipated gross income of such amount. Map 8 shows the parcels enrolled in the CAUV program in Chester. There are 65 parcels totaling 883 acres, representing 5% of the township. In a comparison with the other townships, Chester is ranked last with respect to total acres in the CAUV program (see Table 7).

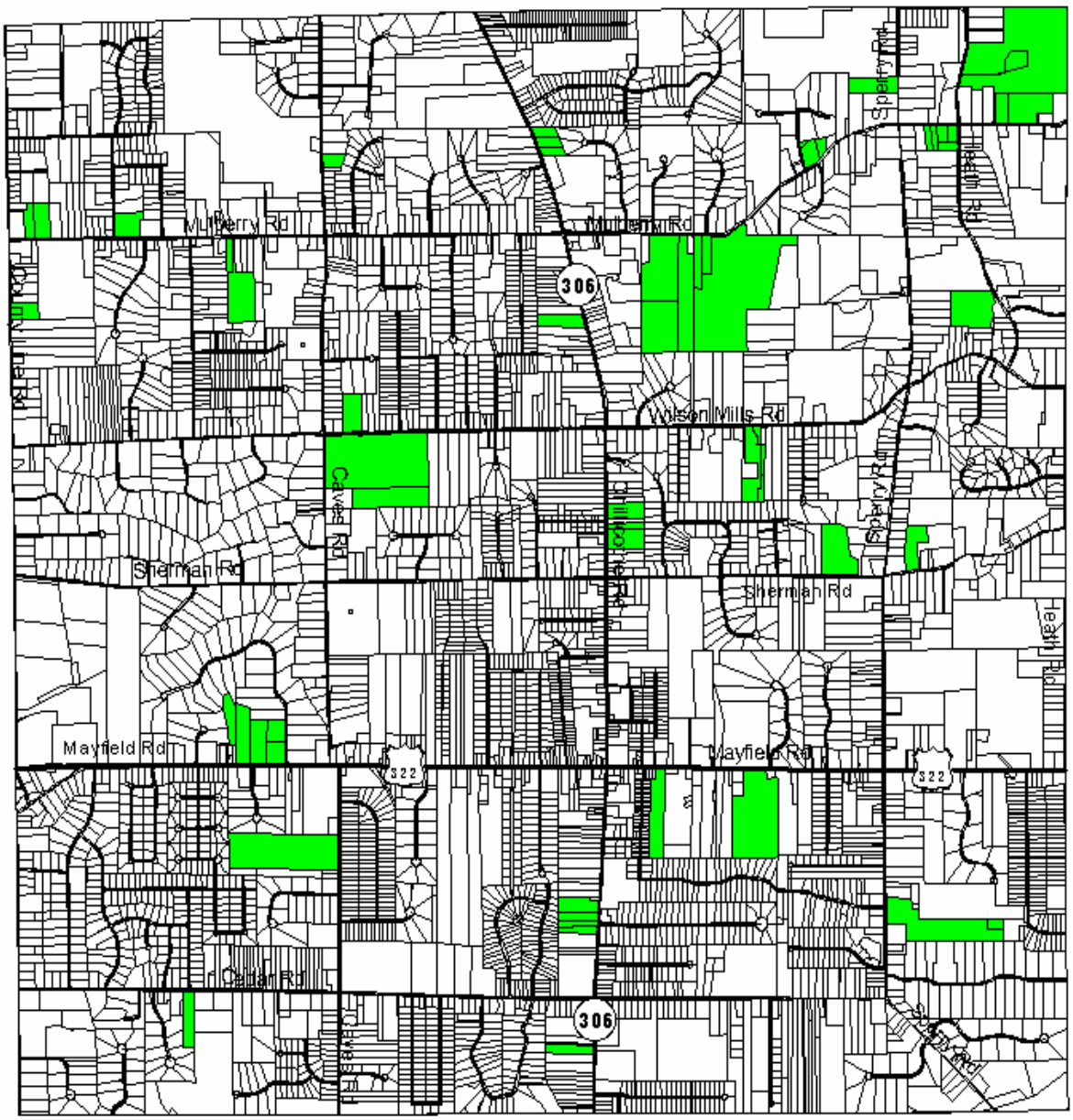
Table 7

Property In CAUV By Township: 2002
Geauga County

Rank by Acres	Township	No. of Parcels	Total CAUV Acres	Avg./Acre per Parcel	Rank by Avg./ Acre	Avg. AG Value per Acre	Avg. True Value per Acre	Rank by Value		% of Twp. in CAUV
								AG	True	
6	Auburn	186	5,302.46	28	12	$508	$4,410	8	7	28%
12	Bainbridge	60	2,039.81	34	5	$736	$6,466	3	3	12%
10	Burton	160	3,813.15	24	15	$531	$3,489	6	8	25%
14	Chardon	59	1,551.35	26	14	$671	$5,128	4	5	10%
16	Chester	65	883.05	13	16	$1,583	$8,954	1	1	5%
7	Claridon	166	4,778.19	29	9	$392	$3,091	10	9	33%
11	Hambden	81	2,583.03	32	8	$339	$2,799	13	11	17%
4	Huntsburg	225	6,350.5	28	11	$352	$2,204	12	14	38%
2	Middlefield	250	8,206.56	33	7	$370	$2,396	11	13	54%
8	Montville	113	4,297.17	38	3	$308	$1,881	15	15	26%
13	Munson	50	1,687.15	34	6	$586	$5,037	5	4	10%
9	Newbury	132	3,870.77	29	10	$539	$4,883	7	6	21%
1	Parkman	244	9,367.15	38	2	$288	$2,459	14	12	53%
15	Russell	58	1,530.09	26	13	$899	$7,579	2	2	12%
5	Thompson	136	5,759.32	42	1	$202	$1,603	16	16	35%
3	Troy	187	6,547.7	35	4	$393	$2,779	9	10	40%

Source: The Geauga County Auditor's Office

Map 8



Chester Township
CAUV Parcels

N

CAUV Parcels
65 Parcels
883.05 Acres
5% of Township

3000 0 3000 6000 Feet

Source: Geauga County Auditor's Office
Prepared by: Geauga County Planning Commission 2003

Forestry Tax Program

Another program that assists in land preservation is the Ohio Forestry Tax law. To qualify, the tract of land must be 10 or more acres in size, be outside of a municipality, and be certified as forestland by a state forester. In addition, the land cannot be used for grazing or be enrolled in the CAUV program. Map 9 shows the land in Chester enrolled in the forestry program, which includes 92 parcels totaling 1,145 acres or 8% of the township. The tax reduction is 50% plus there is no recoupment penalty if the land is removed from the program. The initial application amount is $50 with no renewal fee. In comparison to the other townships within the county, Chester is ranked eighth with respect to the total number of acres in the Forestry Program (see Table 8).

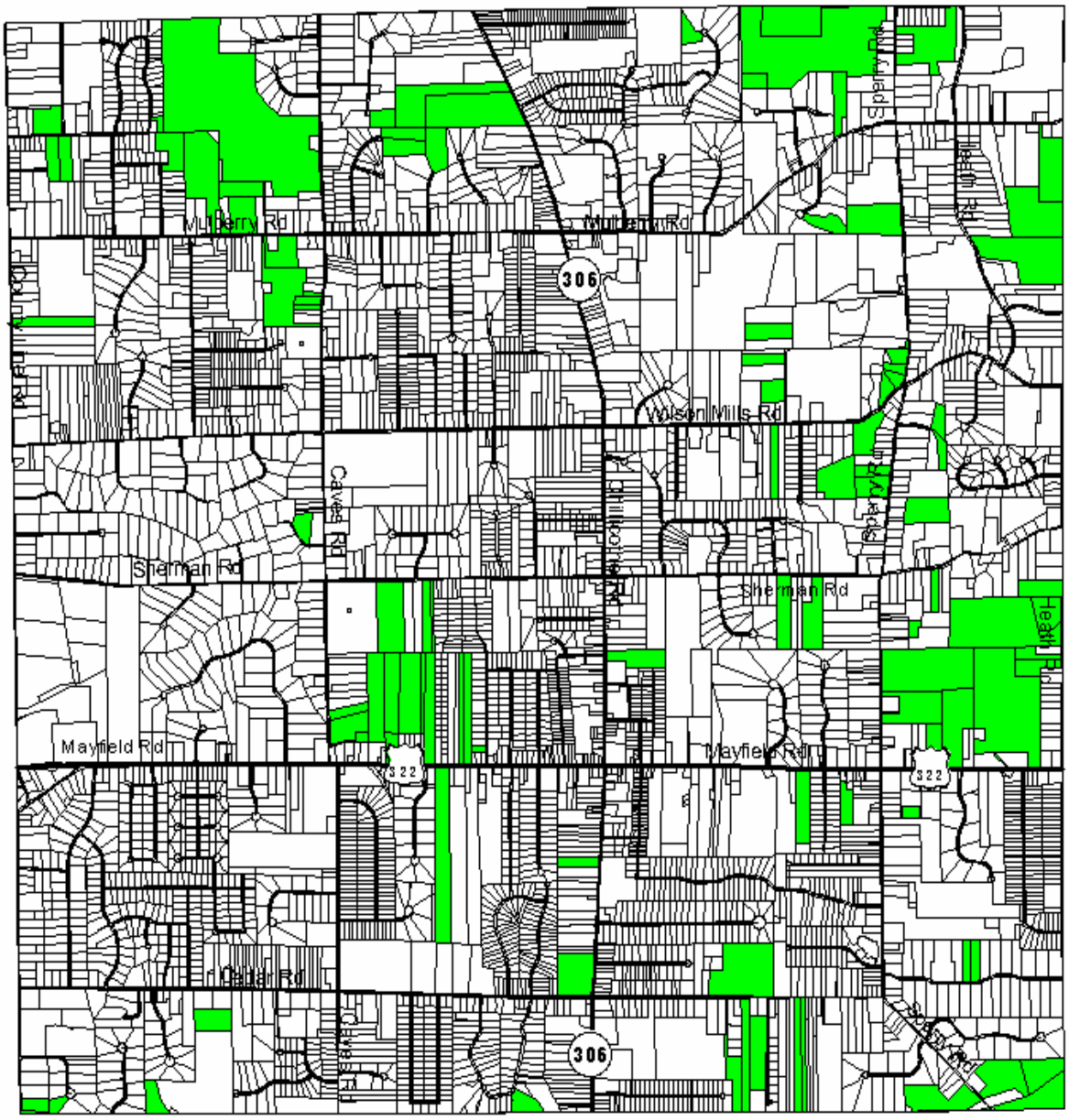
Table 8

Property In Forestry Program By Township: 2002
Geauga County

Township	# Parcels	Rank by Acres	Acreage	% of Township
Auburn	79	11	1,133.39	6%
Bainbridge	87	7	1,210.07	7%
Burton	60	15	937.39	6%
Chardon	145	3	2,348.22	16%
Chester	92	8	1,145.85	8%
Claridon	52	9	1,090.32	8%
Hambden	98	4	1,800.48	13%
Huntsburg	63	12	1,060.52	7%
Middlefield	13	16	647.41	4%
Montville	115	1	2,365.13	15%
Munson	122	5	1,468.91	9%
Newbury	155	2	2,358.58	13%
Parkman	54	13	981.73	6%
Russell	107	14	944.63	8%
Thompson	79	6	1,360.57	8%
Troy	57	10	1,140.63	7%

Source: The Geauga County Auditor's Office

Map 9



Chester Township Forestry Program

N

Forestry Program
92 Parcels
1,145.85 Acres
8% of Township

3000 0 3000 6000 Feet

Source: Geauga County Auditor's Office
Prepared by: Geauga County Planning Commission 2003

Chester has 2,028 acres or 13% of its land area in the CAUV and Forestry Tax Program (see Table 9). The township is ranked last with regard to the total number of acres enrolled in these programs.

Table 9

Total Acres In CAUV And Forestry Programs By Township: 2002
Geauga County

Township	Total Acres	No. of Parcels	% of Township	Rank by Acres
Auburn	6,435.85	265	34%	7
Bainbridge	3,249.88	147	19%	13
Burton	4,750.54	220	31%	10
Chardon	3,899.57	204	26%	12
Chester	2,028.90	157	13%	16
Claridon	5,868.51	218	41%	9
Hambden	4,383.51	179	30%	11
Huntsburg	7,411.02	288	45%	4
Middlefield	8,853.97	263	58%	2
Montville	6,655.75	228	41%	6
Munson	3,156.06	172	19%	14
Newbury	6,229.35	287	34%	8
Parkman	10,348.88	298	59%	1
Russell	2,474.72	165	20%	15
Thompson	7,119.89	215	43%	5
Troy	7,688.33	244	47%	3

Source: The Geauga County Auditor's Office

Agricultural District Program

The formation of an agricultural district, which has requirements similar to the CAUV program, is another protection tool available to farmers. Owners of land in an agricultural district receive a deferment on any assessments for proposed improvements (i.e. sewer and water lines). Legal protection may be provided against nuisance lawsuits as well as the use of the power of eminent domain by local governments. In relation to the other townships within the county, Chester is ranked ninth as to the total number of acres in the Agricultural District Program (see Table 10). Map 10 shows 28 parcels totaling 494.93 acres enrolled in Agricultural Districts, which is 3.3% of the township.

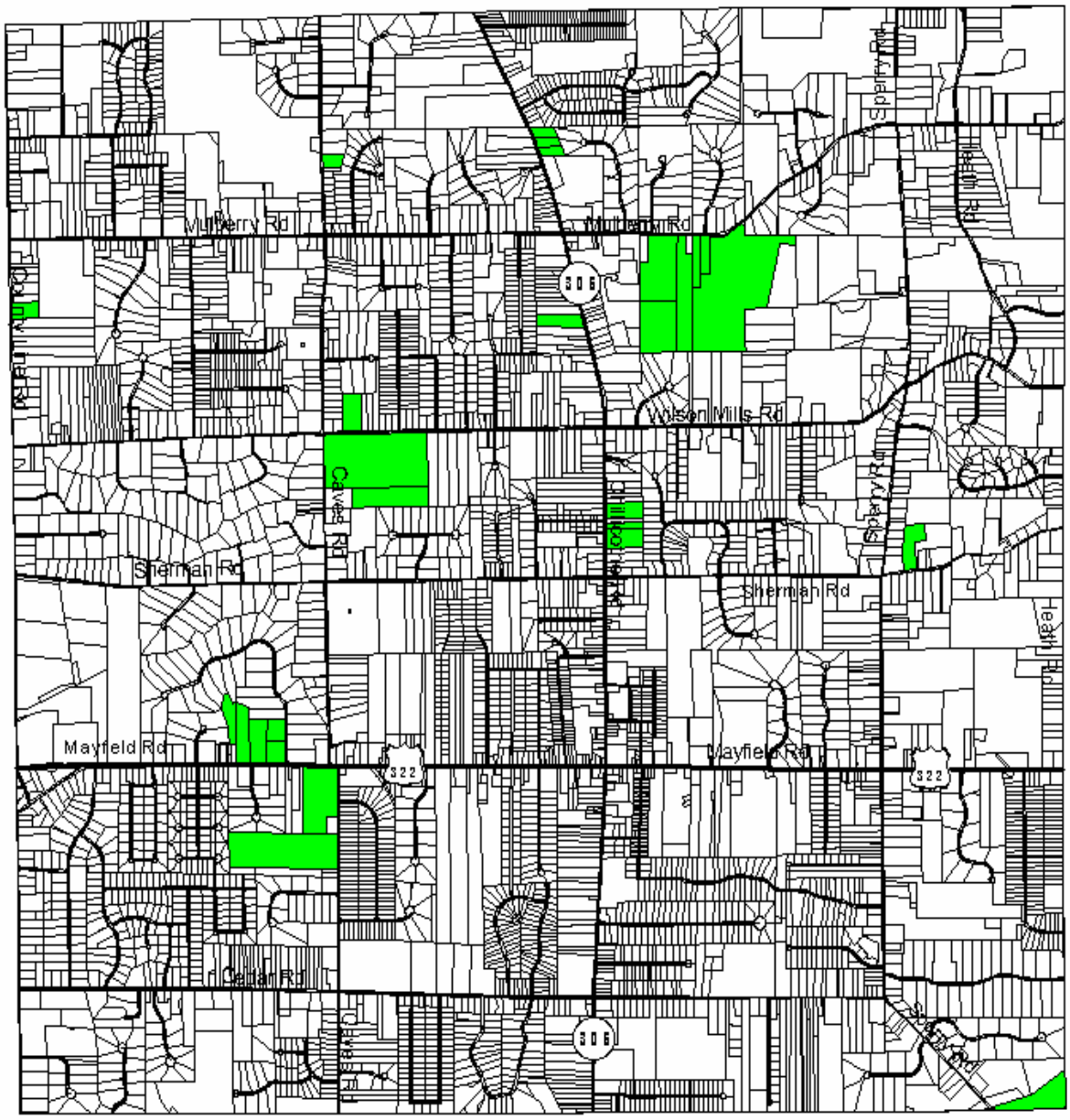
Table 10

Agricultural Districts By Township: 2002
Geauga County

Communities	# of Parcels	Acres	% of Township	Ranking
Auburn	49	1,448.89	7.8%	2
Bainbridge	24	1,074.37	6.5%	3
Burton	23	731,32	4.9%	7
Chardon	13	293.16	2.0%	12
Chester	28	494.93	3.3%	9
Claridon	38	1,501.38	10.4%	1
Hambden	24	690.99	4.8%	8
Huntsburg	5	285.66	1.8%	14
Middlefield	4	217.51	1.5%	16
Montville	10	407.75	2.6%	11
Munson	13	392.92	2.4%	12
Newbury	16	476.88	2.6%	10
Parkman	13	889.51	5.1%	4
Russell	8	235.13	1.9%	15
Thompson	25	838.96	5.1%	5
Troy	17	785.67	4.8%	6

Source: Geauga County Auditor's Office

Map 10



Chester Township
Agricultural District Parcels

N

Ag District Parcels
28 Parcels
494.93 Acres
3.3% of Township

3000 0 3000 6000 Feet

Source: Geauga County Auditor's Office
Prepared by: Geauga County Planning Commission 2003

Agricultural Security Areas

The generalized agricultural security areas (ASA) shown on Map 11 represent potential targets for farmland preservation efforts. The map is based on the following:

- Enrollment in the CAUV program, an Agricultural District, or Forestry Tax program pursuant to Ohio law.
- A minimum of approximately 200 contiguous acres of farmland.
- Prime agricultural soils.
- Prevailing zoning regulations that permit agricultural activities, however, commercial and industrial uses are not allowed in the affected zone.

Farmland Preservation Tools

Clean Ohio Fund

In November 2000, the voters in Ohio passed State Issue One, thereby creating the "Clean Ohio Fund" that includes money for the establishment of an Agricultural Easement Purchase Program (AEPP). The AEPP is administered through the Ohio Department of Agriculture (ODA). The thrust of the AEPP is to acquire development rights on prime, active farmland that is under the intermediate threat of development. Portions of Chester Township, based on the ASA map included in this chapter (see Map 11), may qualify for the AEPP. It is the decision of the individual landowners to submit an AEPP application. However, Chester officials may pursue this process as a means to preserve prime agricultural land in the community and to establish a lasting rural legacy.

Farmland Protection Program (FPP)

FPP is a voluntary federal program that helps farmers keep their land in agriculture use. The program provides matching funds to state and local governments and non-governmental organizations with existing farmland protection programs to purchase conservation easements.

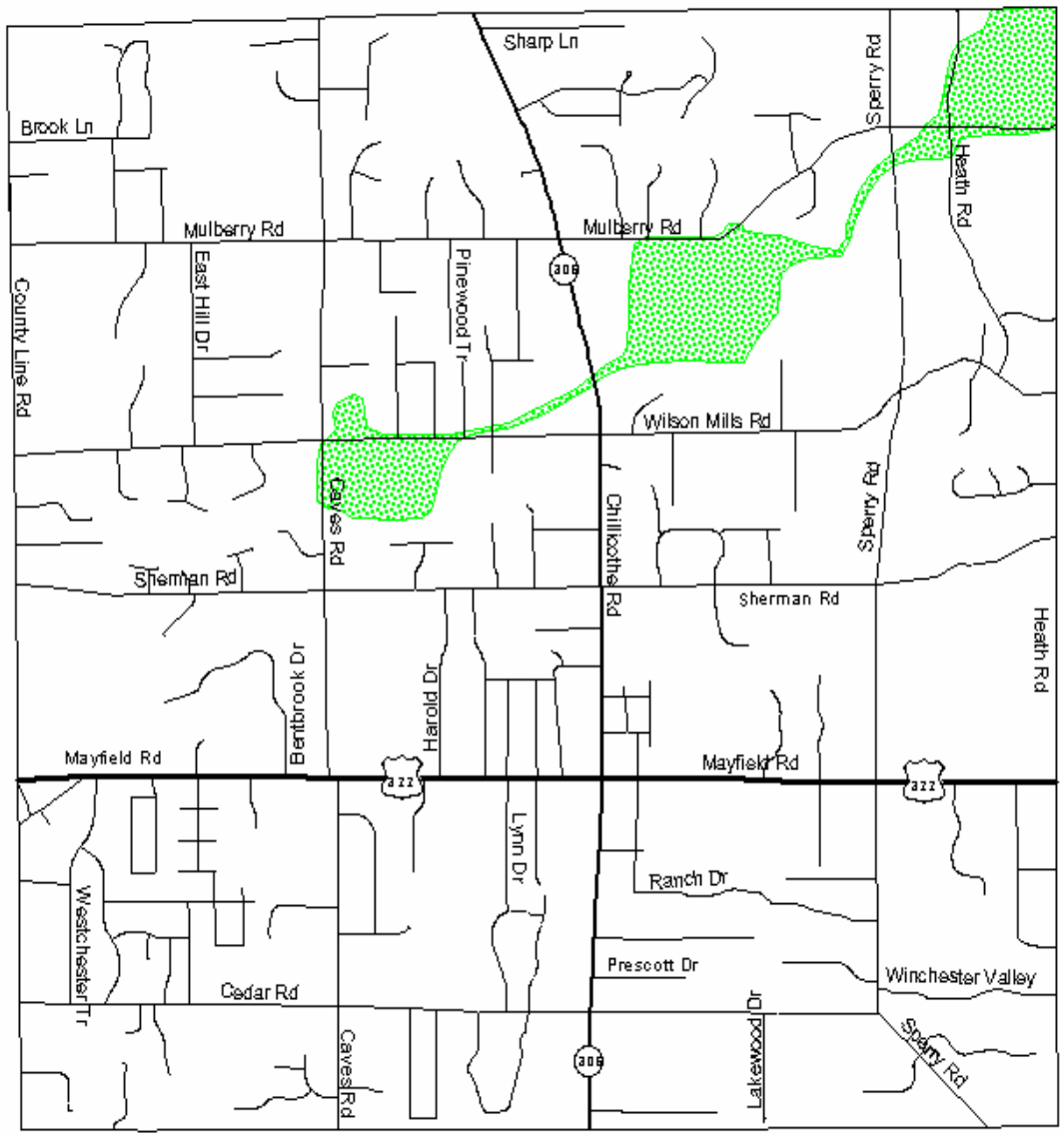
Bargain Sale

This technique involves the sale of property or development rights for less than fair-market value. The seller may use the difference between the appraised fair-market value and the bargain sale price paid by a public agency or qualified nonprofit organization as a charitable contribution for an income tax deduction.

Conservation Reserve Program (CRP)

The CRP is a federal government program implemented in conjunction with the National Resource Conservation Service (NRCS). The thrust of this program is to protect land that may be subject to high erosion levels as well as adjacent waterways and public wellheads by offering governmental rental payments to farmers to convert cropland to appropriate protective cover. Applicants must own the affected land for three years prior to enrollment. The contract period is ten years and rental payments may be up to $50,000 annually.

Map 11



Chester Township
Generalized Agricultural Security Areas

Agricultural
Security Areas
41.42 Acres
0.3% of Township

N

Source: Geauga County Planning Commission & CAUV Parcels
Prepared by: Geauga County Planning Commission 2003

3000 0 3000 6000 Feet

Land Banking/Outright Purchase

Selected undeveloped parcels are acquired as a means to discourage speculation and arrest development of sensitive parcels. The land is placed in a "bank" for future disposition. The land is bought in "fee simple," in other words, all of the rights to the land are purchased and a deed for the property is recorded with the county recorder.

Land Trusts

A land trust is a private, nonprofit corporation formed for the purpose of protecting and preserving real property. The nonprofit corporation status allows a land trust to take title to real estate or accept donations. There are various methods available for a land trust to acquire land. These include agricultural conservation easements, direct purchase in fee simple, life estate plans, and land donations. Once the land is acquired, the trust is responsible for monitoring it to ensure that the recorded restrictions on the property are enforced. At the state and national level, such organizations include the Land Trust Alliance, the Nature Conservancy, the Trust for Public Land, and the American Farmland Trust. Locally, the Chagrin River Land Conservancy is involved with conservation efforts.

Outright Donations

Involves a landowner transferring agricultural land to a governmental entity or to a land trust in the form of a charitable gift. The owner may reserve a life estate as a part of the transfer to ensure that he may remain on the property until death.

Cost of Community Services (COCS)

Previous studies of the cost of community services (COCS) have been able to show the net impact of major land uses (residential, agricultural, commercial, and industrial) on a community's ability to generate adequate income to pay for various public services.

Examples include Madison Township in Lake County where a COCS study showed that for every dollar of revenue raised from residential development $1.40 was spent on public services. However, for every dollar raised, by farm, forest, and undeveloped land, only 38 cents was spent on public services. The results were similar for a study completed in Auburn Township. For agricultural land the ratio was $1.00 of revenue for each 37 cents of expenditure, whereas for residential land the ratio was $1.00 of revenue for each $1.34 of expenditure (see Table 11).

Table 11

Comparison Of Ratios Of Revenue To Expenditures By Land Use
Selected Northeast Ohio Townships

	Ratios		
Township	**Residential**	**Agricultural**	**Industrial/Commercial**
Auburn (Geauga County)	1 : 1.34	1 : .37	1 : .10
Madison (Lake County)	1 : 1.40	1 : .38	1 : .25
Shalersville (Portage County)	1 : 1.58	1 : .31	1 : .15 (commercial only)

Source: Frank J. Costa and Gail Gordon Sommers,
Center for Public Administration and Public Policy Kent State University, 1999

By comparing the net impact of various land uses to the need for community services, local government officials and citizens may be better informed concerning community growth decision-making.

Existing Land Use

An existing land use map of the township was prepared on a parcel level basis by the County Planning Commission staff (see Map 12). Table 12 offers a summary of the various categories of existing land use identified and the percentages of land area that each specified use encompasses.

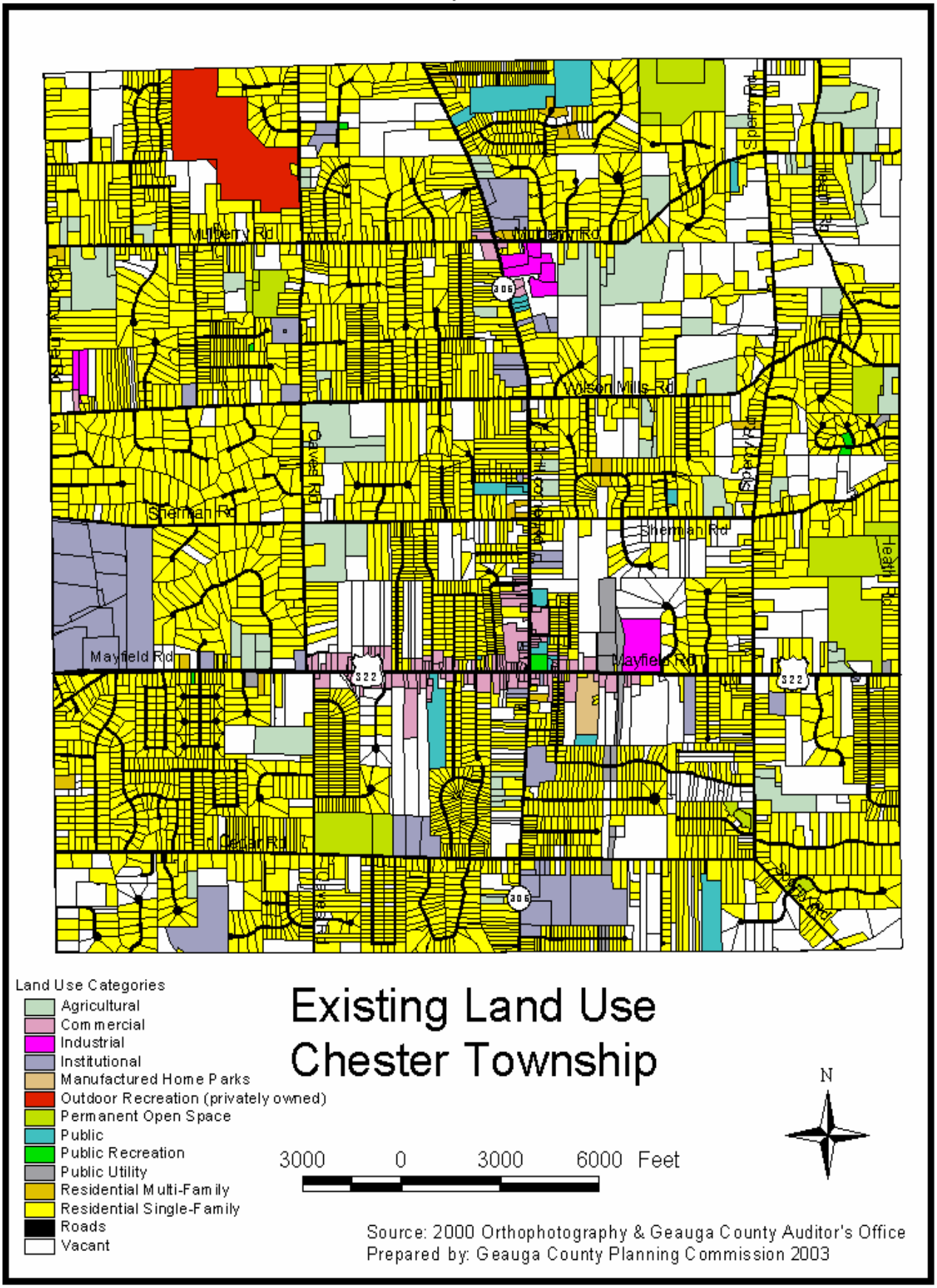
Table 12

Existing Land Use
Chester Township

Land Use	Acres	% of Township
Agricultural	695.61	4.6%
Commercial	220.60	1.5%
Industrial	90.53	0.6%
Institutional	621.28	4.1%
Manufactured Home Park	21.79	0.1%
Outdoor Recreation (privately owned)	211.27	1.4%
Permanent Open Space	16.06	0.1%
Public	179.36	1.2%
Public Recreation	176.70	1.2%
Public Utility	87.39	0.6%
Residential Multi-Family	76.59	0.5%
Residential Single-Family	8,711.98	57.8%
Roads	783.88	5.2%
Vacant	3,183.88	21.1%
Total	15,076.92	100.0%

Source: The Geauga County Planning Commission, 2003

Map 12


Mulberry Rd
Wilson Mills Rd
Sherman Rd
Mayfield Rd
Cedar Rd
Caves Rd
306
322
Land Use Categories
Agricultural
Commercial
Industrial
Institutional
Manufactured Home Parks
Outdoor Recreation (privately owned)
Permanent Open Space
Public
Public Recreation
Public Utility
Residential Multi-Family
Residential Single-Family
Roads
Vacant
Existing Land Use
Chester Township
3000 0 3000 6000 Feet
N
Source: 2000 Orthophotography & Geauga County Auditor's Office
Prepared by: Geauga County Planning Commission 2003

Existing Chester Township Zoning

Per the 2008 zoning map, 97.31% of the township is zoned for residential use. The commercial district and the industrial district combined occupy about 2.59% of the township's land base (see Table 13 and Map 13). Table 13 also provides information on the minimum lot area and lot width required in each zoning district.

Table 13

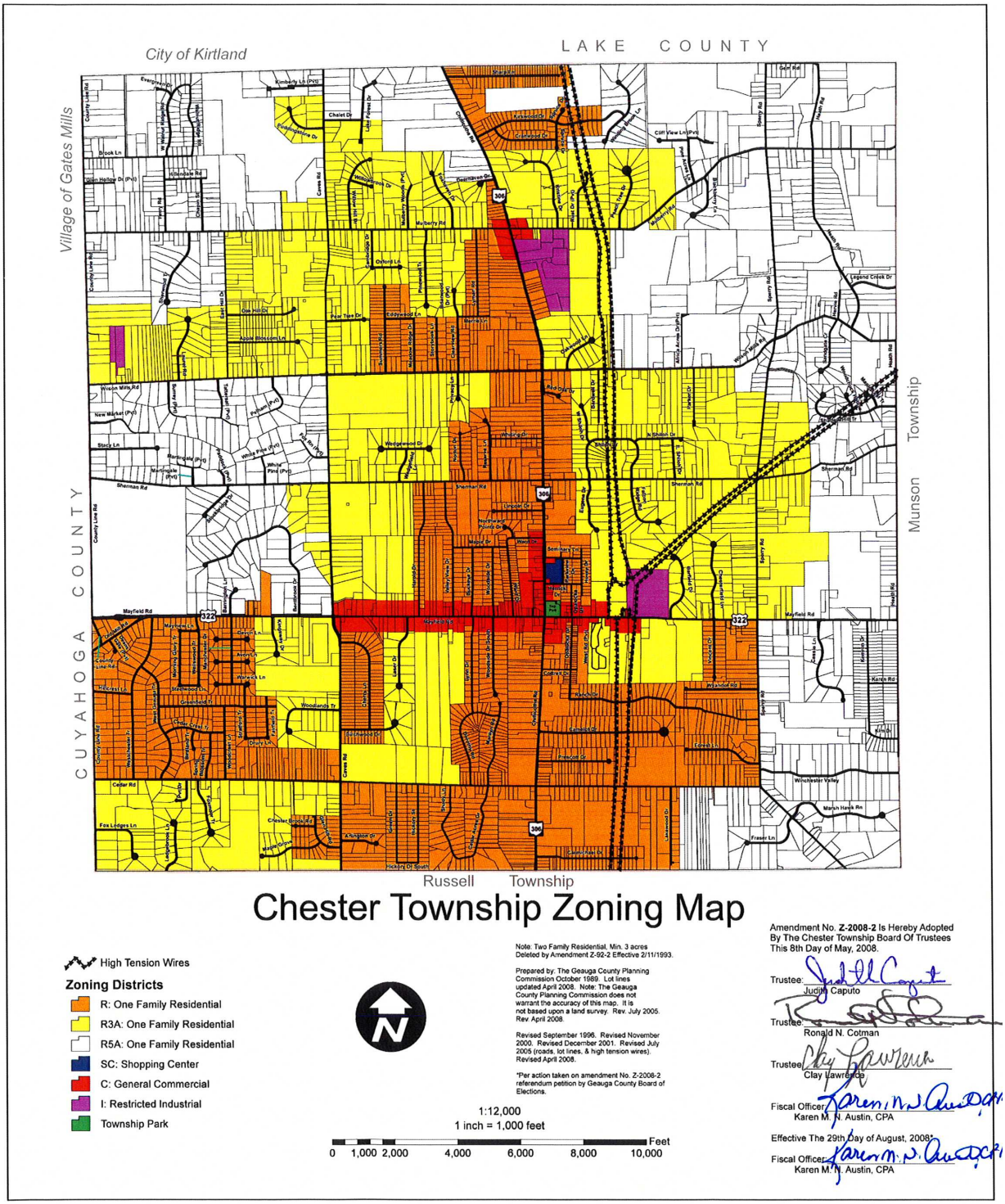
Existing Zoning
Chester Township

Zoning Classification	Land Area (Acres)	% of Township Area	Minimum Lot Area	Minimum Lot Width
R: One Family Residential	3,788.74	25.13%	1.5 acres	150 feet
R3A: One Family Residential	4,796.04	31.81%	3 acres	200 feet
R5A: One Family Residential	6,087.77	40.37%	5 acres	250 feet
C: General Commercial	258.36	1.71%	2 acres	200 feet
I: Restricted Industrial	132.05	0.88%	5 acres	300 feet
SC: Shopping Center	9.37	0.06%	5 acres	500 feet
Township Park (Zoned Residential)	6.23	0.04%	N/A	N/A
Total	15,078.56	100.00%		

Source: Chester Township Zoning Resolution and Map (2008), County Tax Records (2008)

Replacement Page August, 2008

Map 13



Replacement Page August, 2008

Existing Land Use Within Zoning Districts

The following tables depict the acreage and percentage of each land use category by zoning district.

Table 14

R Zoning District
Existing Land Use
Chester Township

Land Use Category	Acreage	% of Zoning District
Agricultural	40.69	1.1%
Commercial	29.47	0.8%
Institutional	174.08	4.6%
Permanent Open Space	9.72	0.3%
Public	32.89	0.9%
Public Recreation	.92	0.0%
Public Utility	23.12	0.6%
Residential Multi-Family	29.12	0.8%
Residential Single-Family	2,720.72	71.5%
Roads	291.52	7.6%
Vacant	450.46	11.8%
Total	3,802.71	100.0%

Source: Existing Land Use From 2000 Orthophotography, Geauga County Auditor's Office
Chester Township Zoning Map, 1996

Prepared By: Geauga County Planning Commission

Table 15

R3A Zoning District
Existing Land Use
Chester Township

Land Use Category	Acreage	% of Zoning District
Agricultural	286.47	6.0%
Commercial	24.94	0.5%
Industrial	.89	0.0%
Institutional	129.32	2.7%
Outdoor Recreation (privately owned)	.36	0.0%
Permanent Open Space	.37	0.0%
Public	33.27	0.7%
Public Recreation	66.72	1.4%
Public Utility	53.45	1.1%
Residential Multi-Family	35.50	0.7%
Residential Single-Family	2,698.62	56.3%
Roads	211.58	4.4%
Vacant	1,256.29	26.2%
Total	4,797.78	100.0%

Source: Existing Land Use From 2000 Orthophotography, Geauga County Auditor's Office
Chester Township Zoning Map, 1996

Prepared By: Geauga County Planning Commission

Table 16

R5A Zoning District
Existing Land Use
Chester Township

Land Use Category	Acreage	% of Zoning District
Agricultural	368.43	6.1%
Commercial	3.81	0.0%
Institutional	306.81	5.0%
Outdoor Recreation (privately owned)	210.92	3.5%
Permanent Open Space	5.97	0.1%
Public	108.24	1.8%
Public Recreation	103.52	1.7%
Public Utility	8.57	0.1%
Residential Multi-Family	3.19	0.0%
Residential Single-Family	3,285.83	54.1%
Roads	250.82	4.1%
Vacant	1,431.57	23.5%
Total	6,087.68	100.0%

Source: Existing Land Use From 2000 Orthophotography, Geauga County Auditor's Office
Chester Township Zoning Map, 1996

Prepared By: Geauga County Planning Commission

Table 17

C Zoning District
Existing Land Use
Chester Township

Land Use Category	Acreage	% of Zoning District
Commercial	151.18	60.7
Institutional	3.01	1.2%
Public	4.98	2.0%
Public Utility	2.26	0.9%
Residential Multi-Family	8.80	3.5%
Residential Single-Family	28.71	11.5%
Roads	25.17	10.1%
Vacant	25.18	10.1%
Total	249.29	100.0%

Source: Existing Land Use From 2000 Orthophotography, Geauga County Auditor's Office
Chester Township Zoning Map, 1996

Prepared By: Geauga County Planning Commission

Table 18

SC Zoning District
Existing Land Use
Chester Township

Land Use Category	Acreage	% of Zoning District
Commercial	7.75	82.7%
Roads	1.62	17.3%
Total	9.37	100.0%

Source: Existing Land Use From 2000 Orthophotography, Geauga County Auditor's Office
Chester Township Zoning Map, 1996

Prepared By: Geauga County Planning Commission

Table 19

I Zoning District
Existing Land Use
Chester Township

Land Use Category	Acreage	% of Zoning District
Commercial	3.44	2.8%
Industrial	89.59	72.3%
Institutional	8.05	6.5%
Public Utility	.03	0.0%
Roads	2.45	2.0%
Vacant	20.31	16.4%
Total	123.87	100.0%

Source: Existing Land Use From 2000 Orthophotography, Geauga County Auditor's Office
Chester Township Zoning Map, 1996

Prepared By: Geauga County Planning Commission

Table 20

Township Park Zoning District
Existing Land Use
Chester Township

Land Use Category	Acreage	% of Zoning District
Public Recreation	5.52	88.7%
Roads	.70	11.3%
Total	6.22	100.0%

Source: Existing Land Use From 2000 Orthophotography, Geauga County Auditor's Office
Chester Township Zoning Map, 1996

Prepared By: Geauga County Planning Commission

Existing Township Zoning In Geauga County

In relation to the other townships in Geauga County, Chester's percentage of land zoned for residential purposes ranks it second (97.4% or 14,690 acres). Comparing land area zoned for commercial (1.7% or 257 acres) and industrial (0.8% or 124 acres) use, Chester is ranked seventh and eighth respectively in the county (see Table 21 and Map 14).

Table 21

Residential, Commercial, And Industrial Zoning Districts By Township: 2002 Geauga County

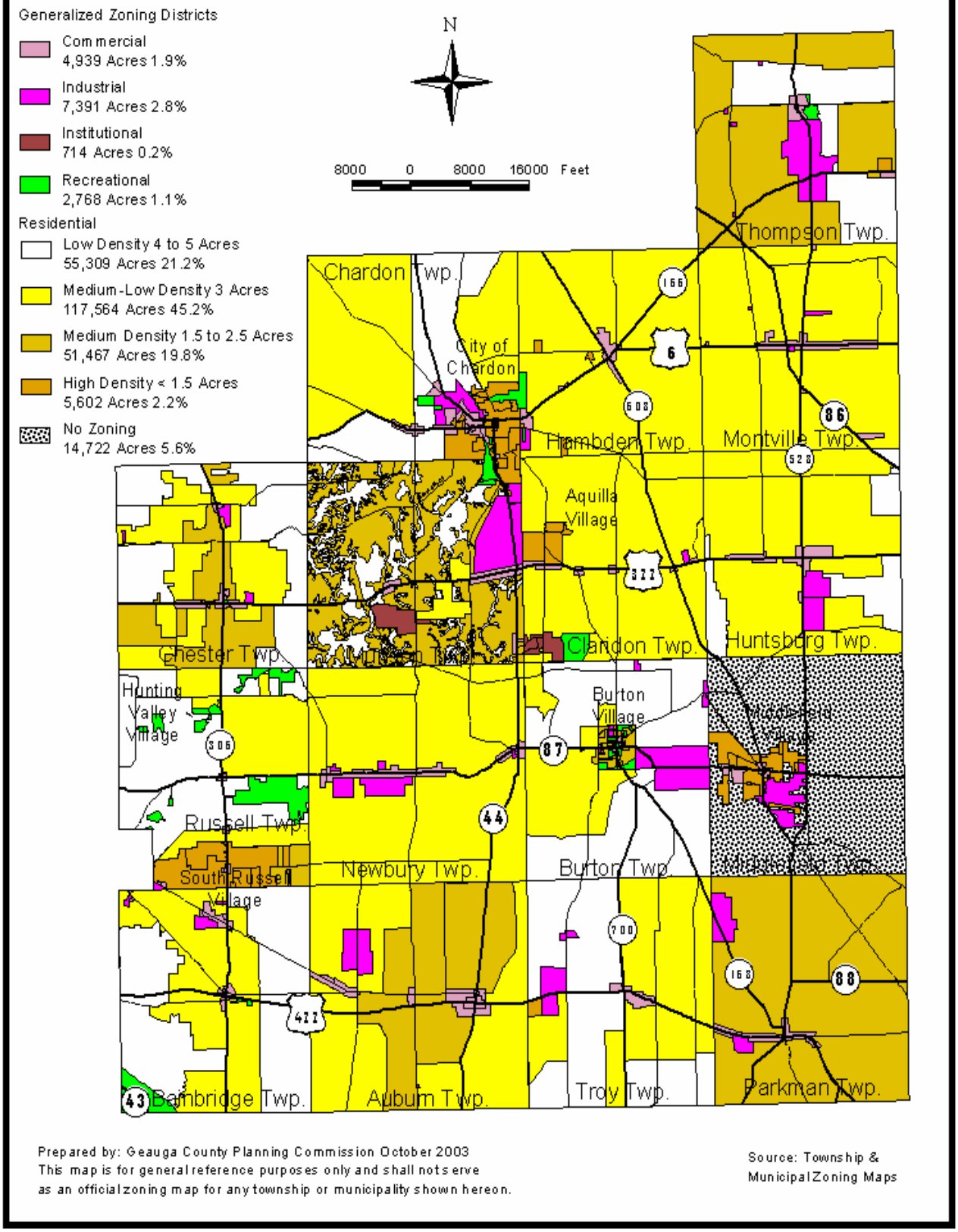
Township	Residential Zoned Acres	% of Twp.	Commercial Zoned Acres	% of Twp.	Industrial Zoned Acres	% of Twp.
Auburn	18,041	94.4%	590	3.1%	482	2.5%
Bainbridge	15,671	94.5%	240	1.4%	131	0.8%
Burton	13,747	92.2%	0	N/A	1,166*	7.8%*
Chardon	14,456	98.9%	159	1.1%	0	N/A
Chester	14,690	97.4%	257	1.7%	124	0.8%
Claridon	13,663	94.6%	168	1.2%	33	0.2%
Hambden	13,999	97.3%	309	2.2%	73	0.5%
Huntsburg	14,729	94.2%	398	2.5%	514	3.3%
Montville	15,172	96.3%	516	3.3%	62	0.4%
Munson	14,322	88.7%	352	2.1%	1,516	9.2%
Newbury	17,174	94.0%	551	3.0%	540	3.0%
Parkman	16,414	95.1%	337	2.0%	506	2.9%
Russell	11,083	89.6%	38	0.3%	0	N/A
Thompson	15,044	91.2%	207	1.3%	1,170	7.1%
Troy	15,838	96.0%	212	1.3%	452	2.7%

Source: The Geauga County Planning Commission, 2003

*Commercial and Industrial are combined

Map 14

Geauga County Generalized Zoning Map



Prepared by: Geauga County Planning Commission October 2003
This map is for general reference purposes only and shall not serve as an official zoning map for any township or municipality shown hereon.

Source: Township & Municipal Zoning Maps

Township Tax Base

The township's tax base is divided into three basic components: real property (land and buildings), tangible personal property (machinery, equipment, and inventory used in business), and public utility property. Since 1990, the total assessed value of taxable property in Chester has increased by 56%. Table 22 provides a comparison with the other townships in the county. Chester, along with the other townships, has the majority of its tax base in real property. The 2000 tax valuation for Chester indicates that 92.9% of its tax base is in real property, 2.1% in tangible personal property, and 5% in public utility property. Since 1990, the township's percentage of real property has increased by 65%, tangible personal property has risen by almost 2%, and public utility property has decreased by 11%.

The assessed real property value figures for residential, agricultural, commercial and industrial land for the years 1990, 1995, and 2000 are outlined in Table 23. Since 1990, the average annual increase for residential land in Chester was 8%. The average annual increase for agricultural land was 7%, industrial land 5%, and commercial land 14%. The value for all classes of land in Chester increased by 91% between 1990 and 2000. In a comparison to the other townships, Chester is ranked second with regard to the total assessed value ($272,180,880) for all classifications (land and buildings) for the year 2000 (see Map 15).

Table 22

Assessed Value Of Taxable Property By Township: 2000
Geauga County

Communities	Real Property		Personal Property		Public Utility	
	Assessed Value	% of Total	Assessed Value	% of Total	Assessed Value	% of Total
Auburn	147,151,620	93.7%	6,077,030	3.9%	3,804,470	2.4%
Bainbridge	337,753,770	92.0%	18,550,860	5.0%	10,792,680	3.0%
Burton	52,484,460	84.8%	6,523,220	10.5%	2,930,640	4.7%
Chardon	113,265,490	94.7%	815,530	0.7%	5,490,940	4.6%
Chester	272,180,880	92.9%	6,269,530	2.1%	14,766,720	5.0%
Claridon	50,074,580	91.9%	780,950	1.4%	3,636,550	6.7%
Hambden	66,015,050	89.3%	3,479,640	4.7%	4,482,460	6.0%
Huntsburg	37,046,780	92.5%	846,680	2.1%	2,161,210	5.4%
Middlefield	43,901,060	76.0%	11,046,140	19.1%	2,848,260	4.9%
Montville	31,901,690	92.9%	669,960	2.0%	1,737,770	5.1%
Munson	167,026,820	92.9%	6,379,600	3.5%	6,550,600	3.6%
Newbury	131,442,820	87.7%	12,372,720	8.3%	6,048,030	4.0%
Parkman	40,441,890	93.3%	1,364,700	3.0%	1,602,390	3.7%
Russell	201,954,150	95.9%	1,215,630	0.5%	7,492,690	3.6%
Thompson	30,786,760	83.9%	3,557,150	9.7%	2,364,190	6.4%
Troy	34,808,220	81.0%	6,451,830	15.0%	1,677,350	4.0%

Source: Geauga County Auditor's Office 2002

Table 23

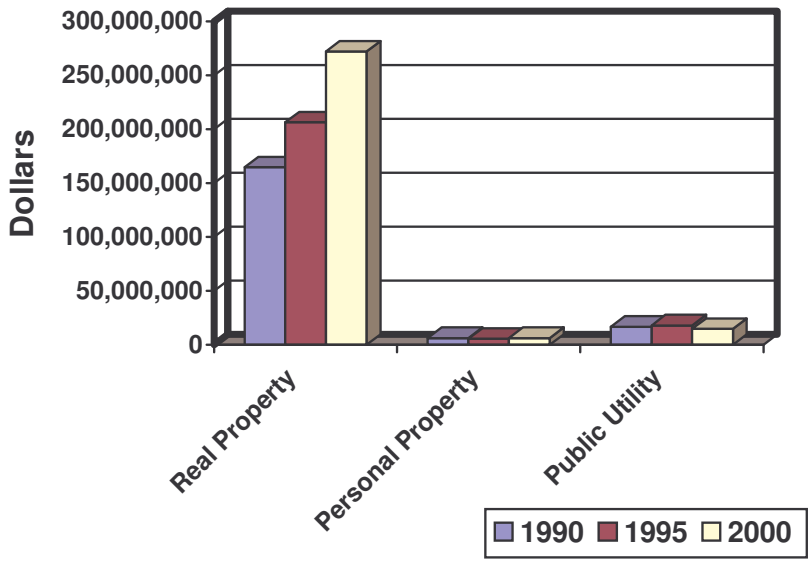
Real Property Values: 1990, 1995, And 2000
Chester Township

	1990	1995	2000
Residential	39,690,560	51,648,930	76,690,460
Agricultural	3,749,500	4,424,370	6,773,390
Industrial	387,200	380,050	611,020
Commercial	3,966,080	4,175,700	6,704,220
Mineral	43,630	867,660	565,420
Total	47,836,970	61,496,710	91,344,510

Source: Geauga County Auditor's Office

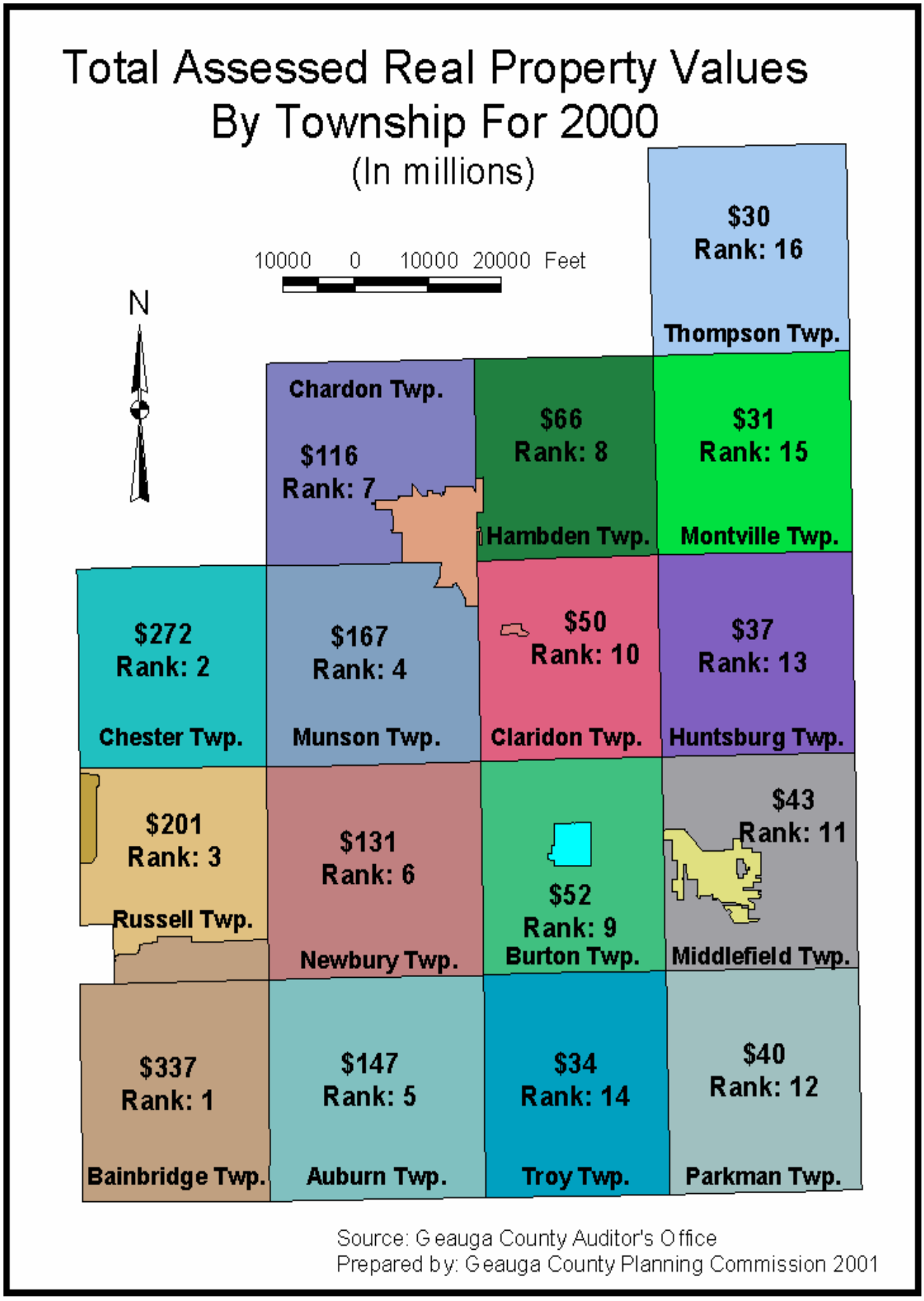
Figure 5

Assessed Value Of Taxable Property: 1990, 1995, And 2000
Chester Township



Source: Geauga County Auditor's Office

Map 15


Total Assessed Real Property Values
By Township For 2000
(In millions)
10000 0 10000 20000 Feet
N
$30
Rank: 16
Thompson Twp.
Chardon Twp.
$116
Rank: 7
$66
Rank: 8
Hambden Twp.
$31
Rank: 15
Montville Twp.
$272
Rank: 2
Chester Twp.
$167
Rank: 4
Munson Twp.
$50
Rank: 10
Claridon Twp.
$37
Rank: 13
Huntsburg Twp.
$201
Rank: 3
Russell Twp.
$131
Rank: 6
Newbury Twp.
$52
Rank: 9
Burton Twp.
$43
Rank: 11
Middlefield Twp.
$337
Rank: 1
Bainbridge Twp.
$147
Rank: 5
Auburn Twp.
$34
Rank: 14
Troy Twp.
$40
Rank: 12
Parkman Twp.
Source: Geauga County Auditor's Office
Prepared by: Geauga County Planning Commission 2001

Growth Simulation

Generalized growth simulations were performed to project potential single-family homes that may exist by the year 2030 in the township and the resultant growth patterns. A software model was prepared in conjunction with Kent State University, Department of Geography to analyze and map future development possibilities. At the township level, such simulations reflect an estimate of growth, recognizing that actual development yields may change due to a number of variables. The existing land use map (see Map 12) was used to determine the amount and location of developed and undeveloped areas in the township.

The following assumptions were applied in the performance of the simulations.

- Historic county building department permit data for single family homes were utilized for the time frame 1970 to 2002 to determine the expected number of new homes to be built.

- Only one, single family home may be built per undeveloped lot in the residential zoning districts.

- A lot size of 3 acres was employed (assuming the average lot size allowed). In the initial simulation prevailing zoning districts (see Map 13) were applied. In the second, the zoning district boundaries shown on the land use plan map (see Map 68) were utilized.

- An even distribution was determined between projected "frontage" residential development along existing roads and development within platted subdivisions.

- Parcels already built upon were excluded for purposes of future development.

Map 17, Avoid Critical Natural Areas

- Critical Natural Areas (CNA's) may not be developed. Such areas include floodplains, wetlands, steep slopes (>18%), and shallow bedrock (<5 feet from the surface) and are classified "very severe" on the composite land capability map (see Map 67).

Map 18, Avoid Critical Natural Areas and Agricultural Security Areas

- Agricultural Security Areas (ASA's) per Map 11 were excluded from development as well as CNA's.

Consequently, the following data were generated with respect to anticipated development activity to the year 2030.

- The township may have 564 new single-family dwelling units. However, if CNA's and ASA's are avoided, 535 units are projected.

- Assuming a lot size of 3 acres, the acreage needed for future residential growth totals 1,692 acres or if CNA's and ASA's are avoided, about 1,605 acres may be developed.

An examination of the existing land use map (as of 2003) reveals that there are approximately 3,183 acres of vacant land and 695 acres of agricultural land available for potential future development in the township. Nevertheless, a portion of the land base is in critical natural areas and may not be developed. Such areas account for about 1,476 acres or 10% of the township's land mass. If the Agricultural Security Areas are factored in (41 acres or .3% of the township), somewhat less land may be available to accommodate future residential growth.

Two growth simulations were devised (one with current zoning district boundaries and one using proposed zoning boundaries based on the land use plan map), each with three maps depicting different scenarios, per the following:

- No Critical Natural Area or Agricultural Security Area restrictions,
- Avoid Critical Natural Areas, and
- Avoid both Critical Natural Areas and Agricultural Security Areas.

Table 24 and Maps 16, 17, and 18 reflect the results of a 3 acre density (one single family dwelling per 3 acres) is assumed with no restrictions, avoiding CNA's, and avoiding CNA's and ASA's respectively; and, utilizing current zoning district boundaries as shown on the land use plan map.

Table 25 and Maps 19, 20, and 21 depict a 3 acre density as well, however, the proposed zoning district boundaries shown on the land use plan map were applied.

The intent of the data and maps is to guide the decision-making process of the township with respect to potential future development. The maps and data demonstrate the linkage between zoning regulations and land use policies and the impacts such regulations and policies may have on the long-range development of the community. The township may choose other growth simulation scenarios and the conclusions, of course, will vary accordingly.

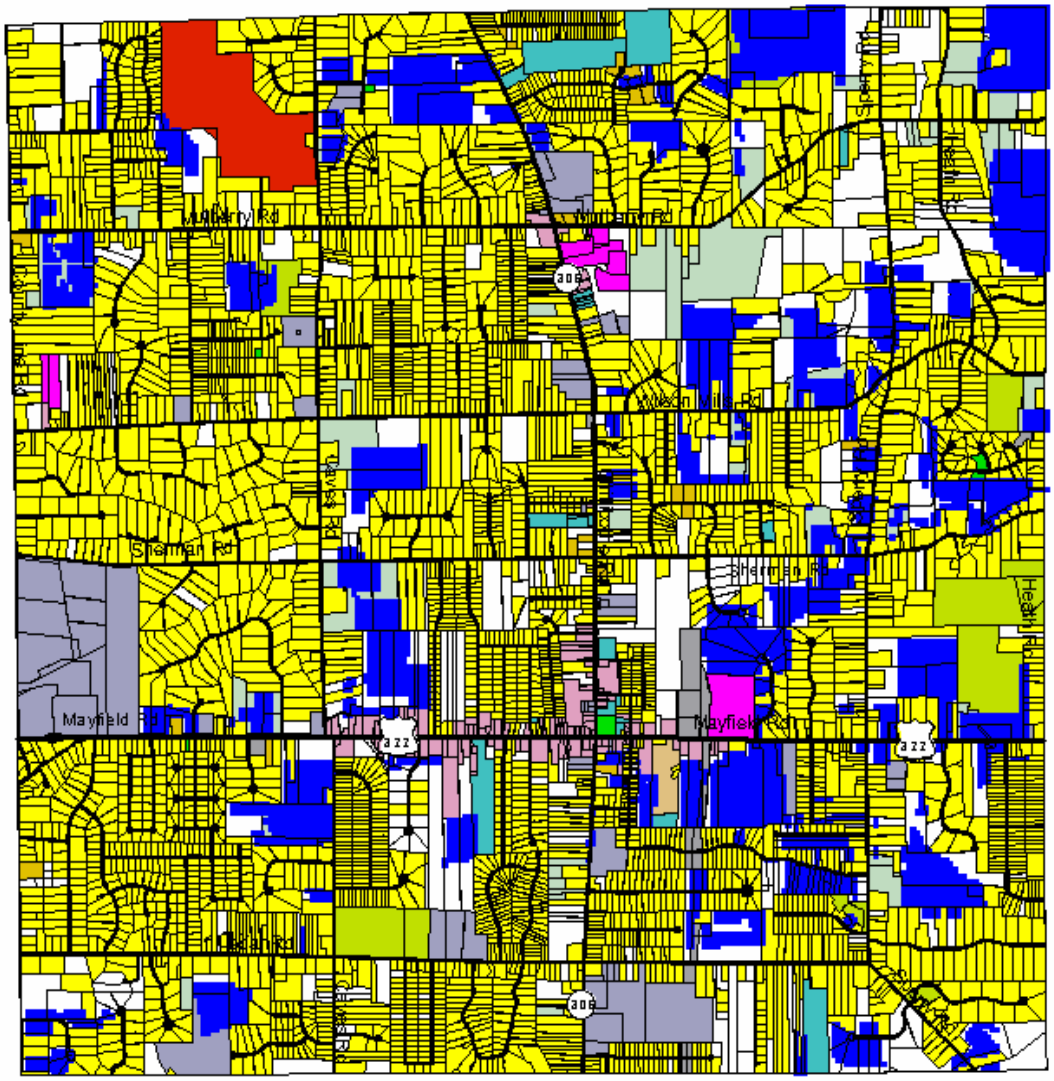
Table 24

Growth Simulations With Existing Zoning Districts To The Year 2030
Chester Township

	Acreage Developed			
	*ASA	**CNA	Vacant	# of Units
Map 16 – No Restrictions	302	451	939	564
Map 17 – Avoid Critical Natural Areas	419	0	1,273	564
Map 18 – Avoid Critical Natural Areas & Agricultural Security Areas	0	0	1,605	535

* ASA – Agricultural Security Areas
** CNA – Critical Natural Areas
Source: The Geauga County Planning Commission

Map 16



Potential Residential Development With Existing Zoning Districts (No Restrictions) Chester Township

Land Use Categories
- Agricultural
- Commercial
- Industrial
- Institutional
- Manufactured Home Parks
- Outdoor Recreation (privately owned)
- Permanent Open Space
- Public
- Public Recreation
- Public Utility
- Residential Multi-Family
- Residential Single-Family
- Roads
- Vacant

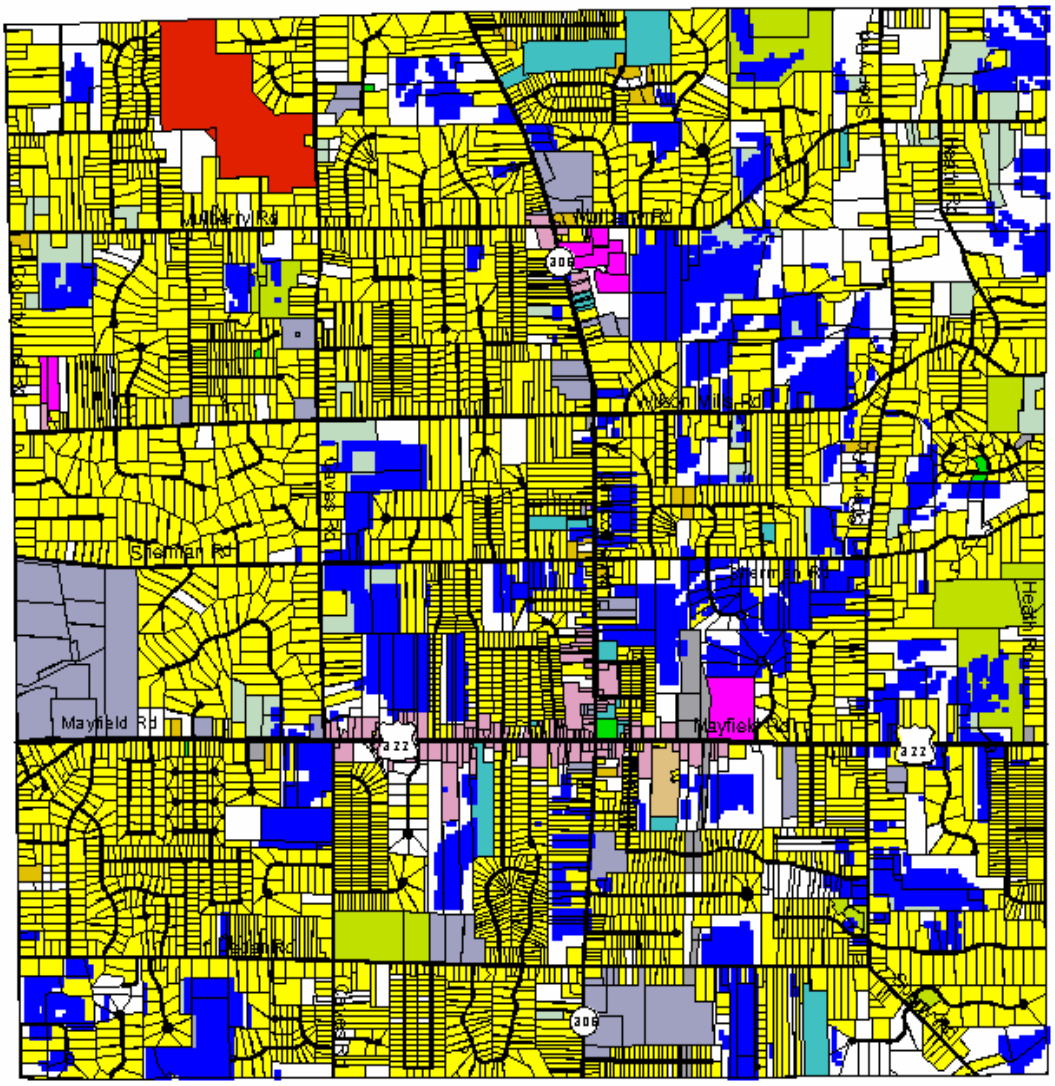
New Residential Single-Family Development

N

3000 0 3000 6000 Feet

Source: KSU Growth Simulation 2002
Prepared by: Geauga County Planning Commission 2003

Map 17



Potential Residential Development With Existing Zoning Districts (On Vacant Land, Avoid CNA's) Chester Township

Land Use Categories
- Agricultural
- Commercial
- Industrial
- Institutional
- Manufactured Home Parks
- Outdoor Recreation (privately owned)
- Permanent Open Space
- Public
- Public Recreation
- Public Utility
- Residential Multi-Family
- Residential Single-Family
- Roads
- Vacant

New Residential Single-Family Development

N

3000 0 3000 6000 Feet

Source: KSU Growth Simulation 2002
Prepared by: Geauga County Planning Commission 2003

Map 18

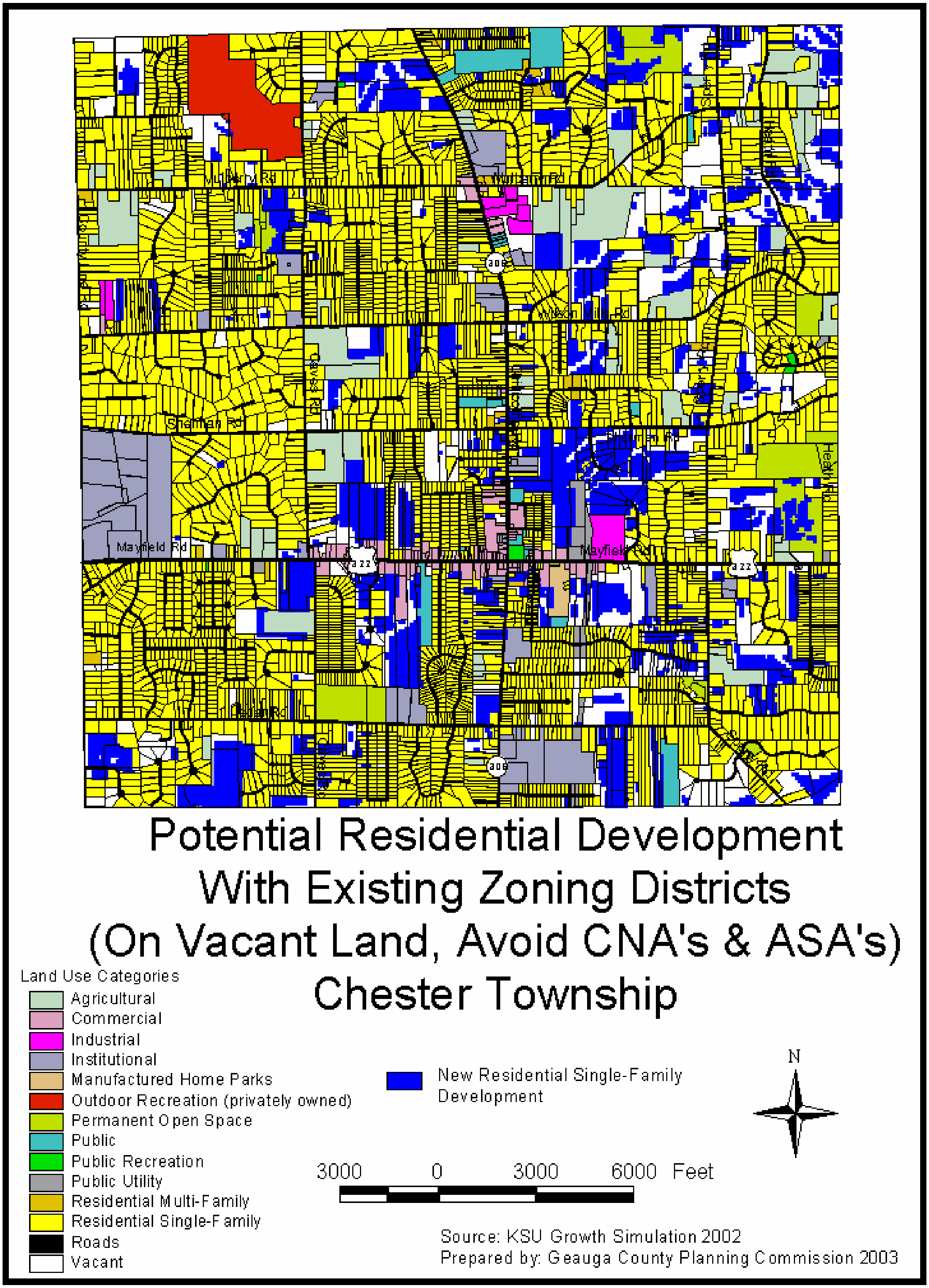

Mulberry Rd
Sherman Rd
Mayfield Rd
Mayfield Rd
Caves Rd
Heath Rd
306
322
Potential Residential Development
With Existing Zoning Districts
(On Vacant Land, Avoid CNA's & ASA's)
Chester Township
Land Use Categories
Agricultural
Commercial
Industrial
Institutional
Manufactured Home Parks
Outdoor Recreation (privately owned)
Permanent Open Space
Public
Public Recreation
Public Utility
Residential Multi-Family
Residential Single-Family
Roads
Vacant
New Residential Single-Family Development
N
3000 0 3000 6000 Feet
Source: KSU Growth Simulation 2002
Prepared by: Geauga County Planning Commission 2003

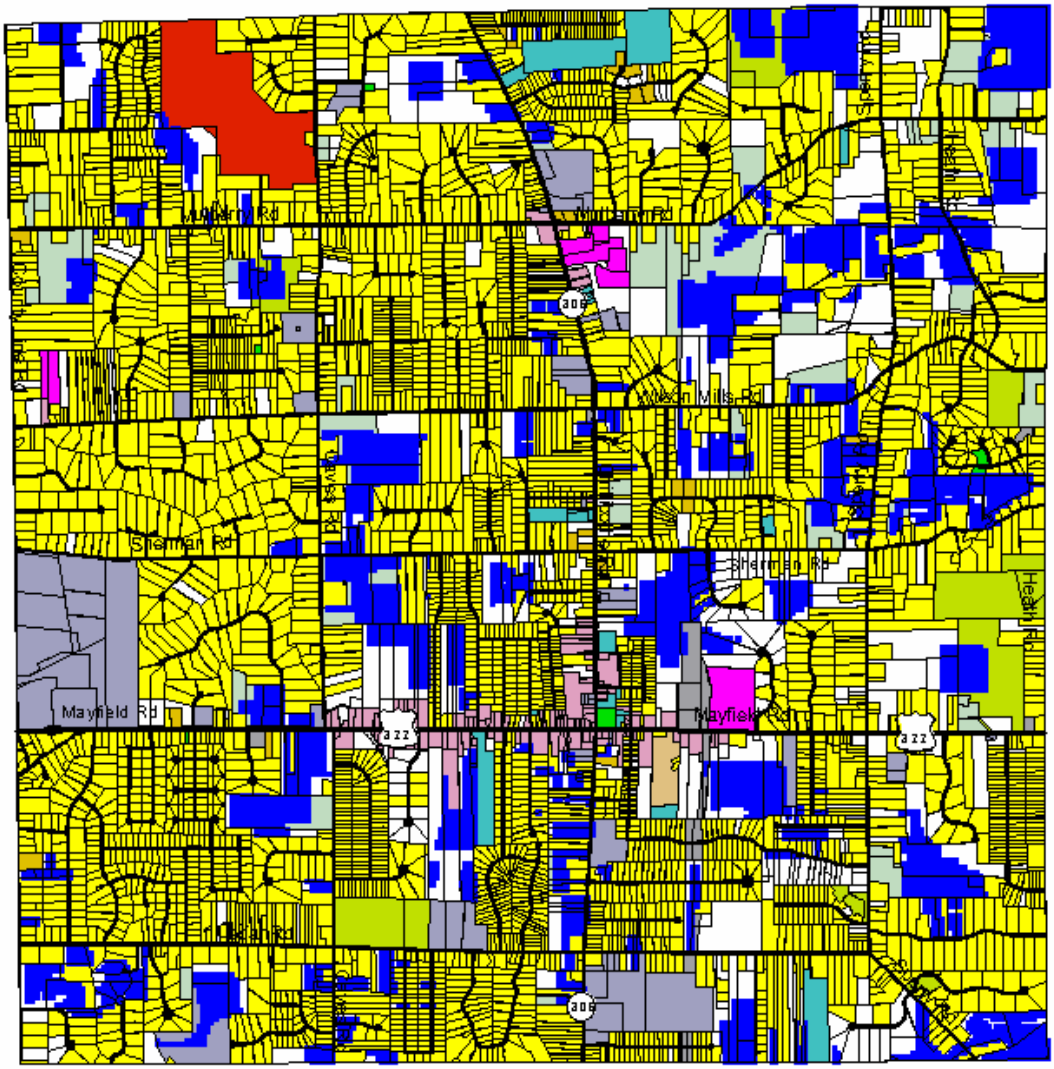
Table 25

Growth Simulations With Proposed Zoning Districts Per LUP Map To The Year 2030 Chester Township

	Acreage Developed			
	*ASA	**CNA	Vacant	# of Units
Map 19 – No Restrictions	308	449	935	564
Map 20 – Avoid Critical Natural Areas	380	0	1,312	564
Map 21 – Avoid Critical Natural Areas & Agricultural Security Areas	0	0	1,605	535

* ASA – Agricultural Security Areas
** CNA – Critical Natural Areas
Source: The Geauga County Planning Commission

Map 19



Potential Residential Development With Proposed Zoning Districts (No Restrictions) Chester Township

Land Use Categories
- Agricultural
- Commercial
- Industrial
- Institutional
- Manufactured Home Parks
- Outdoor Recreation (privately owned)
- Permanent Open Space
- Public
- Public Recreation
- Public Utility
- Residential Multi-Family
- Residential Single-Family
- Roads
- Vacant

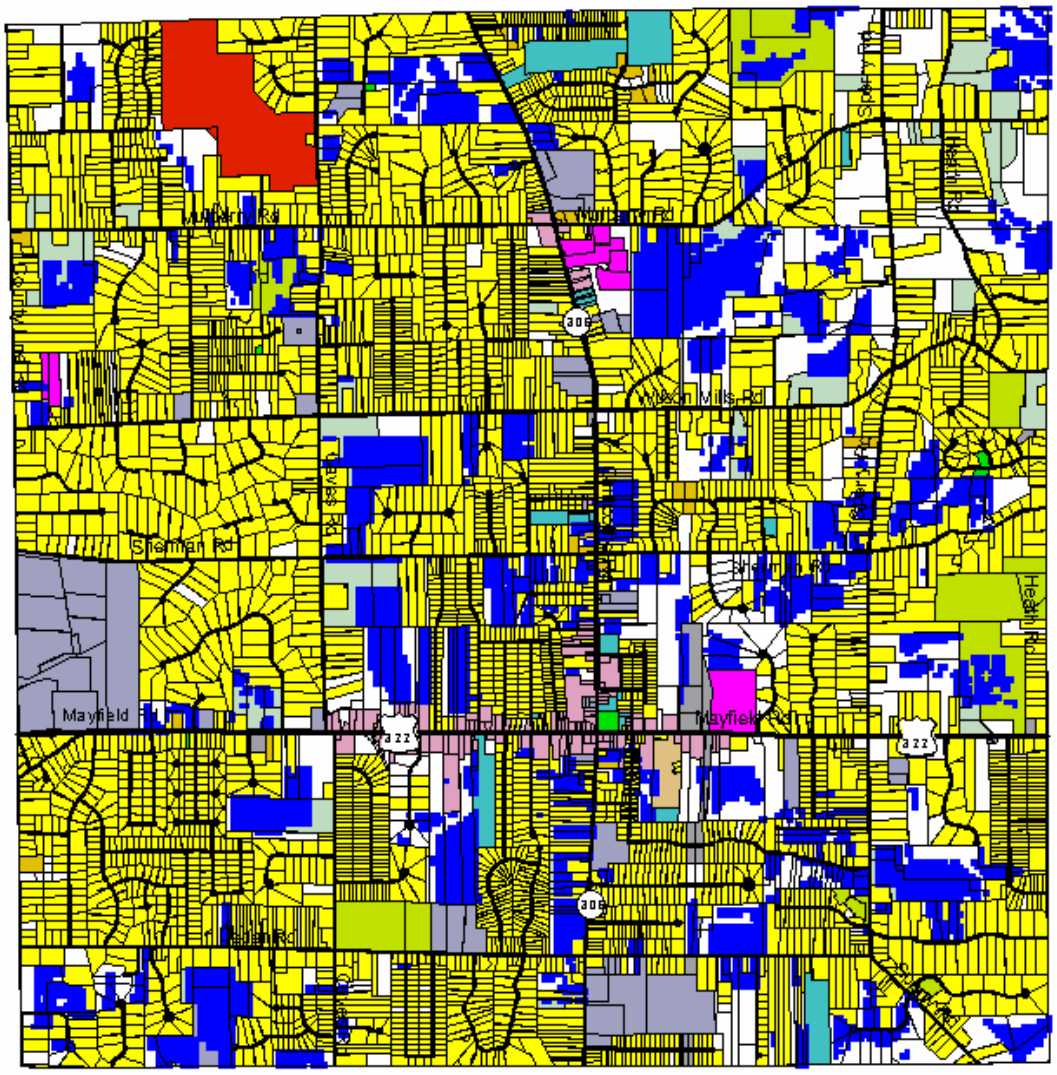
New Residential Single-Family Development

3000 0 3000 6000 Feet

N

Source: KSU Growth Simulation 2002
Prepared by: Geauga County Planning Commission 2003

Map 20



Potential Residential Development With Proposed Zoning Districts (On Vacant Land, Avoid CNA's) Chester Township

Land Use Categories
- Agricultural
- Commercial
- Industrial
- Institutional
- Manufactured Home Parks
- Outdoor Recreation (privately owned)
- Permanent Open Space
- Public
- Public Recreation
- Public Utility
- Residential Multi-Family
- Residential Single-Family
- Roads
- Vacant

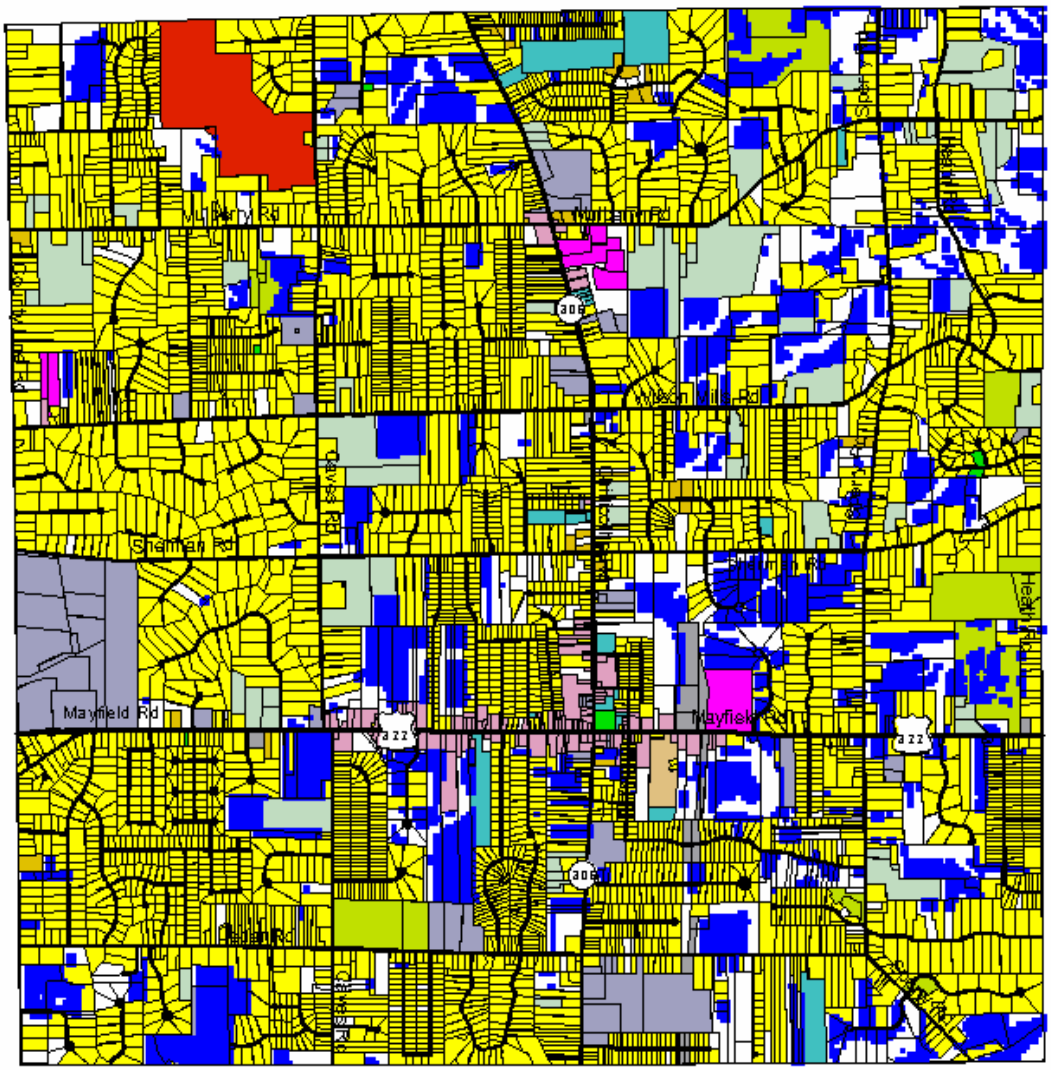
New Residential Single-Family Development

N

3000 0 3000 6000 Feet

Source: KSU Growth Simulation 2002
Prepared by: Geauga County Planning Commission 2003

Map 21



Potential Residential Development With Proposed Zoning Districts (On Vacant Land, Avoid CNA's & ASA's) Chester Township

Land Use Categories
- Agricultural
- Commercial
- Industrial
- Institutional
- Manufactured Home Parks
- Outdoor Recreation (privately owned)
- Permanent Open Space
- Public
- Public Recreation
- Public Utility
- Residential Multi-Family
- Residential Single-Family
- Roads
- Vacant

New Residential Single-Family Development

N

3000 0 3000 6000 Feet

Source: KSU Growth Simulation 2002
Prepared by: Geauga County Planning Commission 2003

CHAPTER III

DEMOGRAPHICS

Introduction

The primary emphasis of this chapter will be on developing a demographic profile of Chester Township. This profile will be used in conjunction with the topics in other chapters to formulate recommendations for the land use plan.

Demographic Profile

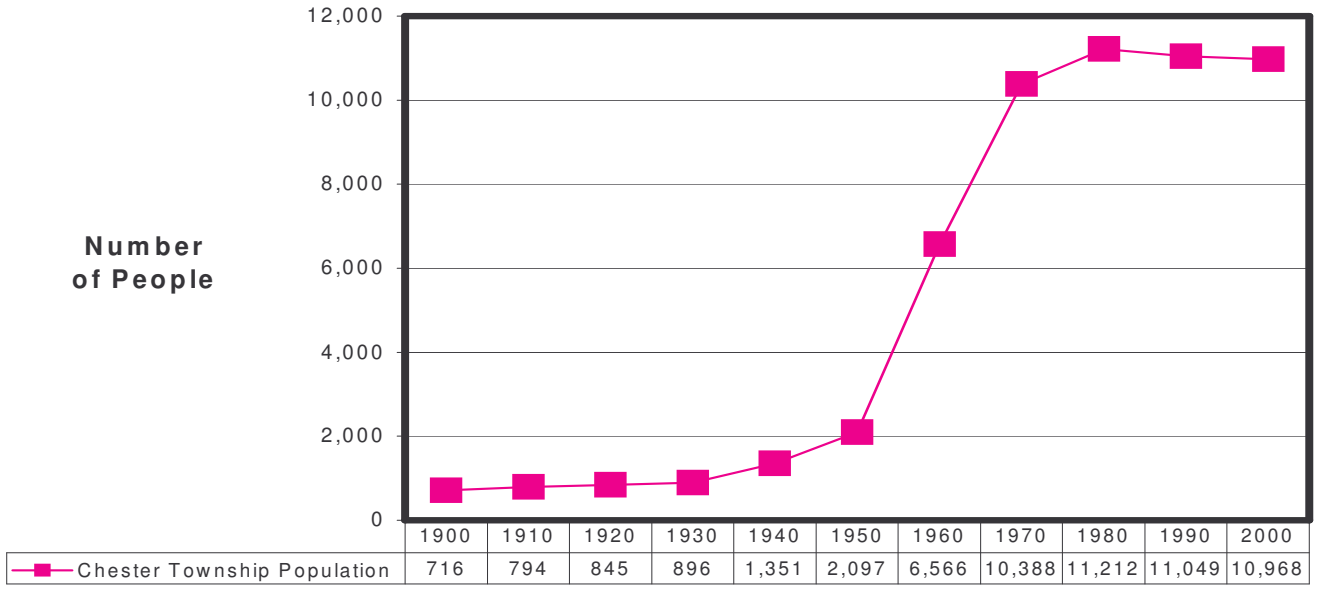
Population

Demographic information can provide essential insights into the composition of a community. As a result, it is a basic element of land use planning and decision-making. The following is an analysis of relevant 1970, 1980, 1990, and 2000 Census data.

Over the years, population growth in Chester Township was not dramatic until around 1950. As reflected in the following figure, it has increased from 716 persons in 1900 to 10,968 in 2000. However, during the last twenty years the township has decreased in population by 244 persons or 2%.

Figure 6

Population Growth: 1900 To 2000
Chester Township



	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000
Chester Township Population	716	794	845	896	1,351	2,097	6,566	10,388	11,212	11,049	10,968

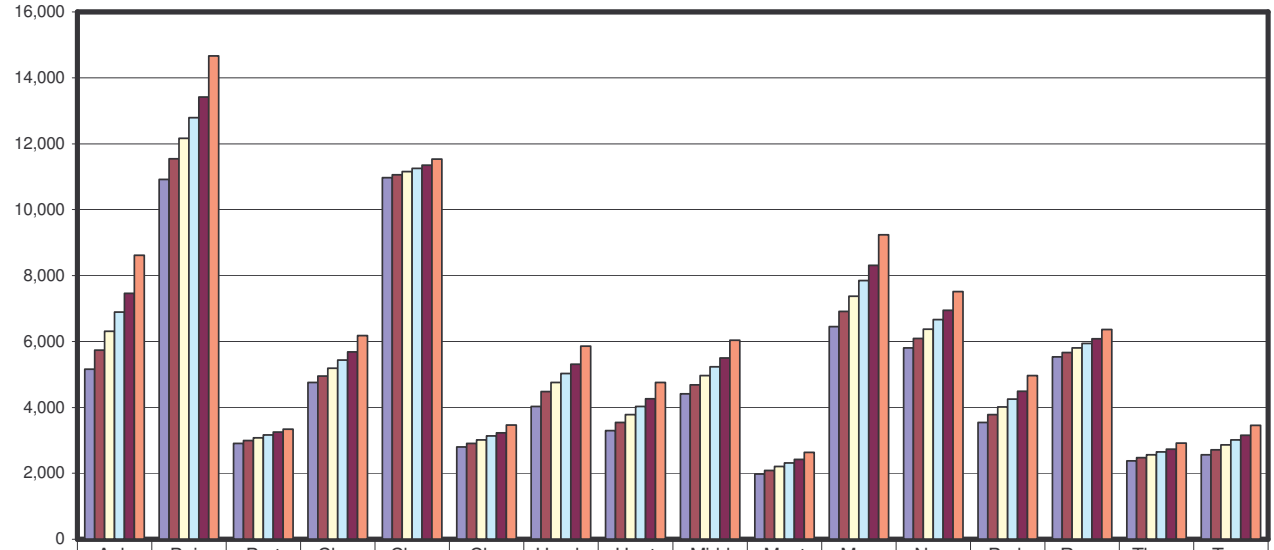
Source: U.S. Census Bureau

Currently available population projections reveal a trend toward an increase in the absolute number of residents in Chester Township, although the 1990 and 2000 Census counts show a decrease in population. Figure 7 reflects projections to the year 2030 that are based upon the historical trend of the past three decades.

It should be noted that all population projections, to some degree, are based upon past trends and expected future events. There are certain risks involved with projections for small geographic areas or political subdivisions due to the possibility of the variables analyzed being more susceptible to greater fluctuation. In addition, as the time span for the projections increases from the base year, accuracy often decreases. As a result, although projections are a useful element in the plan, precautions must be taken when assessing their validity.

Figure 7

Population Projections By Township: 2005 To 2030
Geauga County



	Aub	Bain	Burt	Char	Ches	Clar	Hamb	Hunt	Midd	Mont	Mun	New	Park	Russ	Thom	Troy
2000	5,158	10,916	2,908	4,763	10,968	2,801	4,024	3,297	4,418	1,984	6,450	5,805	3,546	5,529	2,383	2,567
2005	5,734	11,541	2,995	4,949	11,062	2,910	4,480	3,540	4,689	2,093	6,915	6,090	3,782	5,668	2,472	2,715
2010	6,310	12,166	3,082	5,195	11,156	3,019	4,756	3,783	4,960	2,202	7,380	6,375	4,018	5,807	2,561	2,863
2015	6,886	12,791	3,169	5,441	11,250	3,128	5,032	4,026	5,231	2,311	7,845	6,660	4,254	5,946	2,650	3,011
2020	7,462	13,416	3,256	5,687	11,344	3,227	5,308	4,269	5,502	2,420	8,310	6,945	4,490	6,085	2,739	3,159
2030	8,614	14,666	3,340	6,179	11,532	3,465	5,860	4,755	6,044	2,638	9,240	7,515	4,962	6,363	2,917	3,455

Source: The Geauga County Planning Commission

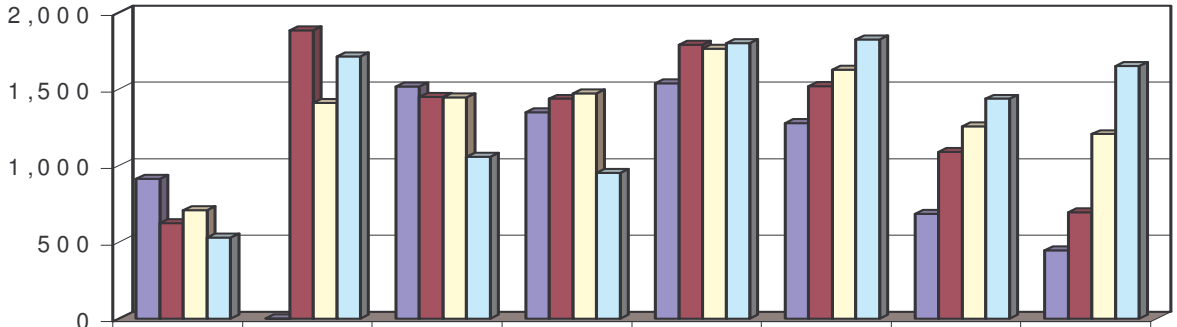
Note: 2000 reflects Census counts.
2005 to 2030 are projections.

Population by Age Group

The following figure indicates that the population for each age category has remained somewhat constant during the last three decades. Individuals 65 and over reflected the largest increase, going from 4.3% of the population in 1970 to over 15% in 2000. In addition, the 2000 Census figures revealed that the highest percentage (17%) was in the 45-54 age range (see Figure 9).

Figure 8

Age Distribution: 1970, 1980, 1990, & 2000
Chester Township

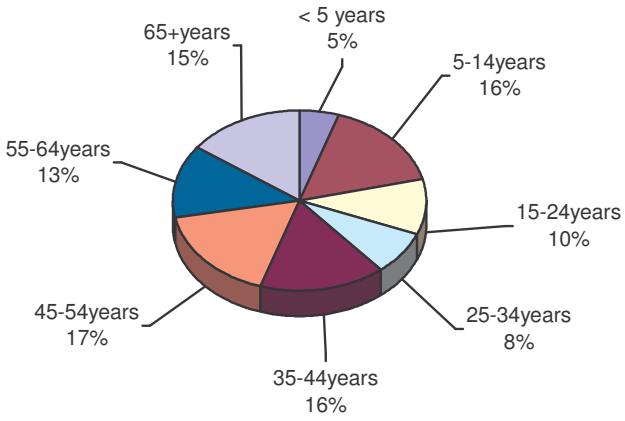


	Under 5	5 - 14	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 & over
1970	914	2.659	1,517	1,350	1,537	1,278	686	447
1980	625	1,884	1,450	1,437	1,791	1,520	1,090	695
1990	708	1,410	1,446	1,473	1,764	1,626	1,258	1,206
2000	529	1,715	1,059	953	1,800	1,825	1,437	1,650

Source: U.S. Census Bureau

Figure 9

Percentage Of Age Groups: 2000
Chester Township



Source: U.S. Census Bureau

Income

The results of the 1980 Census revealed that about 11% of Chester Township residents had incomes greater than $50,000. In 1990, the Census data indicated that almost 48% of the township residents had incomes greater than $50,000 and by 2000 this percentage increased to over 66%. The information pertaining to income is shown in greater detail in Table 26. The average household income in Chester was $81,979 in 1999. In comparison with the other townships in the county, Chester is ranked sixth, above the county average of $77,348 (see Map 22). The Census data indicated that the median household income for the township was $66,977 in 2000. In comparison to the other townships, Chester is ranked fourth in terms of per capita income (see Map 23).

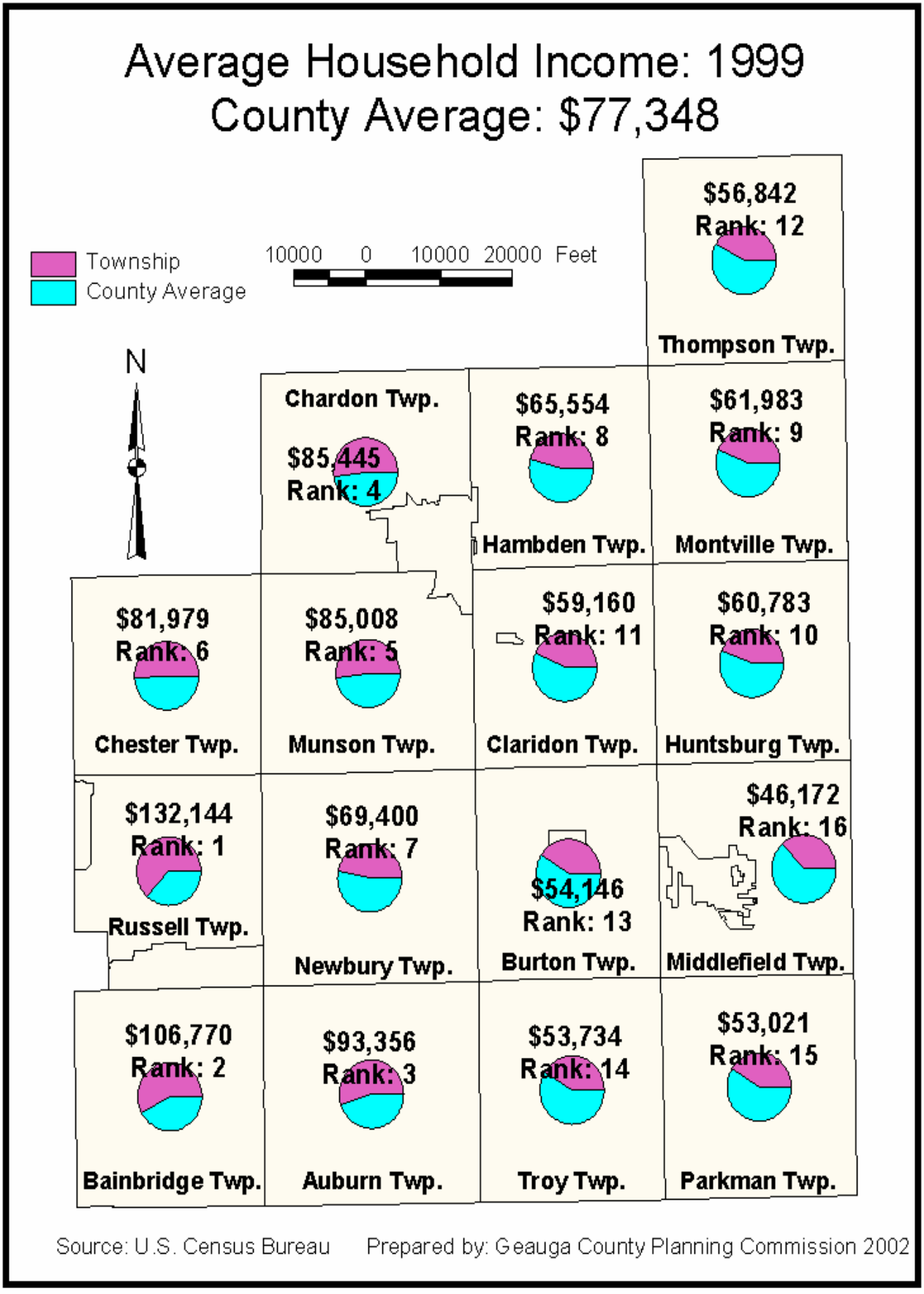
Table 26

Income Distribution: 1980, 1990, And 2000
Chester Township

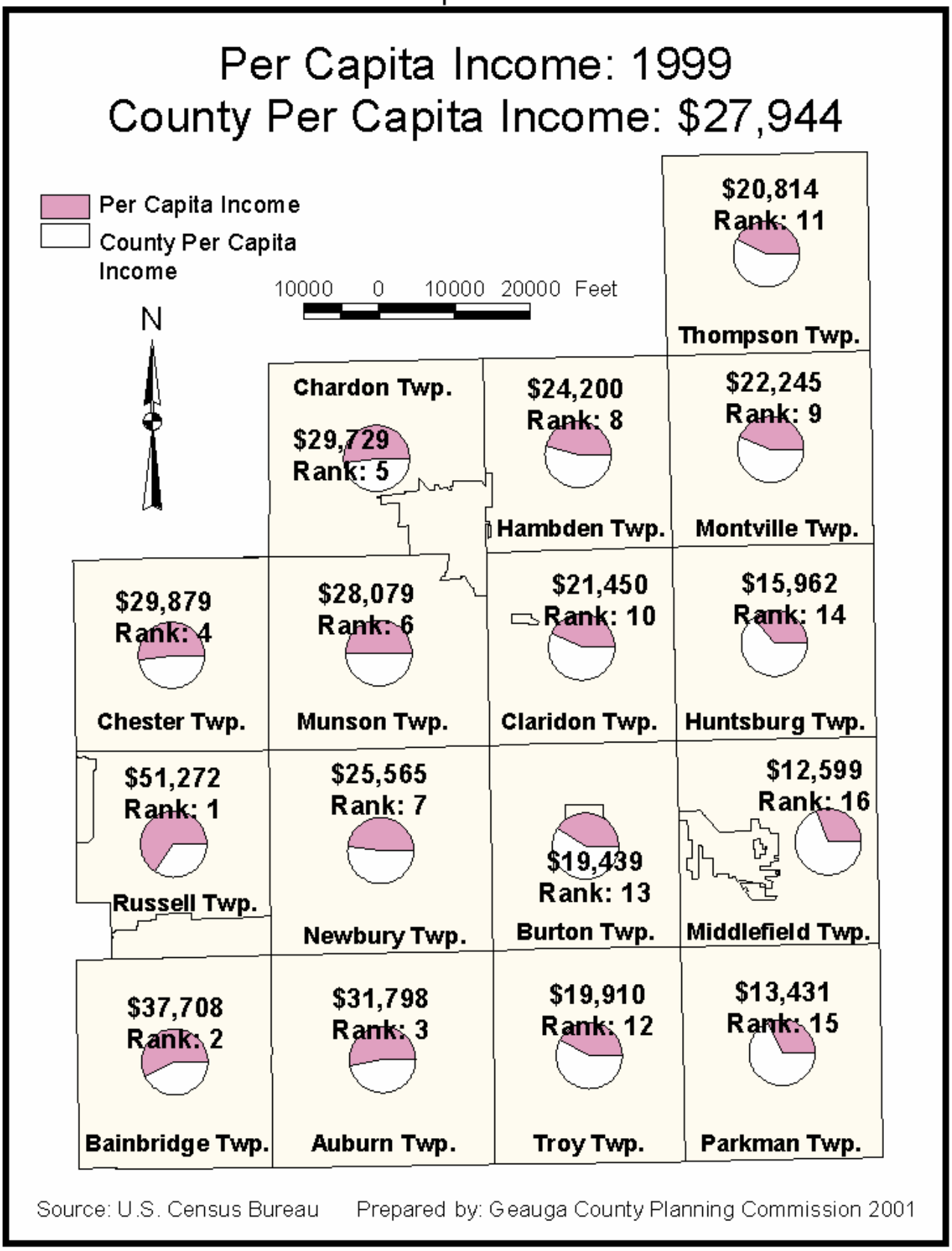
	1980		1990		2000	
Income	**Households**	**%**	**Households**	**%**	**Households**	**%**
Under $10,000	280	6.4%	169	4.6%	49	1.2%
$10,000-$14,999	210	6.3%	152	4.1%	158	4.0%
$15,000-$24,999	837	25.0%	303	8.1%	215	5.4%
$25,000-$34,999	876	26.1%	569	15.3%	375	9.4%
$35,000-$49,999	781	23.2%	744	20.0%	527	13.3%
Over $50,000	370	11.0%	1,787	47.9%	2,645	66.7%
Total	3,354	100.0%	3,724	100.0%	3,969	100.0%

Source: U.S. Census Bureau

Map 22


Average Household Income: 1999
County Average: $77,348
Township
County Average
10000 0 10000 20000 Feet
N
$56,842
Rank: 12
Thompson Twp.
Chardon Twp.
$85,445
Rank: 4
$65,554
Rank: 8
Hambden Twp.
$61,983
Rank: 9
Montville Twp.
$81,979
Rank: 6
Chester Twp.
$85,008
Rank: 5
Munson Twp.
$59,160
Rank: 11
Claridon Twp.
$60,783
Rank: 10
Huntsburg Twp.
$132,144
Rank: 1
Russell Twp.
$69,400
Rank: 7
Newbury Twp.
$54,146
Rank: 13
Burton Twp.
$46,172
Rank: 16
Middlefield Twp.
$106,770
Rank: 2
Bainbridge Twp.
$93,356
Rank: 3
Auburn Twp.
$53,734
Rank: 14
Troy Twp.
$53,021
Rank: 15
Parkman Twp.
Source: U.S. Census Bureau
Prepared by: Geauga County Planning Commission 2002

Map 23

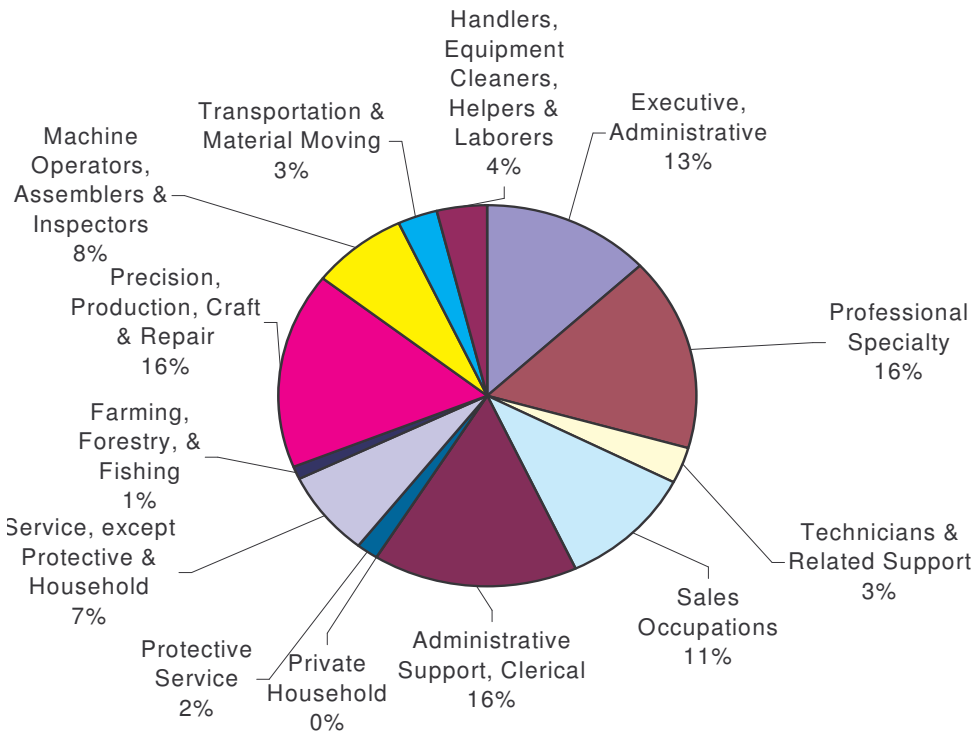

Per Capita Income: 1999
County Per Capita Income: $27,944
Per Capita Income
County Per Capita Income
10000 0 10000 20000 Feet
N
$20,814
Rank: 11
Thompson Twp.
Chardon Twp.
$29,729
Rank: 5
$24,200
Rank: 8
Hambden Twp.
$22,245
Rank: 9
Montville Twp.
$29,879
Rank: 4
Chester Twp.
$28,079
Rank: 6
Munson Twp.
$21,450
Rank: 10
Claridon Twp.
$15,962
Rank: 14
Huntsburg Twp.
$51,272
Rank: 1
Russell Twp.
$25,565
Rank: 7
Newbury Twp.
$19,439
Rank: 13
Burton Twp.
$12,599
Rank: 16
Middlefield Twp.
$37,708
Rank: 2
Bainbridge Twp.
$31,798
Rank: 3
Auburn Twp.
$19,910
Rank: 12
Troy Twp.
$13,431
Rank: 15
Parkman Twp.
Source: U.S. Census Bureau
Prepared by: Geauga County Planning Commission 2001

Occupations and Labor Force

A comparison of the 1980, 1990, and 2000 Census figures with regard to the occupations of the residents in Chester reflects only some slight shifts in the overall breakdown of job classifications. In 1980, the highest percentage of the wage earners in the township were classified as precision, production, craft, and repair occupations; professional specialty; and administrative support, clerical occupations (see Figure 10). In 1990, the highest percentage of the labor force in the township was classified in professional specialty and executive administrative occupations. According to the 2000 Census data, Chester had the highest percentage (43.7%) of the labor force in managerial and professional occupations followed by sales and office occupations at 26.5 % (see Table 27).

Figure 10

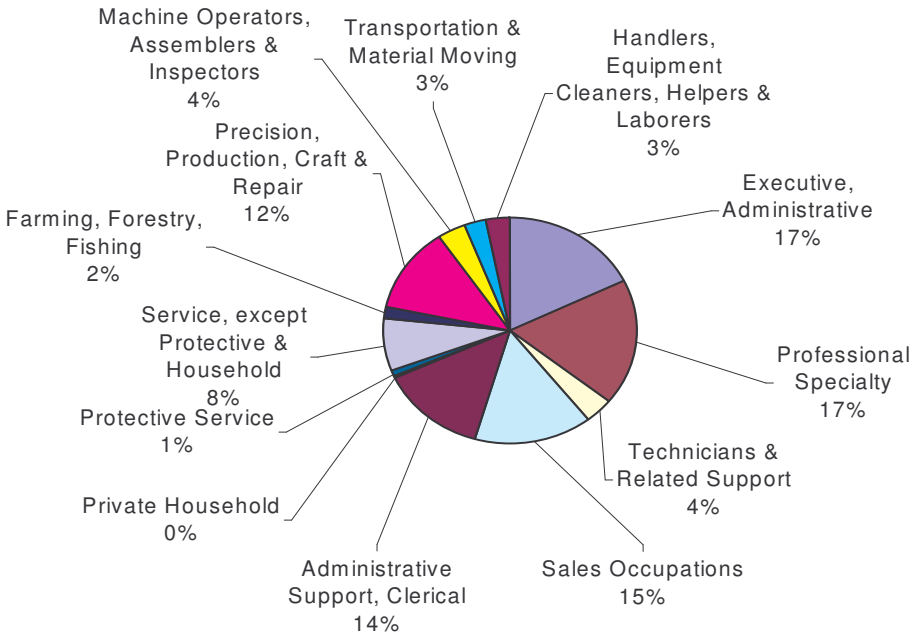
Labor Force: 1980
Chester Township



Source: U.S. Census Bureau

Figure 11

Labor Force: 1990
Chester Township



Source: U. S. Census Bureau

Table 27

Occupations Of Residents By Township: 2000
Geauga County

Townships	Managerial & Professional	Service	Sales & Office	Farming, Forestry & Fishing	Construction, Extraction & Maintenance	Operators, Fabricators & Laborers
Auburn	44.0%	8.7%	28.6%	0.0%	9.4%	9.3%
Bainbridge	52.2%	9.4%	27.2%	0.0%	4.6%	6.6%
Burton	30.0%	13.8%	24.0%	`1.3%	14.7%	16.2%
Chardon	41.5%	12.9%	27.9%	0.6%	6.1%	11.0%
Chester	43.7%	11.8%	26.5%	0.3%	8.6%	9.1%
Claridon	33.8%	14.6%	21.7%	0.9%	14.8%	14.2%
Hambden	29.6%	10.6%	29.2%	0.9%	11.0%	18.8%
Huntsburg	16.7%	12.4%	19.9%	2.6%	22.4%	26.0%
Middlefield	17.1%	11.2%	14.8%	2.3%	25.0%	29.6%
Montville	29.2%	11.2%	27.5%	1.8%	14.2%	16.1%
Munson	44.5%	10.9%	26.3%	0.0%	8.4%	9.9%
Newbury	32.2%	15.2%	26.9%	1.1%	9.2%	15.4%
Parkman	16.9%	12.2%	14.0%	3.9%	34.7%	18.3%
Russell	55.9%	8.0%	24.8%	0.5%	4.8%	6.0%
Thompson	25.7%	14.5%	25.9%	0.9%	14.7%	18.3%
Troy	27.8%	11.9%	20.7%	0.4%	20.9%	18.3%

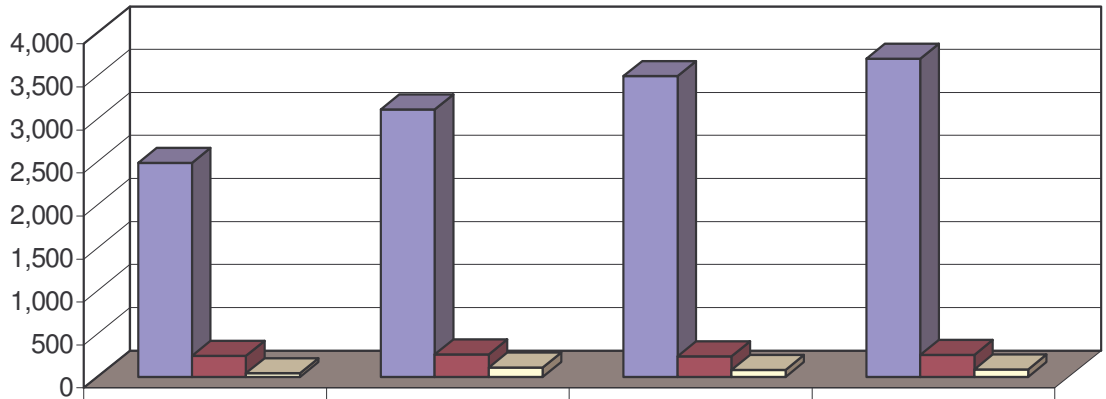
Source: U.S. Census Bureau

Home Ownership

The Census data indicate that home ownership is a strong element in the community. The number of owner-occupied housing units has steadily increased, going from 2,487 units in 1970 to 3,696 in 2000 (see Figure 12), representing 91.5% of the housing units in the township. From 1970 to 2000, the number of rental units in the township has remained relatively constant from a high of 260 units in 1980 to a low of 240 units in 1990. The number of vacant units increased significantly (64 units or 152%) between 1970 and 1980. However, the number of vacant units decreased during the last twenty years by 18.8% or 20 units.

Figure 12

Housing Units By Occupancy: 1970, 1980, 1990, And 2000
Chester Township



	1970	1980	1990	2000
Owner Occupied	2,487	3,106	3,497	3,696
Renter Occupied	241	260	240	256
Vacant	42	106	79	86

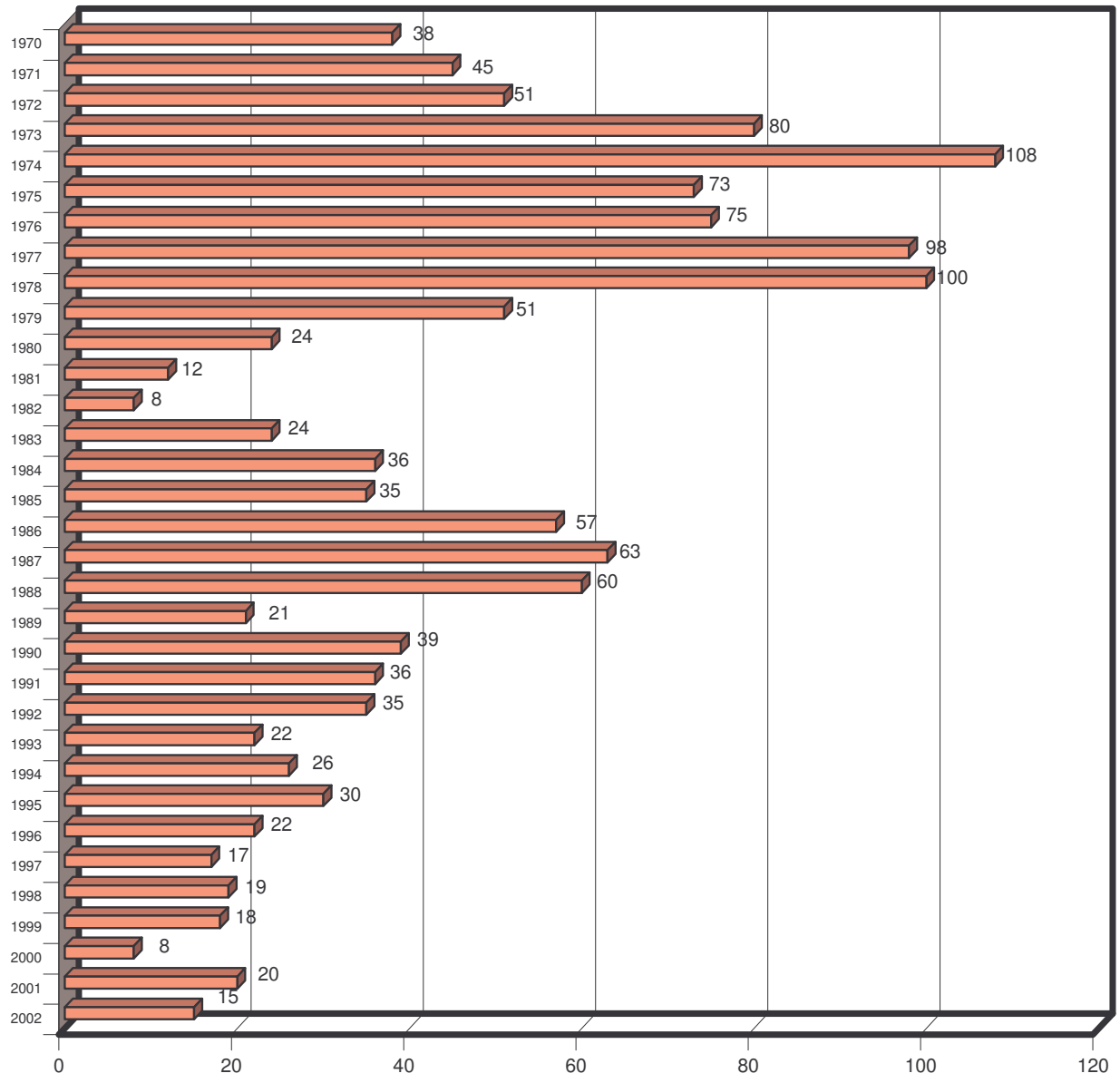
Source: U.S. Census Bureau.

Housing Starts

Based upon permits issued by the county building department, 1,331 new homes were erected in Chester from 1970 through 2002 (see Figure 13). Compared to the other 15 townships within the county, Chester was ranked third regarding the total number of housing starts (see Map 24), averaging approximately 41 per year (see Figure 14). Since 1990 Chester has shown a steady decline in the number of new housing starts going from 39 in 1990 to 15 in 2002 (see Figure 13). An additional 564 new single-family dwellings are projected to be constructed in the township by the year 2030 (see Figure 15).

Figure 13

New Housing Starts: 1970 To 2002
Chester Township



Source: Geauga County Building Department.
Note: Based on building permits issued for single family homes.

Map 24

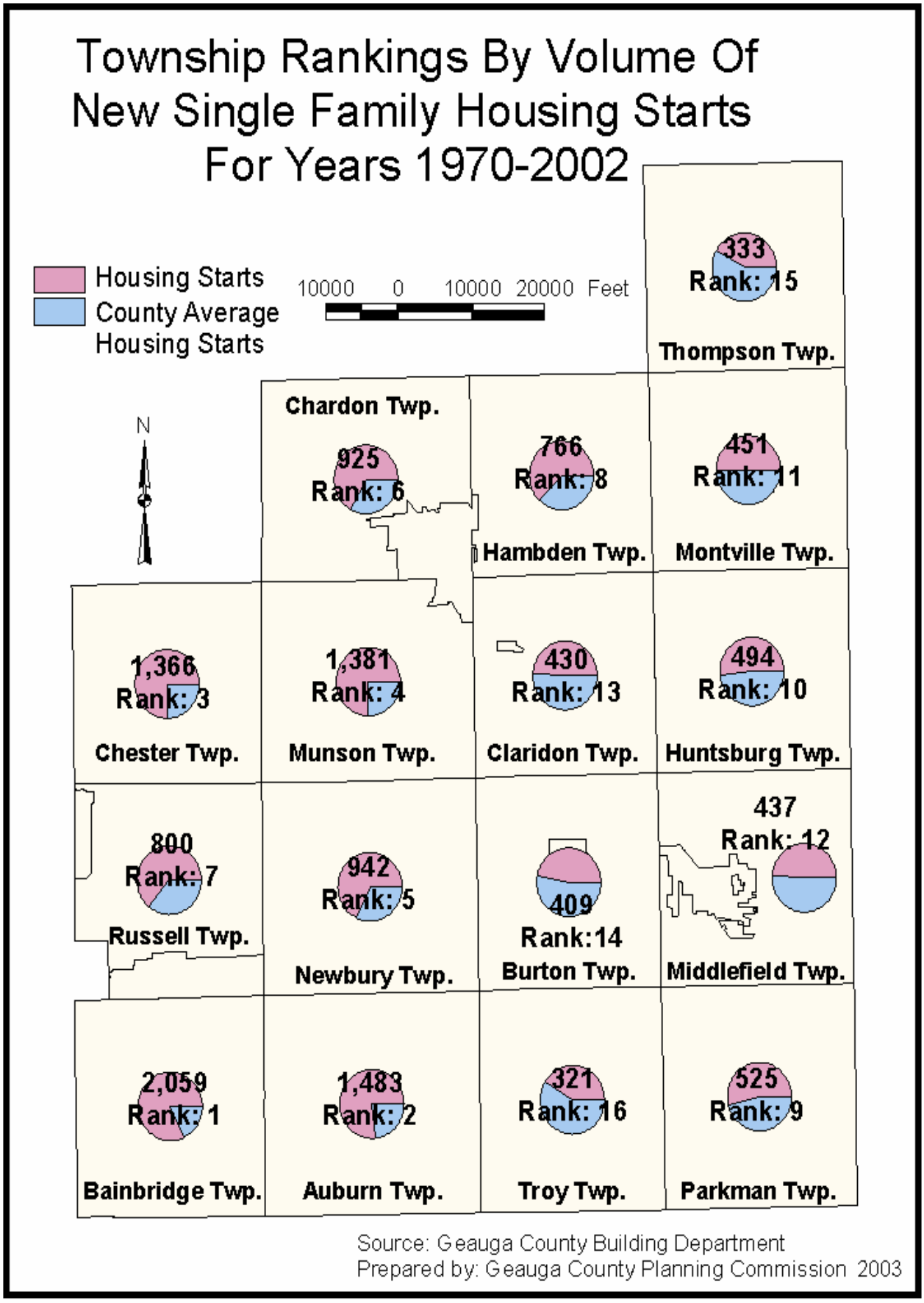
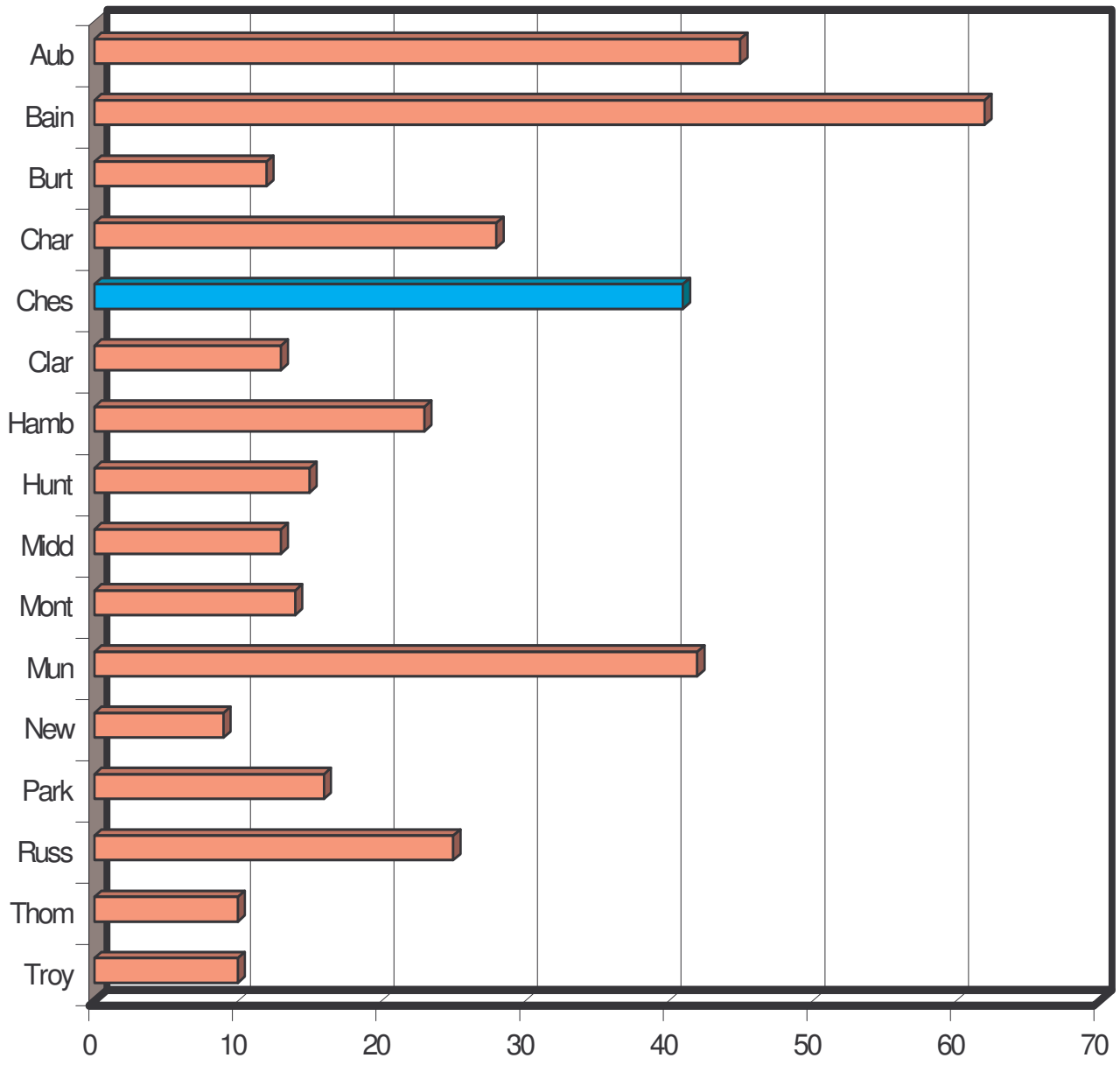

Township Rankings By Volume Of New Single Family Housing Starts For Years 1970-2002
Housing Starts
County Average Housing Starts
10000 0 10000 20000 Feet
N
333
Rank: 15
Thompson Twp.
Chardon Twp.
925
Rank: 6
766
Rank: 8
Hambden Twp.
451
Rank: 11
Montville Twp.
1,366
Rank: 3
Chester Twp.
1,381
Rank: 4
Munson Twp.
430
Rank: 13
Claridon Twp.
494
Rank: 10
Huntsburg Twp.
800
Rank: 7
Russell Twp.
942
Rank: 5
Newbury Twp.
409
Rank:14
Burton Twp.
437
Rank: 12
Middlefield Twp.
2,059
Rank: 1
Bainbridge Twp.
1,483
Rank: 2
Auburn Twp.
321
Rank: 16
Troy Twp.
525
Rank: 9
Parkman Twp.
Source: Geauga County Building Department
Prepared by: Geauga County Planning Commission 2003

Figure 14

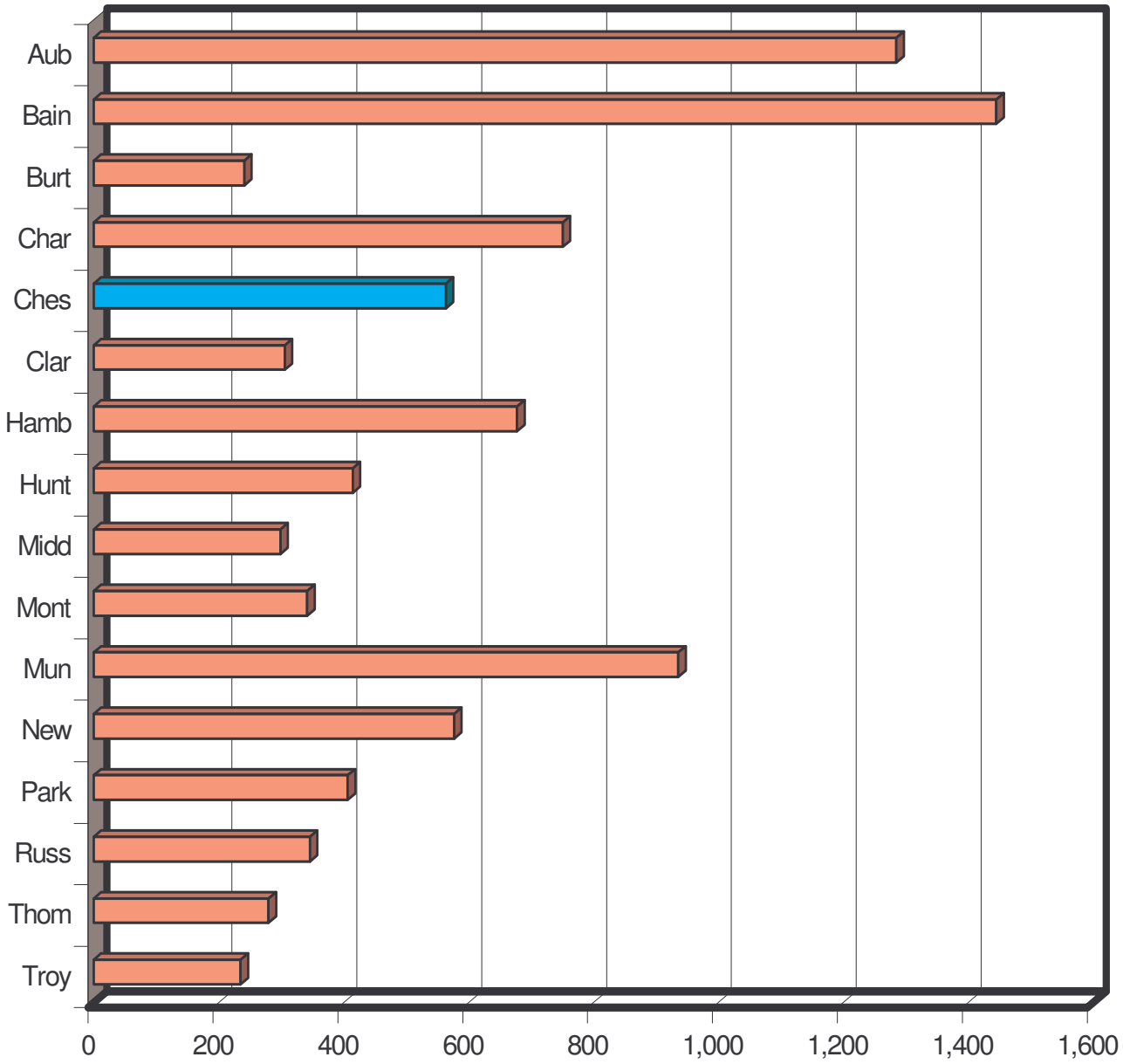
Average Annual Number Of Housing Starts By Township: 1970 To 2002
Geauga County



Source: Geauga County Planning Commission

Figure 15

Projected New Housing Starts By Township To Year 2030
Geauga County



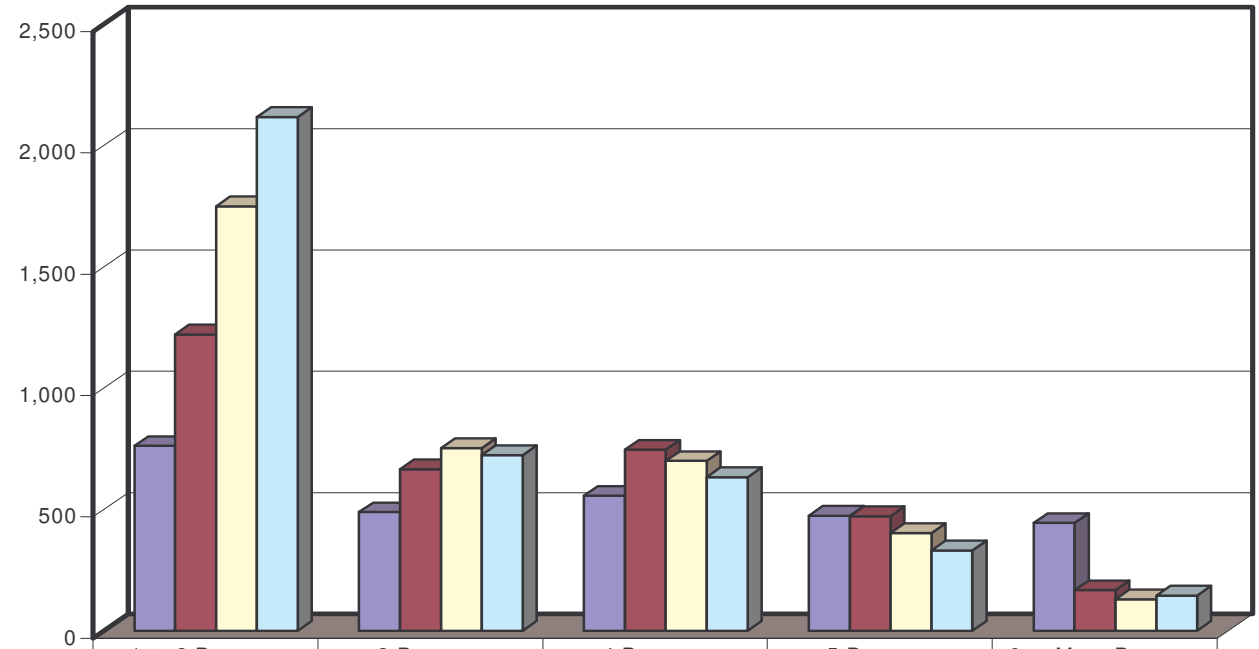
Source: Geauga County Planning Commission

Persons Per Household

Although the number of housing units in the township has increased between 1970 and 2000, the number of persons per household has decreased, as shown in Figure 16. The township appears to be following the national trend toward a smaller number of persons per household.

Figure 16

Persons Per Occupied Housing Unit: 1970, 1980, 1990, And 2000
Chester Township



	1 to 2 Persons	3 Persons	4 Persons	5 Persons	6 or More Persons
1970	762	489	557	475	445
1980	1,222	666	747	473	168
1990	1,750	754	700	403	130
2000	2,118	724	633	331	146

Source: U.S. Census Bureau

Value of Housing Units

The last three Census counts indicate that the value of owner occupied housing units has increased significantly (see Table 28). In 1970, 94.3% of the housing units were valued at less than $50,000. In 1980, the majority of units (63.6%) were in the $50,000 to $99,999 category. In 1990, most (69%) of the housing units were valued at over $100,000, and by 2000 over 74% of the housing units were valued at over $150,000. Chester is ranked sixth compared to the other townships with a median value of $182,900 per the 2000 Census (see Map 25).

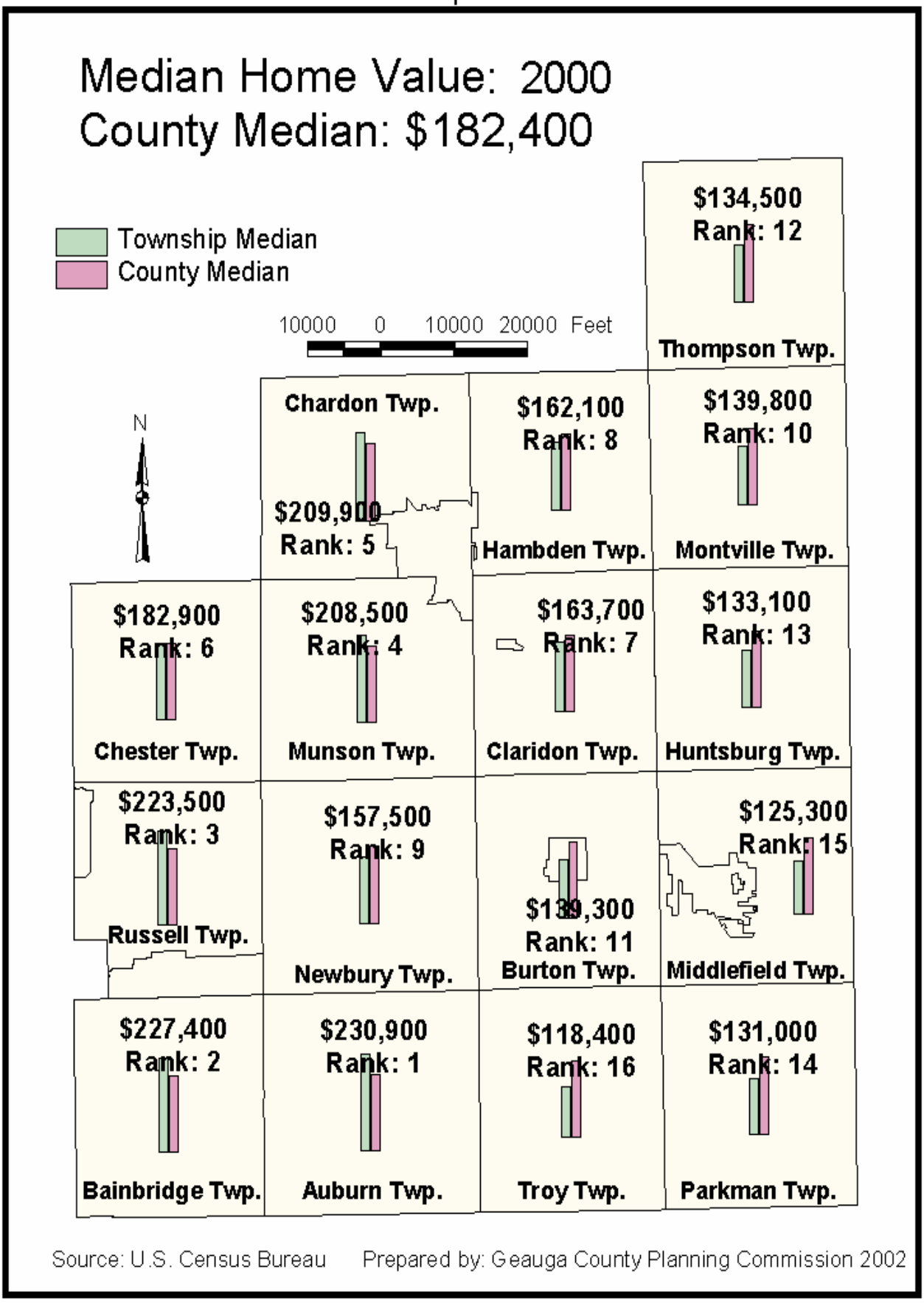
Table 28

Value Of Owner Occupied Housing Units: 1970, 1980, 1990, And 2000
Chester Township

	1970		1980		1990		2000	
Dollars	Units	**%**	**Units**	**%**	**Units**	**%**	**Units**	**%**
Under $15,000	41	1.8%	3	0.1%	11	0.4%	16	0.5%
$15,000 to 24,999	536	24.3%	6	0.2%	0	0.0%	0	0.0%
$25,000 to $49,999	1,511	68.2%	156	5.7%	0	0.0%	9	0.3%
$50,000 to $99,999	126	5.7%	1,714	63.6%	918	30.6%	58	1.7%
$100,000 to $149,999	0	0.0%	631	23.5%	1,242	41.5%	798	23.4%
$150,000 and over	0	0.0%	187	6.9%	824	27.5%	2,530	74.1%
Total	2,214	100.0%	2,697	100.0%	2,995	100.0%	3,411	100.0%

Source: U.S. Census Bureau

Map 25


Median Home Value: 2000
County Median: $182,400
Township Median
County Median
10000 0 10000 20000 Feet
N
$134,500
Rank: 12
Thompson Twp.
Chardon Twp.
$209,900
Rank: 5
$162,100
Rank: 8
Hambden Twp.
$139,800
Rank: 10
Montville Twp.
$182,900
Rank: 6
Chester Twp.
$208,500
Rank: 4
Munson Twp.
$163,700
Rank: 7
Claridon Twp.
$133,100
Rank: 13
Huntsburg Twp.
$223,500
Rank: 3
Russell Twp.
$157,500
Rank: 9
Newbury Twp.
$139,300
Rank: 11
Burton Twp.
$125,300
Rank: 15
Middlefield Twp.
$227,400
Rank: 2
Bainbridge Twp.
$230,900
Rank: 1
Auburn Twp.
$118,400
Rank: 16
Troy Twp.
$131,000
Rank: 14
Parkman Twp.
Source: U.S. Census Bureau
Prepared by: Geauga County Planning Commission 2002

Home Sales

Since 1990, there has been an average of 111 single-family home sales per year in Chester (see Table 29). The average sale price for a dwelling has risen from $125,832 in 1990 to $209,849 in 2002 (see Figure 17). This represents a 67% increase during this time period, ranking Chester next to last compared to the other townships within the county (see Figure 18). However, with respect to the average sale price for a single family dwelling in 2002, Chester was ranked sixth (at $209,849) in relation to the other townships (see Map 26).

Table 29

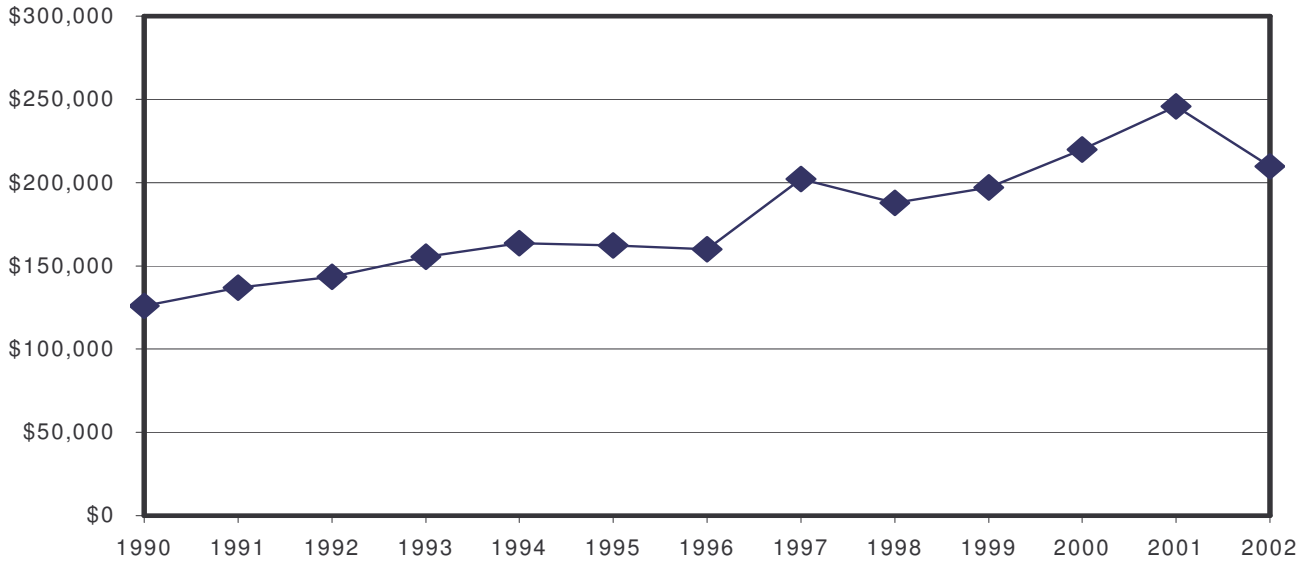
Single Family Home Sales: 1990 To 2002
Chester Township

Price	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<$30,000	2	1	1	1	0	2	0	0	0	0	0	0	0
$30,000-$49,999	6	5	3	1	4	2	0	0	1	0	0	0	0
$50,000-$69,999	7	4	8	2	2	2	0	0	1	1	0	0	2
$70,000-$89,999	11	10	12	8	8	12	2	0	1	1	1	1	0
$90,000-$109,999	11	15	16	8	13	16	8	2	3	2	2	1	1
$110,000-$124,999	17	12	18	13	11	13	12	7	7	11	7	3	5
$125,000-$139,999	20	9	13	13	13	21	13	8	18	25	7	7	5
$140,000-$159,999	10	9	10	16	29	17	23	16	25	26	14	11	18
$160,000-$174,999	10	6	7	10	10	12	15	13	20	16	14	21	11
$175,000 +	16	17	20	23	37	37	28	43	56	67	67	61	65
Total	110	88	108	95	127	134	101	89	132	149	112	96	107

Source: Geauga County Auditor's Office

Figure 17

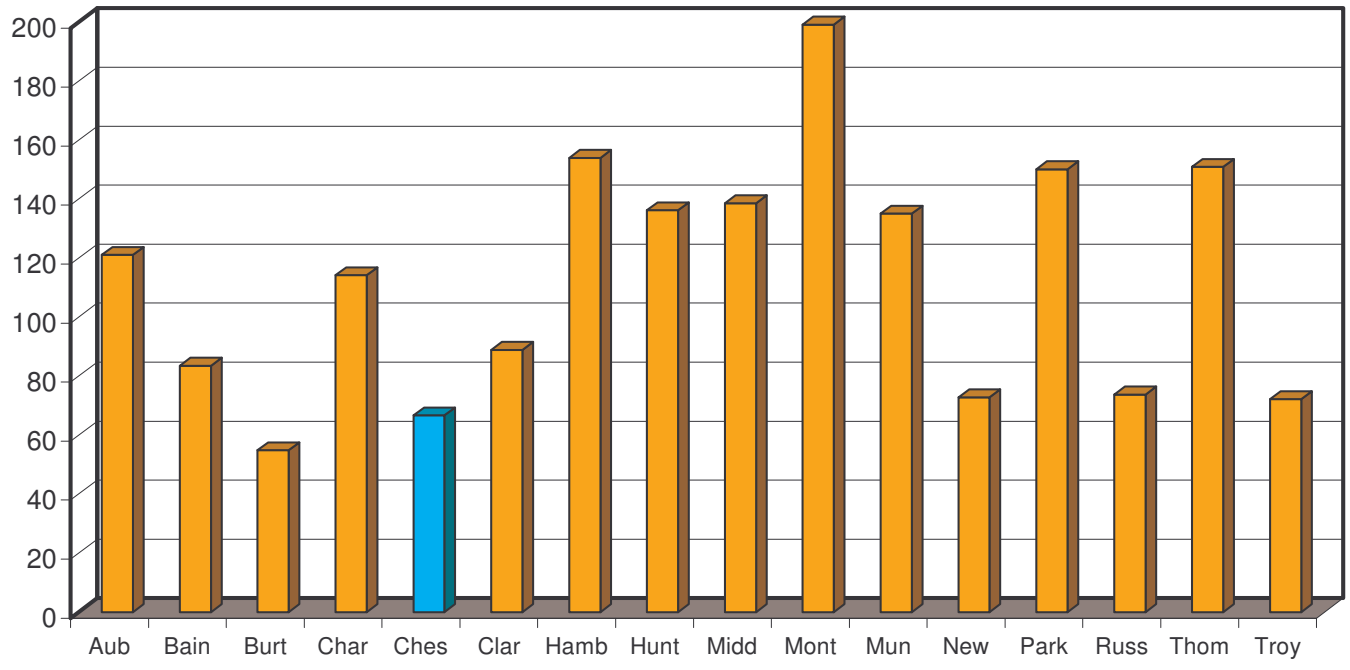
Average Sale Price Of Homes: 1990 To 2002
Chester Township



Source: Geauga County Auditor's Office

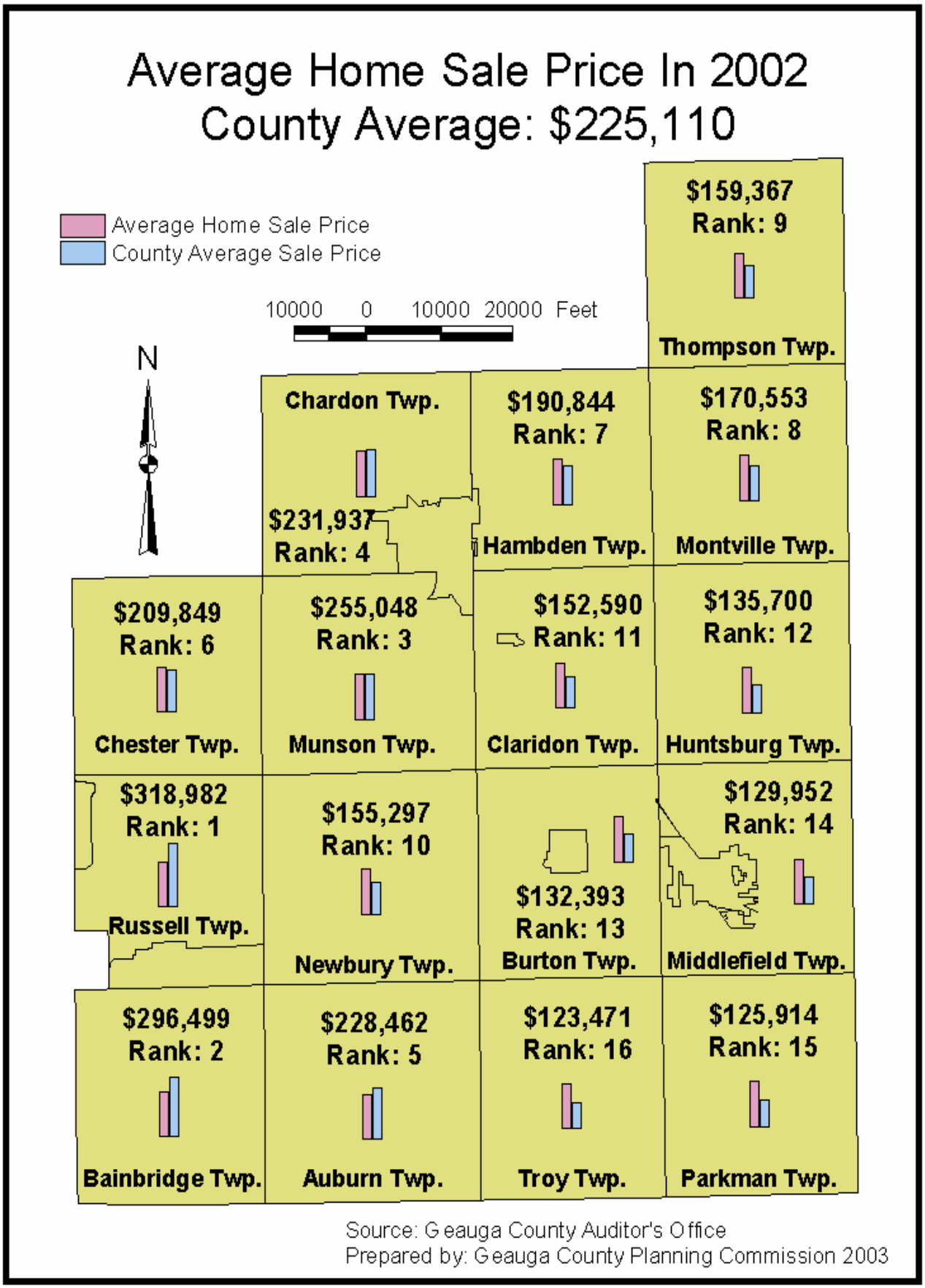
Figure 18

Percent Increase In The Average Sale Price Of Homes By Township: 1990 To 2002
Geauga County



Source: Geauga County Auditor's Office

Map 26

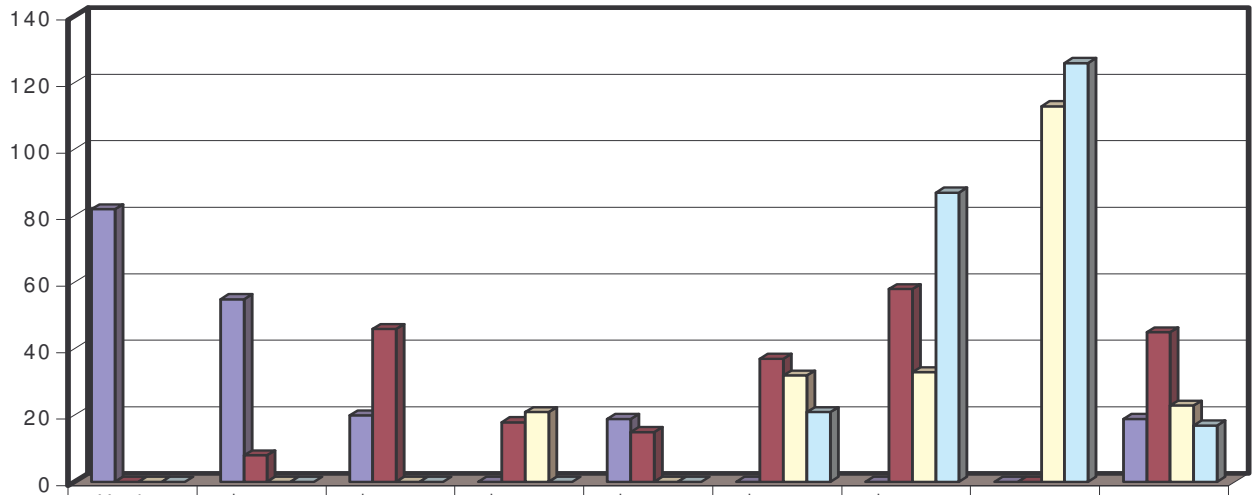

Average Home Sale Price In 2002
County Average: $225,110
Average Home Sale Price
County Average Sale Price
10000 0 10000 20000 Feet
N
$159,367
Rank: 9
Thompson Twp.
Chardon Twp.
$231,937
Rank: 4
$190,844
Rank: 7
Hambden Twp.
$170,553
Rank: 8
Montville Twp.
$209,849
Rank: 6
Chester Twp.
$255,048
Rank: 3
Munson Twp.
$152,590
Rank: 11
Claridon Twp.
$135,700
Rank: 12
Huntsburg Twp.
$318,982
Rank: 1
Russell Twp.
$155,297
Rank: 10
Newbury Twp.
$132,393
Rank: 13
Burton Twp.
$129,952
Rank: 14
Middlefield Twp.
$296,499
Rank: 2
Bainbridge Twp.
$228,462
Rank: 5
Auburn Twp.
$123,471
Rank: 16
Troy Twp.
$125,914
Rank: 15
Parkman Twp.
Source: Geauga County Auditor's Office
Prepared by: Geauga County Planning Commission 2003

Contract Rent

Monthly rent increased between 1970 and 2000. In 1970, according to the Census, the highest percentage of renters paid under $150.00 per month. In 1990, the largest percent of renters were paying over $600.00 and by 2000 most renters were expending over $750.00 monthly (see Figure 19).

Figure 19

Monthly Contract Rent: 1970, 1980, 1990, And 2000
Chester Township



	Under $100	$100-$149	$150-$199	$200-$249	$250-$299	$300-$399	$400-$599	$600+	No Cash
1970	82	55	20	0	19	0	0	0	19
1980	0	8	46	18	15	37	58	0	45
1990	0	0	0	21	0	32	33	113	23
2000	0	0	0	0	0	21	87	126	17

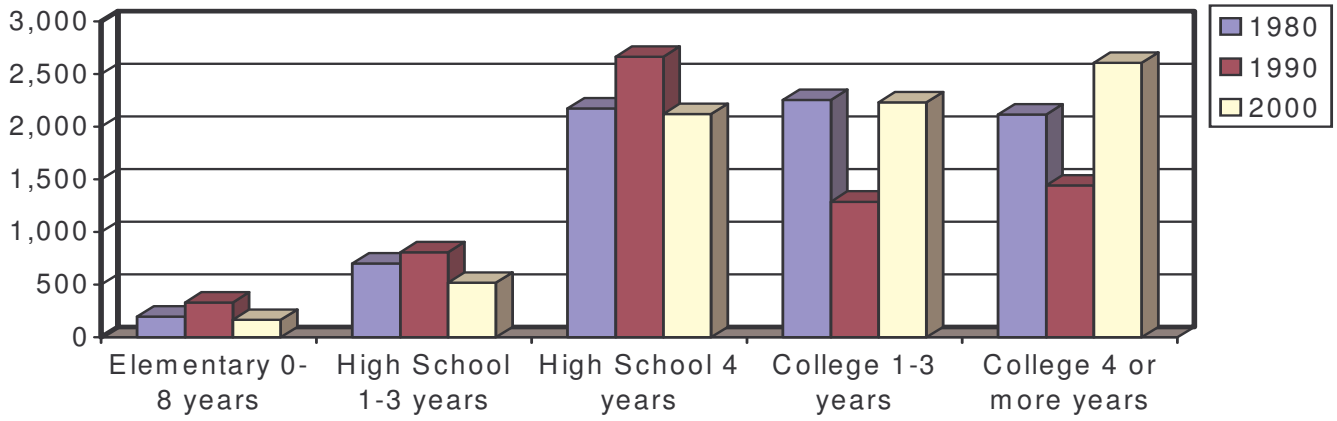
Source: U.S. Census Bureau

Educational Level

Figure 20 provides information pertaining to the educational level of Chester residents 25 years and older from the 1980, 1990, and 2000 Census. In 1980, 6,546 residents 25 years and older had a high school diploma. In 1990, this figure decreased to 5,396 people and according to the 2000 Census data, it rose to 6,956. The 2000 Census also indicates that 34% of Chester's residents 25 years and older have a college degree (see Figure 21).

Figure 20

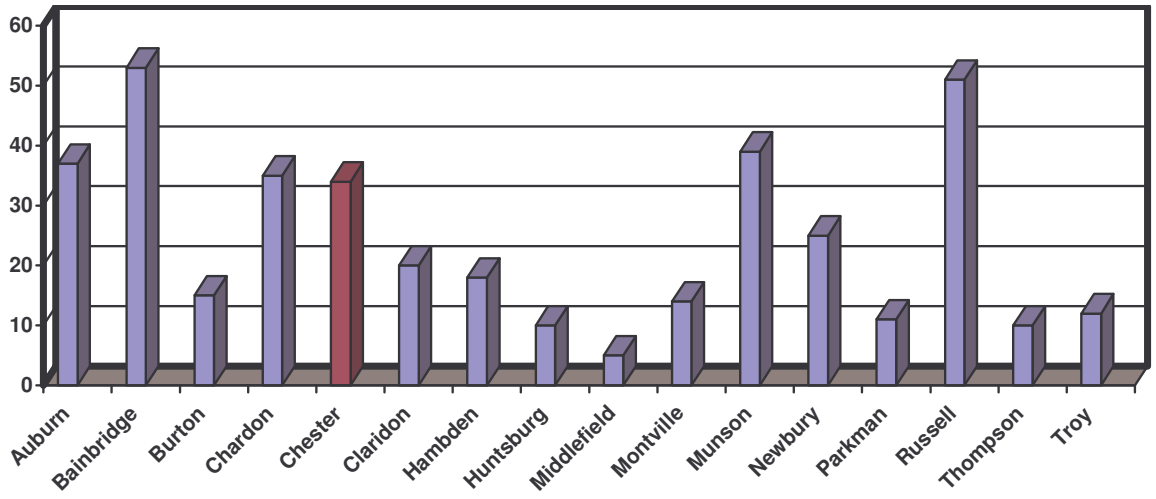
Years Of School Completed (Persons >25 Years Old): 1980, 1990, And 2000
Chester Township



Source: U.S. Census Bureau

Figure 21

Percentage Of College Graduates (Persons > 25 Years Old) By Township: 2000
Geauga County



Source: U.S. Census Bureau

CHAPTER IV

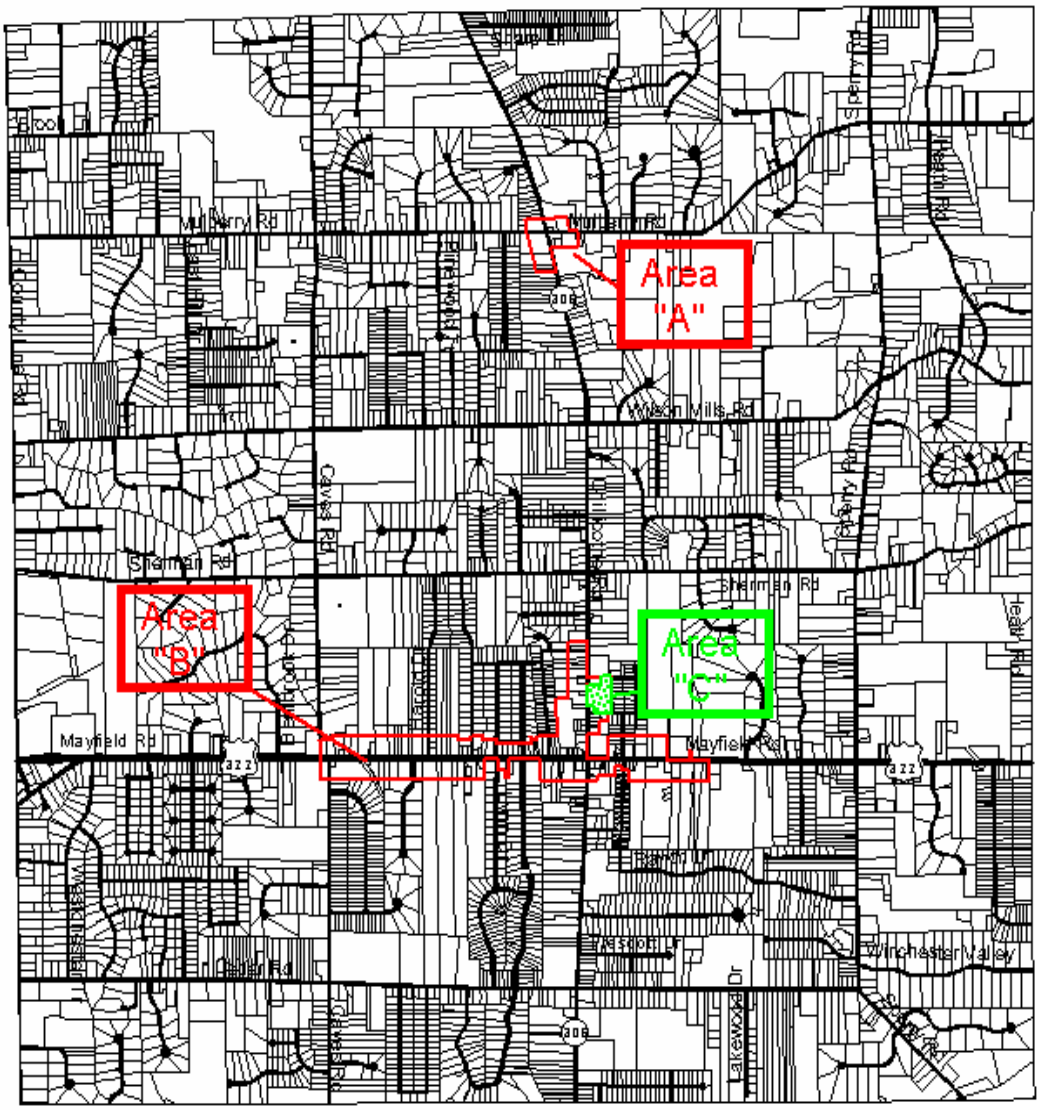
INVENTORY OF COMMERCIAL AND SHOPPING CENTER ZONING DISTRICTS

Purpose

This chapter represents an inventory of the environmental features and associated characteristics within the commercial and shopping center zones (1996) in Chester Township. Existing land use within the affected zones has been included as well. Areas “A” and “B” on the following maps reflects the current boundaries of the commercial district. Area “C” represents the shopping center zone.

The inventory consists of a series of maps and related data produced by utilizing the Geographic Information System (GIS). Township officials may refer to the following information as a guide for decision-making when considering, for example, zoning amendments and site plans. However, for all legal purposes, the official Chester Township Zoning Map is the defining authority.

Map 27



Chester Township Commercial & Shopping Center Zones

N

Zoning Districts

C: Commercial: 249.29 acres 97% of Area

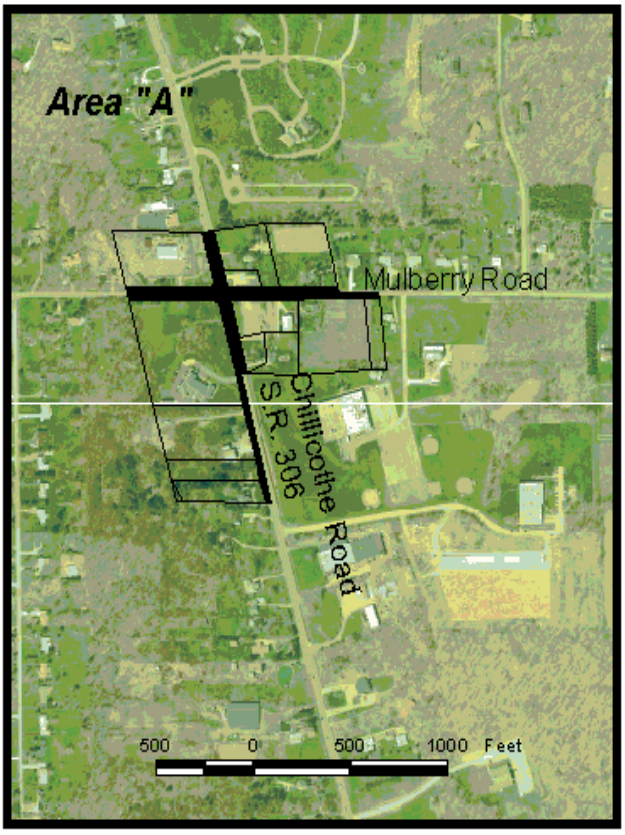
SC: Shopping Center: 7.74 acres 3% of Area

Commercial & Shopping Center Zoned Properties total 257 acres or 1.7% of the Township

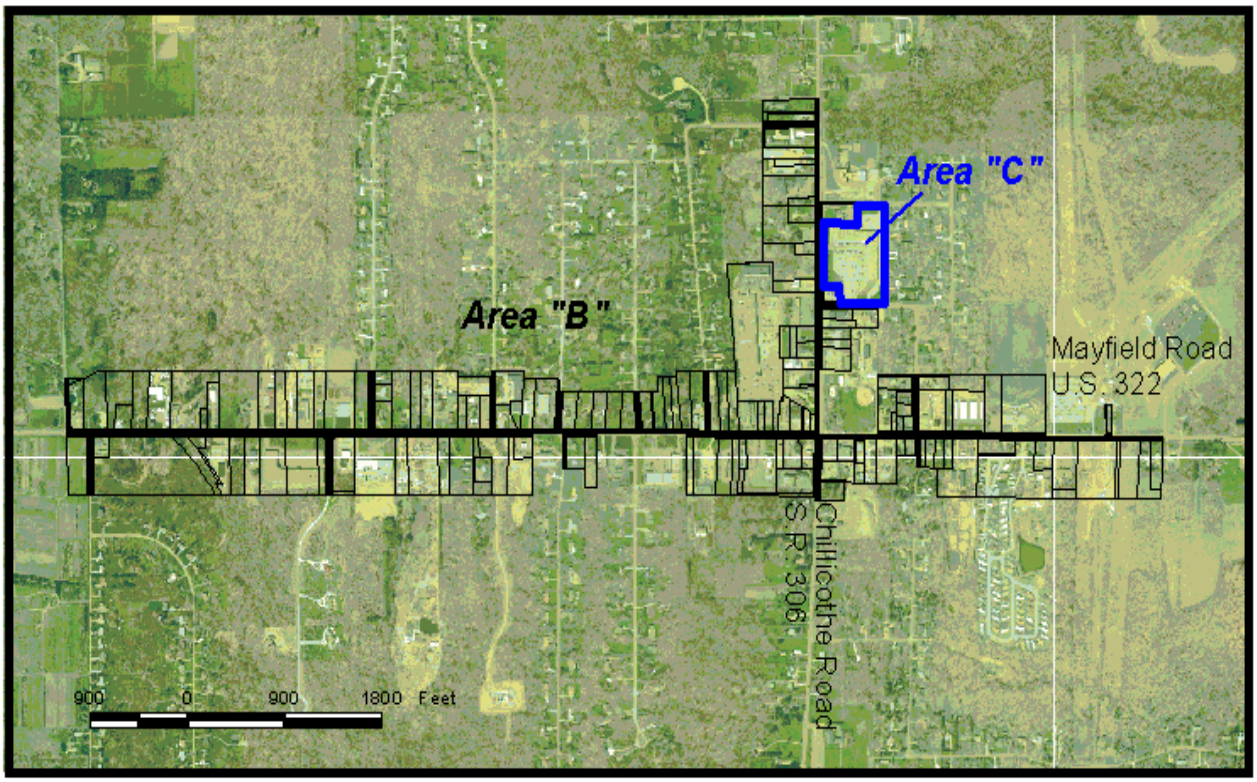
4000 0 4000 8000 Feet

Source: Chester Township Zoning Map September 5th, 1996
Prepared by: Geauga County Planning Commission 2002

Map 28

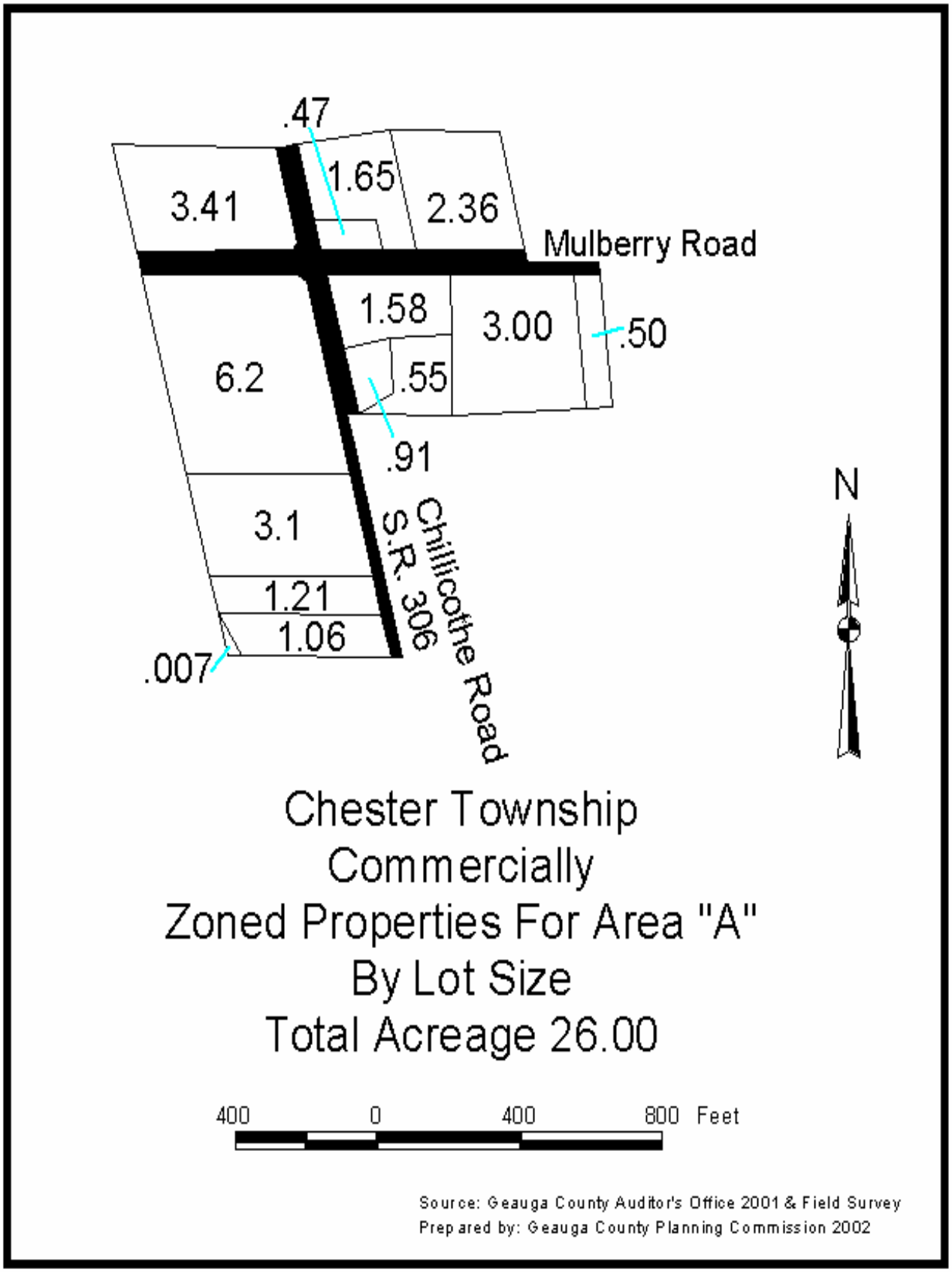


Chester Township Commercial (Area A & B) & Shopping Center (Area C) Zoned Properties: Aerial Photography



Source: Geauga County Auditor's Office 1999
Prepared by: Geauga County Planning Commission 2002

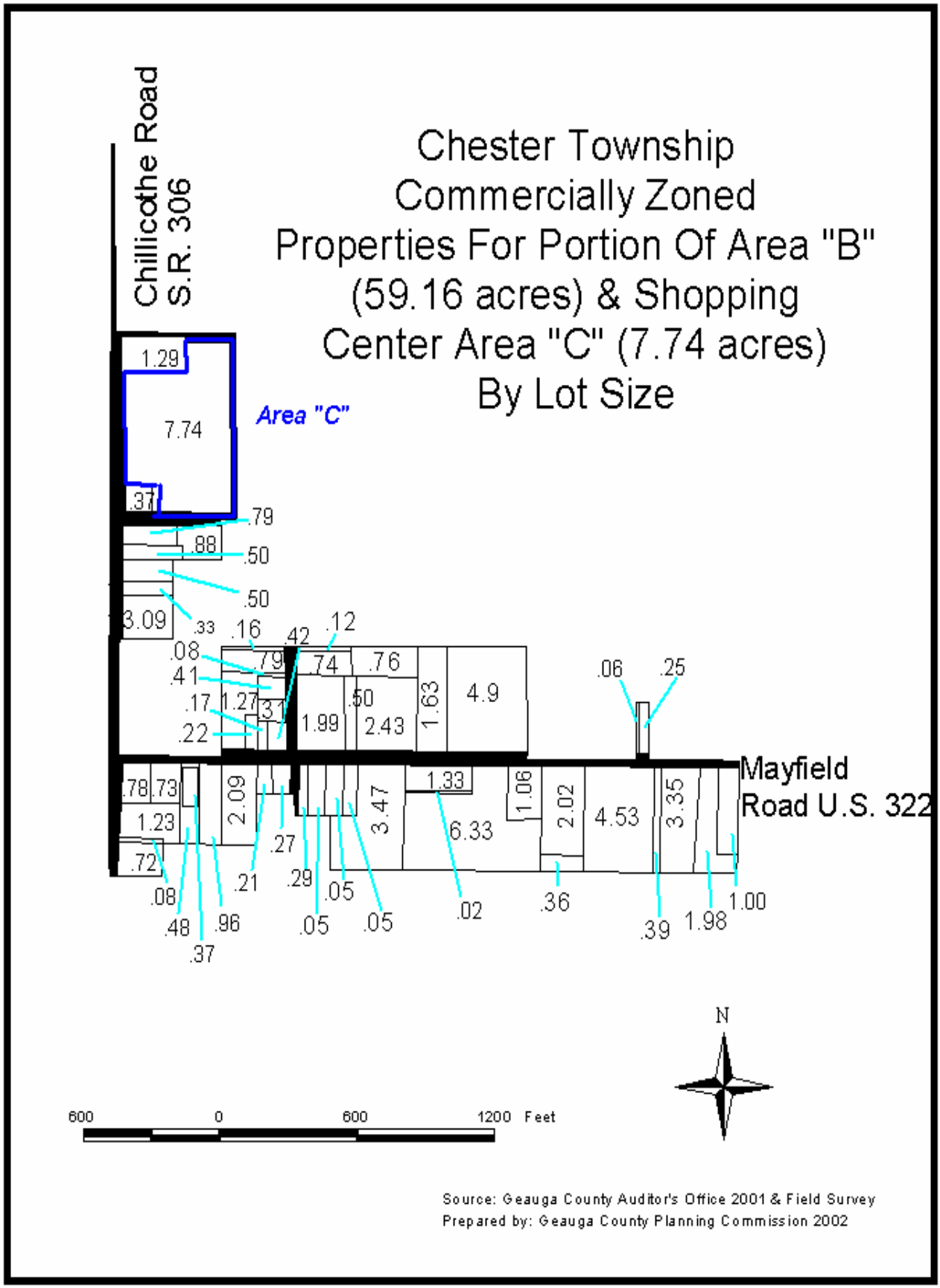
Map 29



Chester Township
Commercially
Zoned Properties For Area "A"
By Lot Size
Total Acreage 26.00

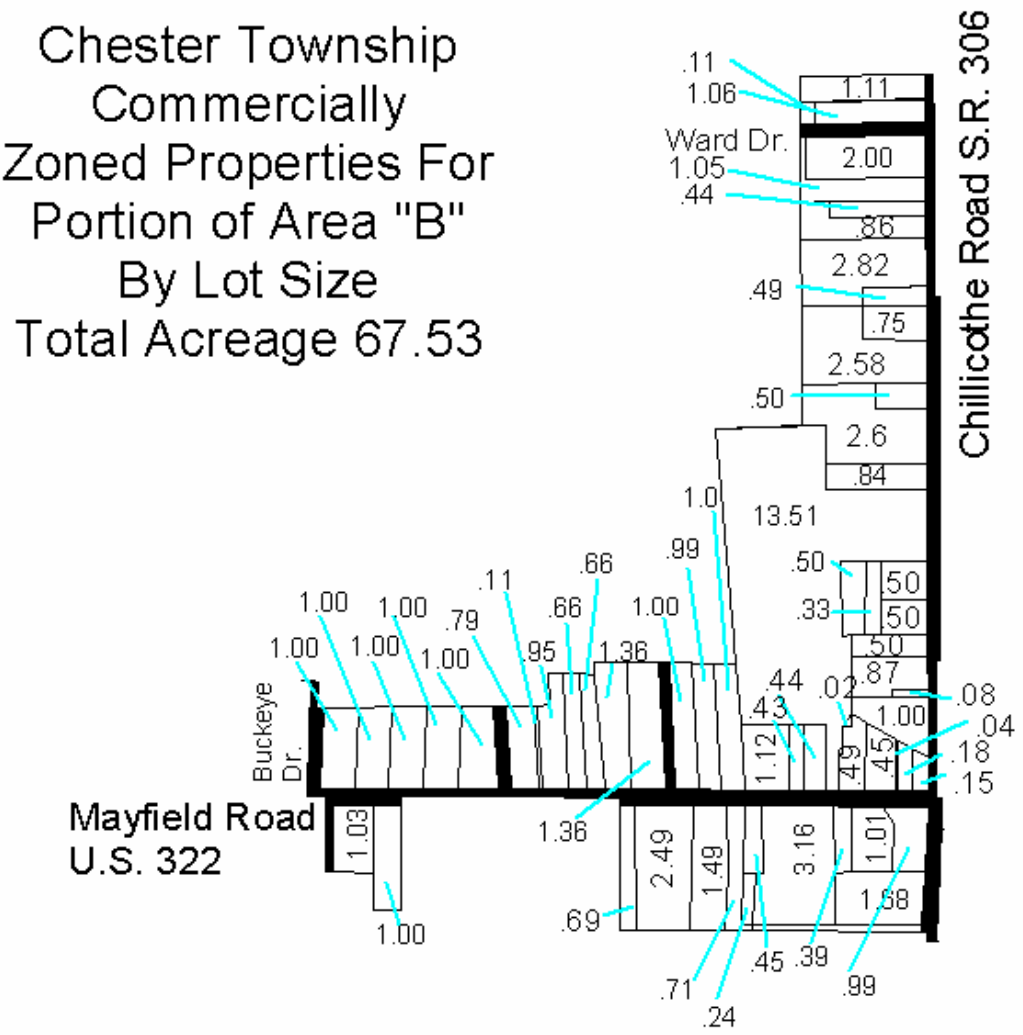
Source: Geauga County Auditor's Office 2001 & Field Survey
Prepared by: Geauga County Planning Commission 2002

Map 30


Chillicothe Road
S.R. 306
Chester Township
Commercially Zoned
Properties For Portion Of Area "B"
(59.16 acres) & Shopping
Center Area "C" (7.74 acres)
By Lot Size
Area "C"
1.29
7.74
.37
.79
.88
.50
.50
3.09
.33
.16
.42
.12
.08
.41
.17
1.27
.31
.22
.79
.74
.76
.50
1.99
2.43
1.63
4.9
.06
.25
Mayfield
Road U.S. 322
.78
.73
1.23
.72
.08
.48
.37
.96
2.09
.21
.27
.29
.05
.05
.05
3.47
1.33
6.33
.02
1.06
.36
2.02
4.53
.39
3.35
1.98
1.00
N
600
0
600
1200 Feet
Source: Geauga County Auditor's Office 2001 & Field Survey
Prepared by: Geauga County Planning Commission 2002

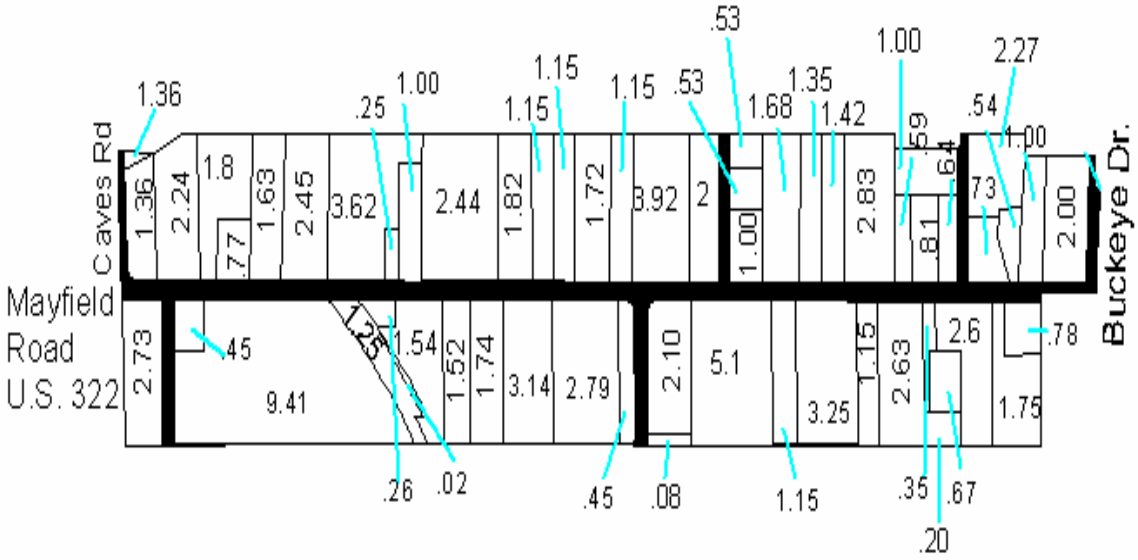
Map 31

Chester Township Commercially Zoned Properties For Portion of Area "B" By Lot Size Total Acreage 67.53



Source: Geauga County Auditor's Office 2001 & Field Survey
Prepared by: Geauga County Planning Commission 2002

Map 32



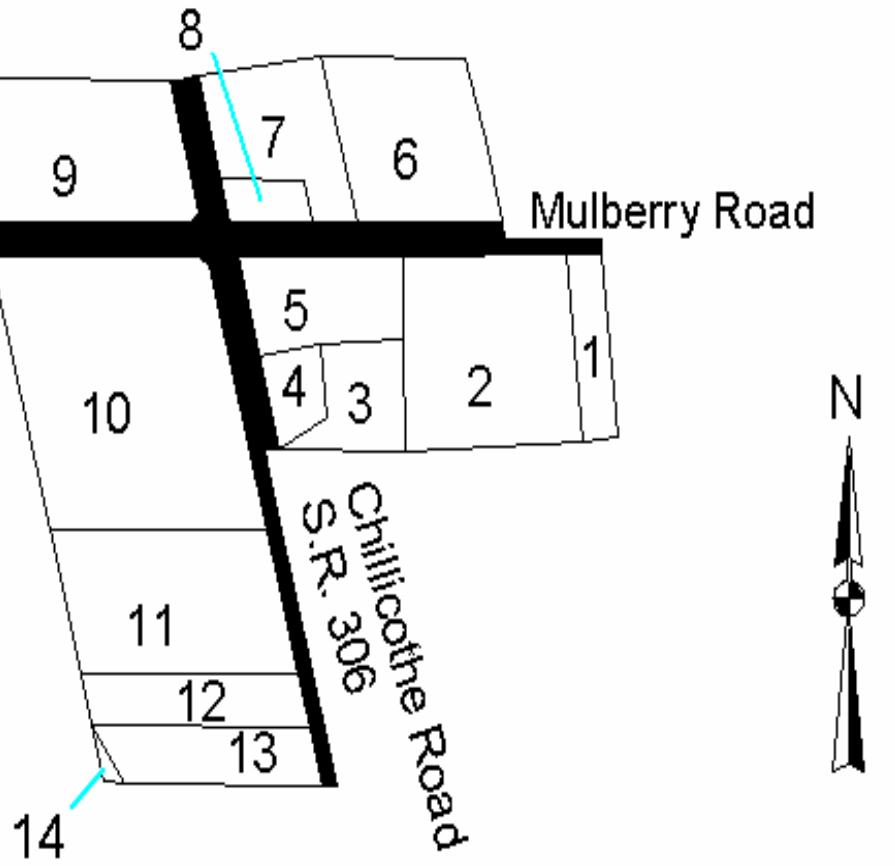
Chester Township Commercially Zoned Properties For Portion of Area "B" By Lot Size Total Acreage 96.63

N

1000 0 1000 2000 Feet

Source: Geauga County Auditor's Office 2001 & Field Survey
Prepared by: Geauga County Planning Commission 2002

Map 33

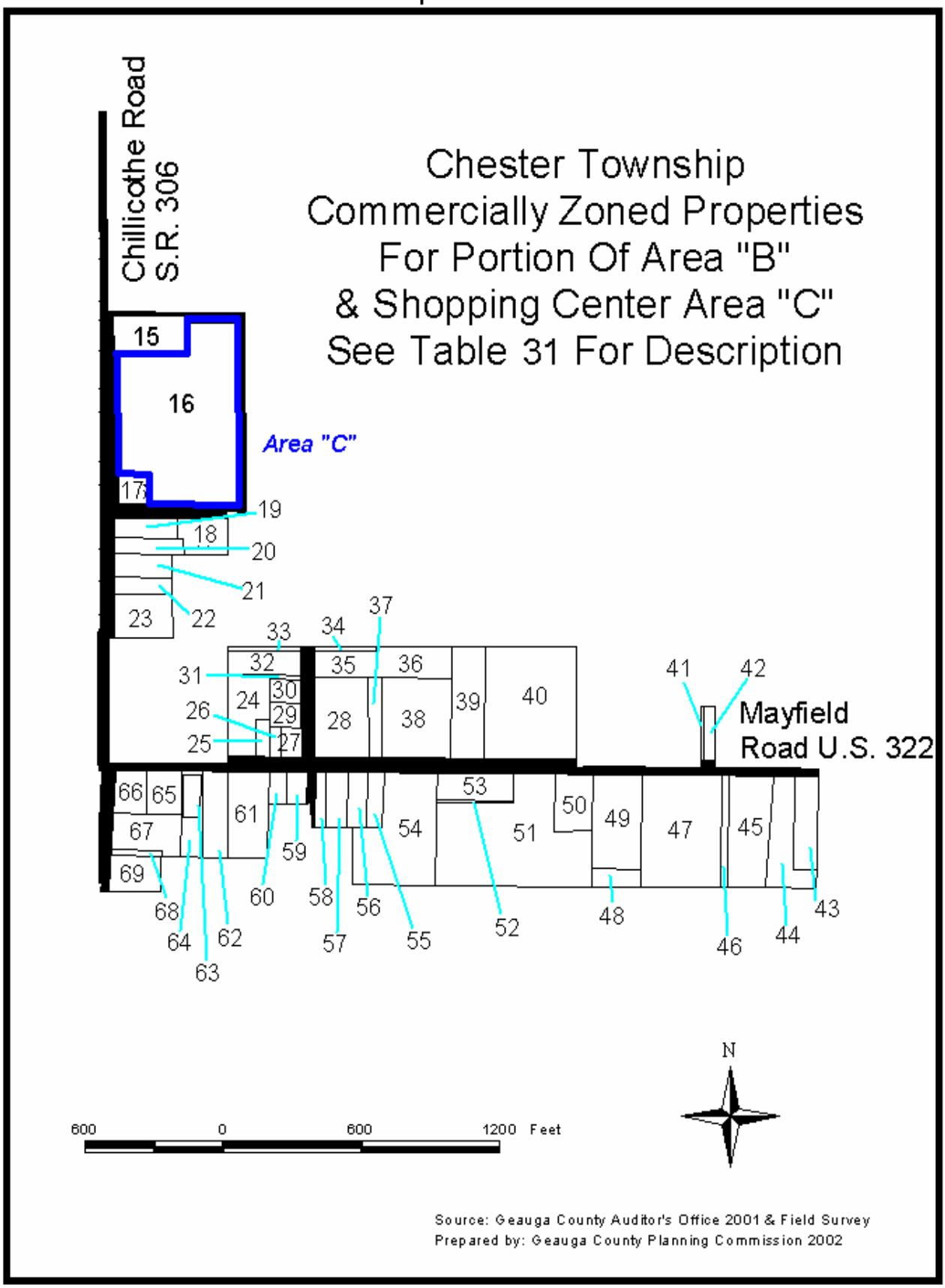


Chester Township
Commercially Zoned Properties
For Area "A"
See Table 30 For Description

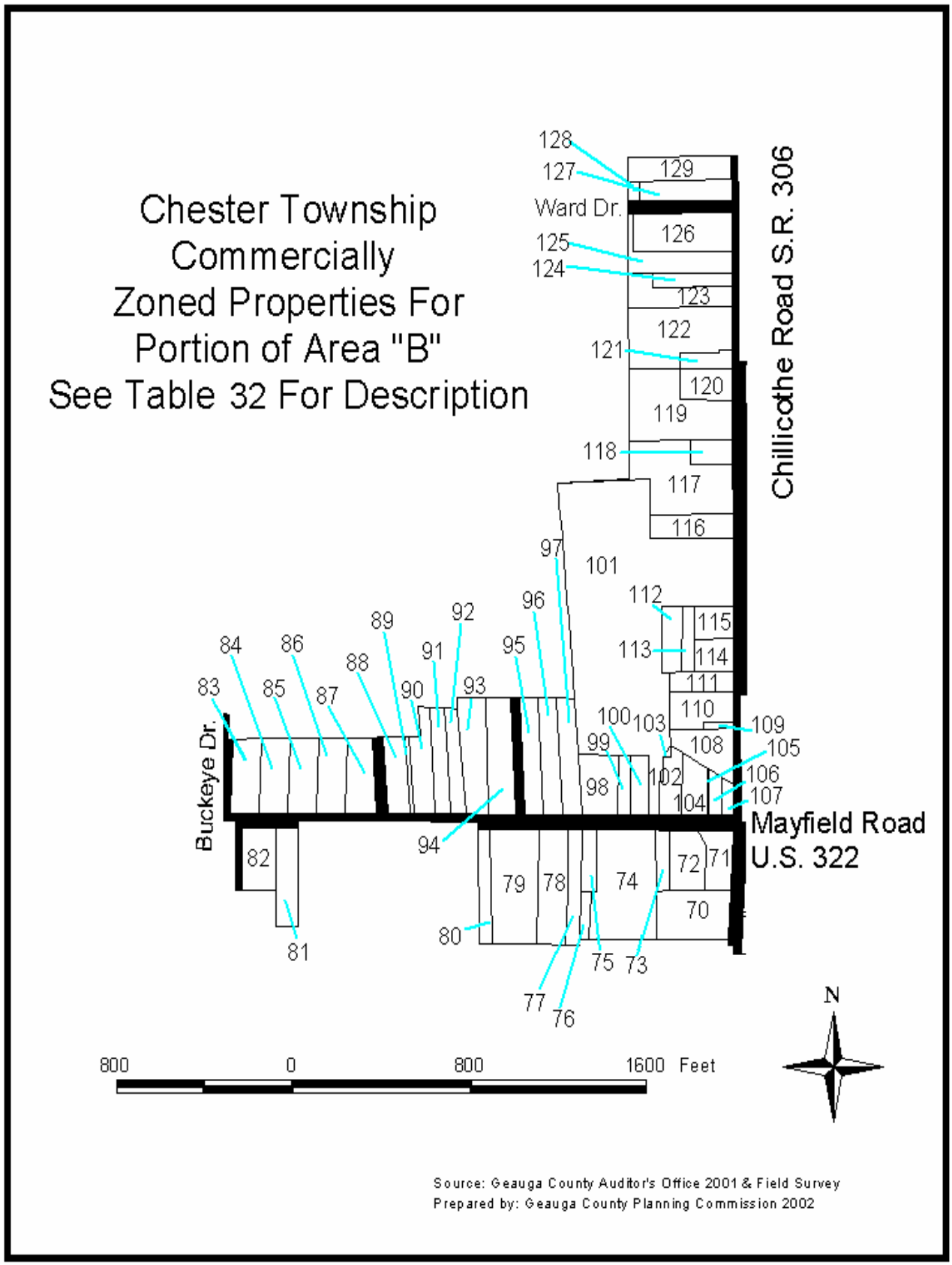
400 0 400 800 Feet

Source: Geauga County Auditor's Office 2001 & Field Survey
Prepared by: Geauga County Planning Commission 2002

Map 34


Chillicothe Road
S.R. 306
Chester Township
Commercially Zoned Properties
For Portion Of Area "B"
& Shopping Center Area "C"
See Table 31 For Description
Area "C"
Mayfield
Road U.S. 322
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
N
600
0
600
1200 Feet
Source: Geauga County Auditor's Office 2001 & Field Survey
Prepared by: Geauga County Planning Commission 2002

Map 35


Chester Township
Commercially
Zoned Properties For
Portion of Area "B"
See Table 32 For Description
Chillicothe Road S.R. 306
Ward Dr.
Buckeye Dr.
Mayfield Road
U.S. 322
128
127
129
126
125
124
123
122
121
120
119
118
117
116
97
101
112
115
113
114
111
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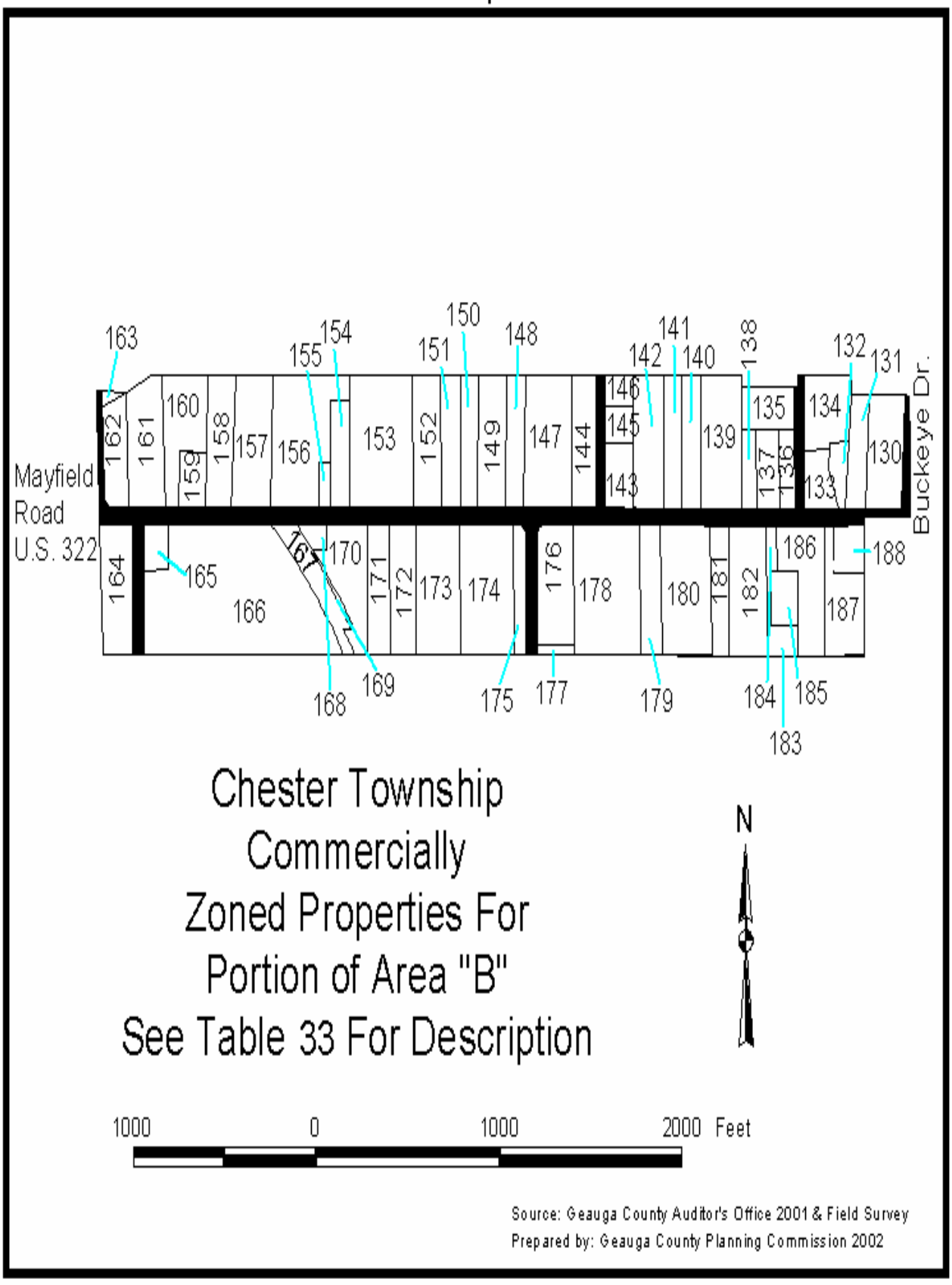
72
71
70
80
75
73
77
76
N
800
0
800
1600 Feet
Source: Geauga County Auditor's Office 2001 & Field Survey
Prepared by: Geauga County Planning Commission 2002

Map 36


Mayfield Road U.S. 322
Buckeye Dr.
163
162
161
160
159
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186
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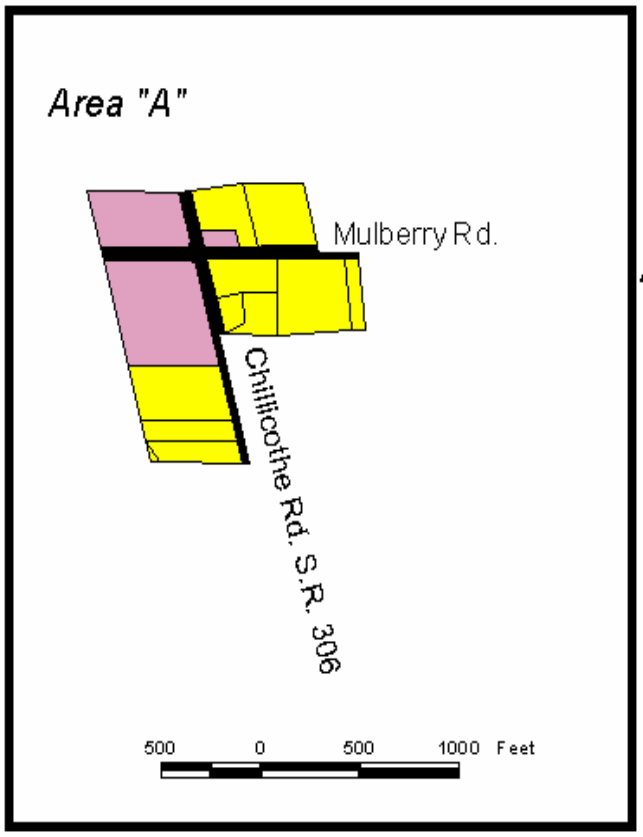
188
Chester Township
Commercially
Zoned Properties For
Portion of Area "B"
See Table 33 For Description
N
1000
0
1000
2000 Feet
Source: Geauga County Auditor's Office 2001 & Field Survey
Prepared by: Geauga County Planning Commission 2002

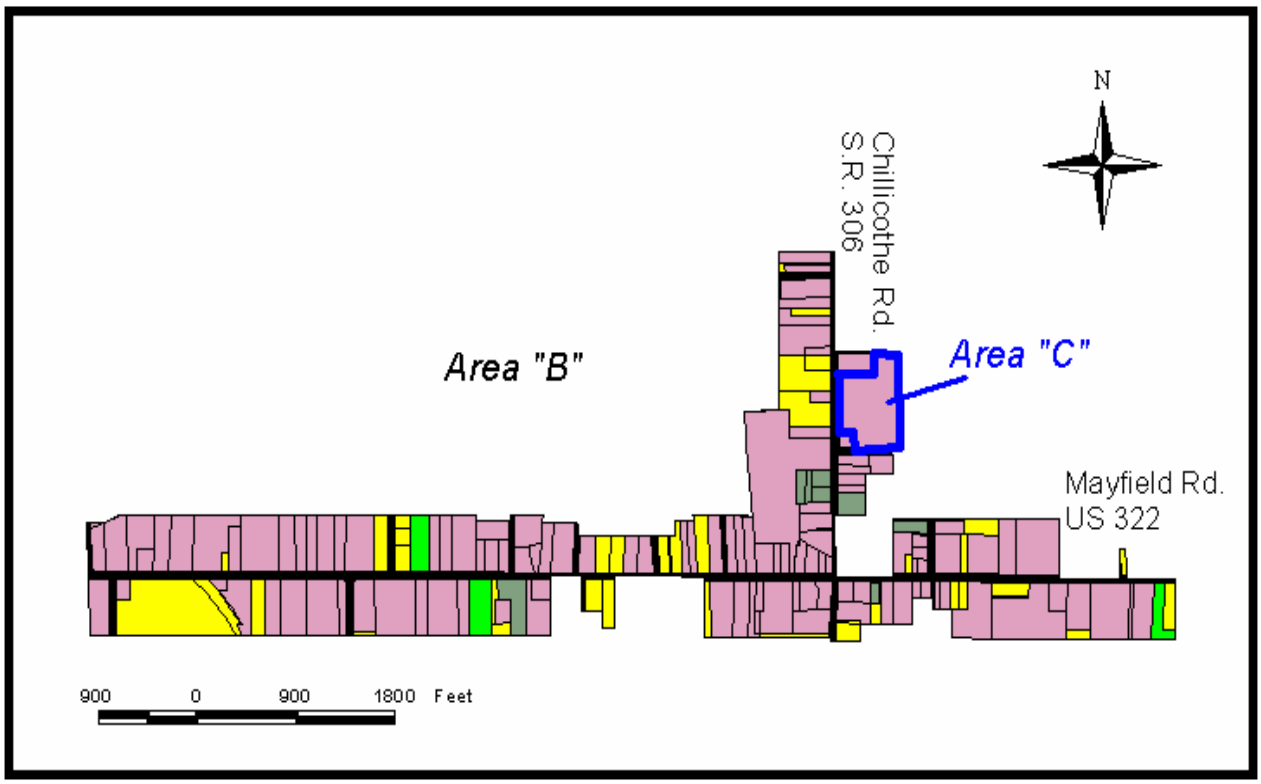
Map 37



Chester Township Commercial Areas "A" & "B" & Shopping Center Area "C" Zoned Properties: County Auditor's Land Use Data For Tax Purposes

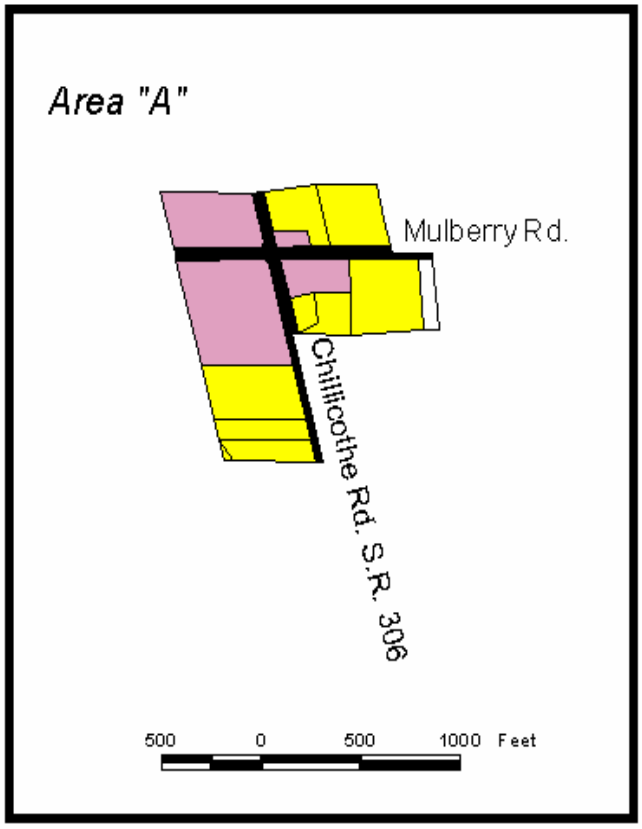
Land Use
- Agriculture 5 acres 2.0%
- Commercial 175 acres 67.9%
- Residential 51 acres 19.7%
- Institutional/Government 5 acres 2.0%
- Roads 21 acres 8.4%

See Table 34 For Description



Source: Geauga County Auditor's Office 2001
Prepared by: Geauga County Planning Commission 2002

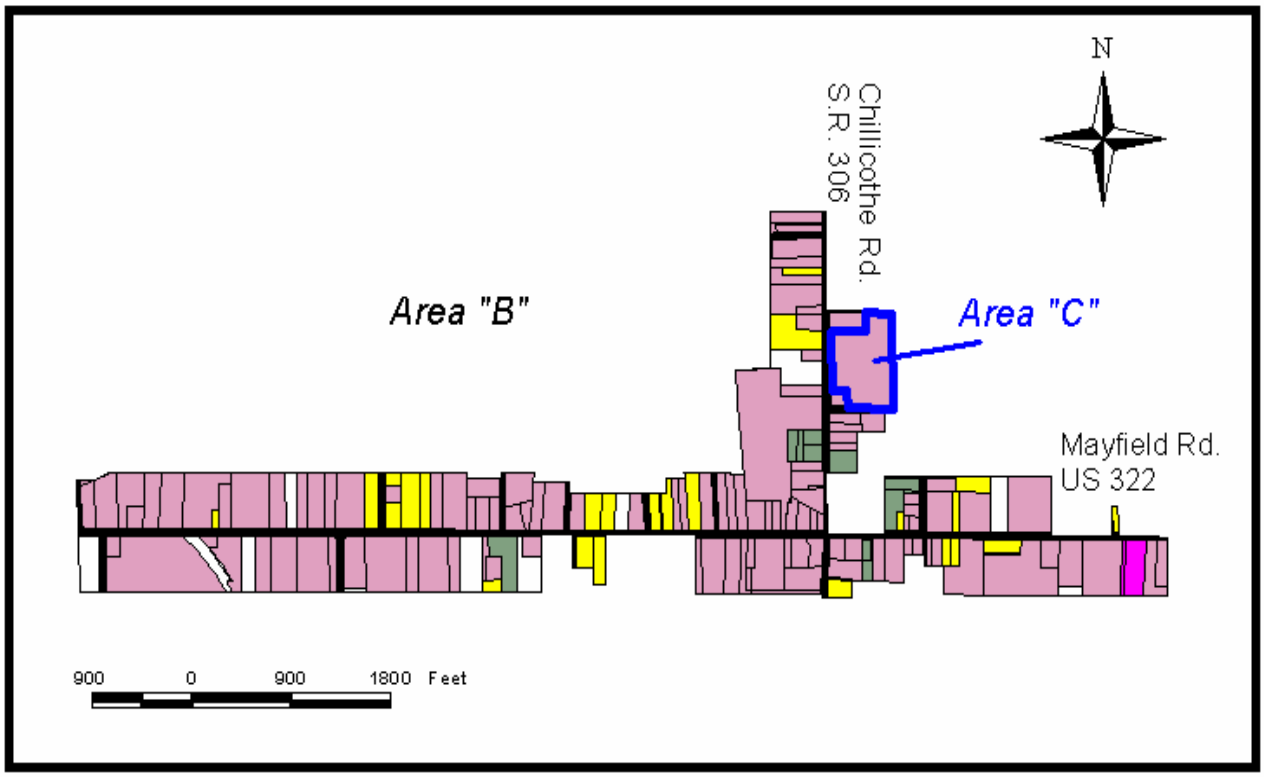
Map 38



Chester Township Commercial Areas "A" & "B" & Shopping Center Area "C" Zoned Properties: Geauga County Planning Commission Existing Land Use

Land Use
- Commercial 173 acres 69.5%
- Institutional 7 acres 2.8%
- Public Utility 2 acres 0.8%
- Residential 31 acres 12.4%
- Vacant 15 acres 6.1%
- Roads 21 acres 8.4%

See Table 34 For Description



Source: Field Survey by Geauga County Planning Commission
Prepared by: Geauga County Planning Commission 2002

Table 30

Description For Commercially Zoned Properties For Area "A"

Chester Township

Map I.D. #	Location	Permanent Parcel #	Owner	Sq. Feet of Bldg(s).	Total Acreage	Current Zoning	Auditor's Classification	GCPC Land Use	Comm. Zoned Acreage
1	S of Mulberry Rd, E of SR 306	11-272630	Branch James & M	N/A	0.50	C	501	V	0.500
2	S of Mulberry Rd, E of SR 306	11-368000	Whitcomb Marilyn	N/A	3.00	C	511	R	3.000
3	E of SR 306, S of Mulberry Rd	11-388989	Butler K&S Trustees	N/A	0.55	C	501	R	0.550
4	E of SR 306, S of Mulberry Rd	11-388988	Butler K&S Trustees	N/A	0.91	C	511	R	0.910
5	SE corner of Mulberry Rd & SR 306	11-047000	Butler S&R Trustees	2,800	1.58	C	599	C	1.580
6	N on Mulberry Rd, E of SR 306	11-046900	Butler K&S Trustees	N/A	2.36	C	511	R	2.360
7	NE corner of Mulberry Rd & SR 306	11-097500	Maloney Linda	N/A	1.65	C	511	R	1.650
8	NE corner of Mulberry Rd & SR 306	11-056130	S&R Income Prop.	2,800	0.47	C	420	C	0.470
9	NW corner of Mulberry Rd & SR 306	11-106500	Beclay John	5,760	3.87	C/R	455	C	3.410
10	SW corner of Mulberry Rd & SR 306	11-237500	Business Laws Inc	11,670	9.45	C/R	447	C	6.200
11	W of SR 306, S of Mulberry Rd	11-186680	Bicans Holdings	N/A	5.00	C/R	511	R	3.100
12	W of SR 306, S of Mulberry Rd	11-210400	Weisend C & L	N/A	2.08	C/R	511	R	1.210
13	W of SR 306, S of Mulberry Rd	11-217620	McKenzie Shelia	N/A	1.06	C	511	R	1.060
14	W of SR 306, S of Mulberry Rd	11-210500	Weisend C & L	N/A	0.07	C	501	V	0.007

Sources: Geauga County Auditor's Office, 2001 | GCPC, 2001 | Chester Township Zoning Map, 1996

Prepared by: Geauga County Planning Commission, 2002

Legend For Table 30

Zoning

C Commercial
R Residential (1.5 acres)

Geauga County Planning Commission Existing Land Use

C Commercial
R Residential
V Vacant

Geauga County Auditor's Tax Classification

420 Small Detached Retail
447 Office Bldg, - 1 & 2 Story
455 Commercial Garage
501 Vacant land (residential)
511 Unplatted 0-9.99 acres
599 Other residential structures

Table 31

Description For Commercially Zoned Properties For Portion Of Area "B" & Shopping Center Area "C"

Chester Township

Map I.D. #	Location	Permanent Parcel #	Owner	Sq. Feet of Bldg(s).	Total Acreage	Current Zoning	Auditor's Classification	GCPC Land Use	Comm. Zoned Acreage
15	SE corner of SR 306 & Seminary Ln	11-069710	Del Broco Prop	7,920	1.29	C	447	C	1.290
16	NE corner of SR 306 & Herrick Dr	11-040800	Consolidated Invest	63,466	7.74	SC	425	C	7.740
17	NE corner of SR 306 & Herrick Dr	11-008500	Radej Leon & B	1,199	0.37	C	455	C	0.370
18	S of Herrick Dr, E of SR 306	11-388884	Petronzio Managm	5,000	0.88	C	499	C	0.880
19	SE corner of SR 306 & Herrick Dr	11-222700	Umit Ramadan	9,204	0.79	C	429	C	0.790
20	E of SR 306, S of Herrick Dr	11-222400	Young Realty Co	6,200	0.50	C	429	C	0.500
21	E of SR 306, S of Herrick Dr	11-292310	Notarian Tony	2,432	0.50	C	420	C	0.500
22	E of SR 306, S of Herrick Dr	11-292320	Notarian Tony	1,000	0.33	C	499	C	0.330
23	E of SR 306, S of Herrick Dr	11-714100	Chester Twp Trustees	N/A	3.09	C	630	INST	3.090
24	N of Mayfield Rd, E of SR 306	11-358100	Chester Twp Trustees	N/A	1.27	C	420	INST	1.270
25	N of Mayfield Rd, E of SR 306	11-139700	Henry Arlene	N/A	0.22	C	511	R	0.220
26	N of Mayfield Rd, E of SR 306	11-280400	Oliverio Anthony	5,460	0.17	C	499	C	0.170
27	NW corner of Mayfield & Opalocka	11-109450	Oliverio Anthony	2,275	0.42	C	447	C	0.420
28	N of Mayfield Rd, E of Opalocka Dr	11-031900	Armand R. Dinardo	3,110	1.99	C	453	C	1.990
29	N of Mayfield Rd, W of Opalocka Dr	11-137200	Oliverio Anthony	1,754	0.31	C	442	C	0.310
30	N of Mayfield Rd, W of Opalocka Dr	11-096700	Ferrara Frank	3,240	0.41	C	455	C	0.410
31	N of Mayfield Rd, W of Opalocka Dr	11-713600	Chester Twp Trustees	N/A	0.08	C	630	INST	0.080
32	N of Mayfield Rd, W of Opalocka Dr	11-713700	Chester Twp Trustees	N/A	0.79	C	630	INST	0.790
33	N of Mayfield Rd, W of Opalocka Dr	11-188100	Larrick Family Ltd	5,843	0.77	C/R	442	C	0.160
34	N of Mayfield Rd, E of Opalocka Dr	11-124800	Enzoco	N/A	0.68	C/R	500	V	0.120

Sources: Geauga County Auditor's Office, 2001 | GCPC, 2001 | Chester Township Zoning Map, 1996

Prepared by: Geauga County Planning Commission, 2002

Table 31 (Cont'd)

Map I.D. #	Location	Permanent Parcel #	Owner	Sq. Feet of Bldg(s).	Total Acreage	Current Zoning	Auditor's Classification	GCPC Land Use	Comm. Zoned Acreage
35	N of Mayfield Rd, E of Opalocka Dr	11-124700	Greiner Gloria Trustee	2,817	0.74	C	499	C	0.740
36	N of Mayfield Rd. E of Opalocka Dr	11-314050	Walczak Marvin	N/A	2.30	C/R	510	R	0.760
37	N of Mayfield Rd, E of Opalocka Dr	11-015100	Balice Constaine	N/A	0.50	C	511	R	0.500
38	N of Mayfield Rd, E of Opalocka Dr	11-285550	Lewis James & J	22,120	2.43	C	499	C	2.430
39	N of Mayfield Rd, E of Opalocka Dr	11-388769	AMP Enterprises	N/A	1.71	C/R3A	400	V	1.630
40	N of Mayfield Rd, E of Opalocka Dr	11-350500	Alaqua Carlof	1,000	12.50	C/R3A	462	C	4.900
41	N of Mayfield Rd, E of Opalocka Dr	11-037400	Brewer Judy Trustee	N/A	0.06	C	501	R	0.060
42	N of Mayfield Rd, E of Opalocka Dr	11-037500	Brewer Judy Trustee	N/A	0.25	C	511	R	0.250
43	S of Mayfield Rd, E of Opalocka Dr	11-205700	Lahner Daniel & M	1,605	1.00	C	511	C	1.000
44	S of Mayfield Rd, E of Opalocka Dr	11-205800	Lahner Daniel & M	1,792	11.55	C/R3A	199	C	1.980
45	S of Mayfield Rd, E of Opalocka Dr	11-600400	CEI	N/A	6.43	C/R3A	470	PU	3.350
46	S of Mayfield Rd, E of Opalocka Dr	11-600600	East Ohio Gas	N/A	0.84	C/R3A	471	PU	0.390
47	S of Mayfield Rd, E of Opalocka Dr	11-256900	DiNardo Armand	N/A	15.14	C/R3A	499	C	4.530
48	S of Mayfield Rd, E of Opalocka Dr	11-116600	Gibson Janet	12,060	8.00	C/R3A	501	V	0.360
49	S of Mayfield Rd, E of Opalocka Dr	11-160200	Austin James & K	3,818	2.02	C	429	C	2.020
50	S of Mayfield Rd, E of Opalocka Dr	11-056700	Montgomery Scott	4,329	1.06	C	499	C	1.060
51	S of Mayfield Rd, E of Opalocka Dr	11-257500	Maywood Park Inc	N/A	21.79	C/R3A	415	C	6.330

Sources: Geauga County Auditor's Office, 2001 GCPC, 2001 Chester Township Zoning Map, 1996

Prepared by: Geauga County Planning Commission, 2002

Table 31 (Cont'd)

Map I.D. #	Location	Permanent Parcel #	Owner	Sq. Feet of Bldg(s).	Total Acreage	Current Zoning	Auditor's Classification	GCPC Land Use	Comm. Zoned Acreage
52	S of Mayfield Rd, E of Opalocka Dr	11-024500	Geauga Hospital	N/A	0.02	C	501	R	0.020
53	S of Mayfield Rd, E of Opalocka Dr	11-024400	Geauga Hospital	N/A	1.33	C	511	R	1.330
54	S of Mayfield Rd, E of Opalocka Dr	11-018700	Petronzio Leo	9,380	17.00	C/R3A	417	C	3.470
55	S of Mayfield Rd, E of Opalocka Dr	11-278200	Randell Robert	N/A	0.05	C	511	R	0.050
56	S of Mayfield Rd, E of Opalocka Dr	11-281100	Paganini School	N/A	0.50	C	511	R	0.050
57	S of Mayfield Rd, E of Opalocka Dr	11-253350	Paganini Emil	3,548	0.50	C	429	C	0.050
58	SE corner of Mayfield & Opalocka	11-253340	Paganini Emil	N/A	0.29	C	400	C	0.290
59	SW corner of Mayfield & Opalocka	11-109500	Galiardi William	N/A	0.27	C	400	C	0.270
60	S of Mayfield Rd, E of SR 306	11-109400	Galiardi William	2,640	0.21	C	429	C	0.210
61	S of Mayfield Rd, E of SR 306	11-152400	Horvath Doris	3,600	2.87	C/R	455	C	2.090
62	S of Mayfield Rd, E of SR 306	11-073910	Ambrose John & B	7,596	0.96	C	454	C	0.960
63	S of Mayfield Rd, E of SR 306	11-710800	Pilla Anthony	N/A	0.37	C	685	INST	0.370
64	S of Mayfield Rd, E of SR 306	11-141640	Pilla Anthony	N/A	0.48	C	511	INST	0.480
65	S of Mayfield Rd, E of SR 306	11-247300	May. & Chill. Roads	2,866	0.73	C	400	C	0.730
66	SE corner of Mayfield Rd & SR 306	11-144000	May. & Chill. Roads	1,232	0.78	C	420	C	0.780
67	E of SR 306, S of Mayfield Rd	11-002100	Albino Michael	11,900	1.23	C	425	C	1.230
68	E of SR 306, S of Mayfield Rd	11-098100	Heisley Hopkins	N/A	0.08	C	501	R	0.080
69	E of SR 306, S of Mayfield Rd	11-097900	Heisley Hopkins	N/A	0.72	C	511	R	0.720

Sources: Geauga County Auditor's Office, 2001 GCPC, 2001 Chester Township Zoning Map, 1996

Prepared by: Geauga County Planning Commission, 2002

Legend For Table 31

Zoning

C	Commercial
R	Residential (1.5 acres)
R3A	Residential (3 acres)
SC	Shopping Center

Geauga County Planning Commission Existing Land Use

C	Commercial
INST	Institutional
PU	Public Utility
R	Residential
V	Vacant

Geauga County Auditor's Tax Classification

199	Other agricultural use
400	Vacant (commercial)
415	Mobile home Park
417	C.A.U.V.
420	Small detached retail
425	Neighborhood shop center
429	Other retail structure
442	Medical clinic and offices
447	Office bldg. – 1 & 2 story
453	Car wash
454	Auto sales and service
455	Commercial garage
462	Golf range/mini course
470	CEI vacant
471	East Ohio Gas vacant
499	Other commercial structures
500	Vacant land (residential)
501	Unplatted vacant land (residential)
510	One-family dwelling
511	Unplatted 0-9.99 acres
630	Owned by township
685	Churches, public worship

Table 32

Description For Commercially Zoned Properties For Portion Of Area "B"
Chester Township

Map I.D. #	Location	Permanent Parcel #	Owner	Sq. Feet of Bldg(s).	Total Acreage	Current Zoning	Auditor's Classification	GCPC Land Use	Comm. Zoned Acreage
70	W of SR 306, S of Mayfield Rd	11-275650	Greenbaum Ronald	17,997	1.68	C	429	C	1.680
71	SW corner of SR 306 & Mayfield Rd	11-327800	BP Exploration	4,508	0.99	C	452	C	0.990
72	S of Mayfield Rd, W of SR 306	11-243420	Chester Properties	10,360	1.01	C	499	C	1.010
73	S of Mayfield Rd, W of SR 306	11-173600	JGT Enterprises	6,608	0.39	C	447	C	0.390
74	S of Mayfield Rd, W of SR 306	11-262400	Spence William	3,920	3.16	C	435	C	3.160
75	S of Mayfield Rd, W of SR 306	11-362800	D & L Investment	16,952	0.45	C	447	C	0.450
76	S of Mayfield Rd, W of SR 306	11-362900	D & L Investment	N/A	0.24	C	400	C	0.240
77	S of Mayfield Rd, W of SR 306	11-268200	Phillips Raymond	1,624	0.71	C	400	C	0.710
78	S of Mayfield Rd, W of SR 306	11-268000	Baker G R	1,889	1.49	C	435	C	1.490
79	S of Mayfield Rd, W of SR 306	11-265410	Petronzio Roseann	20,200	2.95	C/R	425	C	2.490
80	S of Mayfield Rd, W of SR 306	11-388912	Petronzio Edward	N/A	3.04	C/R	511	C	0.690
81	S of Mayfield Rd, W of SR 306	11-028200	Cocca Giglio	N/A	1.00	C	510	R	1.000
82	SE corner of Mayfield Rd & Lynn Dr	11-242700	Newcomer Robert	N/A	1.03	C	510	R	1.030
83	NE corner of Mayfield & Buckeye Dr	11-264200	Premeir Restaurant	1,176	1.00	C	435	C	1.000
84	N of Mayfield Rd, E of Buckeye Dr	11-075100	Del Balso Joseph	N/A	1.00	C	510	R	1.000
85	N of Mayfield Rd, E of Buckeye Dr	11-190100	DiLillo Frank	N/A	1.00	C	510	R	1.000
86	N of Mayfield Rd, E of Buckeye Dr	11-321060	Aster Ferdinard	N/A	1.00	C	400	V	1.000
87	NW corner of Mayfield & Woodside	11-321050	Aster Ferdinard	2,714	1.00	C	429	C	1.000
88	NE corner of Mayfield & Woodside	11-103300	Foster Margret	N/A	0.79	C	511	R	0.790
89	N of Mayfield Rd, E of Woodside Dr	11-103200	Foster Margret	N/A	0.11	C	501	R	0.110

Sources: Geauga County Auditor's Office, 2001 | GCPC, 2001 | Chester Township Zoning Map, 1996

Prepared by: Geauga County Planning Commission, 2002

Table 32 (Cont'd)

Map I.D. #	Location	Permanent Parcel #	Owner	Sq. Feet of Bldg(s).	Total Acreage	Current Zoning	Auditor's Classification	GCPC Land Use	Comm. Zoned Acreage
90	N of Mayfield Rd, E of Woodside Dr	11-103500	Foster Margret	N/A	0.95	C	501	R	0.950
91	N of Mayfield Rd, E of Woodside Dr	11-252400	Macdonald Arlene	2,760	0.66	C	447	C	0.660
92	N of Mayfield Rd, E of Woodside Dr	11-128550	Peltz Joyce	3,276	0.66	C	447	C	0.660
93	N of Mayfield Rd, E of Woodside Dr	11-339600	Marra Alfonso	N/A	1.36	C	511	R	1.360
94	NW corner of Mayfield Rd & Ward	11-174200	Capretta John	7,059	1.36	C	420	C	1.360
95	NE corner of Mayfield Rd & Ward	11-052600	Castrataro Mary	3,760	1.00	C	447	C	1.000
96	N of Mayfield Rd, E of Ward Dr	11-283300	Kaim Frank	3,879	0.99	C	447	C	0.990
97	N of Mayfield Rd, E of Ward Dr	11-153900	Caves Road LLC	6,680	1.00	C	430	C	1.000
98	N of Mayfield Rd, E of Ward Dr	11-320100	Cipriani Investments	10,982	1.12	C	447	C	1.120
99	N of Mayfield Rd, E of Ward Dr	11-099500	First National Bank	N/A	0.43	C	400	C	0.430
100	N of Mayfield Rd, E of Ward Dr	11-099400	First National Bank	5,192	0.44	C	444	C	0.440
101	N of Mayfield Rd, W of SR 306	11-366800	West Geauga Plaza	130,309	13.51	C	426	C	13.510
102	N of Mayfield Rd, W of SR 306	11-055670	Janki Phillip	2,400	0.49	C	453	C	0.490
103	N of Mayfield Rd, W of SR 306	11-389166	Janki Phillip	N/A	0.02	C	400	C	0.020
104	N of Mayfield Rd, W of SR 306	11-184100	Mayfield Enterprises	8,116	0.45	C	420	C	0.450
105	N of Mayfield Rd, W of SR 306	11-389039	Mayfield Enterprises	N/A	0.04	C	400	C	0.040
106	N of Mayfield Rd, W of SR 306	11-311500	True North Energy	N/A	0.18	C	400	C	0.180
107	NW corner of Mayfield Rd & SR 306	11-311400	True North Energy	1,450	0.15	C	452	C	0.150
108	W of SR 306, N of Mayfield Rd	11-358300	Chillicothe Rd LLC	4,856	1.00	C	435	C	1.000
109	W of SR 306, N of Mayfield Rd	11-358200	Chillicothe Rd LLC	N/A	0.08	C	400	C	0.080

Sources: Geauga County Auditor's Office, 2001 | GCPC, 2001 | Chester Township Zoning Map, 1996
Prepared by: Geauga County Planning Commission, 2002

Table 32 (Cont'd)

Map I.D. #	Location	Permanent Parcel #	Owner	Sq. Feet of Bldg(s).	Total Acreage	Current Zoning	Auditor's Classification	GCPC Land Use	Comm. Zoned Acreage
110	W of SR 306, N of Mayfield Rd	11-262700	Adelman Real Est	1,782	0.87	C	455	C	0.870
111	W of SR 306, N of Mayfield Rd	11-246400	Adelman Real Est	8,560	0.50	C	480	C	0.500
112	W of SR 306, N of Mayfield Rd	11-710600	Chesterland Bapt	N/A	0.50	C	685	INST	0.500
113	W of SR 306, N of Mayfield Rd	11-710500	Chesterland Bapt	N/A	0.33	C	685	INST	0.330
114	W of SR 306, N of Mayfield Rd	11-710400	Chesterland Bapt	N/A	0.50	C	685	INST	0.500
115	W of SR 306, N of Mayfield Rd	11-710300	Chesterland Bapt	N/A	0.50	C	685	INST	0.500
116	W of SR 306, N of Mayfield Rd	11-337900	Swogger Emily	4,746	0.84	C	499	C	0.840
117	W of SR 306, N of Mayfield Rd	11-338000	Swogger Emily	N/A	3.47	C/R	501	V	2.600
118	W of SR 306, N of Mayfield Rd	11-266000	Petronzio Managemt	4,000	0.50	C	499	C	0.500
119	W of SR 306, N of Mayfield Rd	11-337800	Swogger Emily	N/A	4.63	C/R	511	R	2.580
120	W of SR 306, N of Mayfield Rd	11-253900	Pederson Cheryl	1,219	0.75	C	511	C	0.750
121	W of SR 306, N of Mayfield Rd	11-223320	Austin James & K	2,268	0.49	C	447	C	0.490
122	W of SR 306, N of Mayfield Rd	11-223300	Pilla Antonio & L	27,570	4.67	C/R	425	C	2.820
123	W of SR 306, N of Mayfield Rd	11-351100	Gattozzi Nicholas	3,200	2.00	C/R	499	C	0.860
124	W of SR 306, N of Mayfield Rd	11-351000	Gattozzi Nicholas	N/A	0.44	C	511	R	0.440
125	W of SR 306, N of Mayfield Rd	11-111300	JPH Properties	5,010	1.91	C/R	441	C	1.050
126	SW corner of SR 306 & Ward Dr	11-351050	Travarca Sam	11,128	2.00	C	420	C	2.000
127	NW corner of SR 306 & Ward Dr	11-187800	Langford Richard	1,554	1.06	C	442	C	1.060
128	W of SR 306, N of Ward Dr	11-009100	Ward Properties	N/A	0.11	C	501	C	0.110
129	W of SR 306, N of Ward Dr	11-009000	Ward Properties	2,415	1.11	C	401	C	1.110

Sources: Geauga County Auditor's Office, 2001 GCPC, 2001 Chester Township Zoning Map, 1996
Prepared by: Geauga County Planning Commission, 2002

Legend For Table 32

Zoning

C	Commercial
R	Residential (1.5 acres)

Geauga County Planning Commission Existing Land Use

C	Commercial
INST	Institutional
R	Residential
V	Vacant

Geauga County Auditor's Tax Classification

400	Vacant land (commercial)
420	Small detached retail
425	Neighborhood shop center
426	Community shop center
429	Other retail structure
430	Restaurant, café and/or bar
435	Drive-in restaurant
441	Funeral Home
442	Medical clinic and office
444	Full service bank
499	Other commercial structures
447	Office building – 1 and 2 story
452	Auto service station
453	Car wash
455	Commercial garage
480	Commercial warehouse
499	Other commercial structures
501	Unplatted vacant lot
510	One-family dwelling
511	Unplatted 09-9.99 acres
685	Churches, public worship

Table 33

Description For Commercially Zoned Properties For Portion Of Area "B"
Chester Township

Map I.D. #	Location	Permanent Parcel #	Owner	Sq. Feet of Bldg(s).	Total Acreage	Current Zoning	Auditor's Classification	GCPC Land Use	Comm. Zoned Acreage
130	NW corner of Mayfield & Buckeye	11-239910	Petronzio Managemt	15,428	2.00	C	442	C	2.000
131	N of Mayfield Rd, W of Buckeye Dr	11-167760	Kelling Robert	3,900	1.00	C	429	C	1.000
132	N of Mayfield Rd, W of Buckeye Dr	11-389070	Petronzio Managemt	N/A	0.54	C	400	C	0.540
133	NE corner of Mayfield & Valley View	11-211000	Master Realty	1,360	0.73	C	455	C	0.730
134	N of Mayfield E of Valley View Dr	11-265800	Petronzio Managemt	19,935	2.27	C	447	C	2.270
135	N of Mayfield W of Valley View Dr	11-362770	Weber William	100	1.00	C	499	C	1.000
136	NW corner of Mayfield & Valley View	11-199820	Wantz Properties	N/A	0.64	C	400	C	0.640
137	N of Mayfield Rd, E of Harold Dr	11-199810	Wantz Robert	5,274	0.81	C	430	C	0.810
138	N of Mayfield Rd, E of Harold Dr	11-068550	Cvelbar Carol	4,310	0.59	C	441	C	0.590
139	N of Mayfield Rd, E of Harold Dr	11-362780	Weber William	20,083	13.00	C/R	499	C	2.830
140	N of Mayfield Rd, E of Harold Dr	11-362760	Weber William	N/A	6.09	C/R	400	C	1.420
141	N of Mayfield Rd, E of Harold Dr	11-331400	Phoenix Properties	944	5.91	C/R	499	R	1.350
142	N of Mayfield Rd, E of Harold Dr	11-361000	Ianiro Michele	N/A	10.00	C/R	199	R	1.680
143	NE corner of Mayfield Rd & Harold	11-281500	Godale William	N/A	1.00	C	511	R	1.000
144	NW corner of Mayfield Rd & Harold	11-341000	Marx William & L	N/A	2.00	C	511	R	2.000
145	N of Mayfield, East of Harold Dr	11-092110	Evans Doris	N/A	0.53	C	510	R	0.530
146	N of Mayfield, East of Harold Dr	11-192200	Natran J & P	N/A	0.53	C	510	R	0.530
147	N of Mayfield Rd, W of Harold Dr	11-210110	Marx William & L	N/A	15.52	C/R3A	400	C	3.920
148	N of Mayfield Rd, W of Harold Dr	11-210100	Marx William & L	2,028	1.67	C/R3A	454	C	1.150
149	N of Mayfield Rd, W of Harold Dr	11-210120	Marx William & L	13,797	2.50	C/R3A	455	C	1.720

Sources: Geauga County Auditor's Office, 2001 | GCPC, 2001 | Chester Township Zoning Map, 1996
Prepared by: Geauga County Planning Commission, 2002

Table 33 (Cont'd)

Map I.D. #	Location	Permanent Parcel #	Owner	Sq. Feet of Bldg(s).	Total Acreage	Current Zoning	Auditor's Classification	GCPC Land Use	Comm. Zoned Acreage
150	N of Mayfield Rd, W of Harold Dr	11-089830	TKD Properties	6,456	1.67	C/R3A	455	C	1.150
151	N of Mayfield Rd, W of Harold Dr	11-070600	Daniels Bros Fuel	N/A	1.67	C/R3A	499	V	1.150
152	N of Mayfield Rd, W of Harold Dr	11-351400	K & L Property Mgmt	8,400	2.65	C/R3A	455	C	1.820
153	N of Mayfield Rd, W of Harold Dr	11-304100	Oberle John Trustee	4,398	6.00	C/R3A	429	C	2.440
154	N of Mayfield Rd, W of Harold Dr	11-077800	Bill Mar Properties	7,180	1.00	C	499	C	1.000
155	N of Mayfield Rd, W of Harold Dr	11-226500	Mills Bernice	N/A	0.25	C	511	R	0.250
156	N of Mayfield Rd, W of Harold Dr	11-227200	Suglia Mike	4,971	4.11	C/R3A	455	C	3.620
157	N of Mayfield Rd, E of Caves Rd	11-080600	Yerman Anthony	12,876	2.61	C/R3A	455	C	2.450
158	N of Mayfield Rd, E of Caves Rd	11-167800	Chapic Susan	978	1.85	C/R3A	499	C	1.630
159	N of Mayfield Rd, E of Caves Rd	11-304800	Spuzzillo Gerald	2,281	0.77	C	447	C	0.770
160	N of Mayfield Rd, E of Caves Rd	11-304700	Spuzzillo Gerald	N/A	2.09	C/R3A	400	C	1.800
161	N of Mayfield Rd, E of Caves Rd	11-234470	Haag June	3,181	2.24	C	447	C	2.240
162	NE corner of Mayfield Rd & Caves	11-181100	Kreuz P Trustee	1,867	1.36	C	452	C	1.360
163	N of Mayfield Rd, E of Caves Rd	11-181000	Kreuz P Trustee	N/A	0.13	C	400	V	0.130
164	SW corner of Mayfield Rd & Caves	11-211500	Mayfield United Ch	1,867	29.20	C/R3A	400	V	2.730
165	SE corner of Mayfield Rd & Caves	11-349300	Marino Michael	1,680	0.45	C	455	C	0.450
166	S of Mayfield Rd, E of Caves Rd	11-199600	Caves Road LLC	N/A	9.41	C	501	C	9.410
167	S of Mayfield Rd, E of Caves Rd	11-259900	Caves Road LLC	N/A	1.75	C/R	501	V	1.250
168	S of Mayfield Rd, E of Caves Rd	11-030200	Bloom Brothers	4,090	0.26	C	429	C	0.260
169	S of Mayfield Rd, E of Caves Rd	11-030300	Bloom Brothers	N/A	0.02	C	400	C	0.020

Sources: Geauga County Auditor's Office, 2001 | GCPC, 2001 | Chester Township Zoning Map, 1996
Prepared by: Geauga County Planning Commission, 2002

Table 33 (Cont'd)

Map I.D. #	Location	Permanent Parcel #	Owner	Sq. Feet of Bldg(s).	Total Acreage	Current Zoning	Auditor's Classification	GCPC Land Use	Comm. Zoned Acreage
170	S of Mayfield Rd, E of Caves Rd	11-030500	Bloom Brothers	20,000	1.74	C/R	420	C	1.540
171	S of Mayfield Rd, E of Caves Rd	11-262850	Fialko Brian Trustee	N/A	2.20	C/R	501	V	1.520
172	S of Mayfield Rd, E of Caves Rd	11-273360	DeLaat David	3,093	2.34	C/R3A	447	C	1.740
173	S of Mayfield Rd, W of Laser Dr	11-388974	Cianci Angelo	N/A	3.14	C	400	C	3.140
174	S of Mayfield Rd, W of Laser Dr	11-385400	Cianci Angelo	62,264	2.79	C	426	C	2.790
175	SW corner of Mayfield Rd & Laser	11-389066	Cianci Angelo	N/A	0.45	C	400	C	0.450
176	SE corner of Mayfield Rd & Laser	11-207900	Levy Nelson	8,160	2.10	C	480	C	2.100
177	S of Mayfield Rd, E of Laser Dr	11-388973	Cianci Angelo	N/A	0.28	C/R3A	500	V	0.080
178	S of Mayfield Rd, E of Laser Dr	11-170700	Kirby James	20,873	36.00	C/R3A	425	C	5.100
179	S of Mayfield Rd, E of Laser Dr	11-260600	Perko Stanley	1,240	1.15	C	499	C	1.150
180	S of Mayfield Rd, E of Laser Dr	11-325700	Perko Stanley	N/A	3.25	C	400	C	3.250
181	S of Mayfield Rd, E of Laser Dr	11-244100	Nolan John	2,100	1.50	C/R3A	499	C	1.150
182	S of Mayfield Rd, E of Laser Dr	11-363700	Ritchie Scott	N/A	28.50	C/R3A	199	V	2.630
183	S of Mayfield Rd, E of Laser Dr	11-233700	Cavasini B & D	N/A	1.54	C/R3A	511	R	0.200
184	S of Mayfield Rd, E of Laser Dr	11-233610	Parisi Joseph & C	N/A	0.35	C	501	C	0.350
185	S of Mayfield Rd, E of Laser Dr	11-233600	Parisi Joseph & C	2,040	0.67	C	442	C	0.670
186	S of Mayfield Rd, E of Laser Dr	11-714404	Geauga Co Comm	N/A	26.69	C/R3A	620	INST	2.600
187	S of Mayfield Rd, E of Laser Dr	11-060700	DiNardo Armand	N/A	1.75	C	400	V	1.750
188	S of Mayfield Rd, E of Laser Dr	11-060600	OTG 3 LLC	924	0.78	C	452	C	0.780

Sources: Geauga County Auditor's Office, 2001 | GCPC, 2001 | Chester Township Zoning Map, 1996

Prepared by: Geauga County Planning Commission, 2002

Legend For Table 33

Zoning

C	Commercial
R	Residential (1.5 acres)
R3A	Residential (3 acres)

Geauga County Planning Commission Existing Land Use

C	Commercial
INST	Institutional
R	Residential
V	Vacant

Geauga County Auditor's Tax Classification

199	Other agricultural uses
400	Vacant land (commercial)
401	04-19 Apartment rental
420	Small detached retail
425	Neighborhood shop center
426	Community shop center
429	Other retail structures
430	Restaurant, café and/or bar
442	Medical clinic and offices
447	Office building - 1 and 2 story
452	Auto service station
454	Auto sales and service
455	Commercial garage
499	Other commercial structures
500	Vacant land (residential)
501	Unplatted vacant lot
510	One-family dwelling
511	Unplatted 0-9.99 acres
620	Owned by county

Table 34

Grand Totals For Tables 30 To 33

Current Zoning (applicable parcels) per Chester Township Zoning Map (1996)

	District	Acres	%
C	Commercial	249.3	49.4%
R	Residential (1.5acres)	46.8	9.4%
R3A	Residential (3 acres)	200.2	39.7%
SC	Shopping Center	7.7	1.5%

Existing Land Use for Commercial Zone by Geauga County Planning Commission (2001)

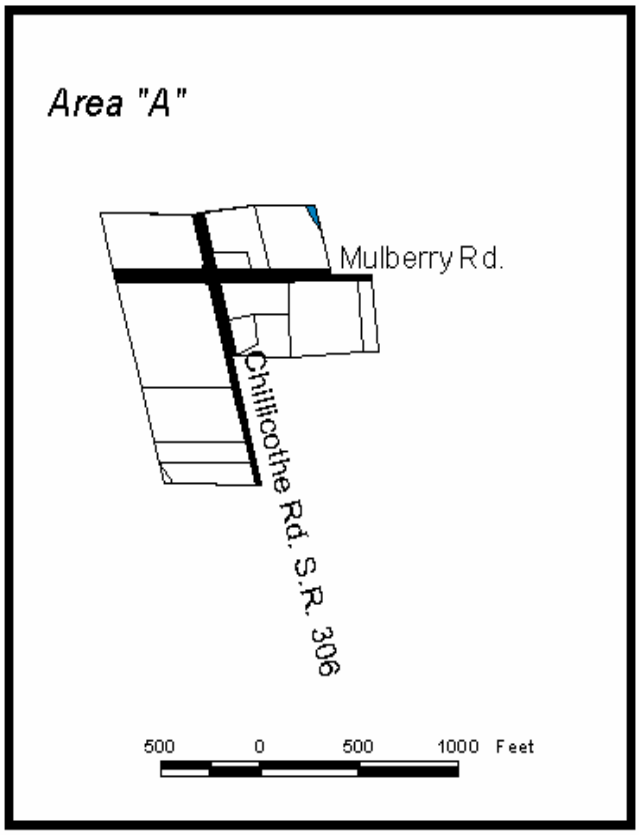
	Land Use	Acres	%
C	Commercial	194.2	75.6%
INST	Institutional	6.2	2.4%
PU	Public Utility	3.7	1.4%
R	Residential	35.7	13.9%
V	Vacant	17.2	6.7%

Table 35

Tax Classification By Geauga County Auditor (2001)

Auditor's Classification	Parcel Acreage		Commercial Acreage	
	Acres	%	Acres	%
199 Vacant Land (agricultural)	50.05	9.9%	6.29	2.4%
400 Vacant Land (commercial)	66.88	13.7%	23.77	9.2%
401 04-19 Apt Rental Unit	1.11	0.2%	1.11	0.4%
415 Mobile Home Park	21.79	4.3%	5.97	2.3%
417 C.A.U.V.	17.0	3.4%	3.47	1.4%
420 Small Det Retail (-10000)	8.57	1.7%	8.37	3.2%
425 Neighborhood Shop Center	50.59	10.0%	19.38	7.5%
426 Community Shop Center	16.3	3.2%	16.3	6.3%
429 Other Retail Structure	13.17	2.6%	9.61	3.7%
430 Rest., Café and/or Bar	1.81	0.3%	1.81	0.7%
435 Drive-in Restaurant	6.65	1.3%	6.65	2.6%
441 Funeral Home	2.50	0.5%	2.50	0.9%
442 Medical Clinic & Offices	3.73	0.7%	3.73	1.4%
444 Full Service Bank	.44	0.01%	.44	0.2%
447 Office Bldg. – 1 & 2 Story	20.09	4.0%	16.58	6.5%
452 Auto Service Station	3.28	0.6%	3.28	1.3%
453 Car Wash	2.48	0.5%	2.48	0.9%
454 Auto Sales and Service	2.63	0.5%	2.11	0.8%
455 Comm Garage	22.74	4.5%	18.72	7.3%
462 Golf Range Mini/Mini Course	12.50	2.5%	4.9	1.9%
470 CEI vacant	6.43	1.3%	3.35	1.3%
471 East Ohio Gas vacant	.84	0.2%	.39	0.2%
480 Comm Warehouse	2.6	0.5%	2.6	1.0%
499 Other Commercial Structures	32.84	6.5%	19.85	7.7%
500 Vacant Land (residential)	24.88	4.9%	15.87	6.2%
501 Unplatted Vacant Lot	19.45	3.9%	17.51	6.8%
510 One-Family Dwelling	3.36	0.7%	1.82	0.7%
511 Unplatted 0-09.99 acres	40.94	8.1%	32.64	12.7%
599 Other Residential Structures	1.58	0.3%	1.58	0.6%
620 Owned by County	26.69	5.3%	2.6	1.0%
630 Owned by Township	3.96	0.8%	3.96	1.5%
685 Churches, Public Worship	2.2	0.4%	2.2	0.8%

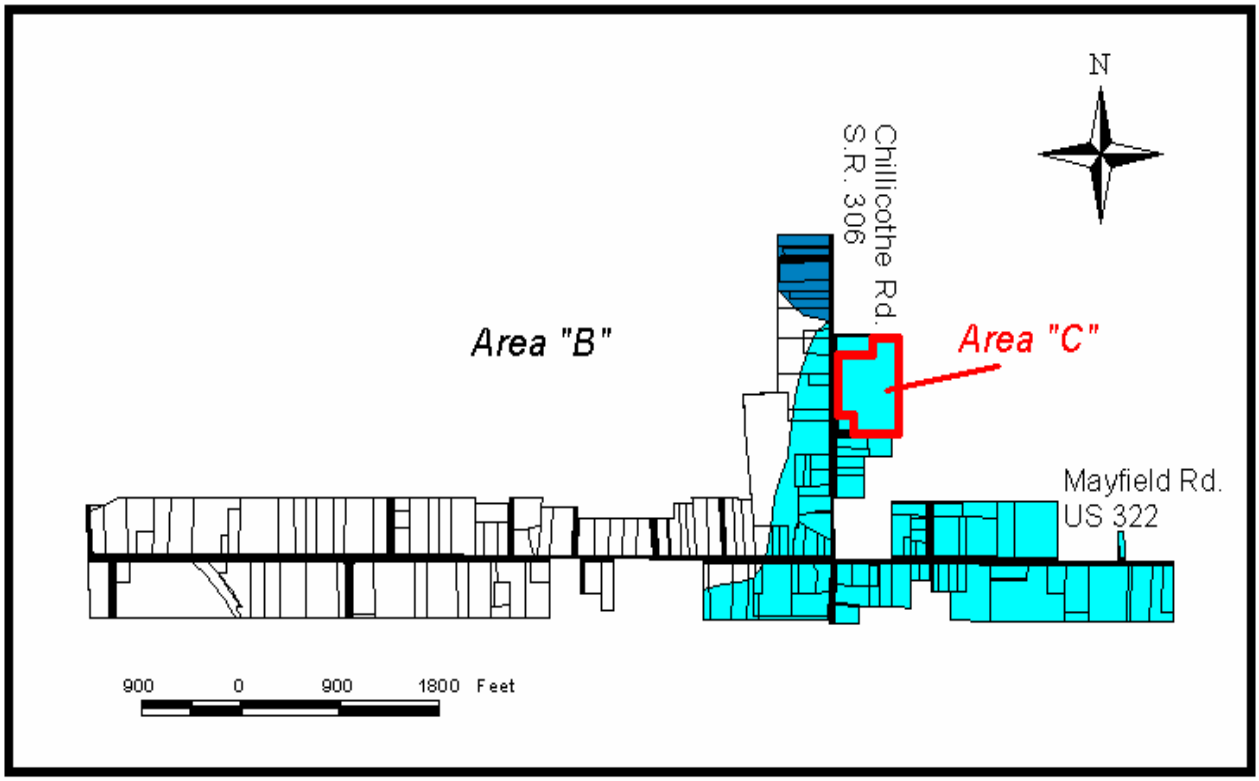
Map 39



Chester Township Commercial Areas "A" & "B" & Shopping Center Area "C" Zoned Properties: Watersheds

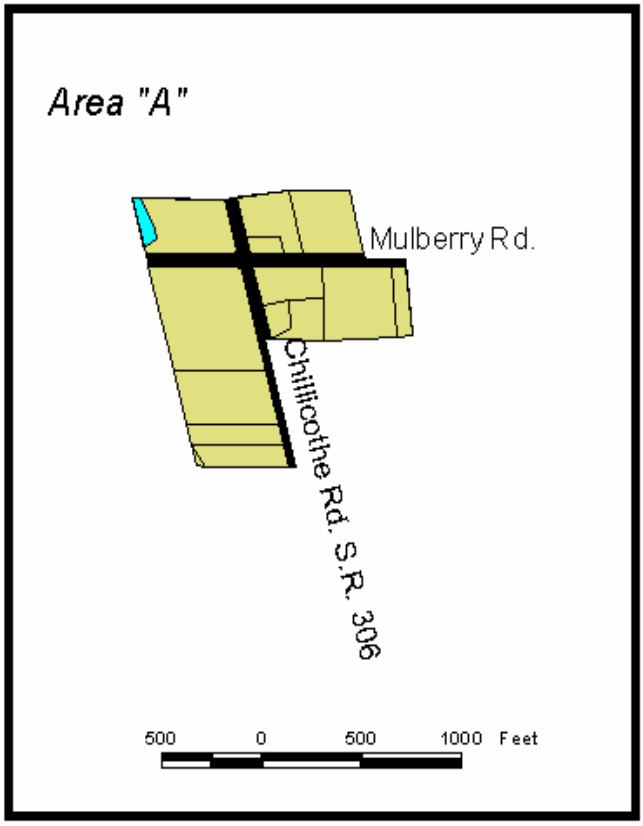
Chagrin River Water Basin Watersheds

- Chagrin River above East Branch 155 acres 60.3%
- Chagrin River above Silver Creek 95 acres 36.9%
- East Branch Chagrin River at Kirtland 7 acres 2.8%



Source: Ohio Department of Natural Resources 1996
Prepared by: Geauga County Planning Commission 2002

Map 40

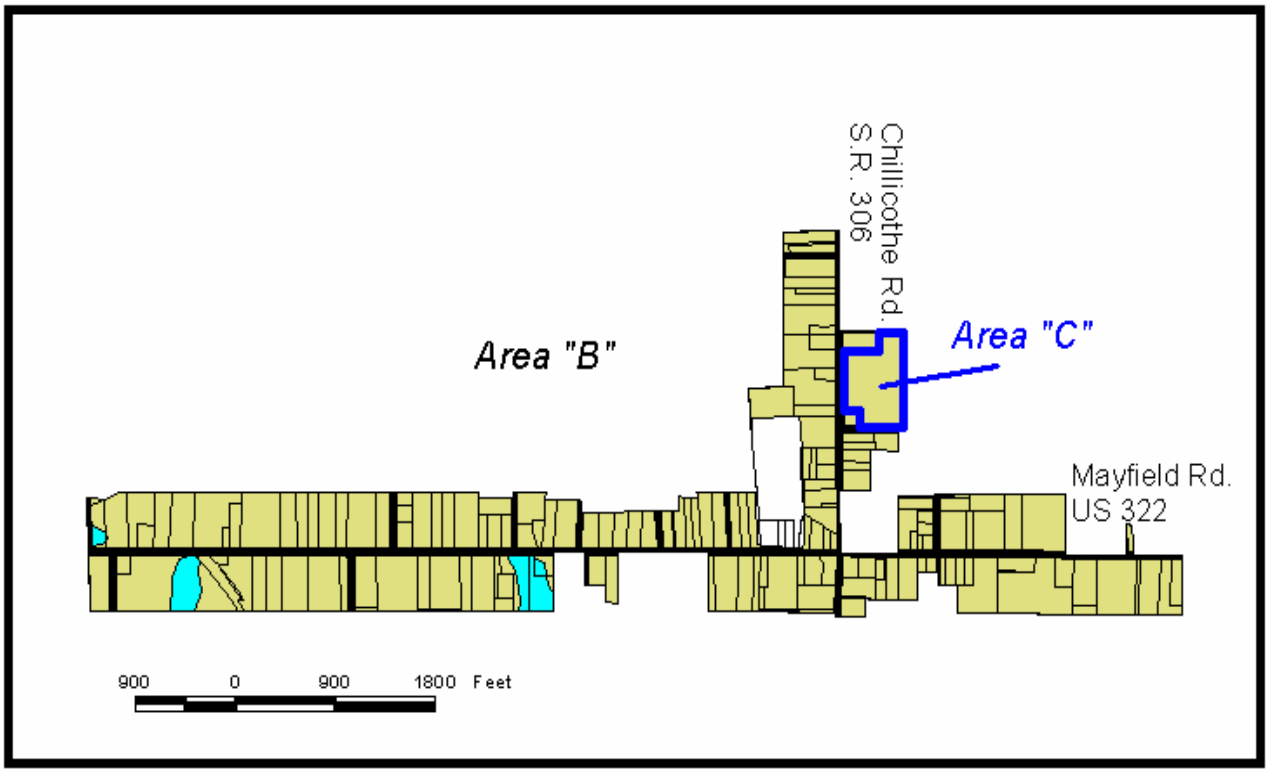


Chester Township Commercial Areas "A" & "B" & Shopping Center Area "C" Zoned Properties: Generalized Wetlands

Wetlands 7 acres 2.8%
Non-wetlands 239 acres 92.8%
Not Rated 11 acres 4.4%

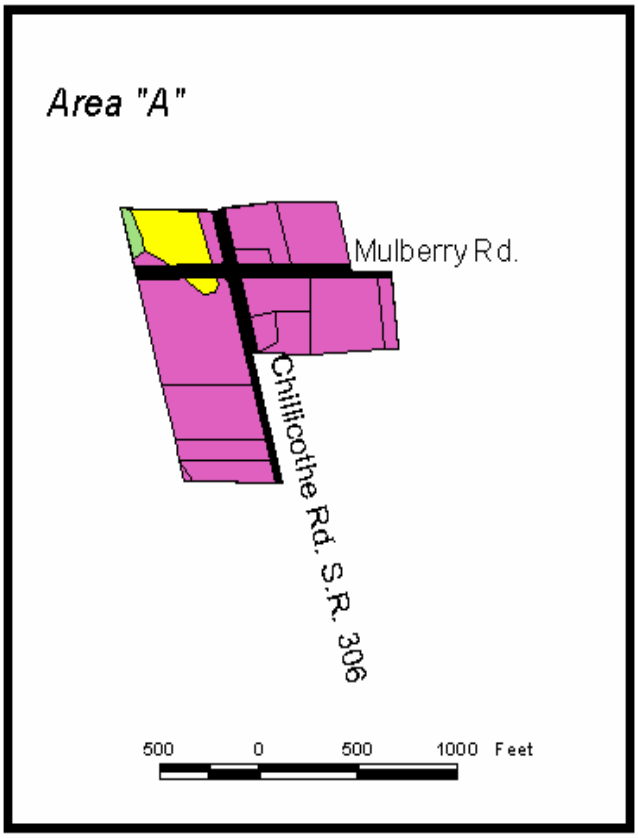
N

See Ratings In Plan, Page V-25



Source: Geauga County Soil Survey 1982
Prepared by: Geauga County Planning Commission 2002

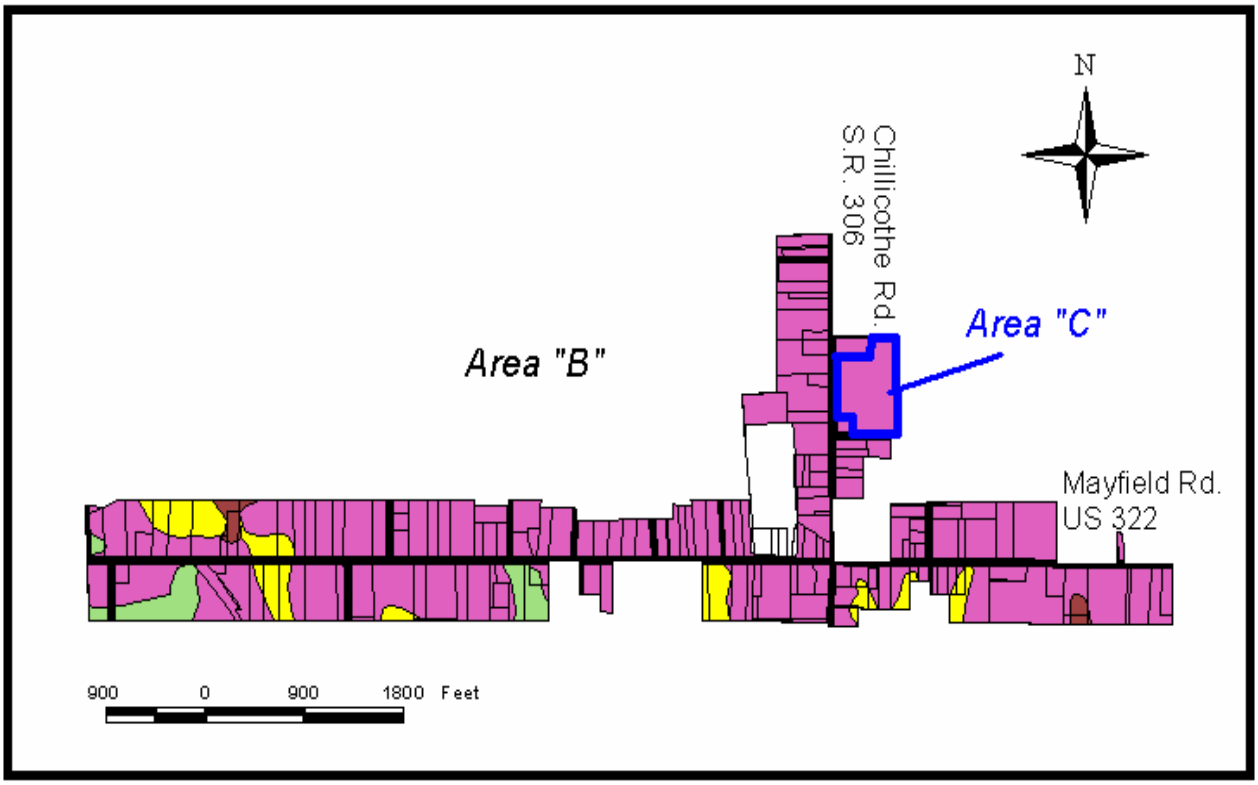
Map 41



Chester Township Commercial Areas "A" & "B" & Shopping Center Area "C" Zoned Properties: Slope

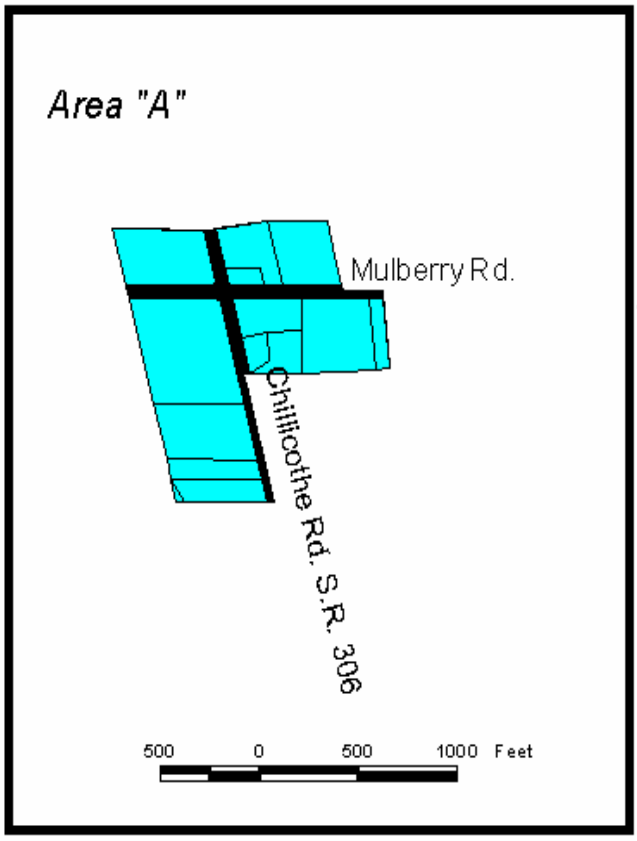
Slope
- 0-2% 9 acres 3.6%
- 2-6% 216 acres 83.6%
- 6-12% 19 acres 7.6%
- 12-18% 2 acres 0.8%
- Not Rated 11 acres 4.4%

See Ratings In Plan, Page V-9



Source: Geauga County Soil Survey 1982
Prepared by: Geauga County Planning Commission 2002

Map 42



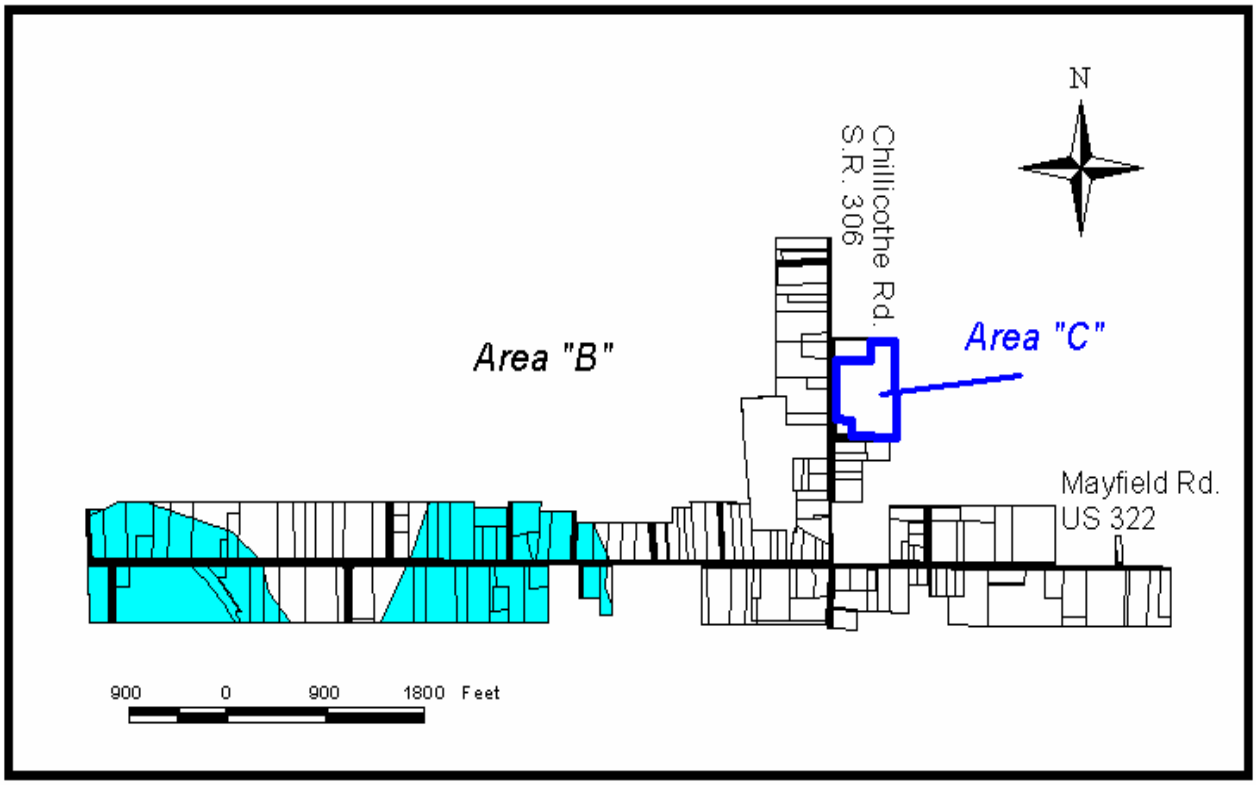
Chester Township Commercial Areas "A" & "B" & Shopping Center Area "C" Zoned Properties: Generalized Ground Water Availability

Ground Water Availability

5 to 15 Gallons Per Minute
94 acres 36.5%

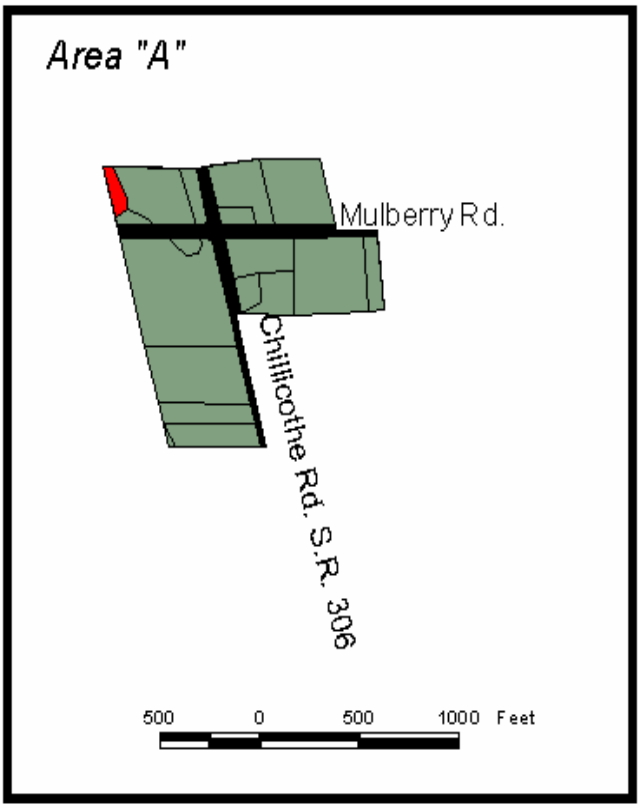
25 to 100 Gallons Per Minute
163 acres 63.5%

See Ratings In Plan, Page V-31



Source: Ohio Department of Natural Resources 1978
Prepared by: Geauga County Planning Commission 2002

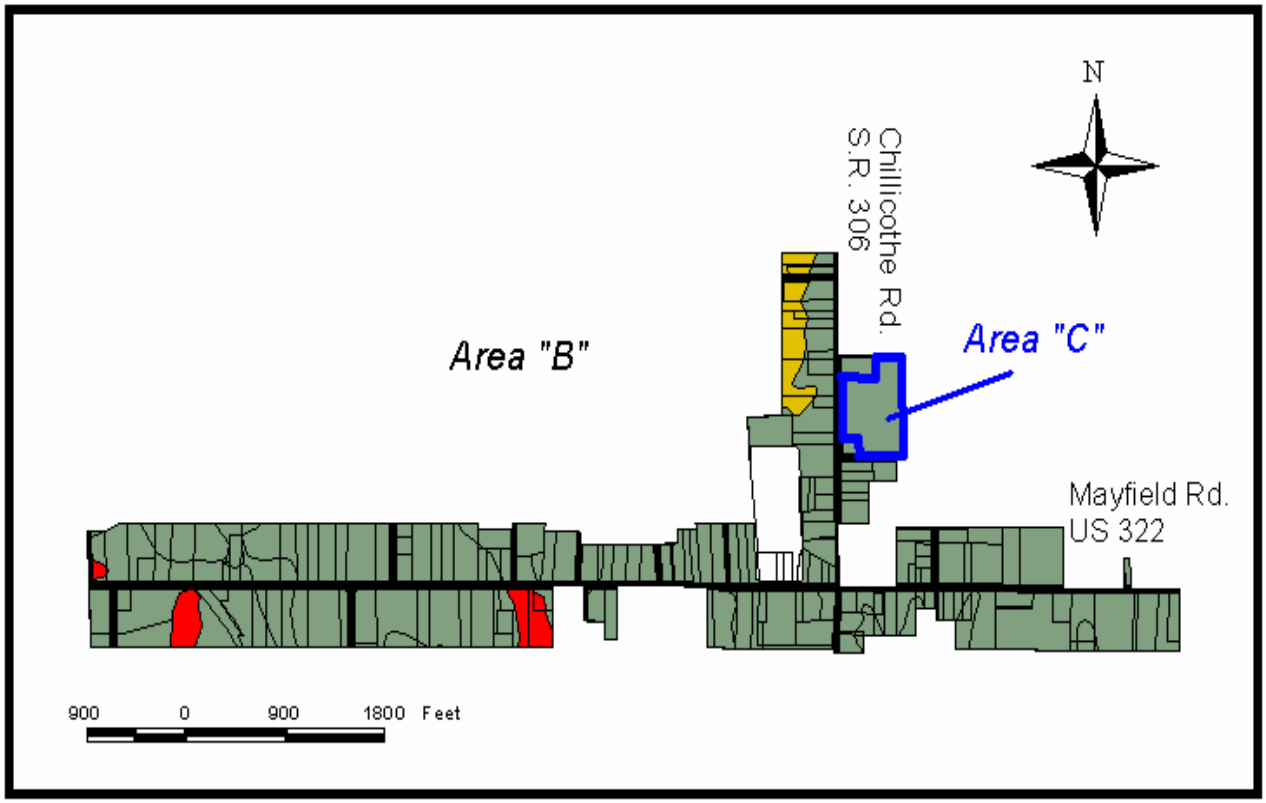
Map 43



Chester Township Commercial Areas "A" & "B" & Shopping Center Area "C" Zoned Properties: Soil Capability For Commercial Buildings

Soil Capability Ratings
- Slight 6 acres 2.4%
- Severe 233 acres 90.4%
- Very Severe 7 acres 2.8%
- Not Rated 11 acres 4.4%

See Ratings In Plan, Page V-50



Source: Geauga County Soil Survey 1982
Prepared by: Geauga County Planning Commission 2002

CHAPTER V

NATURAL RESOURCES

Introduction

A significant aspect of this plan entails the collection and analysis of key environmental data. The maps in this section provide a visual display of the existing environmental features in the township. It should be noted that the maps are not meant to replace an on-site investigation by a qualified professional soils scientist or geotechnical engineer.

The following environmental variables were collected, mapped, and analyzed:

Detailed Soils
Prime Agricultural Land
Depth To Bedrock
Slope
Shrink-Swell Potential
Potential Frost Action
Depth to Seasonal Watertable
Permeability
Watersheds
Hydrography
Flood Plains
Wetlands
Drainage
Groundwater Availability
Hydrogeologic Settings
Groundwater Pollution Potential

Detailed Soils

A detailed soils analysis provides basic insights into the limitations of the physical environment on development. Each soil type reflects distinct characteristics which can be rated according to the degree of limitation that they represent for a specified land use.

The Ohio Department of Natural Resources (ODNR), Division of Lands and Soils, conducted a soil survey of Chester Township. Soil scientists examined the soil to a depth of three to five feet by means of an auger. The soil samples were laboratory tested to determine such properties as texture, permeability, and type of parent material. Wetlands, streams, and drainageways were also noted. Aerial base maps were utilized, following the field observations, to delineate the boundaries of the various soil types identified. A total of 29 different soil classifications were identified in Chester Township (see Table 36 and Map 44).

The inventory and evaluation of the soils is a key element in the land use planning process. The land use plan is meant to be in harmony with the characteristics of the soil and the capability of it to support development.

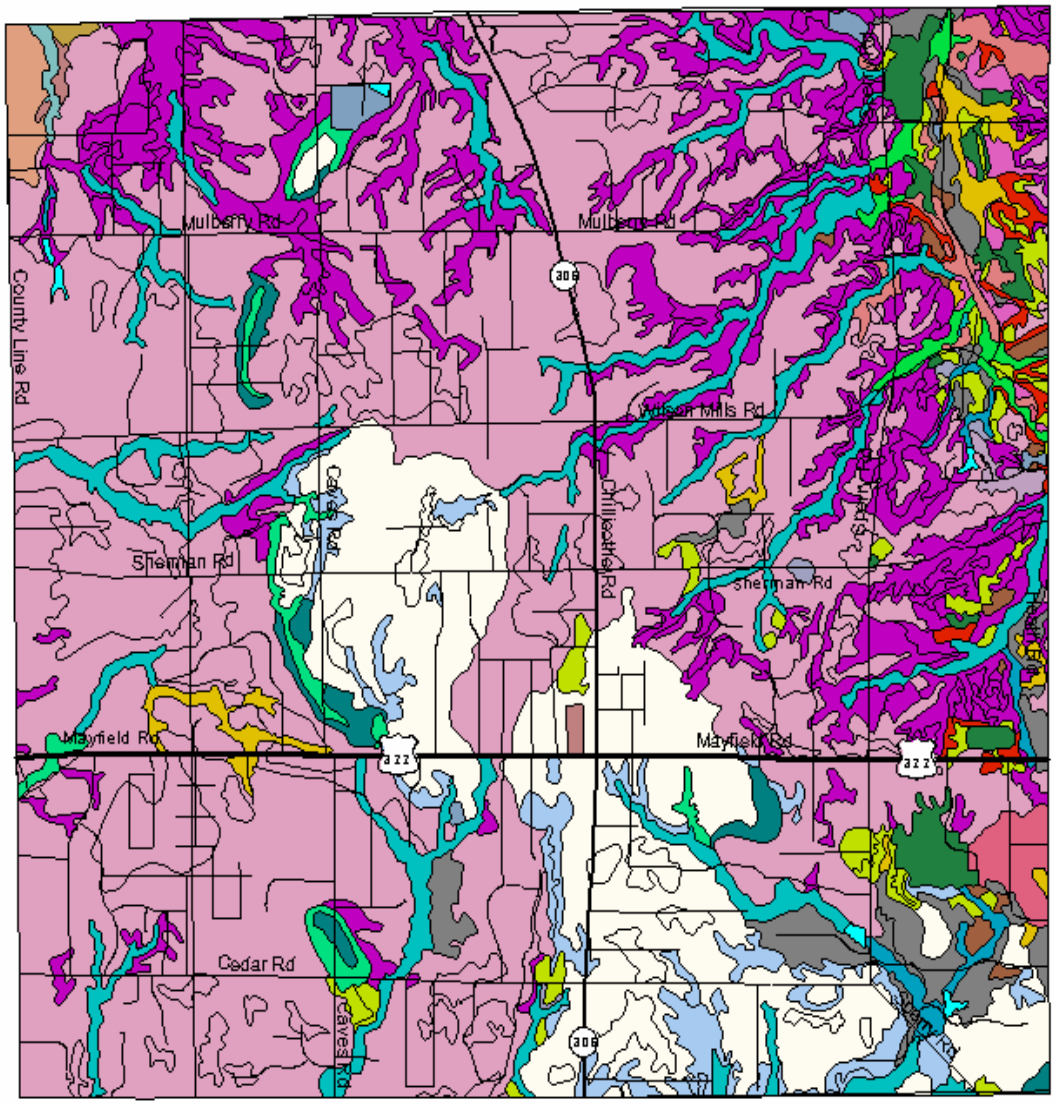
Table 36

Soils Types
Chester Township

Soils	Acres	% of Township
BgB - Bogart	105.3	.7%
BrF - Brecksville	20.6	.14%
CcA - Caneadea	1.7	.01%
CnA, B, C - Chili	254.3	1.68%
CoD - Chili Gravelly	26.1	.17%
CyD, F - Chili-Oshtemo	85.2	.57%
Da - Damascus	10.7	.07%
DrB - Darien	15.7	.1%
EhB,C,D,E,F - Ellsworth	2,202.1	14.52%
EmC - Ellsworth	10.9	.07%
FcA, B - Fitchville	363.3	2.38%
GfB, C - Glenford	58.9	.39%
HsB - Haskins	24.3	.16%
Ho - Holly	87.9	.58%
JtA - Jimtown	51.5	.34%
LrB, C - Lordstown	138.8	.92%
LxD, F - Lordstown Rock	128.7	.85%
MgA, B, C - Mahoning	7,584.9	50.5%
MtA - Mitiwanga	77.6	.52%
Or - Orrville	854.7	5.6%
OsB - Oshtemo	85.2	.57%
Pg - Pis, Gravel	159.7	1.1%
RsC, D, F - Rittman	405.8	2.67%
Sb - Sebring	163.8	1.1%
Tg - Tioga	74.7	.5%
Ud - Udorthents	48.9	.32%
Ur - Urban Land	9.8	.06%
W - Water	98.6	.65%
WbA, B - Wadsworth	1,927.2	12.76%
Totals	**15,076.9**	**100.00%**

Source: Geauga County Soil Survey 1982

Map 44



Chester Township Soils

N

Source: Ohio Department of Natural Resources 1982
Prepared By: Geauga County Planning Commission 2001

4000 0 4000 8000 Feet

Prime Agricultural Land

As defined by the United States Department of Agriculture, Natural Resource Conservation Service (NRCS), prime agricultural land has the appropriate soil quality, moisture supply, and attendant growing season to produce a high crop yield when treated and managed in accordance with modern farm methods. Generally, prime agricultural soils will be more productive under intense cultivation than other soils, using the same management practices. The majority of the soils in the township are considered prime agricultural land (see Table 37 and Map 45).

Table 38 reflects the prime agricultural land classification system utilized by NRCS. The numbers represent progressively greater limitations, a narrower choice of crops, and the way crops respond to management. The letters given are subclasses, which indicate the problems associated with a particular soil type. The letter “E” means that the primary limitation is the risk of erosion (unless close-growing plant cover is maintained) and the letter “W” indicates that water in, or on the surface of, the soil interferes with plant growth or cultivation.

Table 37

Prime Agricultural Soil Map Legend
Chester Township

Rating	Acres	% of Township
Prime	518.6	3.4%
Prime with Drainage	11,230.7	74.5%
Non-Prime	3,078.5	20.4%
Not Rated	249.1	1.7%
Total	15,076.9	100.0%

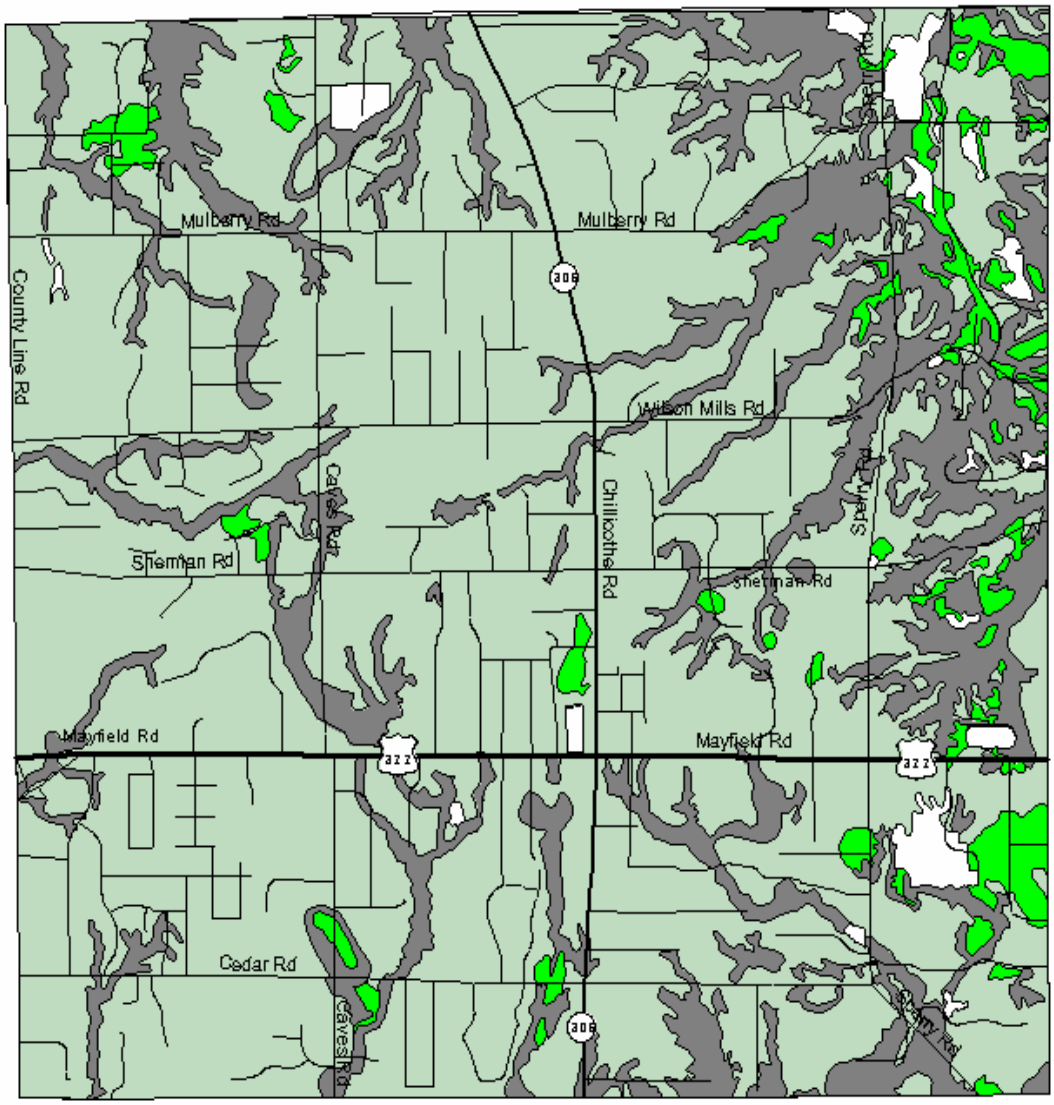
Table 38

Agricultural Ratings
Chester Township

Map Units	Soils	Agricultural Classification	Prime Land
Bg B	Bogart	2E	X
Cc	Caneadea	3W	X*
Cn A, B	Chili	2E	X
Cn C	Chili	3E	
Co D	Chili	4E	
Cy D, F	Chili-Oshtemo	4E	
Da	Damascus	3W	X*
Dr	Darien	3W	X*
Eh B	Ellsworth	2E	X
Eh C	Ellsworth	4E	
Eh D, E, F	Ellsworth	5E	
Em C	Ellsworth, Shale	4E	
Fc A, B	Fitchville	3W	X*
Gf B	Glenford	2E	X
Gf C	Glenford	3E	
Hs B	Haskins	2E	X*
Ho	Holly	3W	
Jt A	Jimtown	3W	X*
Lr B	Lordstown	2E	X
Lr C	Lordstown	3E	
Lx D, F	Lordstown	5E	
Mg A, B	Mahoning	3E	X*
Mg C	Mahoning	4E	
Mt A	Mitiwanga	2W	X*
Or	Orrville	3W	
Os B	Oshtemo	3S	X
Rs C	Rittman	4E	
Rs D, F	Rittman	5E	
Sb	Sebring	3W	X*
Tg	Tioga	3W	
Wb A, B	Wadsworth	3E	X*

* Qualify as prime farmland, provided proper drainage measures are implemented.

Map 45



ChesterTownship
Prime Agricultural Soils

Soil Ratings

- Prime
- Prime with Drainage
- Non-prime
- Not Rated

N

Source: Geauga County
Soil Survey 1982
Prepared by: Geauga County
Planning Commission 2001

3000 0 3000 6000 Feet

Depth to Bedrock

Just over two and one half percent of the township (see Table 39) is underlain by bedrock at a depth of less than five feet. As shown on Map 46, these areas of shallow bedrock are spread throughout the township. The specific soil types which identify shallow bedrock include: Lordstown Rock Outcrop Complex, Brecksville Silt Loam, Darien Silt Loam, Ellsworth Silt Loam Shale Substratum, Mitiwanga Silt Loam, and Lordstown Loam.

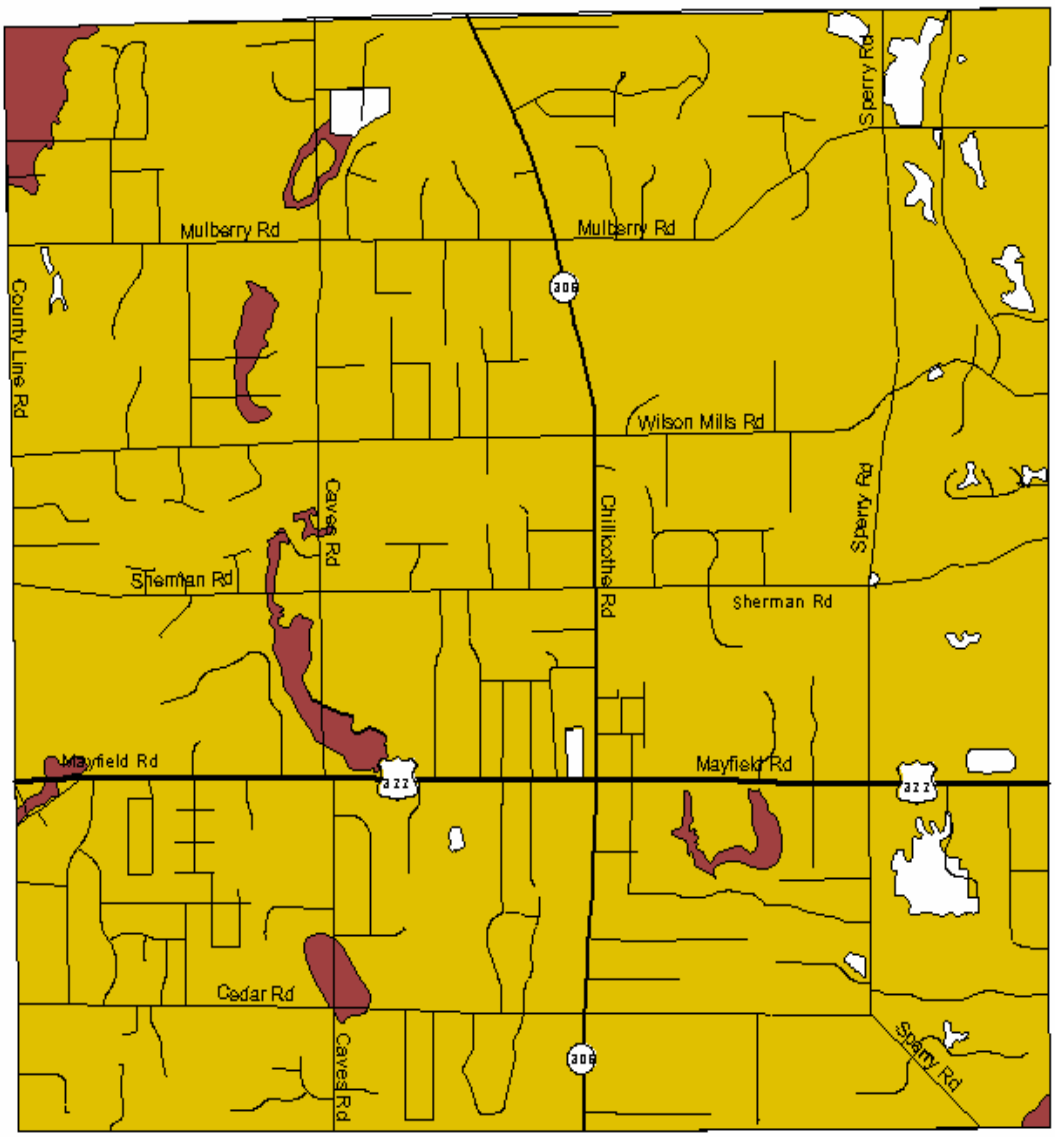
An environmental concern involving development over shallow bedrock is the potential for pollution from faulty on-site septic systems. In addition, shallow depth to bedrock may present limitations for the installation of basements and underground utilities.

Table 39

Depth To Bedrock Map Legend
Chester Township

Depth to Bedrock	Acres	% of Township Area
Depth to Bedrock < 5 ft.	392.3	2.6%
Depth to Bedrock > 5 ft.	14,367.6	95.3%
Not Rated	317.0	2.1%
Total	15,076.9	100.0%

Map 46



Chester Township
Depth to Bedrock

Depth to Bedrock
- < 5 feet
- > 5 feet
- Not Rated

N

Source: Geauga County
Soil Survey 1982
Prepared by: Geauga County
Planning Commission 2001

3000 0 3000 6000 Feet

Slope

Slope represents the inclination of the land surface from a horizontal plane. The percentage of slope is determined by taking the vertical distance divided by the horizontal distance, then multiplying it by 100. Consequently, a 10 percent slope is a vertical change of 10 feet in 100 feet of horizontal distance.

According to Table 40 and Map 47, over 77% of the terrain in Chester Township is classified as level to gently rolling (0 to 6%). Slope of 6 to 12% covers almost 12% of the community's land area.

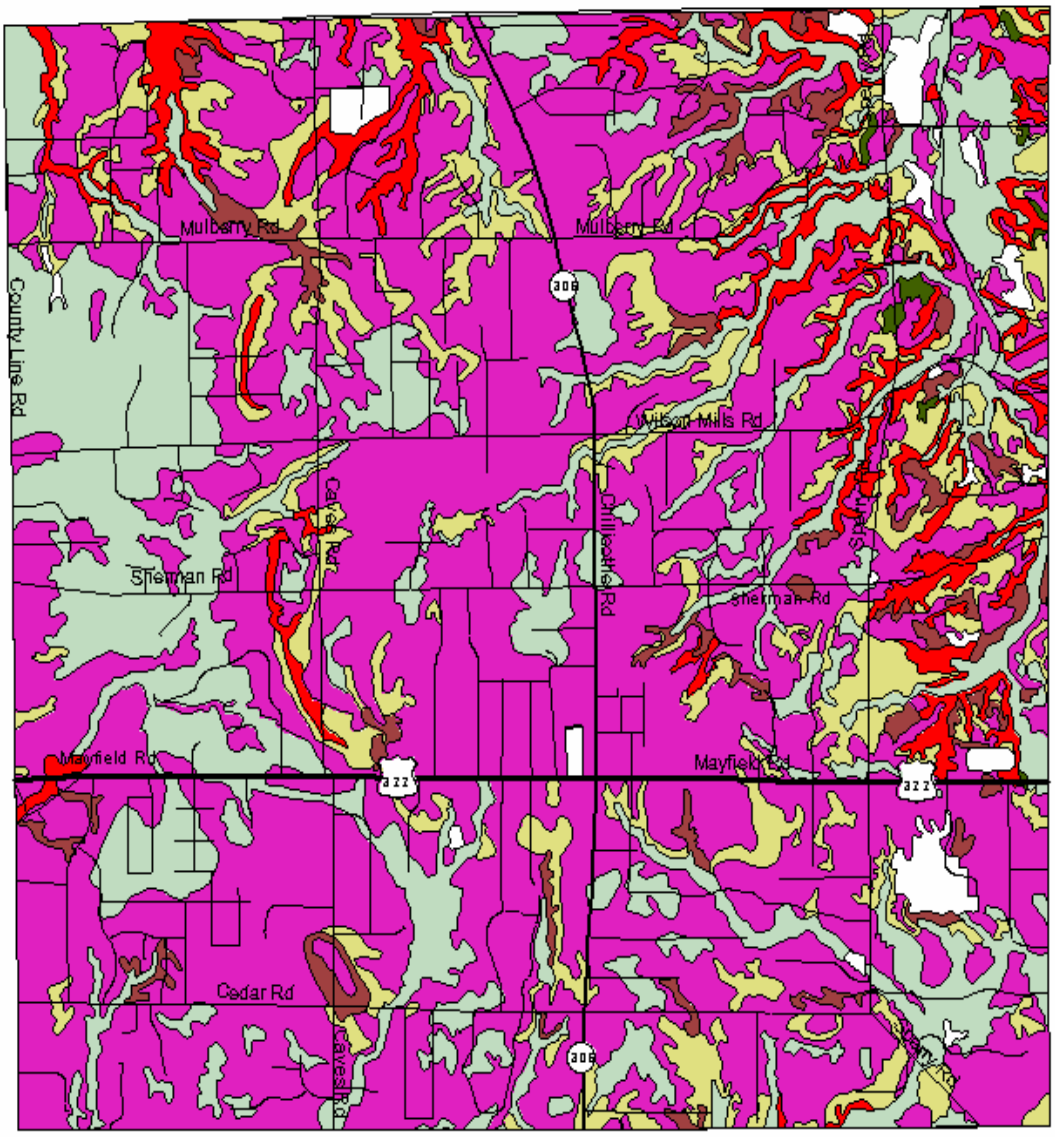
The degree of slope has an impact on the feasibility of placing improvements on a site. Steeply sloped areas may be unsuitable for development. Erosion and runoff of soil sediment during construction is a significant concern. On-site septic systems may not function properly on severe or very severe soil slopes.

Table 40

Slope Map Legend
Chester Township

% Slope	Acres	% of Township Area
0 - 2%	3,503.3	23.3%
2 - 6%	8,170.5	54.2%
6 - 12%	1,783.0	11.8%
12 - 18%	466.5	3.1%
18 - 25%	34.0	.2%
Greater than 25%	802.6	5.3%
Not Rated	317.0	2.1%
Total	15,076.9	100.0%

Map 47



Chester Township
Slope

Slope
- 0-2%
- 2-6%
- 6-12%
- 12-18%
- 18-25%
- greater than 25%
- Not Rated

N

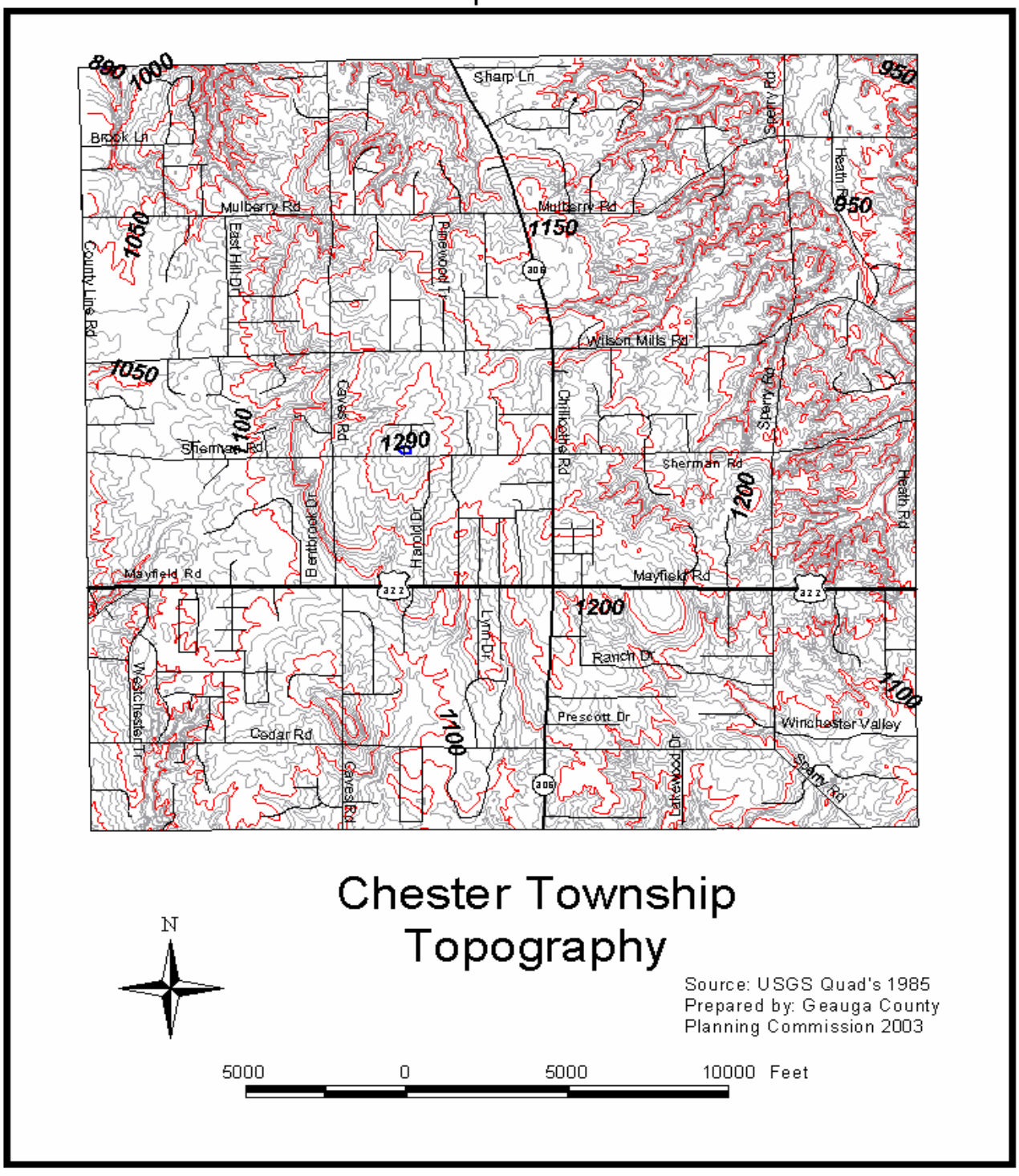
3000 0 3000 6000 Feet

Source: Geauga County
Soil Survey 1982
Prepared by: Geauga County
Planning Commission 2001

Topography

The highest point in the township is at an elevation of approximately 1,290 feet located just east of Caves Road on the north side of Sherman Road. The lowest point is at an elevation of 890 feet at the very northwest corner of the township (see Map 48).

Map 48



Shrink-Swell Potential

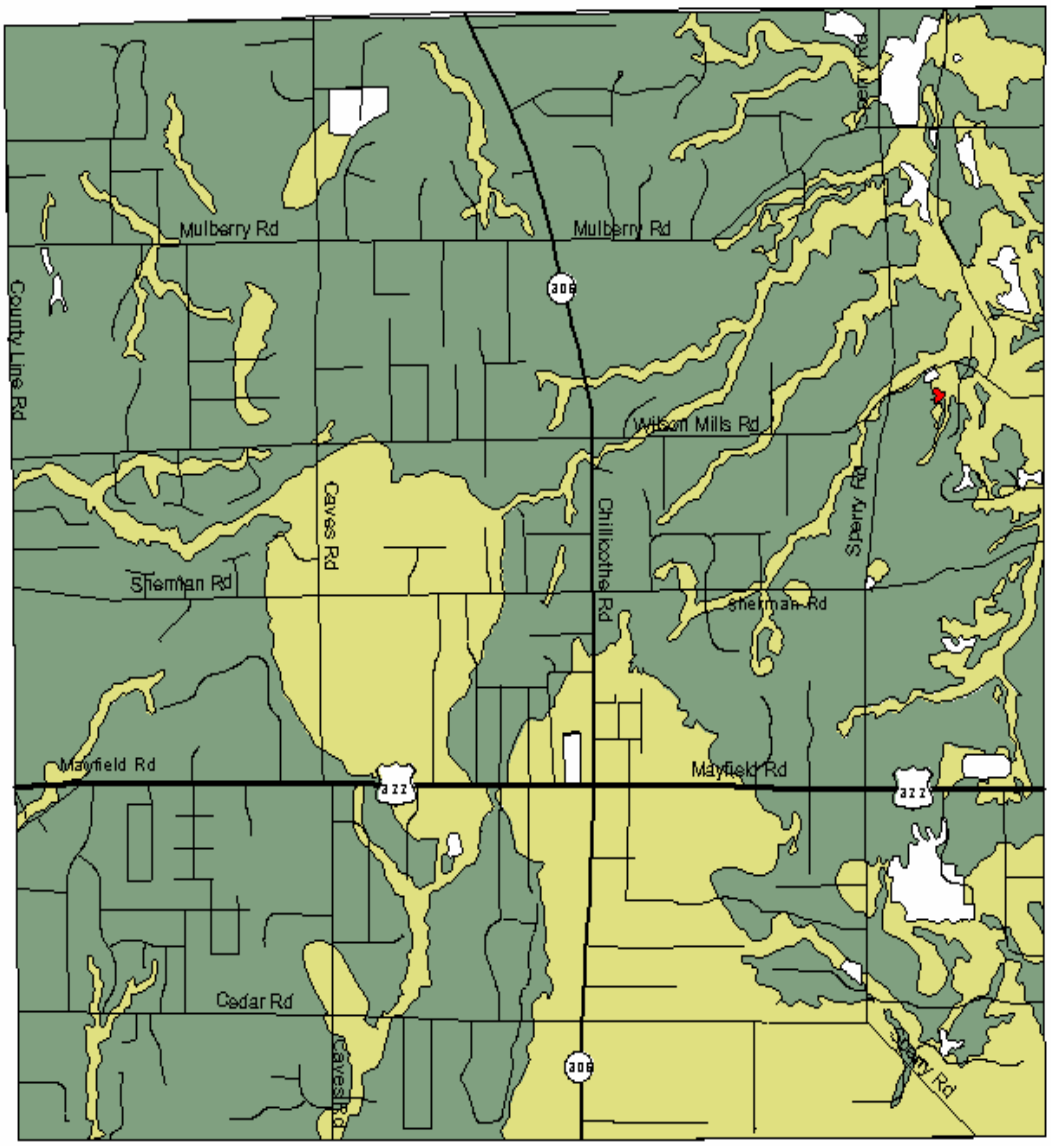
Shrink-swell potential is a measurement of the relative change in volume of soil material, based on changes in its moisture content. The degree of swelling and shrinking of soil is also influenced by the amount of clay ingredient. Soils rated with a "high" shrink-swell potential may cause roads to deteriorate and foundations to crack and move. The majority of the soils are rated "moderate" (see Table 41 and Map 49).

Table 41

Shrink-Swell Potential Map Legend
Chester Township

Rating	Acres	% of Township Area
Low	4,070.8	27.00%
Moderate	10,297.5	68.30%
High	1.5	0.01%
Not Rated	707.1	4.69%
Total	15,076.9	100.00%

Map 49



Chester Township
Shrink-Swell Potential

Shrink-Swell Potential
- Low
- Moderate
- High
- Not Rated

N

3000 0 3000 6000 Feet

Source: Geauga County
Soil Survey 1982
Prepared by: Geauga County
Planning Commission 2001

Potential Frost Action

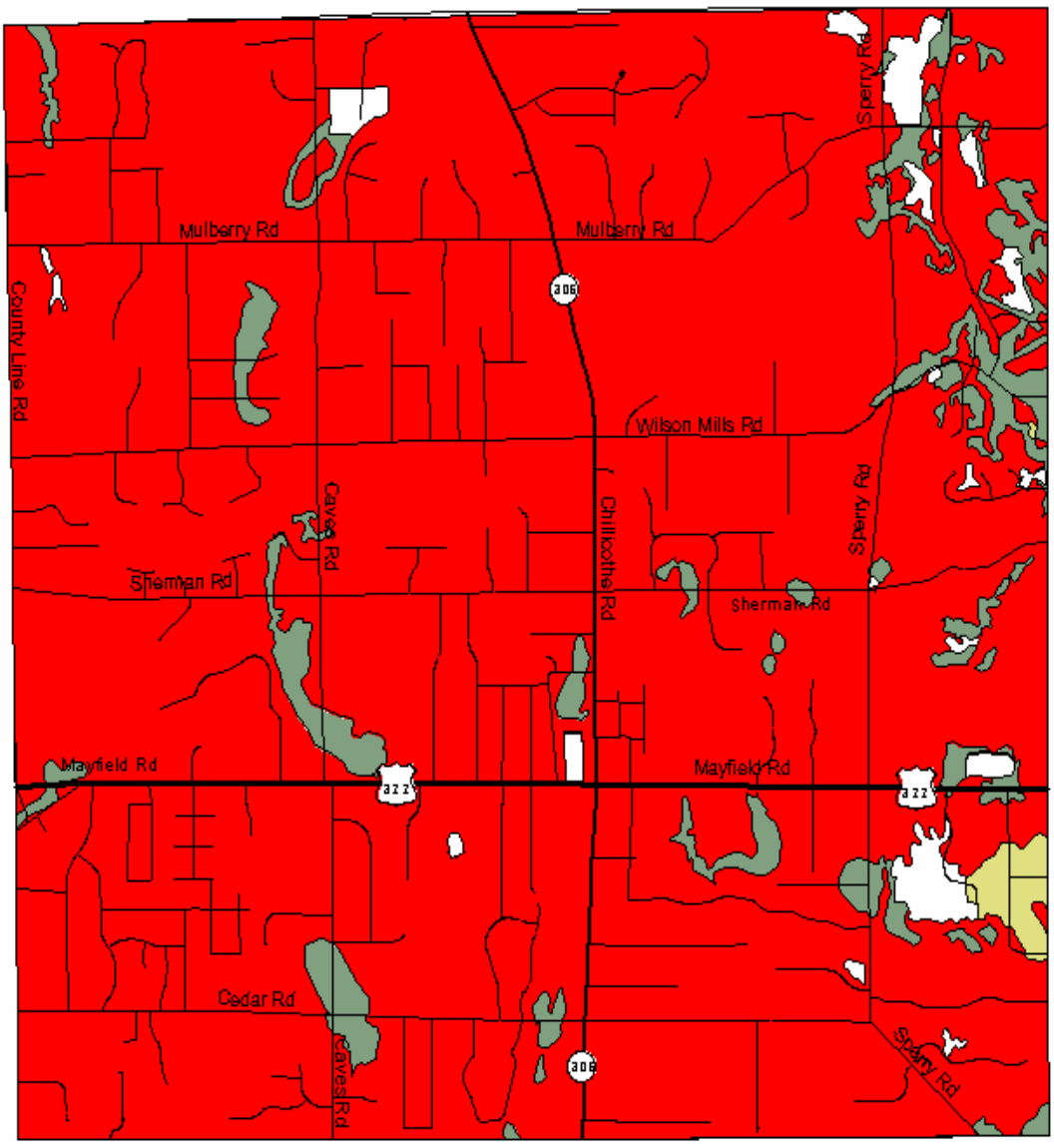
Potential frost action rates the possibility for damage resulting from heaving, excessive wetting, and loss of soil strength in areas where substantial ground freezing is common. Low soil strength coupled with frost heave may cause damage to roads and foundations. Most of the township (76.39%) is rated "high" for potential frost action (see Table 42 and Map 50).

Table 42

Potential Frost Action Map Legend
Chester Township

Rating	Acres	% of Township Area
Low	696.5	4.62%
Moderate	2,546.5	16.89%
High	11,517.3	76.39%
Not Rated	316.6	2.10%
Total	15,076.9	100.00%

Map 50



Chester Township
Potential Frost Action

Frost Action
- Low
- Moderate
- High
- Not Rated

N

Source: Geauga County Soil Survey 1982
Prepared by: Geauga County Planning Commission 2001

3000 0 3000 6000 Feet

Depth to Seasonal High Water Table

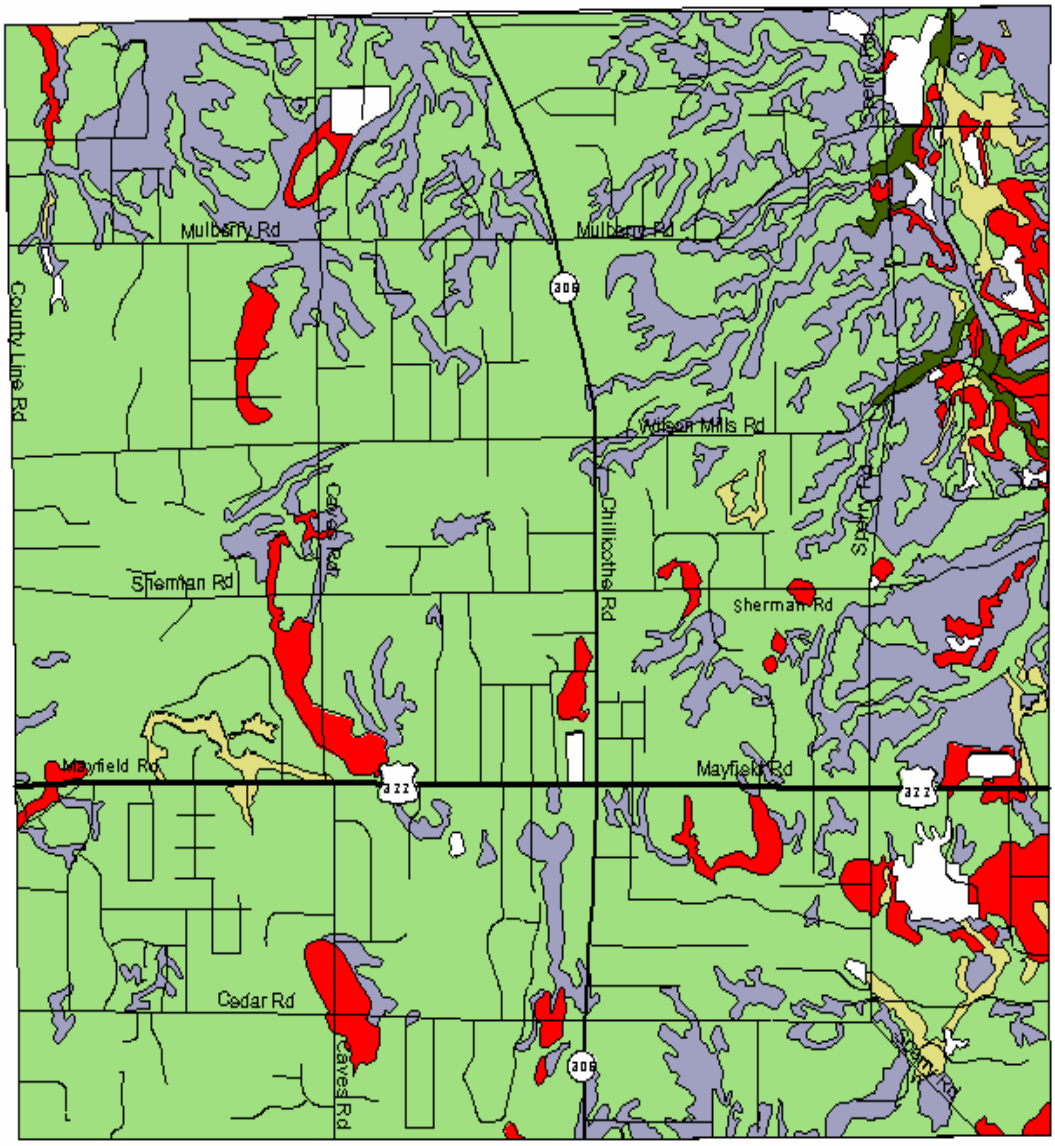
Depth to seasonal high water table indicates the shallowest depth at which the soil is saturated in a zone more than six inches thick for a continuous period of more than two weeks. A high seasonal water table may cause the improper operation of on-site sewage disposal systems, wet or flooded basements, and cracked or damaged foundations. Specially designed drainage systems and foundations may be required. About 70% of the township is in 12-24 inch category (see Table 43 and Map 51).

Table 43

Depth To Seasonal High Water Table Map Legend
Chester Township

Rating	Acres	% of Township Area
0 - 12 inches	262.3	1.74%
12 - 24 inches	10,486.0	69.55%
24 - 36 inches	3,063.6	20.32%
36 - 48 inches	75.4	.50%
Greater than 48 inches	873.0	5.79%
Not Rated	316.6	2.10%
Total	15,076.9	100.00%

Map 51



Chester Township
Depth To Seasonal High Water Table

Depth to Water Table
- 0-12"
- 12-24"
- 24-36"
- 36-48"
- 48" & greater
- Not Rated

N

3000 0 3000 6000 Feet

Source: Geauga County
Soil Survey 1982
Prepared by: Geauga County
Planning Commission 2001

Permeability

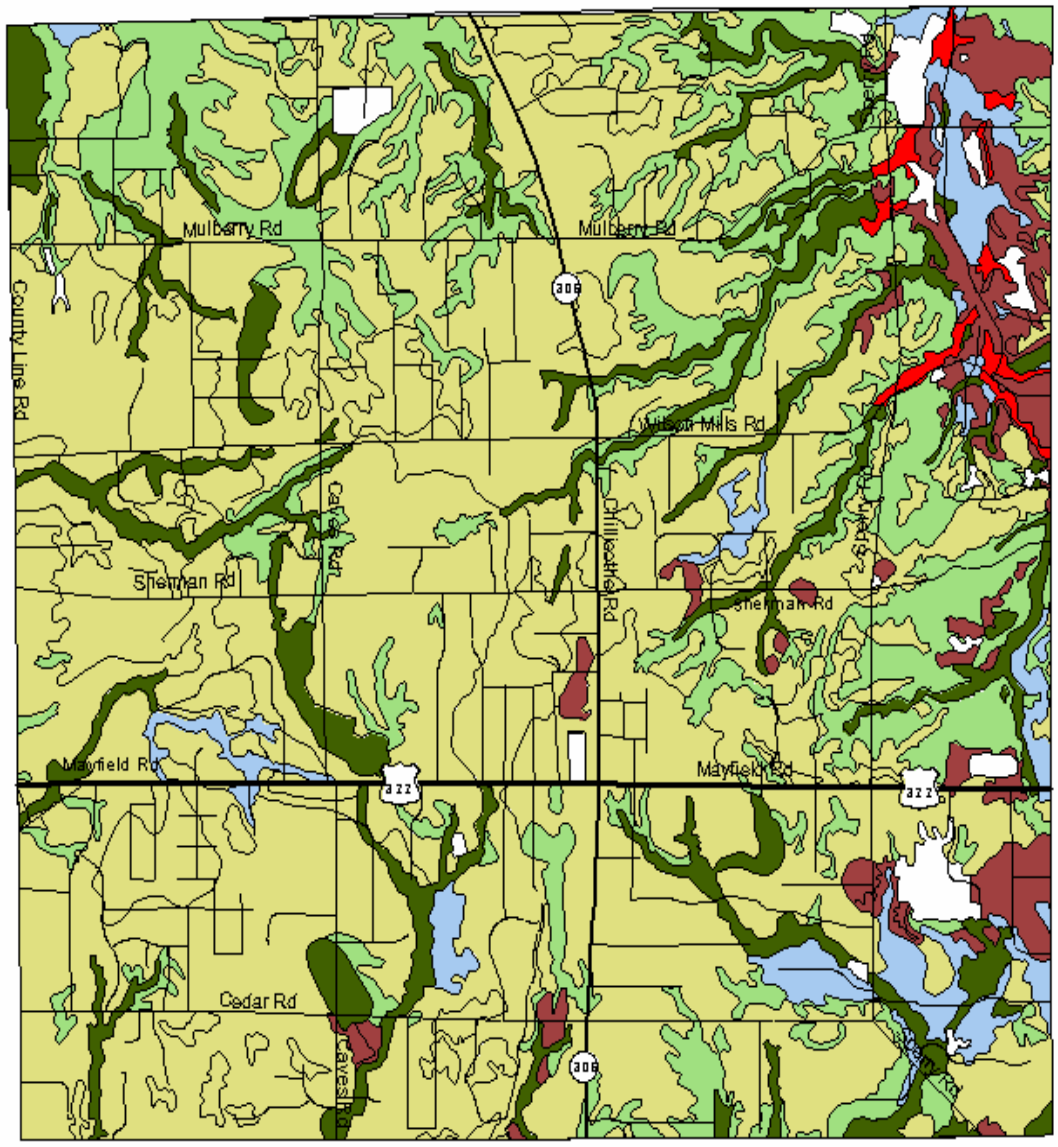
Permeability is an estimate of the rate of downward water movement in a soil horizon when it is saturated but allowed to drain freely. It is typically expressed in inches per hour (iph). The rate of permeability is primarily determined by the soil texture, structure, porosity, and infiltration tests. It is an important variable in the successful operation of septic tank leach fields. Nearly 80% of the township is rated "very slow" for permeability (see Table 44 and Map 52).

Table 44

Permeability Map Legend
Chester Township

Rating		Acres	% of Township Area
Very Slow:	< 0.06iph	11,740.4	77.87%
Slow:	0.06 to 0.20iph	407.1	2.70%
Moderately Slow:	0.2 to 0.6iph	527.7	3.50%
Moderate:	0.6 to 2.0iph	1,106.6	7.34%
Moderately Rapid:	2.0 to 6.0iph	405.6	2.69%
Rapid:	6.0 to 20.0iph	182.4	1.21%
Not Rated		707.1	4.69%
	Total	15,076.9	100.00%

Map 52



Chester Township Permeability

Permeability
- Very Slow
- Slow
- Moderate slow
- Moderate
- Moderate Rapid
- Rapid
- Not Rated

N

4000 0 4000 8000 Feet

Source: Geauga County Soil Survey 1982
Prepared by: Geauga County Planning Commission 2001

Water Basins and Watersheds

Chester Township is part of the Chagrin Water Basin and three watersheds (see Table 45 and Map 53).

During periods of precipitation, all of the excess water that is not absorbed into the ground is called runoff. Eventually, the runoff travels through a watershed and into a stream, which in turn flows through downstream watersheds.

Runoff often produces soil erosion and soil sediment that is regarded to be a pollutant. It degrades water quality and can disrupt sensitive ecological conditions. In recognition of the problems associated with soil erosion and water pollution, the Geauga County Board of Commissioners adopted water and soil sediment pollution control regulations in 1979. The township adopted zoning regulations concerning stormwater runoff and soil sediment pollution as well.

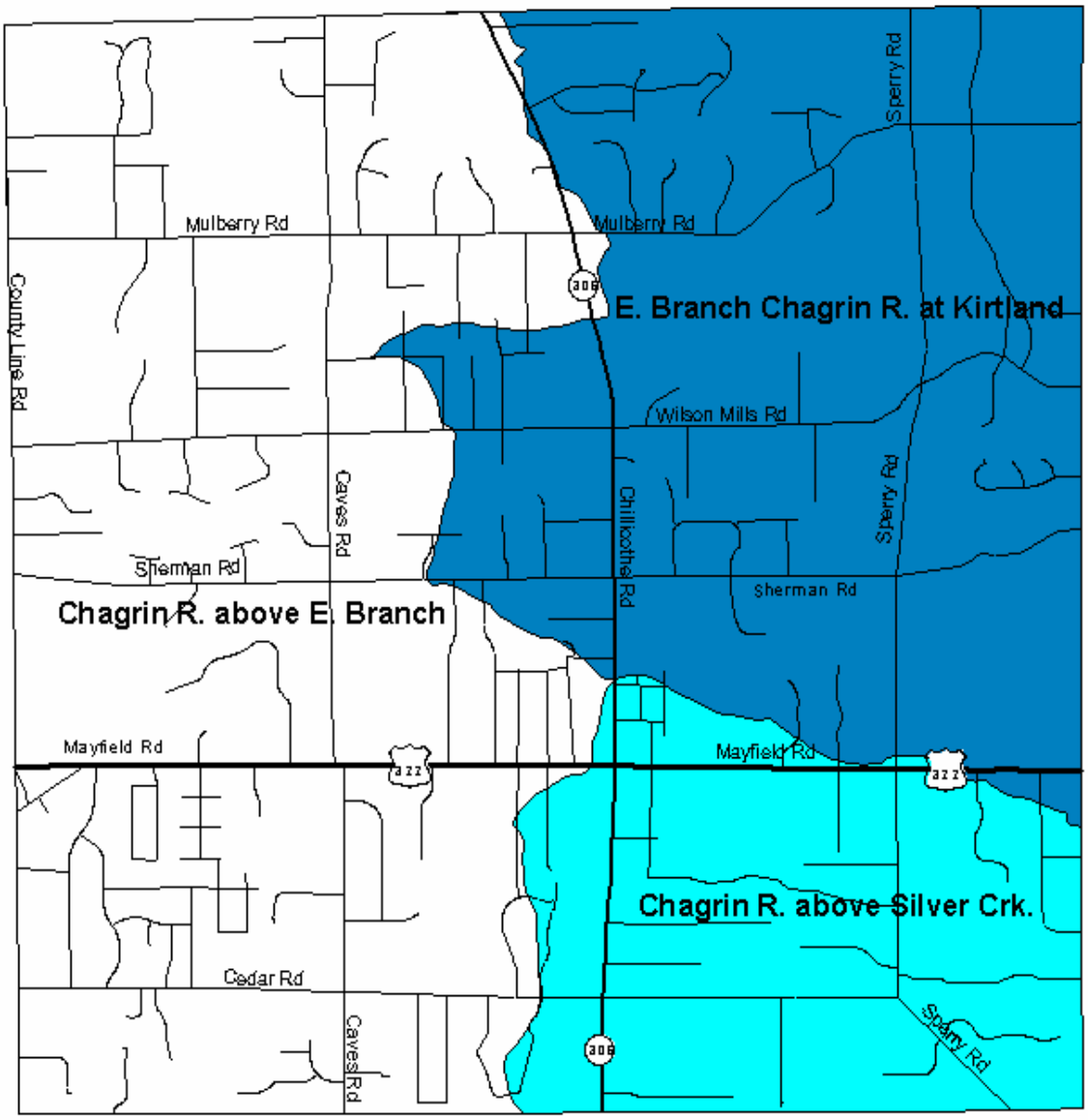
Table 45

Water Basins And Watersheds
Chester Township

Water Basin	Watershed	Area (acres)	% of Township Area
Chagrin	Chagrin River	8,018.0	53.18%
Chagrin	East Branch-Chagrin	5,379.4	35.68%
Chagrin	Griswold Creek	1,679.5	11.14%
	Total	15,076.9	100.00%

Source: Ohio Capability Analysis Program, Ohio Department of Natural Resources,1979

Map 53



Chester Township Watersheds

N

Source: Ohio Department of Natural Resources 1996
Prepared by: Geauga County Planning Commission 2001

3000 0 3000 6000 Feet

Generalized Hydrography

The hydrography layer was traced from the 2000 orthophotography and interpolated from the two foot contours created for the township. The natural features included are ponds, creeks, intermittent creeks, ditches, hidden drains, and lakes (see Map 54). Definitions of the natural features are provided below.

- Ponds are freestanding, contained bodies of water less than 200' x 200' in size but at least 10' x 10'.
- Creeks are natural streams with an average width less than 50' of visible water.
- Intermittent creeks are natural drainage ways with a defined channel but no visible water.
- Ditches are man-made drainageways.
- Hidden drains include any drainage structures beneath the ground surface, such as culverts.
- Rivers are natural streams with an average width of 50' or more of visible water.
- Lakes are freestanding, contained bodies of water greater than 200' x 200' in area.

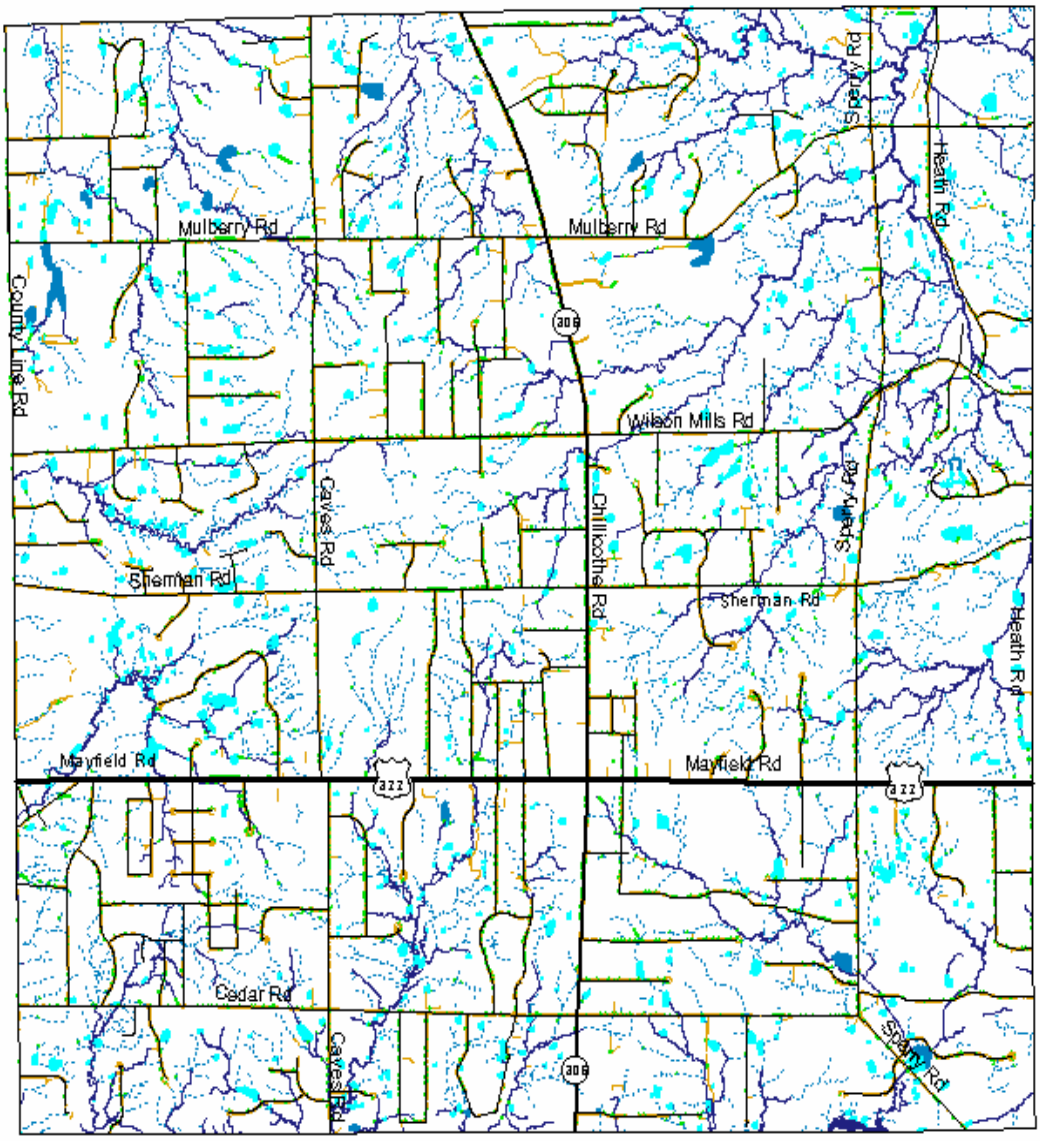
Table 46

Hydrography
Chester Township

Natural Feature	Number / Count	Total Linear Feet / Acreage
Pond	761	129.2 Acres
Creek	717	543,154.8 Feet
Intermittent Creek	2,011	765,679.6 Feet
Ditch	4,354	767,925.8 Feet
Hidden Drain	3,870	146,504.5 Feet
River	8	4,314.5 Feet
Lake	19	30.2 Acres

Source: Wiser Company, 2000

Map 54



Chester Township Hydrography

Hydrography
- Pond
- Creek
- Intermittent Creek
- Ditch
- Hidden Drain
- River
- Lake

N

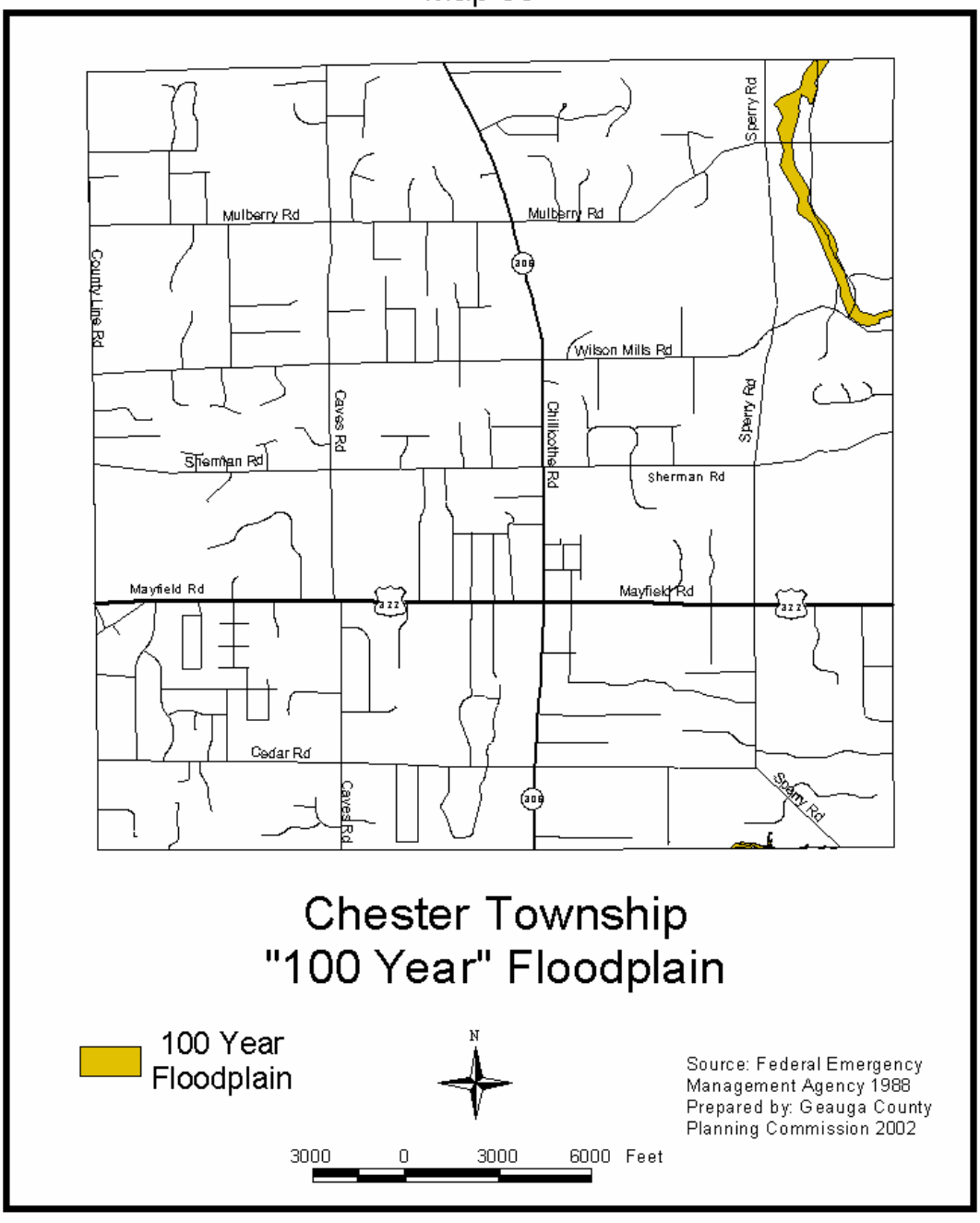
Source: 2000 Orthophotography
Analysis by Wiser Co.
Prepared by: Geauga County
Planning Commission 2002

3000 0 3000 6000 Feet

Flood Plains

Within Chester Township, the Chagrin River (its East Branch), and associated tributaries are designated as “100 year” flood hazard areas (such areas have a one percent chance of being flooded at this magnitude annually). This river system falls within the flood plain regulations adopted by the county pursuant to the National Flood Insurance Program. According to the regulations, proposed buildings within the flood plain must either be flood proofed or the first floor of such buildings, including the basement, must be raised a minimum of one foot above the 100 year base flood elevation.

Map 55



Generalized Wetlands

The U. S. Department of the Interior, Fish and Wildlife Service, (FWS), prepared a wetlands inventory of the township. The generalized map on the following page is meant to represent the areas identified as wetlands through the FWS inventory and the soils map in Chester Township (see Table 47 and Map 56).

These areas were delineated by the FWS through the use of stereoscopic analysis of high altitude aerial photographs. Under the FWS classification system, wetlands must have one or more of the following three attributes:

1. Hydrophytic Vegetation: plant life which grows in water, soil or a substrate that is at least periodically deficient in oxygen as a result of excessive water content.

2. Hydric Soils: soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions (absence of free oxygen) in the upper part.

3. Wetland Hydrology: permanent or periodic inundation, or soil saturation to the surface, at least seasonally.

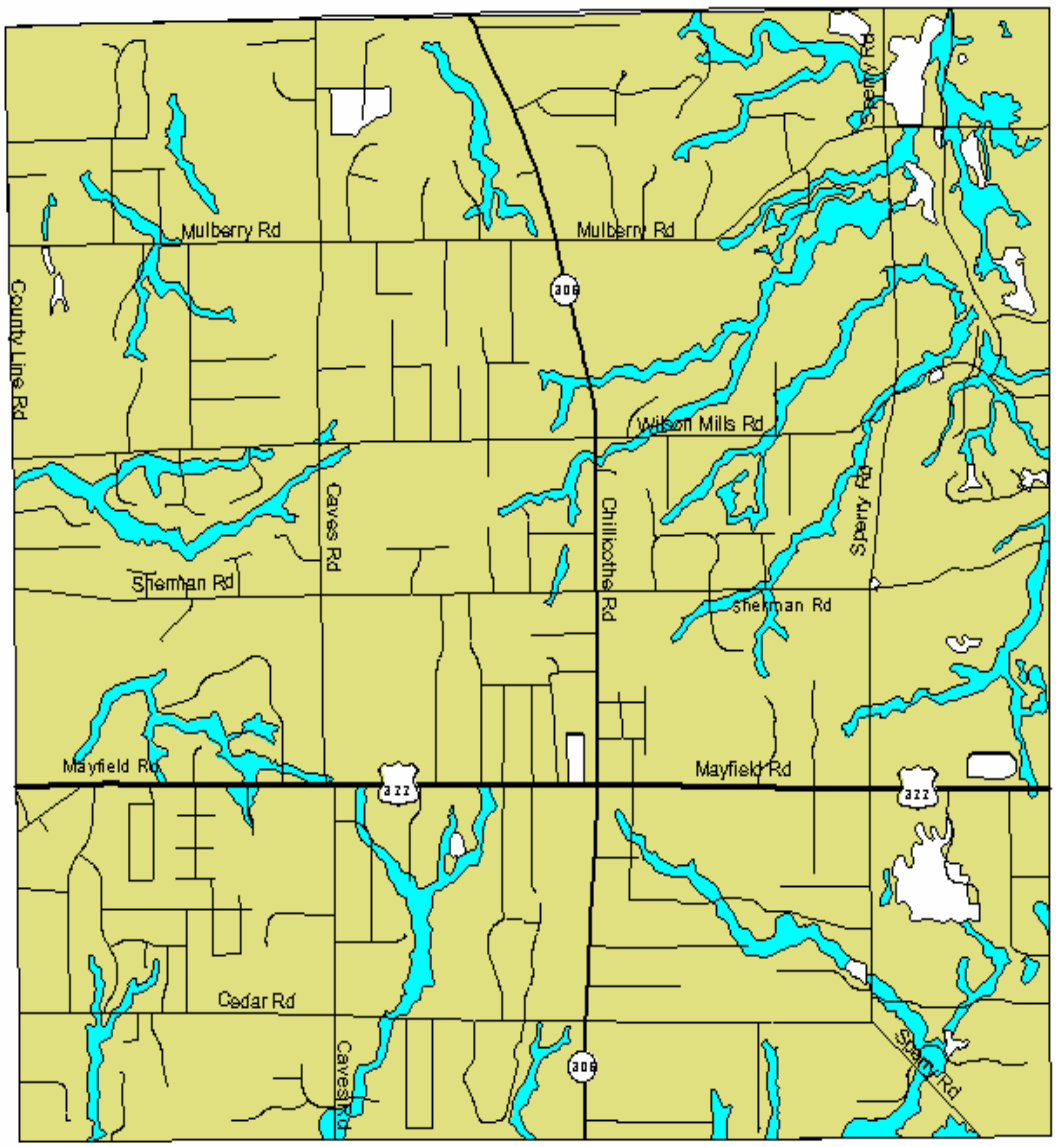
Wetlands merit protection due to the array of useful functions they perform. They improve water quality by serving as a natural filtration system. The vegetation traps sediment and other pollutants from the water. Wetlands retain large quantities of water, thereby providing downstream protection during periods of heavy rainfall and, conversely, supplementing streams during periods of dry weather and low flow. Finally, wetlands serve as havens for some rare plant species as well as breeding, nesting, and feeding grounds for a variety of wildlife. The U. S. Army Corps of Engineers is involved with regulation of wetlands under Section 404 of the Clean Water Act as well as the Ohio EPA. Chester Township has 1,249.1 acres in wetlands, which is 8.3% of the township area.

Table 47

Generalized Wetlands Map Legend
Chester Township

Rating	Acres	% of Township
Wetlands	1,249.1	8.3%
Non-Wetlands	13,578.6	90.1%
Not Rated	249.2	1.6%
Total	15,076.9	100.0%

Map 56



Chester Township
Generalized Wetlands

Wetlands
Non-wetlands
Not Rated

N

Source: Geauga County
Soil Survey 1982
Prepared by: Geauga County
Planning Commission 2002

3000 0 3000 6000 Feet

EPA Phase II Storm Water Regulations

The Phase II storm water regulation is an extension of the 1990 U.S. EPA rules establishing the National Pollutant Discharge Elimination Systems (NPDES) storm water (Phase I) program. The Phase II rule extends coverage of the NPDES storm water program to certain "small" MS4s ("urbanized areas" as defined by the U.S. Bureau of the Census), but takes a slightly different approach to how the storm water management program is developed and implemented. A small MS4 is any MS4 not already covered by the Phase I program. The Phase II rule automatically covers on a nationwide basis all small MS4s located in "urbanized areas" unless waived by the NPDES permitting authority. An MS4 is a municipal separate wastewater treatment facility, which includes sewer facilities, ditches, and culverts. The definition of "small" MS4s includes any land area comprising one or more places adjacent to a densely populated area that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile.

According to the EPA four areas within Geauga County must comply with the Phase II requirements. These areas include portions of Bainbridge, Russell, and Chester Townships, and the entire South Russell Village area. Although a portion of Auburn Township is included as an MS4 area the township was granted a waiver from the Phase II small MS4 program (letter dated July 25, 2003). Geauga County operates facilities within the Townships of Bainbridge, Russell and Chester and has thus prepared a Geauga County Storm Water Management Phase II Report (adopted by the Board of County Commissioners May 15, 2003), which will be updated every December to comply with the Phase II requirements. The Chester Township Board of Trustees has also adopted an individual Storm Water Management Plan effective March 6, 2003. Compliance with the EPA Storm Water Phase II program mandates the urbanized areas to establish Best Management Practices (BMP's) for the following six storm water control measures:

- Public Education and Outreach – Distributing educational materials and performing outreach to inform citizens about the impacts polluted storm water runoff discharges can have on water quality.

- Public Participation and Involvement – Providing opportunities for citizens to participate in program development and implementation, including effectively publicizing public hearings and/or encouraging citizen representation on a storm water management panel.

- Illicit Discharge Detection and Elimination – Developing and implementing a plan to detect and eliminate illicit discharges to the storm water system.

- Construction Site Runoff Control – Developing, implementing, and enforcing an erosion and sediment control program for construction activities that affect one or more acres of land.

- Post Construction Site Runoff Control – Developing, implementing, and enforcing a program to address discharges of post-construction storm water runoff from new development and redevelopment areas.

- Pollution Prevention / Good Housekeeping – Developing and implementing a program with the goal of preventing or reducing pollutant runoff from municipal operations.

In addition to identifying BMP's for each of the above listed control items, measurable goals must be established to monitor the BMP's effectiveness. As a part of the monitoring process, the Geauga County General Health District may be conducting an inventory of septic systems within "urbanized areas" that fall under the EPA's storm water management plan.

Drainage

Drainage describes the rapidity and the extent of the removal of water from the soil (see Table 48 and Map 57). The definitions below relative to drainage are from the Ohio Department of Natural Resources, Division of Lands and Soil:

> Very Poorly Drained (VPD) - Water is removed so slowly that the soil is saturated for an extended length of time.
>
> Poorly Drained (PD) - Water is removed from the soil so slowly that it remains wet for long periods of time. The water table is commonly at or near the surface during a considerable part of the year.
>
> Somewhat Poorly Drained (SPD) - Water is removed from the soil so slowly that it remains wet for significant periods, but not all of the time. Somewhat poorly drained soils commonly have a slow permeable layer within the profile, a high water table, additions through seepage, or a combination of these conditions.
>
> Moderately Well Drained (MWD)- Water is removed from the soil somewhat slowly so that the profile is wet for a small but significant part of the time. Moderately well drained soils commonly have a slow permeable layer within or immediately beneath the surface soil and subsoil layers, a relatively high water table, additions of water through seepage, or some combination of these conditions.
>
> Well Drained (WD) - Water is removed from the soil readily, but not rapidly. Well-drained soils are commonly loamy textured, although soils of other texture may also be well drained.

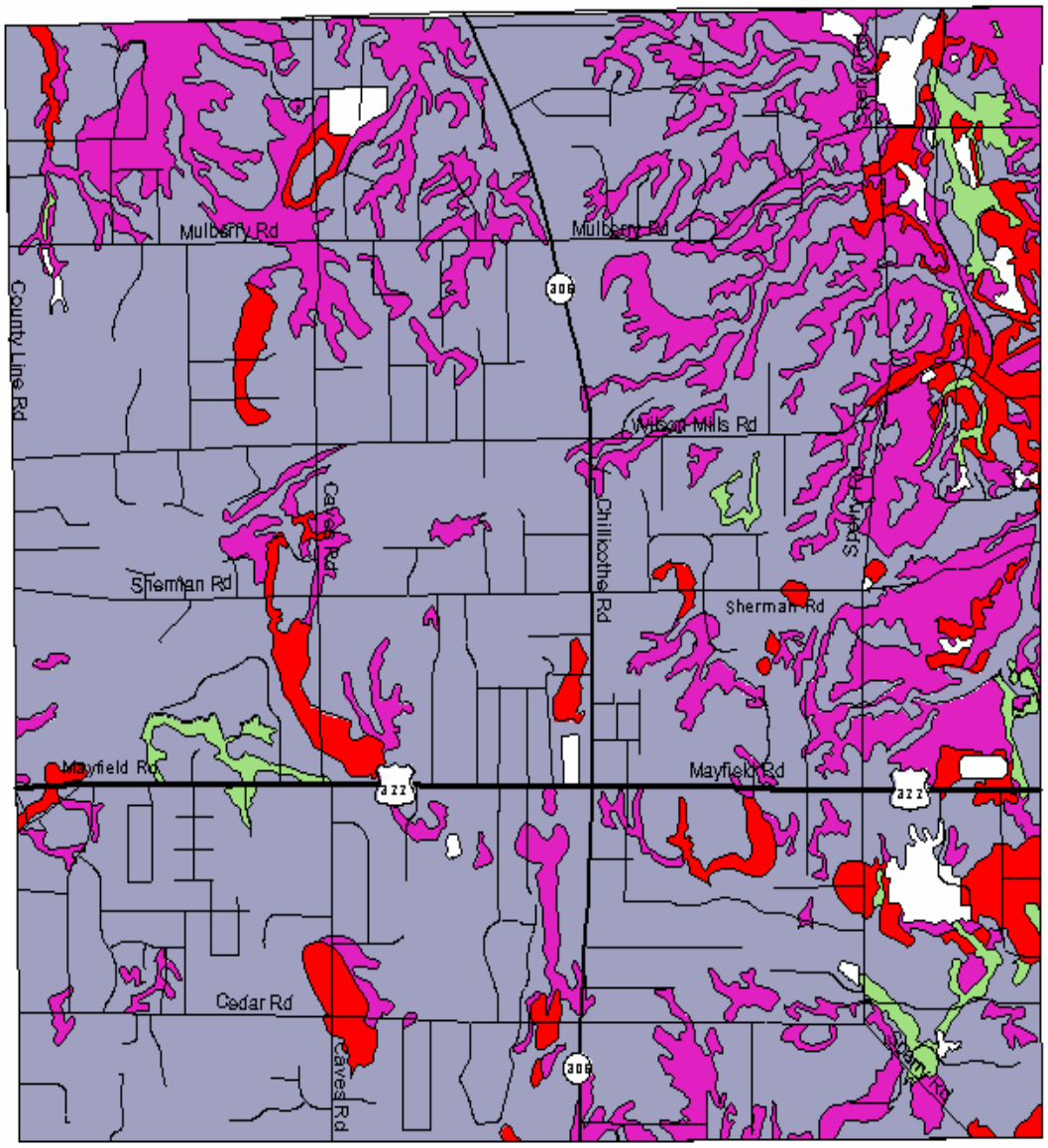
Almost 11 percent of the township is “somewhat poorly drained.”

Table 48

Drainage Map Legend
Chester Township

Rating	Acres	% of Township Area
Very Poorly Drained	0.0	0.0%
Poorly Drained	234.8	1.5%
Somewhat Poorly Drained	10,863.4	72.1%
Moderately Well Drained	2,905.9	19.3%
Well Drained	755.8	5.0%
Not Rated	317.0	2.1%
Total	15,076.9	100.0%

Map 57



Chester Township Drainage

Soil Drainage
- Poorly Drained
- Somewhat Poorly Drained
- Moderately Well Drained
- Well Drained
- Not Rated

N

3000 0 3000 6000 Feet

Source: Geauga County Soil Survey 1982
Prepared by: Geauga County Planning Commission 2002

Generalized Ground Water Availability

According to the Division of Water, Ohio Department of Natural Resources, over 62% of the township has a ground water potential of up to 25 gallons per minute (see Table 49 and Map 58). Generally, there are no central water supply systems in Chester Township. As a result, the management of ground water resources is a paramount concern in order to maintain quality and quantity. Potential pollution hazards should be minimized. Such hazards may include malfunctioning septic systems, improper brine disposal from oil and gas wells, as well as runoff from inappropriately applied fertilizer, herbicides, pesticides, and animal wastes.

An initial countywide groundwater study was conducted by the United States Geological Survey (USGS) in 1978 which included water level measurements in 77 wells. The study found that most of the groundwater in the county is withdrawn from sandstones of the Pottsville and Cuyahoga Formations. No discernible effects from residential development were evident. The ground water was deemed to be generally of good quality. The groundwater levels measured in wells completed in the various geologic units indicated that the groundwater moves within local flow systems from topographically high recharge areas to topographically low discharge areas. Generally, groundwater flows radially away from the highlands towards adjacent streams and river valleys. A comparison of water levels measured in 1978, 1979, 1980, 1985, and 1986 by USGS indicates that no long-term regional water-level changes have occurred in the county.

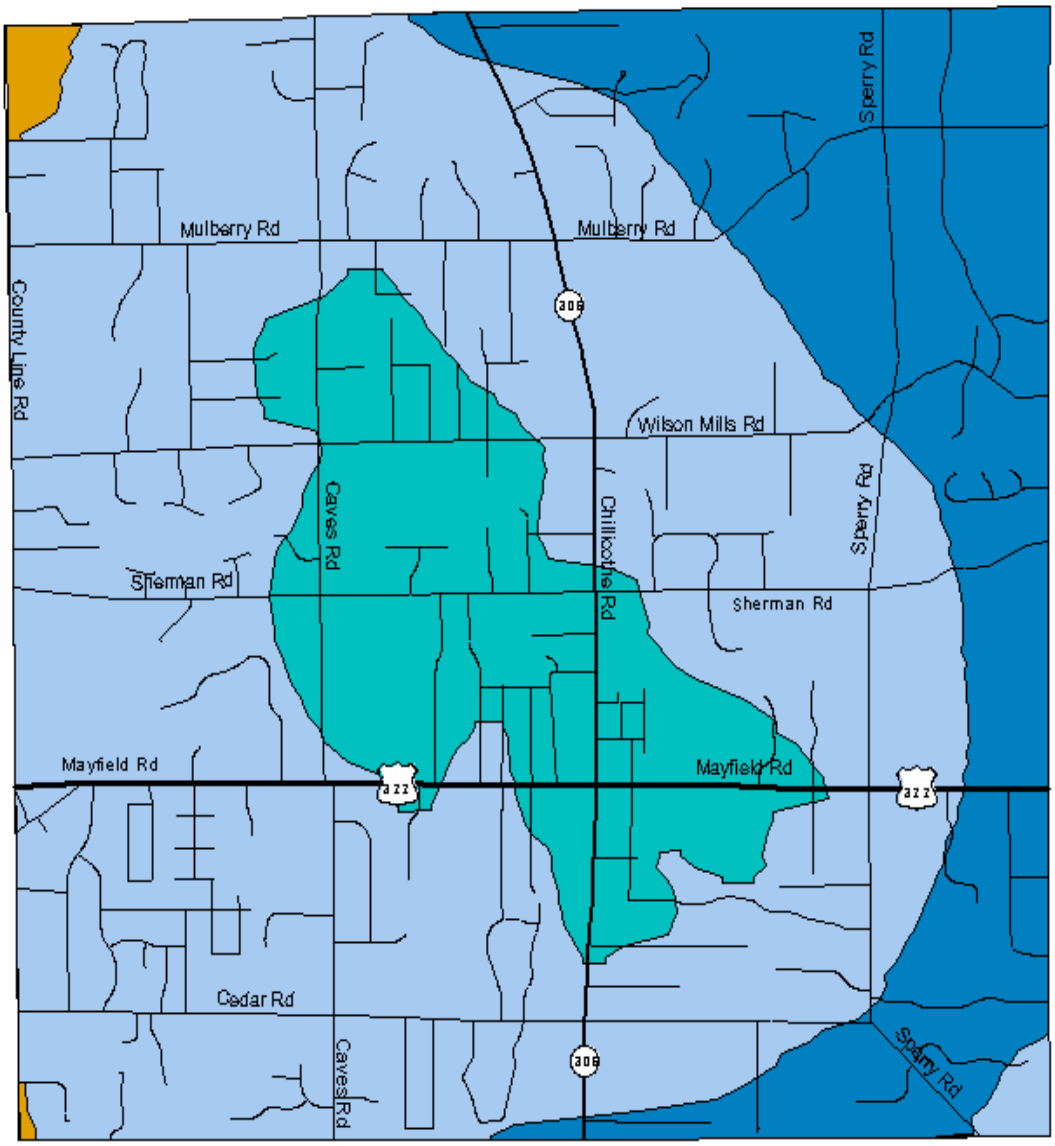
The most recent USGS study for Geauga County was completed in 1995. It examined groundwater flow and changes in groundwater levels since 1986 within the major aquifers of the county. Water levels in 219 wells were measured and about 80% of the wells showed changes in the range of plus or minus five feet. The study concluded that an increase in population and groundwater pumpage did not correlate with the decline in water levels. The predominant reason for the decline seemed to be a decrease in recharge from 1986 to 1994. The USGS has initiated a program to create a well network in the county. Recording devices have been placed on selected wells to obtain continuous output of data.

Table 49

Generalized Ground Water Availability Map Legend
Chester Township

Expected Gallons Per Minute (GPM)	Acres	% of Township Area
3 GPM	91.1	.6%
3 – 10 GPM	3,266.2	21.7%
5 – 15 GPM	9,435.5	62.6%
25 – 100 GPM	2,284.1	15.1%
Total	15,076.9	100.0%

Map 58



Chester Township
Generalized Ground Water Availability

Ground Water Availability

- Seldom Exceeds 3 Gallons Per Minute
- 3 - 10 Gallons Per Minute
- 5 - 15 Gallons Per Minute
- 25 - 100 Gallons Per Minute

N

Source: Ohio Department of Natural Resources 1978
Prepared by: Geauga County Planning Commission 2001

4000 0 4000 8000 Feet

Hydrogeologicic Settings and Ratings

The Division of Water, Ohio Department of Natural Resources has developed a ground water pollution mapping program using the DRASTIC mapping process. This process is comprised of two major elements: designated mapped units called hydrogeologic settings and a rating system for pollution potential.

Hydrogeologic settings form the basis of the system. Inherent within each hydrogeologic setting are the physical characteristics that affect ground water pollution potential. The following factors have been identified during the development of the DRASTIC system: depth to water (D), net recharge (R), aquifer media (A), soil media (S), topography (T), impact of the vadose zone media (I), and hydraulic conductivity of the aquifer (C). These variables form the acronym DRASTIC and are used in a ranking scheme that uses a combination of weights and ratings to establish a numerical value called the ground water pollution potential index (GWPP) that are contained in the document titled Ground Water Pollution Potential of Geauga County Report No. 12 prepared by the Ohio Department of Natural Resources, Division of Water, Ground Water Resources Section (1994). These factors incorporate concepts and mechanisms such as attenuation, retardation, and time or distance of travel of a contaminant with respect to the physical characteristics of the hydrogeologic setting. Broad consideration of these factors and mechanisms coupled with existing conditions in a setting provide a basis for determination of the area's relative vulnerability to contamination.

Map 59 identifies the hydrogeologic region and setting within the township. Chester Township (as well as all of Geauga County) lies within the glaciated central hydrogeologic region of the DRASTIC system. The first number (7) refers to the hydrogeologic region and the next combination of letters and numbers identifies the hydrogeologic setting and the corresponding parameters that are unique to that specific setting. The following information provides a description of each hydrogeologic setting and associated ratings for Chester Township.

7Aa Glacial Till Over Bedded Sedimentary Rock

This hydrogeologic setting is characterized by high relief with prominent, steep-sided ridges, and by relatively flat-lying, fractured sedimentary rocks. The rocks are predominantly sandstones with thin, inter-layered coals and shale that are covered by varying thickness of glacial till. The thin coal seams are usually highly fractured and are quite permeable. Thin clay and shale zones tend to impede vertical water movement and create "perched" water tables. The till is basically an unsorted deposit that contains localized deposits of sand and gravel. Although precipitation is abundant in the region, recharge is generally moderate due to the relatively high depth to water (low water table) and the corresponding thick vadose zone comprised of compacted till. Depth to water is variable, but generally ranges between 25 and 50 feet.

Setting: 7Aa12		General		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	5-15	5	9	45
Net Recharge	4-7	4	6	24
Aquifer Media	Bedded SS, LS, Sh, Sequences	3	6	18
Soil Media	Sandy Loam	2	6	12
Topography	6-12	1	9	9
Impact of Vadose Zone	Silty Clay	5	4	20
Hydraulic Conductivity	100-300	3	2	6
			GWPP Index	134

Setting: 7Aa15		General		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	30-50	5	3	15
Net Recharge	4-7	4	6	24
Aquifer Media	Bedded SS, LS, Sh, Sequences	3	6	18
Soil Media	Silty Loam	2	4	8
Topography	2-6	1	9	9
Impact of Vadose Zone	Bedded SS, LS, Sh, Sequences	5	6	30
Hydraulic Conductivity	100-300	3	2	6
			GWPP Index	110

7Ad Glacial Till Over Sandstone

This hydrogeologic setting is characterized by low topography and relatively flat-lying, fractured sandstones that are covered by varying thickness of glacial till. The till is principally unsorted deposits that may be interbedded with loess or localized deposits of sand and gravel. Although ground water occurs in both the glacial deposits and in the intersecting bedrock fractures, the bedrock is typically the principal aquifer. The glacial till serves as a source of recharge to the underlying bedrock. Although precipitation is abundant in most of the region, recharge is moderate because of the glacial tills that typically weather to clay. Depth to water is extremely variable, depending in part on the thickness of the glacial till, but averages around 40 feet.

Setting: 7Ad10		General		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	50-75	5	3	15
Net Recharge	4-7	4	6	24
Aquifer Media	Sandstone	3	6	18
Soil Media	Clay Loam	2	3	6
Topography	2-6	1	9	9
Impact of Vadose Zone	Silt/Clay	5	4	20
Hydraulic Conductivity	300-700	3	4	12
			GWPP Index	104

Setting: 7Ad13		General		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	15-30	5	7	35
Net Recharge	4-7	4	6	24
Aquifer Media	Sandstones	3	4	12
Soil Media	Clay Loam	2	3	6
Topography	2-6	1	9	9
Impact of Vadose Zone	Silt/Clay	5	4	30
Hydraulic Conductivity	1-300	3	1	12
			GWPP Index	109

Setting: 7Ad21		General		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	30-50	5	5	25
Net Recharge	4-7	4	6	24
Aquifer Media	Sandstones	3	4	12
Soil Media	Clay Loam	2	3	6
Topography	0-2	1	10	10
Impact of Vadose Zone	Sand & Gravel w/sig Silt/Clay	5	4	20
Hydraulic Conductivity	1-100	3	1	3
			GWPP Index	100

7Ae Glacial Till Over Shale

This hydrogeologic setting has varying thickness of till that overlie fractured, flat-lying shales. The till is principally unsorted deposits with interbedded lenses of loess and sand and gravel. Ground water is derived from either localized sources in the overlying till or from deeper, more permeable formations. The shale is relatively impermeable and does not serve as a source of ground water. Although precipitation is abundant, recharge is minimal from the till to deeper formations and occurs only by leakage of water through fractures.

Setting: 7Ae1		General		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	15-30	5	7	35
Net Recharge	2-4	4	3	12
Aquifer Media	Shale	3	2	6
Soil Media	Silty Loam	2	4	8
Topography	18+	1	1	1
Impact of Vadose Zone	Silt/Clay	5	4	20
Hydraulic Conductivity	1-100	3	1	3
			GWPP Index	85

Setting: 7 Ae11		General		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	75-100	5	2	10
Net Recharge	4-7	4	6	24
Aquifer Media	Till	3	5	15
Soil Media	Silty Loam	2	4	8
Topography	18+	1	1	1
Impact of Vadose Zone	Silt/Clay	5	4	20
Hydraulic Conductivity	1-100	3	1	3
			GWPP Index	81

7Ba Outwash

This hydrogeologic setting is characterized by the rolling, hummocky, “kame and kettle” topography primarily associated with the Kent Kame Complex and Kent Moraine. Outwash deposits include ice-contact derived kames, depressional kettles and bogs, outwash plains, and channeled outwash valley trains associated with the stagnation of the Late Wisconsinan Kent Till. Outwash deposits typically overlie buried valleys: in some areas they overlie fractured sedimentary rocks. These deposits contain varying amounts of till and finer silt deposits that may somewhat impede recharge. Sands and gravels serve as the aquifer: the nature and extent of such units is highly variable. Recharge is moderate to high and soils are typically loams or sandy loams with peat or clay occurring in the depressions and kettles. Water levels are highly variable but generally range between 20 and 40 feet. The depth to water is greater for the prominent kames and is usually shallower near kettles. These deposits may be in direct hydraulic connection with underlying, fractured bedrock.

Setting: 7Ba7		General		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	50-75	5	3	15
Net Recharge	10+	4	9	36
Aquifer Media	Sand & Gravel	3	9	27
Soil Media	Silty Loam	2	4	8
Topography	2-6	1	9	9
Impact of Vadose Zone	Sand & Gravel	5	9	45
Hydraulic Conductivity	1000-2000	3	8	24
			GWPP Index	164

7D Buried Valleys

This hydrogeologic setting is characterized by thick deposits of sand and gravel that have been deposited in a former topographic low (usually a pre-glacial river valley) by glacial meltwaters. These deposits are capable of yielding large quantities of ground water. The deposits may or may not underlie a present-day river and may not be in direct hydraulic connection with a stream. Glacial till or recent alluvium often overlies

the buried valley. Usually the deposits are several times more permeable than the surrounding bedrock. Soils are typically a sandy loam. Recharge to the sand and gravel is moderate and water levels are commonly relatively shallow, although they may be quite variable.

Setting: 7 D1		**General**		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	30-50	5	5	25
Net Recharge	2-4	4	3	12
Aquifer Media	Sand and Gravel	3	5	15
Soil Media	Silty Loam	2	4	8
Topography	18+	1	1	1
Impact of Vadose Zone	Silt/Clay	5	4	20
Hydraulic Conductivity	100-300	3	2	6
			GWPP Index	87

Setting: 7 D2		**General**		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	5-15	5	9	45
Net Recharge	7-10	4	8	32
Aquifer Media	Sand and Gravel	3	8	24
Soil Media	Gravel	2	10	20
Topography	0-2	1	10	10
Impact of Vadose Zone	Sand & Gravel w/sig Silt/Clay	5	6	30
Hydraulic Conductivity	700-1000	3	6	18
			GWPP Index	179

Setting: 7 D3		**General**		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	30-50	5	5	25
Net Recharge	4-7	4	6	24
Aquifer Media	Sand and Gravel	3	8	24
Soil Media	Silty Loam	2	4	8
Topography	6-12	1	5	5
Impact of Vadose Zone	Silt/Clay	5	4	20
Hydraulic Conductivity	300-700	3	4	12
			GWPP Index	118

Setting: 7D6		General		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	5-15	5	9	45
Net Recharge	10+	4	9	36
Aquifer Media	Sand and Gravel	3	9	27
Soil Media	Gravel	2	10	20
Topography	0-2	1	10	10
Impact of Vadose Zone	Sand & Gravel	5	9	45
Hydraulic Conductivity	1000-2000	3	8	24
			GWPP Index	207

Setting: 7D7		General		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	75-100	5	2	10
Net Recharge	4-7	4	6	24
Aquifer Media	Sand and Gravel	3	8	24
Soil Media	Clay Loam	2	3	6
Topography	2-6	1	9	9
Impact of Vadose Zone	Silt/Clay	5	4	20
Hydraulic Conductivity	300-700	3	4	12
			GWPP Index	105

Setting: 7D9		General		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	50-75	5	3	15
Net Recharge	4-7	4	6	24
Aquifer Media	Sand and Gravel	3	8	24
Soil Media	Silty Loam	2	4	8
Topography	2-6	1	9	9
Impact of Vadose Zone	Sand & Gravel	5	4	20
Hydraulic Conductivity	300-700	3	4	12
			GWPP Index	112

Setting: 7D12		General		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	50-75	5	3	15
Net Recharge	4-7	4	6	24
Aquifer Media	Sand and Gravel	3	6	18
Soil Media	Silty Loam	2	4	8
Topography	2-6	1	10	10
Impact of Vadose Zone	Silt/Clay	5	4	20
Hydraulic Conductivity	100-300	3	2	6
			GWPP Index	101

Setting: 7D12		General		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	50-75	5	3	15
Net Recharge	4-7	4	6	24
Aquifer Media	Sand and Gravel	3	6	18
Soil Media	Silty Loam	2	4	8
Topography	2-6	1	10	10
Impact of Vadose Zone	Silt/Clay	5	4	20
Hydraulic Conductivity	100-300	3	2	6
			GWPP Index	101

Setting: 7D16		General		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	5-15	5	9	45
Net Recharge	7-10	4	8	32
Aquifer Media	Sand & Gravel	3	6	18
Soil Media	Silty Loam	2	4	8
Topography	0-2	1	10	10
Impact of Vadose Zone	Sand & Gravel w/sig Silt/Clay	5	7	35
Hydraulic Conductivity	100-300	3	2	6
			GWPP Index	154

Setting: 7D25		General		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	30-50	5	5	25
Net Recharge	10+	4	9	36
Aquifer Media	Sand & Gravel	3	6	18
Soil Media	Silty Loam	2	4	8
Topography	2-6	1	9	9
Impact of Vadose Zone	Sand & Gravel	5	9	45
Hydraulic Conductivity	100-300	3	2	6
			GWPP Index	147

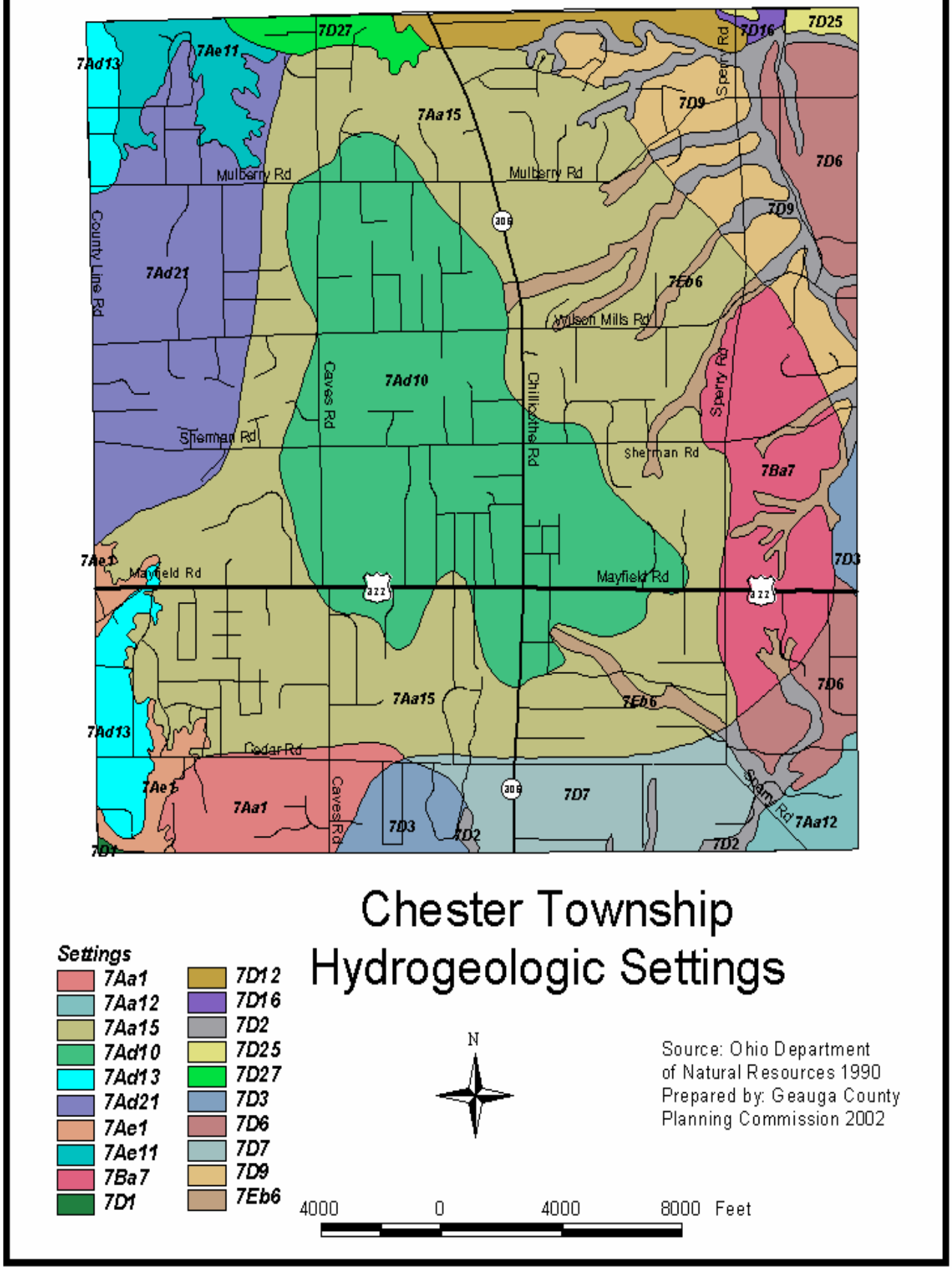
Setting: 7D27		General		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	75-100	5	2	10
Net Recharge	4-7	4	6	24
Aquifer Media	Sand & Gravel	3	6	18
Soil Media	Silty Loam	2	4	8
Topography	18+	1	1	1
Impact of Vadose Zone	Silty Clay	5	4	20
Hydraulic Conductivity	100-300	3	2	6
			GWPP Index	87

7Eb River Alluvium Without Overbank Deposits

This hydrogeologic setting is characterized by flat-lying topography along the floodplains of some moderate-sized streams. Moderately thick, relatively coarse alluvium is found within these stream valleys. These valleys lack significant fine-grained over bank deposits. Recharge is relatively high and the depth to water is less than 15 feet. The coarse alluvium (sand and gravel) aquifer is commonly in direct hydrologic contact with the surface stream. The alluvium may also serve as a source of recharge to the underlying, fractured, sedimentary rocks.

Setting: 7Eb6		**General**		
Feature	**Range**	**Weight**	**Rating**	**Index**
Depth to Water	5-15	5	9	45
Net Recharge	7-10	4	8	32
Aquifer Media	Bedded SS, LS & Sh Sequences	3	6	18
Soil Media	Silty Loam	2	4	8
Topography	0-2	1	10	10
Impact of Vadose Zone	Sans & Gravel w/sig Silt/Clay	5	6	30
Hydraulic Conductivity	300-700	3	2	6
			GWPP Index	149

Map 59



Chester Township Hydrogeologic Settings

Settings

- 7Aa1
- 7Aa12
- 7Aa15
- 7Ad10
- 7Ad13
- 7Ad21
- 7Ae1
- 7Ae11
- 7Ba7
- 7D1
- 7D12
- 7D16
- 7D2
- 7D25
- 7D27
- 7D3
- 7D6
- 7D7
- 7D9
- 7Eb6

N

Source: Ohio Department of Natural Resources 1990
Prepared by: Geauga County Planning Commission 2002

4000 0 4000 8000 Feet

Ground Water Pollution Potential

Map 60 represents the pollution potential as calculated from the hydrogeologic settings. Generally, a higher number means a greater potential for ground water contamination. The color codes are part of a national color scheme, with warm colors (red, orange, and yellow) representing areas of higher vulnerability and cool colors (greens, blues, and violet) representing areas of lower vulnerability to contamination. The computed ground water pollution index for Chester Township ranged from 81 to 207 (see GWPP Index). The majority of the township is in the lower vulnerability range. The area in the eastern quarter of the township appears to have a higher pollution potential (164 – 207 range).

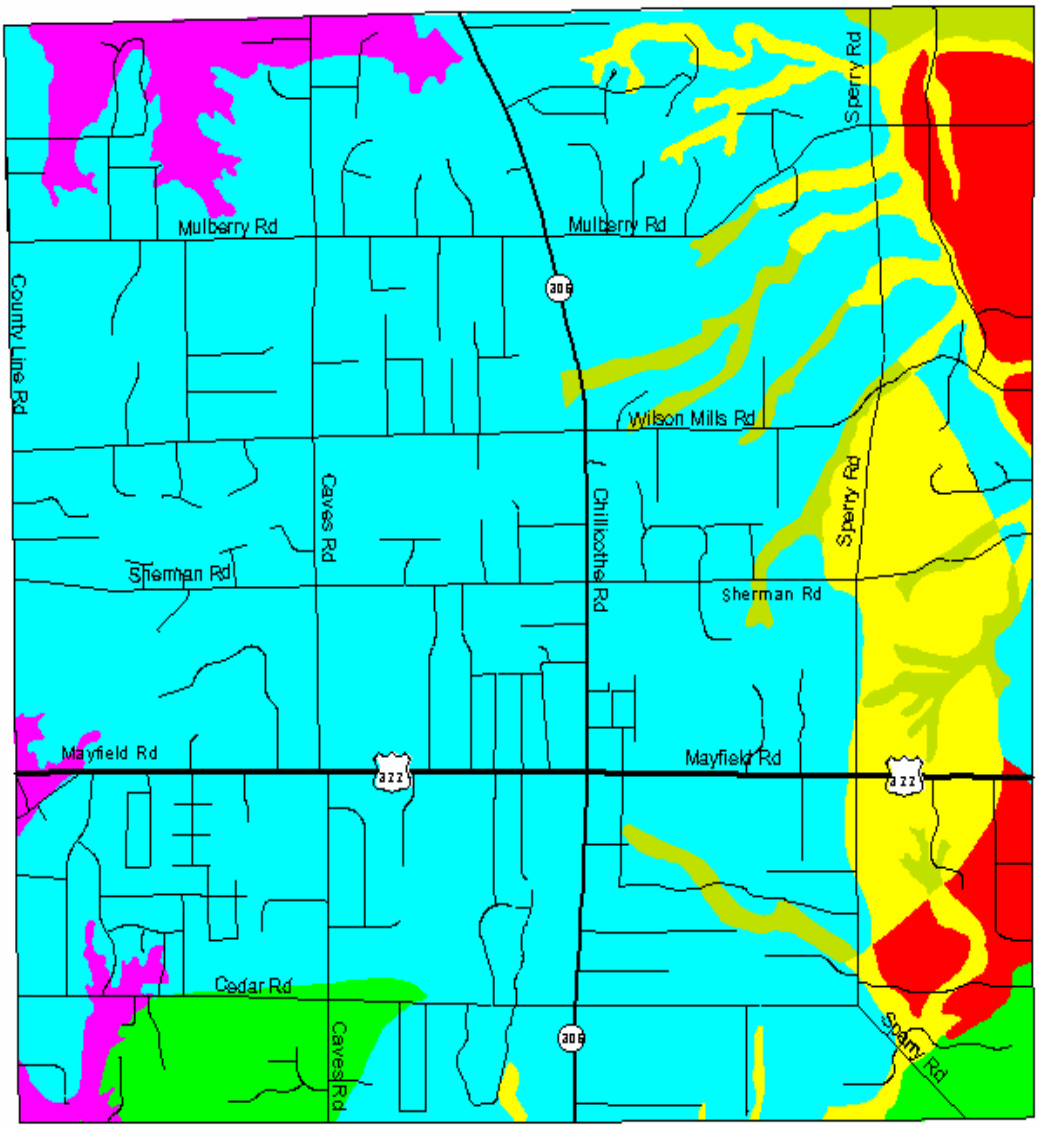
In the development of the DRASTIC system, a set of assumptions must be recognized. The pollution potential evaluation of an area assumes a contaminant with the mobility of water, introduced at the surface, and flushed into the ground water by precipitation. DRASTIC cannot be applied to areas smaller than one hundred acres in size, and is not intended or designed to replace site-specific investigations.

Table 50

Ground Water Pollution Potential Map Legend
Chester Township

Pollution Index	Acres	% of Township
200+	651.5	4.3%
180 – 199	0.00	0.0%
160 – 179	1,411.3	9.4%
140 – 159	499.0	3.3%
120 – 139	638.4	4.2%
100 – 119	11,244.8	74.6%
0 – 99	631.9	4.2%
Total	15,076.9	100.0%

Map 60



Chester Township
Groundwater Pollution Potential

Pollution Index

Higher	200 +
	180 - 199
	160 - 179
	140 - 159
	120 - 139
	100 - 119
Lower	0 - 99

N

4000 0 4000 8000 Feet

Source: Ohio Department of Natural Resources 1990
Prepared by: Geauga County Planning Commission 2002

Land Capability Analysis

The physical data previously identified and mapped can be rated in relationship to various land uses. This process is known as a land capability analysis.

The following types of land uses were selected for a capability analysis because they represent historical and current development trends in the township. It must be stressed that the capability maps are not site specific and, therefore, are not meant to replace an on-site investigation.

> Single Family Dwellings Without Basements: The foundation is assumed to be spread footings of reinforced concrete built on undisturbed soil to a maximum frost penetration depth. The ratings include the soil characteristics affecting strength, settlement, excavation, and construction. Soil settlement and strength are influenced by drainage, seasonal water table, flooding, shrink-swell, and potential frost action. Soil properties relative to the ease of excavation and construction are depth to bedrock, flooding, slope, and seasonal water table.
>
> Single Family Dwellings With Basements: The ratings considered the soil characteristics affecting strength, settlement, excavation, and construction. Soil strength and settlement are influenced by drainage, seasonal water table, flooding, shrink-swell, and potential frost action. Soil properties relative to the ease of excavation and construction are depth to bedrock, flooding, slope, and seasonal water table.
>
> Commercial and/or Light Industrial Buildings: Represents buildings of less than three stories without basements. The foundation is assumed to be spread footings of reinforced concrete built in undisturbed soil to the maximum frost penetration depth. The ratings include soil attributes affecting soil strength, settlement, excavation, and construction. The variables affecting the amount and ease of excavation are slope, depth to bedrock, and seasonal water table.

In addition, the following items were chosen to be a part of the capability analysis because they are closely related to the above uses.

> Septic Tank Absorption Fields: Represents areas in which effluent from a septic tank is distributed into the soil through an approved subsurface system. The soil is evaluated between the depths of 24 to 72 inches. Soil adequacy for on-site sewage disposal is based upon permeability, flooding, seasonal water table, and depth to bedrock, all of which influence the absorption of the effluent. Other variables such as slope and depth to bedrock affect the installation of an on-site septic system as well.

Local Roads: Represents the use of soils for the construction of improved local roads that have all-weather surfacing (commonly asphalt or concrete) and are expected to carry vehicular traffic year round. Such roads are assumed to have a subgrade of appropriate soil material, an aggregate base, and a flexible or rigid surface. The variables rated which affect grading and excavation include slope, depth to bedrock, flooding, and a high seasonal water table. Other soil attributes that affect the construction of local roads include: drainage, shrink-swell, frost action, and seasonal water table.

Underground Utilities: Represents the installation of below-grade utilities such as sewer and water pipelines, telephone lines, and electrical lines. The ratings measure the soil attributes affecting corrosion, compactness, and ease of excavation. Compactness and the rate of corrosion are influenced by drainage, shrink-swell, seasonal water table, and corrosion of both steel and concrete. The ease of excavation is influenced by slope, depth to bedrock, and seasonal water table.

Each subsequent land capability map was produced based upon the ratings which accompany it (see Table 64). The ratings list the variables used, the parameters, and how each of the characteristics were categorized with regard to the specified land use. The following is a description of each rating category.

SLIGHT (SL):	The rating provided when conditions for the given use are suitable. The degree of limitation is insignificant and can be easily overcome.
MODERATE (M):	The rating provided when conditions for the given use are suitable, yet a degree of limitation exists which may be surmounted with proper engineering, design, and maintenance.
SEVERE (S):	The rating provided when conditions exist which are unfavorable for the specified use. However, such conditions do not preclude the given use. Generally, appropriate engineering, design and maintenance are required.
VERY SEVERE (VS):	The rating provided when conditions are very environmentally sensitive or unsuitable for the given use due to highly restrictive characteristics. In most instances, it is very difficult and possibly not cost-effective to attempt to overcome these limitations.
NOT RATED (NR):	This designation includes disturbed areas that were not categorized such as quarries and cut and fill.

Table 51

Limitations For Dwellings Without Basements
Chester Township

Variables	Slight	Moderate	Severe	Very Severe*
Drainage**	WD, MWD	SPD	PD	N / A
Depth to Seasonal Water Table	> 60"	36 - 60"	12 - 36"	0 - 12"
Shrink-Swell	Low	Moderate	High	N / A
Potential Frost Action	Low	Moderate	High	N / A
Depth to Bedrock	0 – 60"	N / A	N / A	N / A
Slope	0 – 6%	6 - 12%	12 - 18%	> 18%
Flooding	None	N / A	N / A	Frequent

*Results in an automatic “unsuitable” rating
**Refer to Page V-27

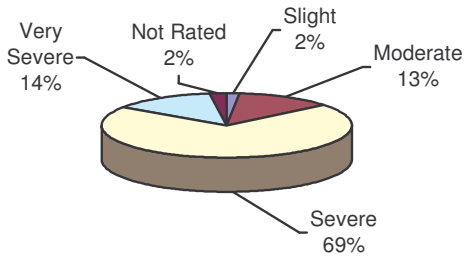
Table 52

Capability For Dwellings Without Basements
Chester Township

Rating	Acres	% Of Township
Slight	241.1	1.6%
Moderate	1,899.6	12.6%
Severe	10,583.9	70.2%
Very Severe	2,035.3	13.5%
Not Rated	317.0	2.1%
Total	15,076.9	100.0%

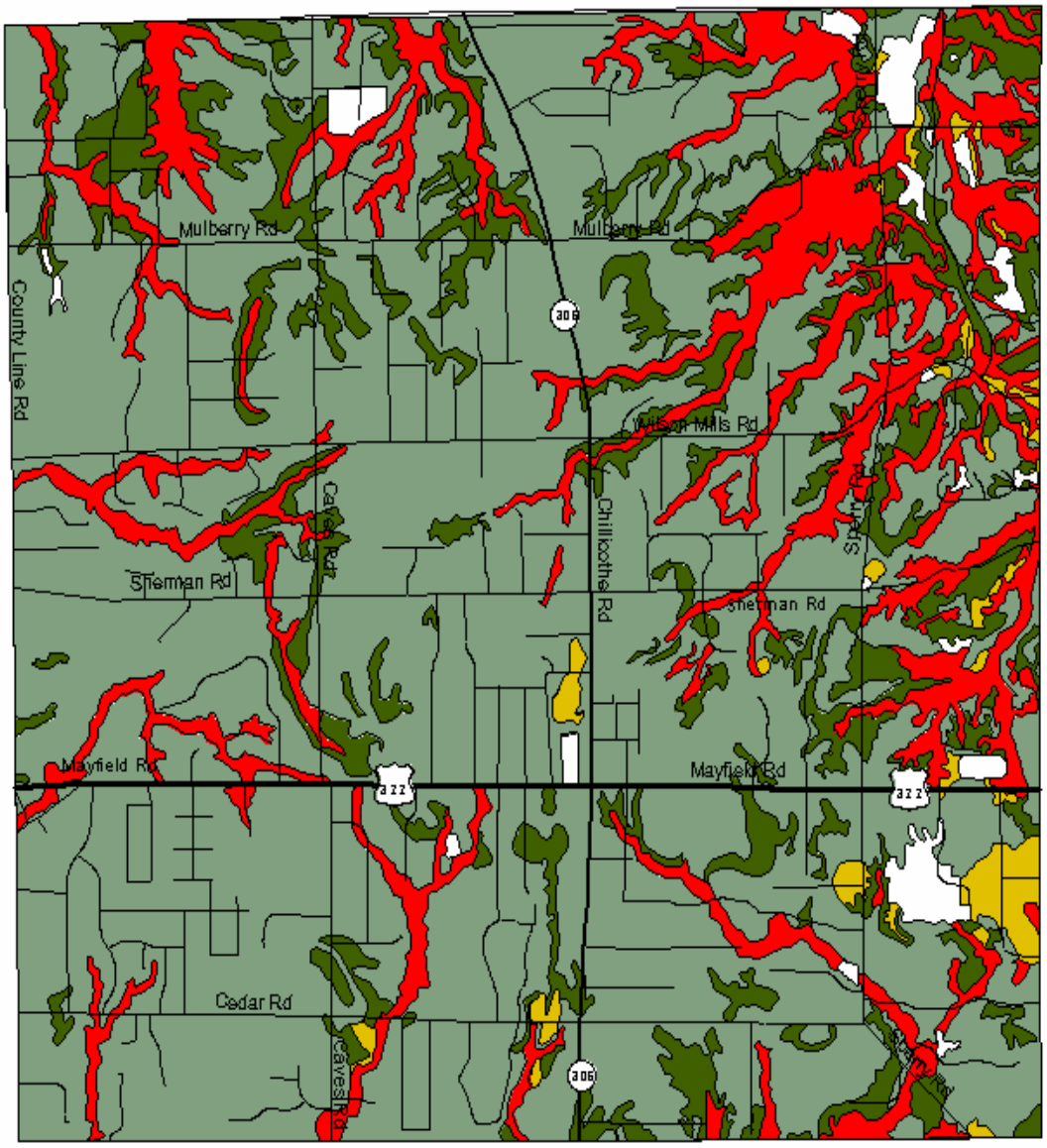
Figure 22

Capability For Dwellings Without Basements
Soil Rating Percentages
Chester Township



Source: Geauga County Planning Commission

Map 61



Chester Township
Capability For Dwellings Without Basements

Soil Capability
- Slight
- Moderate
- Severe
- Very Severe
- Not Rated

N

3000 0 3000 6000 Feet

Source: Geauga County
Soil Survey 1982
Prepared by: Geauga County
Planning Commission 2002

Table 53

Limitations For Dwellings With Basements
Chester Township

Variables	Slight	Moderate	Severe	Very Severe*
Drainage**	WD	MWD	SPD, PD	N / A
Depth to Seasonal Water Table	> 60"	36 - 60"	12 - 36"	0 - 12"
Shrink-Swell	Low	Moderate	High	N / A
Potential Frost Action	Low	Moderate	High	N / A
Depth to Bedrock	> 60"	N / A	40 - 60"	0 - 40"
Slope	0 - 6%	6 - 12%	12 - 18%	> 18%
Flooding	None	N / A	N / A	Frequent

*Results in an automatic “unsuitable” rating
**Refer to Page V-27

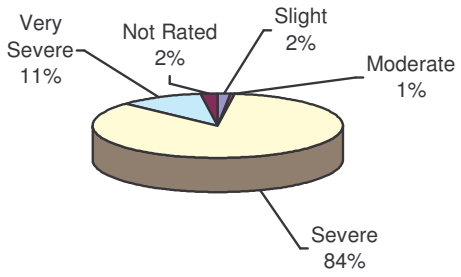
Table 54

Capability For Dwellings With Basements
Chester Township

Rating	Acres	% Of Township
Slight	241.1	1.6%
Moderate	105.5	.7%
Severe	12,770.0	84.7%
Very Severe	1,643.3	10.9%
Not Rated	317.0	2.1%
Total	15,076.9	100.0%

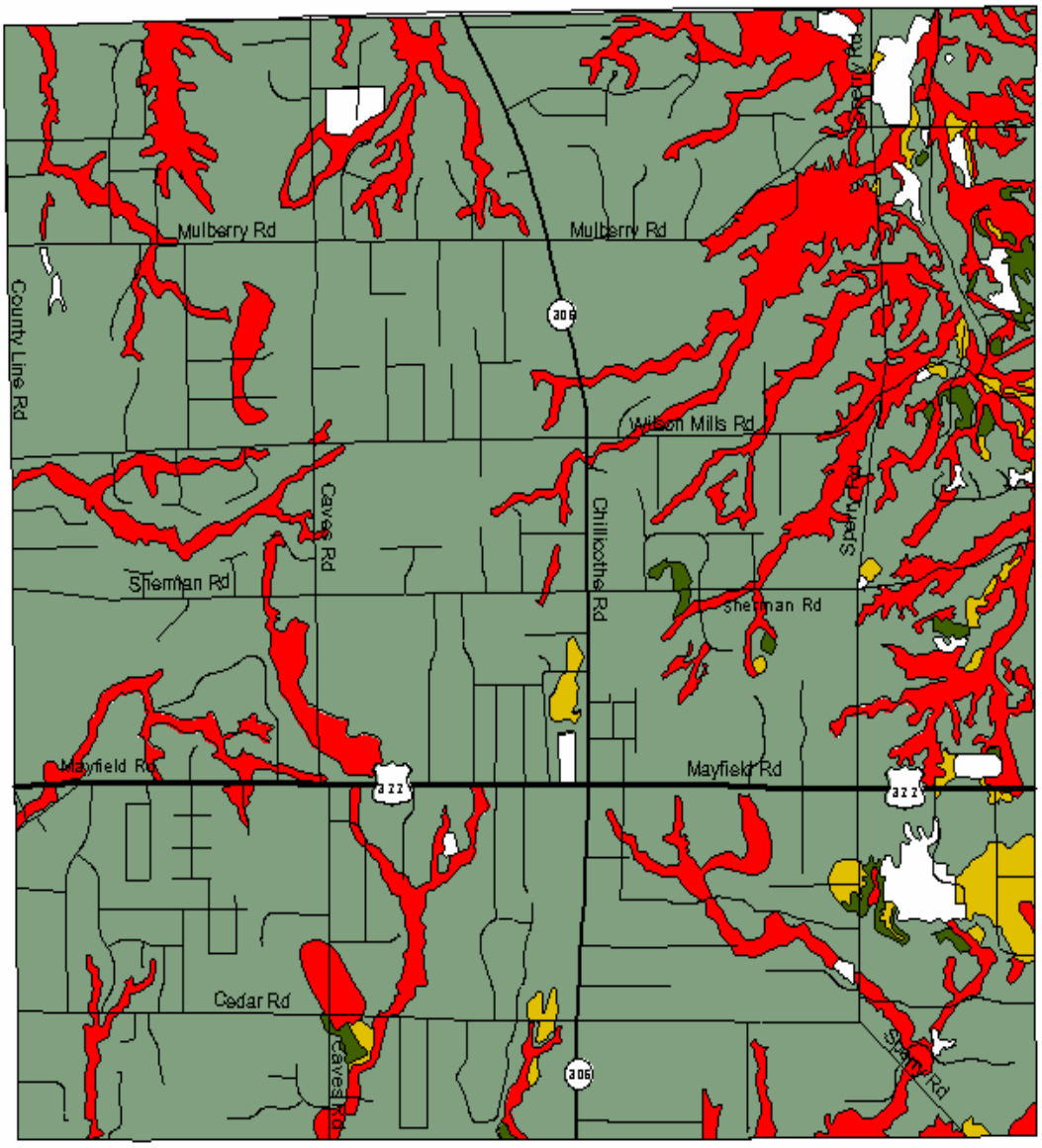
Figure 23

Capability For Dwellings With Basements
Soil Rating Percentages
Chester Township



Source: Geauga County Planning Commission

Map 62



Chester Township
Capability For Dwellings With Basements

Soil Capability
- Slight
- Moderate
- Severe
- Very Severe
- Not Rated

N

3000 0 3000 6000 Feet

Source: Geauga County
Soil Survey 1982
Prepared by: Geauga County
Planning Commission 2002

Table 55

Limitations For Commercial And/Or Light Industrial Buildings
Chester Township

Variables	Slight	Moderate	Severe	Very Severe*
Drainage**	WD, MWD	SPD	PD	N / A
Depth to Seasonal Water Table	> 60"	36 - 60"	12 - 36"	0 - 12"
Shrink-Swell	Low	Moderate	High	N / A
Depth to Bedrock	0 - 60"	N / A	N / A	N / A
Slope	0 - 6%	N / A	6 - 18%	> 18%

*Results in an automatic “unsuitable” rating
**Refer to Page V-27

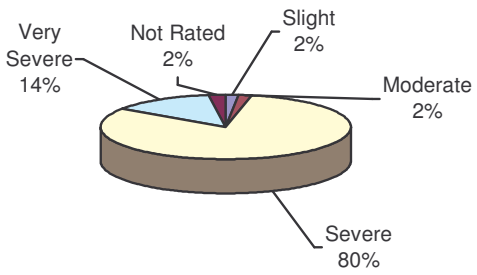
Table 56

Capability For Commercial And/Or Light Industrial Buildings
Chester Township

Rating	Acres	% Of Township
Slight	241.1	1.6%
Moderate	271.3	1.8%
Severe	12,212.2	81.0%
Very Severe	2,035.3	13.5%
Not Rated	317.0	2.1%
Total	15,076.9	100.0%

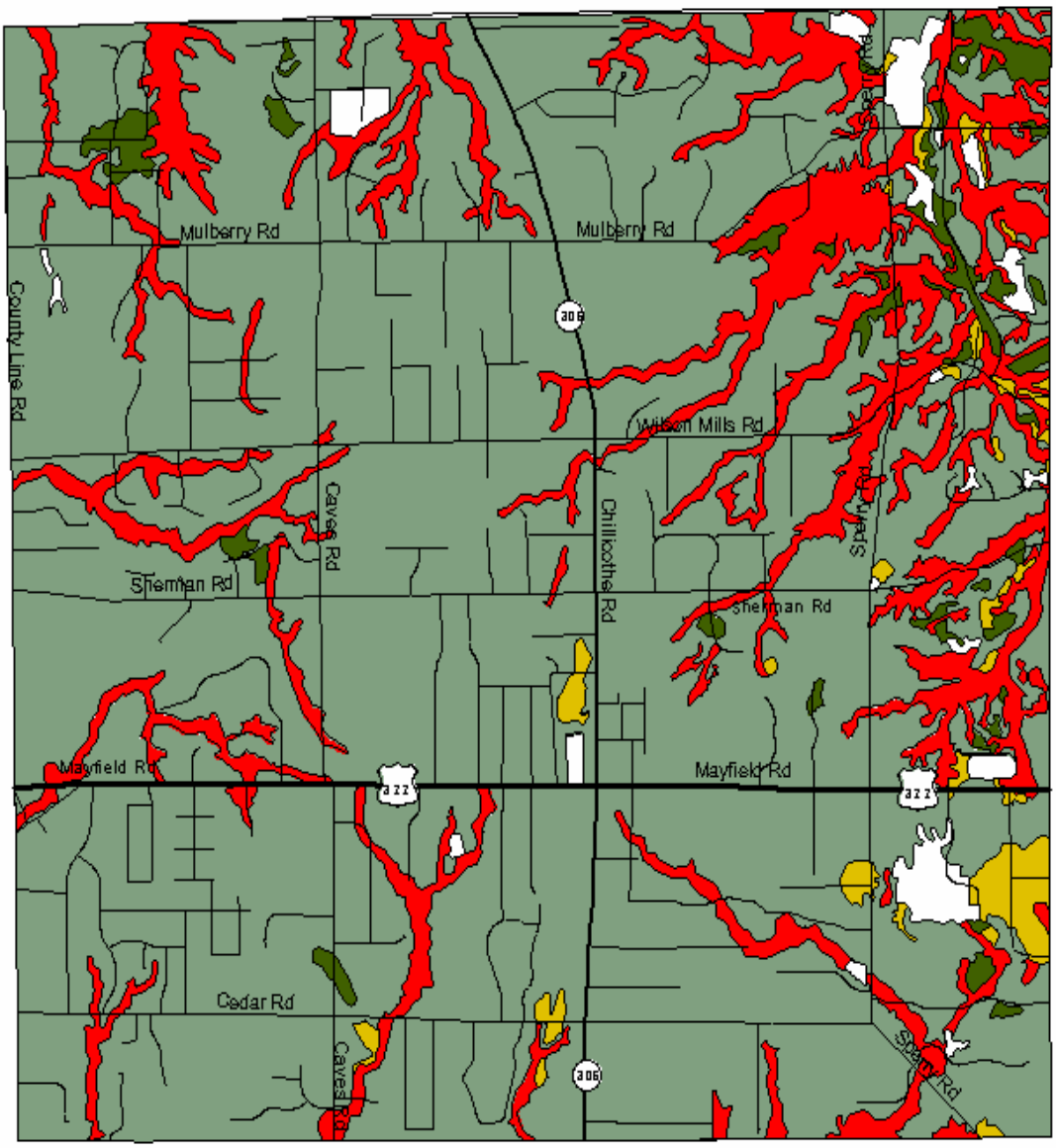
Figure 24

Capability For Commercial And/Or Light Industrial Buildings
Soil Rating Percentages
Chester Township



Source: Geauga County Planning Commission

Map 63



Chester Township
Capability For Commercial and/or Light Industrial Structures

Soil Capability
- Slight
- Moderate
- Severe
- Very Severe
- Not Rated

N

3000 0 3000 6000 Feet

Source: Geauga County Soil Survey 1982
Prepared by: Geauga County Planning Commission 2002

Table 57

Limitations For Septic Tank Absorption Fields
Chester Township

Variables	Slight	Moderate	Severe	Very Severe*
Permeability	MR, R	M	MS, S, VS	N / A
Flooding	None	N / A	N / A	Frequent
Slope	0 - 6%	6 - 12%	12 - 18%	> 18%
Depth to Bedrock	> 60"	N / A	N / A	0 - 60"
Depth to Seasonal Water Table	> 60"	36 - 60"	12 - 36"	0 - 12"

* Results in an automatic “unsuitable” rating

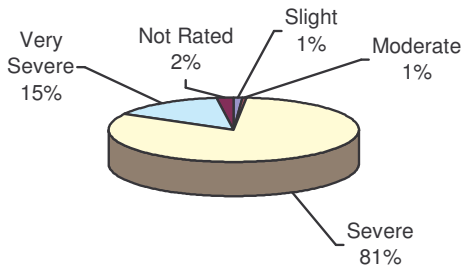
Table 58

Capability For Septic Tank Absorption Fields
Chester Township

Rating	Acres	% Of Township
Slight	150.7	1.0%
Moderate	105.5	.7%
Severe	12,272.4	81.4%
Very Severe	2,231.3	14.8%
Not Rated	317.0	2.1%
Total	15,076.9	100.0%

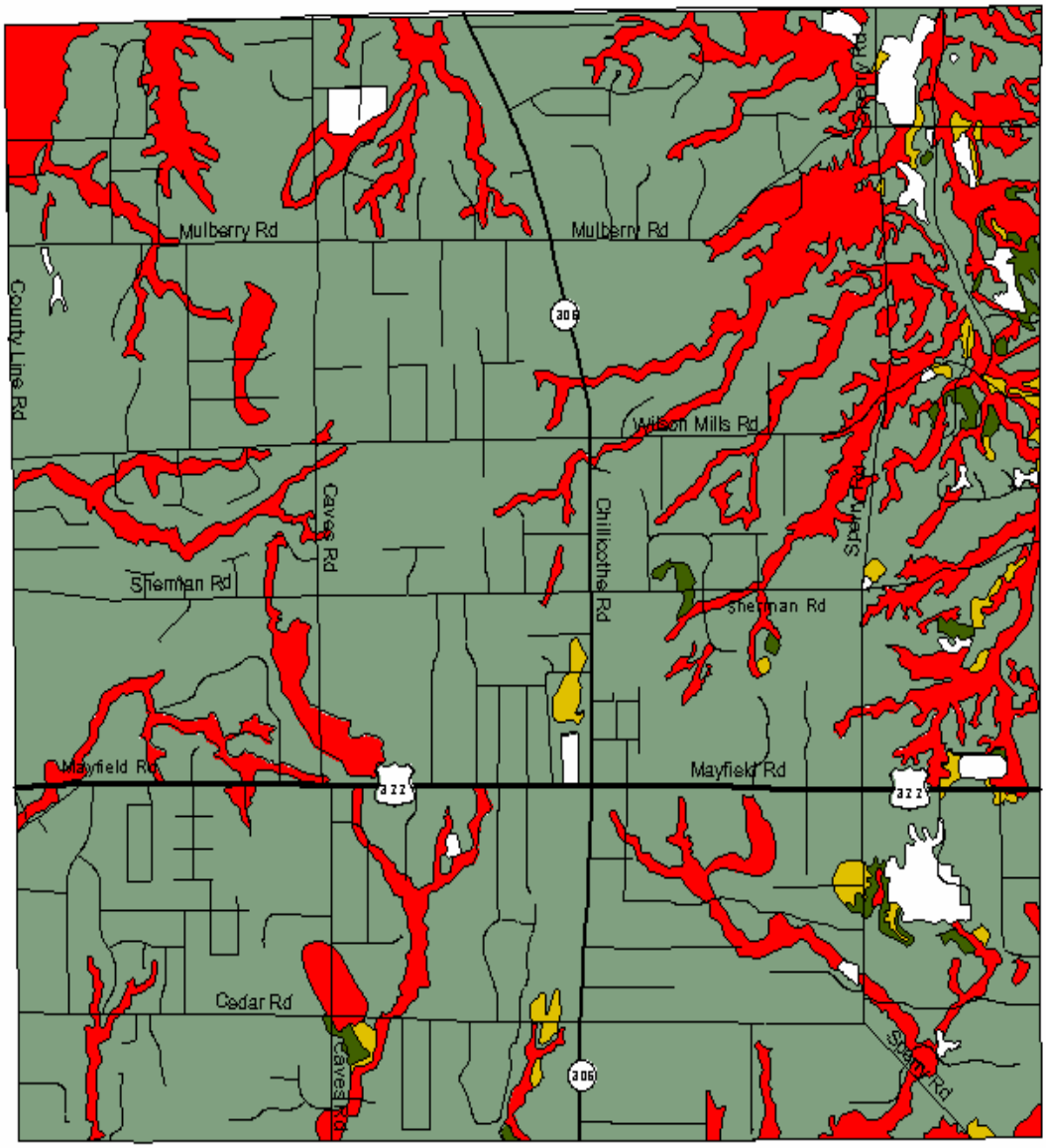
Figure 25

Capability For Septic Tank Absorption Fields
Soil Rating Percentages
Chester Township



Source: Geauga County Planning Commission

Map 64



Chester Township
Capability For Septic Tank Absorption Fields

Soil Capability
- Slight
- Moderate
- Severe
- Very Severe
- Not Rated

N

Source: Geauga County
Soil Survey 1982
Prepared by: Geauga County
Planning Commission 2002

3000 0 3000 6000 Feet

Table 59

Limitations For Local Roads
Chester Township

Variables	Slight	Moderate	Severe	Very Severe*
Drainage**	WD, MWD	SPD	PD	N / A
Flooding	None	N / A	N / A	Frequent
Slope	0 - 6%	6 - 12%	12 - 18%	> 18%
Depth to Bedrock	> 60"	0 - 60"	N / A	N / A
Shrink-Swell	Low	Moderate	High	N / A
Potential Frost Action	Low	Moderate	High	N / A
Depth to Seasonal Water Table	> 60"	36 - 60"	12 - 36"	0 - 12"

*Results in an automatic “unsuitable” rating
**Refer to Page V-27

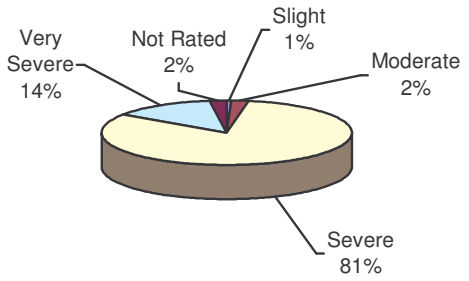
Table 60

Capability For Local Roads
Chester Township

Rating	Acres	% Of Township
Slight	75.3	.5%
Moderate	361.8	2.4%
Severe	12,287.5	81.5%
Very Severe	2,035.3	13.5%
Not Rated	317.0	2.1%
Total	15,076.9	100.0%

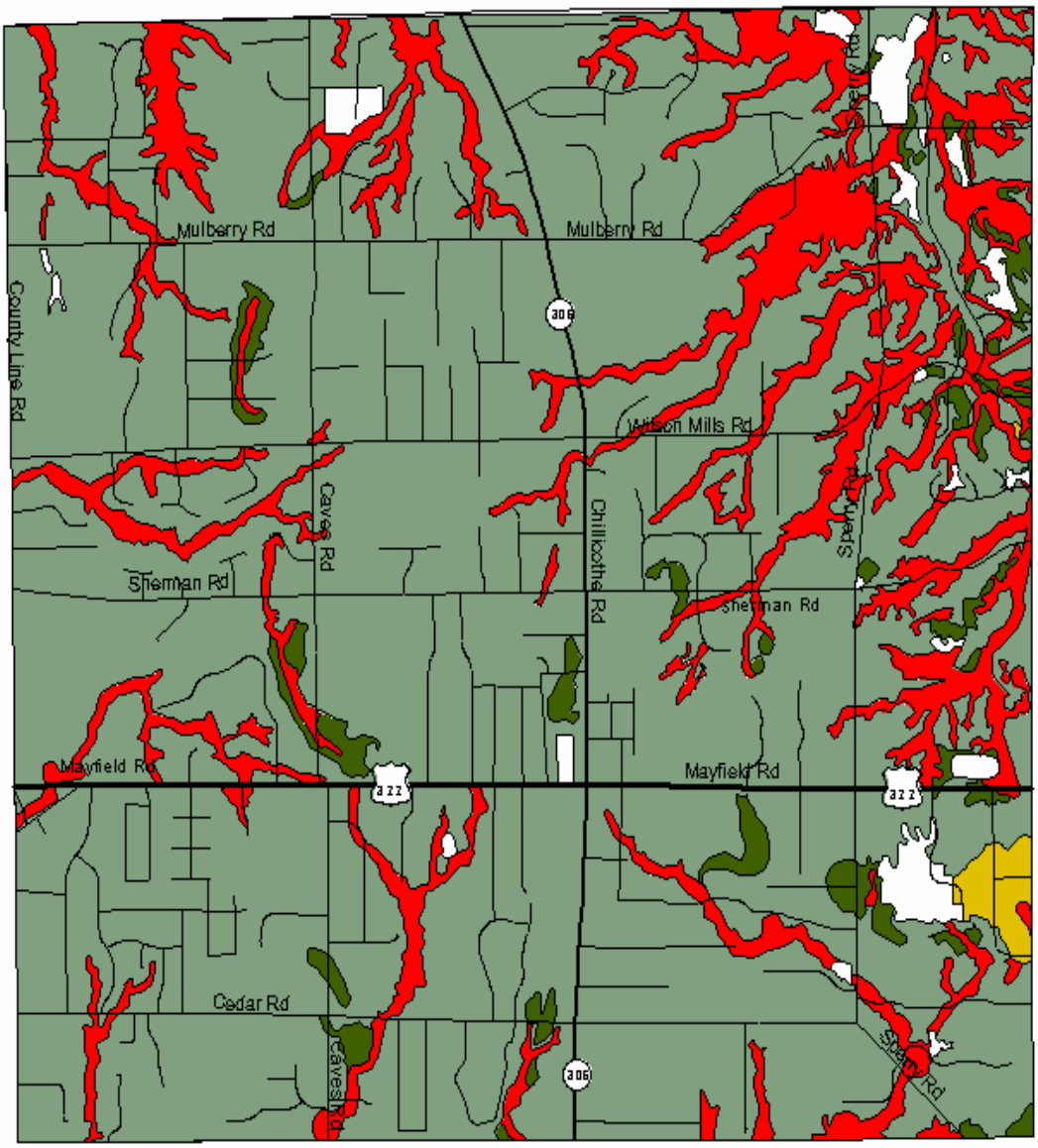
Figure 26

Capability For Local Roads
Soil Rating Percentages
Chester Township



Source: Geauga County Planning Commission

Map 65



Chester Township
Capability For Local Roads

Soil Capability
- Slight
- Moderate
- Severe
- Very Severe
- Not Rated

N

Source: Geauga County
Soil Survey 1982
Prepared by: Geauga County
Planning Commission 2002

3000 0 3000 6000 Feet

Table 61

Limitations For Underground Utilities
Chester Township

Variables	Slight	Moderate	Severe	Very Severe*
Drainage**	WD	MWD	SPD, PD	N / A
Depth to Seasonal Water Table	> 60"	36 - 60"	12 - 36"	0 -12"
Shrink-Swell	Low	Moderate	High	N / A
Depth to Bedrock	> 60"	N / A	40 - 60"	0 - 40"
Slope	0 - 6%	6 - 12%	12 - 18%	> 18%

*Results in an automatic “unsuitable” rating
**Refer to Page V-27

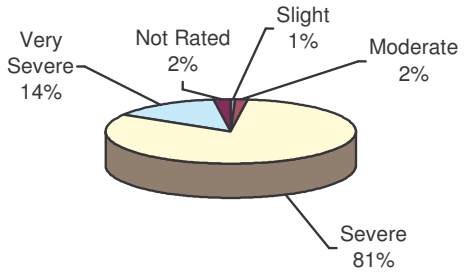
Table 62

Capability For Underground Utilities
Chester Township

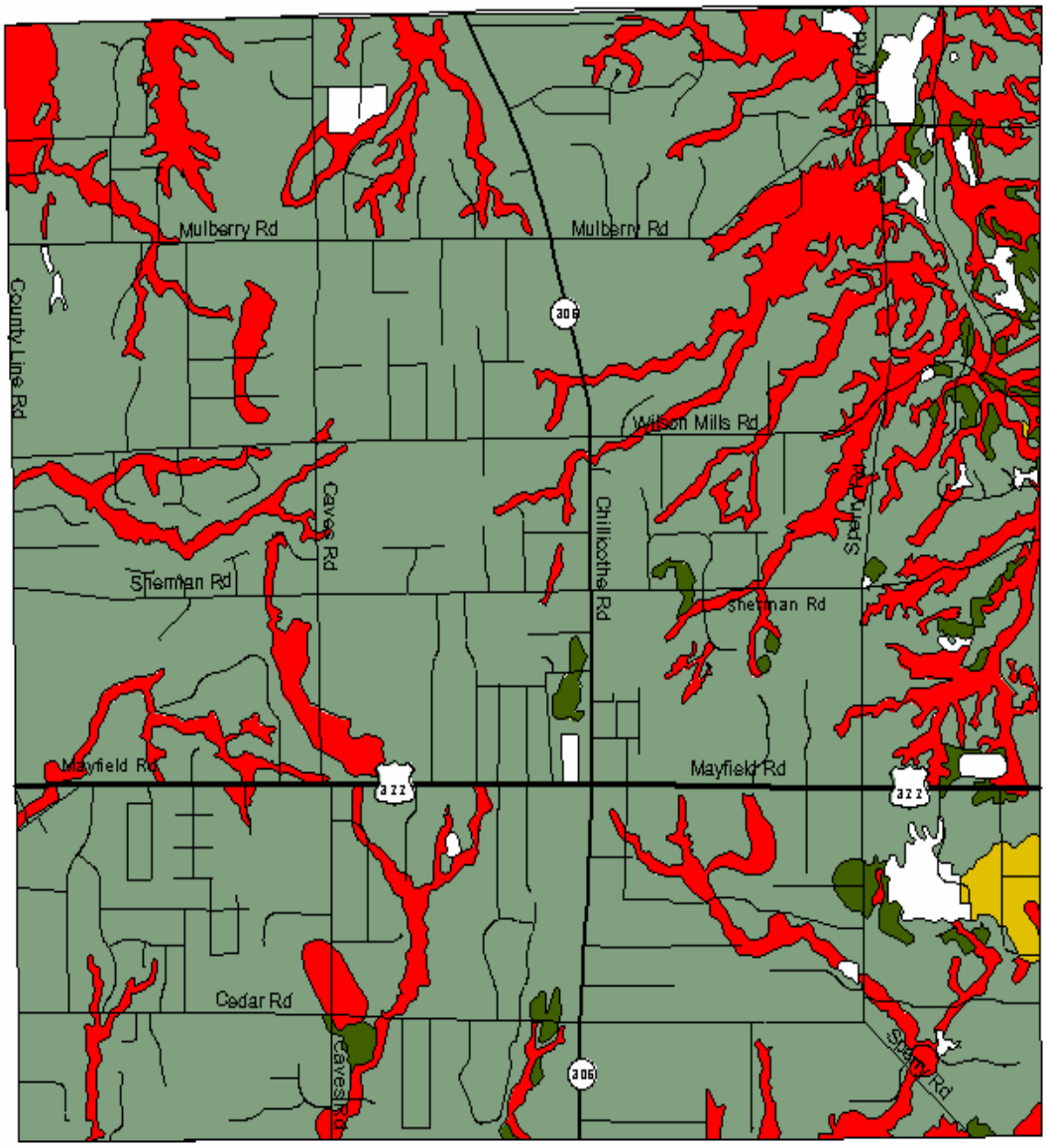
Rating	Acres	% Of Township
Slight	75.3	.5%
Moderate	256.2	1.7%
Severe	12,287.5	81.5%
Very Severe	2,140.9	14.2%
Not Rated	317.0	2.1%
Total	15,076.9	100.0%

Figure 27

Capability For Underground Utilities
Soil Rating Percentages
Chester Township



Source: Geauga County Planning Commission



Chester Township
Capability For Underground Utilities

Soil Capability

- Slight
- Moderate
- Severe
- Very Severe
- Not Rated

N

3000 0 3000 6000 Feet

Source: Geauga County
Soil Survey 1982
Prepared by: Geauga County
Planning Commission 2002

Composite Capability

The following composite capability map provides a total overview of the township. The map reflects all of the physical features that were discussed earlier in this portion of the plan (see Map 67).

A rating system (see Table 64) has also been devised. Generally, the areas rated "slight" have the best potential to support development and cover a very small percentage of the township. The next category is "moderate." Areas rated "moderate" have a fair potential to support development and are limited and scattered throughout the township. The "severe" category encompasses 84.77% of the township. Although there are more limitations relative to this category, it does not preclude development, provided appropriate engineering, design, and maintenance mechanisms are employed. The rating, "very severe," is reserved for those areas with environmentally sensitive conditions. About 9.79% of the township is in this rating. The "not rated" category applies to disturbed areas, lakes, and ponds.

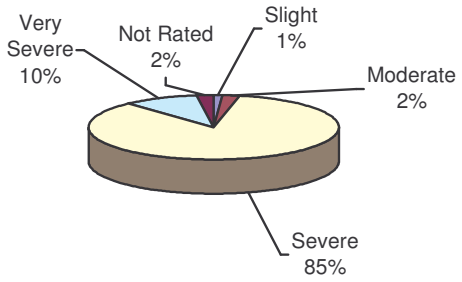
Table 63

Composite Capability Map Legend
Chester Township

Rating	Acres	% of Township Area
Slight	152.3	1.01%
Moderate	351.3	2.33%
Severe	12,780.7	84.77%
Very Severe	1,476.0	9.79%
Not Rated	316.6	2.10%
Total	15,076.9	100.00%

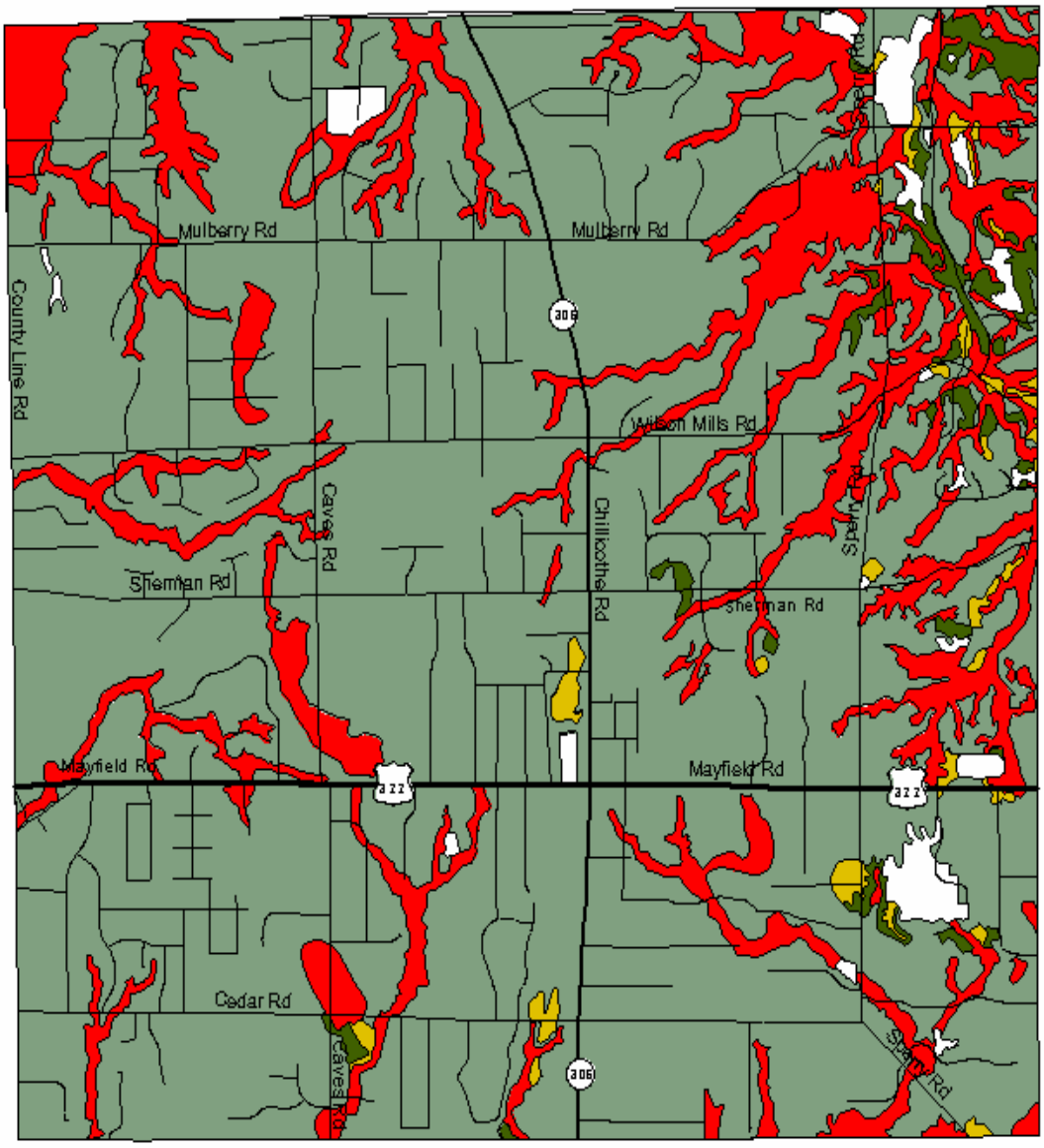
Figure 28

Composite Capability
Percent Of Township Area
Chester Township



Source: Geauga County Planning Commission

Map 67



Chester Township
Composite Capability

Soil Capability
- Slight
- Moderate
- Severe
- Very Severe
- Not Rated

N

Source: Geauga County
Soil Survey 1982
Prepared by: Geauga County
Planning Commission 2002

3000 0 3000 6000 Feet

Table 64

Summary of Soil Capability Ratings
Chester Township

Soils	Septic Tanks	Dwellings With Basements	Dwellings Without Basements	Commercial/ Light Industrial	Local Roads	Underground Utilities
Bogart (Bg B)	Severe	Severe	Moderate	Moderate	Moderate	Severe
Brecksville (Br F)	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe
Caneadea (Cc A)	Severe	Severe	Severe	Severe	Severe	Severe
Chili (Cn A, B)	Slight	Slight	Slight	Slight	Moderate	Moderate
Chili (Cn C)	Moderate	Moderate	Moderate	Severe	Moderate	Moderate
Chili (Co D)	Severe	Severe	Severe	Severe	Severe	Severe
Chili-Oshtemo (Cy D)	Severe	Severe	Severe	Severe	Severe	Severe
Chili-Oshtemo (Cy F)	Severe	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe
Damascus (Da)	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe
Darien (Dr B)	Very Severe	Severe	Severe	Severe	Severe	Severe
Ellsworth (Eh B)	Severe	Severe	Moderate	Moderate	Severe	Severe
Ellsworth (Eh C)	Severe	Severe	Moderate	Severe	Severe	Severe
Ellsworth (Eh D)	Severe	Severe	Severe	Severe	Severe	Severe
Ellsworth (Eh E, F)	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe
Ellsworth (Em C)	Very Severe	Severe	Severe	Severe	Severe	Severe
Fitchville (Fc A, B)	Severe	Severe	Severe	Severe	Severe	Severe
Glenford (Gf B)	Severe	Severe	Moderate	Moderate	Severe	Severe
Glenford (Gf C)	Severe	Severe	Moderate	Severe	Severe	Severe
Haskins (Hs B)	Severe	Severe	Severe	Severe	Severe	Severe
Holly (Ho)	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe
Jimtown (Jt A)	Severe	Severe	Severe	Severe	Severe	Severe
Lordstown (Lr B)	Very Severe	Very Severe	Moderate	Moderate	Severe	Very Severe
Lordstown (Lr C)	Very Severe	Very Severe	Moderate	Severe	Severe	Very Severe
Lordstown (Lx D)	Very Severe	Very Severe	Severe	Severe	Severe	Very Severe
Lordstown (Lx F)	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe
Mahoning (Mg B, C)	Severe	Severe	Severe	Severe	Severe	Severe
Mitiwanga (Mt A)	Very Severe	Very Severe	Severe	Severe	Severe	Severe
Orrville (Or)	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe
Pits, Gravel (Pg)	Not Rated	Not Rated	Not Rated	Not Rated	Not Rated	Not Rated
Oshtemo (Os B)	Severe	Slight	Slight	Slight	Slight	Slight
Rittman (Rs C)	Severe	Severe	Moderate	Severe	Severe	Severe
Rittman (Rs D)	Very Severe	Severe	Severe	Severe	Severe	Severe
Rittman (Rs F)	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe
Sebring (Sb)	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe
Tioga (Tg)	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe	Very Severe
Udorthents (Ud)	Not Rated	Not Rated	Not Rated	Not Rated	Not Rated	Not Rated
Urban Land (Ur)	Not Rated	Not Rated	Not Rated	Not Rated	Not Rated	Not Rated
Wadsworth (Wb A, B)	Severe	Severe	Severe	Severe	Severe	Severe
Water (W)	Not Rated	Not Rated	Not Rated	Not Rated	Not Rated	Not Rated

Source: Geauga County Soil Survey, 1982

CHAPTER VI

SURVEY RESULTS

Mission Statement

The Chester Board of Township Trustees proposed the preparation of a residential survey to determine the attitudes of residents in the township. Specifically in the areas of (1) growth and development, (2) protection of open spaces and farmland, (3) current satisfaction with township services, and (4) the type of development the township would support. It was felt that the survey would assist in recommendations in the land use plan and would help determine areas where additional education of residents might be necessary.

Executive Summary

The following material was prepared by Kent State University, Department of Geography (Dr. Shawn Banasick, Dr. James Tyner, and Dr. Jay Lee). The Geauga County Planning Commission and its staff are not responsible for the survey content.

On October 2, 2002 a written survey was mailed to 4,335 residents of Chester Township. The survey contained fifty-nine "close ended" (multiple choice) survey questions. The survey questions assessed residents' opinions in regards to seven topic areas, including zoning issues (4 questions), development patterns (14 questions), parks (4 questions), commercial/industrial land use (8 questions), water and waste treatment (9 questions), township roads (8 questions), and government services (8 questions). Also included with the Chester Township survey was a similar type of survey which examined resident opinions regarding West Geauga Local Schools. The response rate for the survey was 33%. The survey was designed so that the residents responded by circling their answers directly on the survey form. The responses of the returned surveys were transferred to computer "bubble" sheets specifically designed for ease of tabulation.

Major findings of the Chester Township Survey include:

- There are concerns related to the overall pace and nature of development in the Township.
- There is a need to preserve undeveloped land and historical/cultural features.
- While the current amount of park space seems adequate, more is desired if it could be developed without a tax levy.
- There is little support for the expansion of commercial/industrial activities in the Township, even if it would result in an expansion of the tax base.
- Ground water supplies and well water quality are adequate, and there is little perceived need for a pubic water system or centralized sewer connections.

- There is general satisfaction with current levels of road maintenance and snow plowing, but on the issue of traffic flow opinion was divided.

- There are relatively high levels of satisfaction with Township emergency, fire, and police services, as well as information provision.

Quantitative Analysis

The survey results for all respondents are listed in Appendix A. It is common for survey responses to dramatically differ according to demographic characteristics of the respondent. In order to assess the degree to which demographic factors played a role in the survey, a chi-square test was used. Appendix B is a table of the chi-square test results. The chi-square test can determine if there is a statistically significant relationship between two variables. The responses to each of the survey questions were analyzed according to the demographic questions also included on the survey – location of residence, length of residency and age. A statistically significant result for the chi-square test suggests that there was substantial variation in resident opinion according to that particular demographic characteristic.

One critical issue of chi-square analysis is the number of responses in the analysis table. As part of the analysis procedure, survey question responses are disaggregated into a table according to location of residence (or length of residency or age) and response. However, when there are several table cells that contain with less than 5 respondents the results of the chi-square analysis become unreliable. In the analysis of the Chester Township survey there were several questions which lacked an adequate number of responses for a robust statistical analysis. The questions lacking minimum responses are indicated in the table, and their significance should be interpreted with caution.

Qualitative Analysis

The use of qualitative analysis in this report is designed to supplement the larger quantitative, statistical component of the survey. Specifically, this qualitative analysis, based on a reading of open-ended questions, is meant to provide a deeper understanding–empathy, if you will--of the sentiments and attitudes of the respondents. As with all qualitative studies, 'findings' are not meant to be generalizable.

Qualitative approaches also enable respondents to express their concerns in an open process. One resident, for example, writes "Thank you for giving residents the chance to voice these opinions." This attitude was mirrored in the following: "Your enclosed survey is commendable in gathering residents' opinions." Admittedly, other respondents took this opportunity to criticize the entire survey process. Monies spent on the questionnaire, for example, could have been better spent elsewhere, according to some residents.

Methodologically, this analysis is based on a grounded theory procedure. The strengths of this approach are three-fold. First, it is possible to provide concrete insights into the

complexities and multiplicities of responses. The 'support' of a community center, for example, may be predicated on a combination of reasons. Second, it is possible to identify that local concerns may be affected by larger regional, national, or even global events–many of which may not occur to officials. For example, one respondent in this study identified a concern over ground water issues, because of a perceived threat from terrorism. Another resident, for instance, contends that "the country as a whole is so much in debt that we cannot afford any of these luxury items [e.g., community centers]." Third, these results may shed insight into seemingly contradictory results obtained from the quantitative analysis.

Grounded theory is based on a tripartite process of data coding, including open, axial, and selective coding. Open coding refers to the process where questionnaire results are arranged (coded) by dominant concepts. For each concept, dominant properties (attributes of categories or concepts) are identified. This analytical stage involves the asking of questions of the data, the search for similarities among data, and the characteristics (properties) and ranges (dimensions) of these concepts. The second step consists of axial coding. Here, patterns are sought within the various concepts identified during the open coding stage. The third step, selective coding, provides the principle interpretations. The associated concepts lead to an overall integrated framework. Results of this report are based on the coding of 722 responses. In the following sub-sections we identify the major themes and interpretations that emerged from the coding process.

Survey Results

1. Demographic Characteristics

Tables 1a and 1b are cross-tabulations of the demographic characteristics of the survey respondents. The five largest sub-groups are as follows:

1. Over 65 years old and resident of Chester Township for over 20 years (20.1%)
2. 56 to 65 years old and resident of Chester Township for over 20 years (14.8%)
3. 46 to 55 years old and resident of Chester Township for 11 to 20 years (10.7%)
4. 36 to 45 years old and resident of Chester Township for 11 to 20 years (6.2%)
5. 36 to 45 years old and resident of Chester Township for 7 to 10 years (4.8%)

Clearly, older and more established residents are disproportionately represented in the survey, an important factor to keep in mind for the interpretation of the results. In terms of the spatial distribution of residents, 42.8% of survey respondents live in northern Chester Township (white survey results), 24.9% live in southeast/central Chester Township (yellow survey results), 22.2% live in south/central Chester Township (blue survey results), and 10.1% live in central Chester Township (green survey results).

Table 1a. Survey Responses by Age and Length of Residency

Responses *Row Percent* Column Percent	**Age Under 25**	**26 – 35**	**36 – 45**	**46 – 55**	**56 – 65**	**Over 65**	**Total**
Length of Residency	**1**	**9**	**13**	**2**	**1**	**2**	**28**
Less than 1 year	*3.57* 10.00	*32.14* 11.25	*46.43* 4.15	*7.14* 0.54	*3.57* 0.31	*7.14* 0.56	1.93
1 – 3 years	**4** *4.76* 40.00	**18** *21.43* 22.50	**36** *42.86* 11.50	**16** *19.05* 4.32	**7** *8.33* 2.16	**3** *3.57* 0.85	**84** 5.79
4 – 6 years	**0** *0.00* 0.00	**20** *18.18* 25.00	**50** *45.45* 15.97	**22** *20.00* 5.95	**13** *11.82* 4.01	**5** *4.55* 1.41	**110** 7.58
7 – 10 years	**1** *0.67* 10.00	**8** *5.37* 10.00	**69** *46.31* 22.04	**40** *26.85* 10.81	**21** *14.09* 6.48	**10** *6.71* 2.82	**149** 10.27
11 – 20 years	**2** *0.56* 20.00	**3** *0.83* 3.75	**90** *25.00* 28.75	**155** *43.06* 41.89	**68** *18.89* 20.99	**42** *11.67* 11.86	**360** 24.81
Over 20 years	**2** *0.28* 20.00	**22** *3.06* 27.50	**55** *7.64* 17.57	**135** *18.75* 36.49	**214** *29.72* 66.05	**292** *40.56* 82.49	**720** 49.62
Total	**10** *0.69*	**80** *5.51*	**313** *21.57*	**370** *25.50*	**324** *22.33*	**354** *24.40*	

Table 1b. Survey Responses by Age and Length of Residency.

Responses Percent of Survey	**Age Under 25**	**26 – 35**	**36 – 45**	**46 – 55**	**56 – 65**	**Over 65**	**Total**
Length of Residency **Less than 1 year**	**1** 0.07	**9** 0.62	**13** 0.90	**2** 0.14	**1** 0.07	**2** 0.14	**28** 1.93
1 – 3 years	**4** 0.28	**18** 1.24	**36** 2.48	**16** 1.10	**7** 0.48	**3** 0.21	**84** 5.79
4 – 6 years	**0** 0.00	**20** 1.38	**50** 3.45	**22** 1.52	**13** 0.90	**5** 0.34	**110** 7.58
7 – 10 years	**1** 0.07	**8** 0.55	**69** 4.76	**40** 2.76	**21** 1.45	**10** 0.69	**149** 10.27
11 – 20 years	**2** 0.14	**3** 0.21	**90** 6.20	**155** 10.68	**68** 4.69	**42** 2.89	**360** 24.81
Over 20 years	**2** 0.28	**22** 1.52	**55** 3.79	**135** 9.30	**214** 14.75	**292** 20.12	**720** 49.62
Total	**10** 0.69	**80** 5.51	**313** 21.57	**370** 25.50	**324** 22.33	**354** 24.40	**1,451** 100.00

2. Zoning Issues

A strong majority of survey respondents felt that **growth control** is necessary for Chester Township (Question 3), and most of the survey respondents felt that current zoning practices are adequate to control residential development (Question 15). However, a strong majority felt that the zoning process should incorporate factors other than economic value as the basis for decision making (Question 26). The chi-square analysis identified significant differences in respondent opinion according to age of the respondents (Appendix B). Specifically, the analysis indicated that younger residents (under 25 years old) tended to express higher levels of agreement that current zoning was adequate (37.0% compared to 23.6% overall).

Survey respondents also felt that the special zoning classification for "Churches and Houses of Worship" should be retained (Question 7). However, in this case there were substantial differences in opinion by location of residence and age group. A larger proportion of the respondents who reside in central Chester Township (green surveys) "strongly disagree" that churches should remain a use in residentially zoned areas (28.2% compared to 19.8% overall). In addition, a higher proportion of younger respondents (under 25 years old) also tended to strongly disagree (44.4%).

3. Development Patterns

In terms of **overall development patterns** most survey respondents were satisfied to some degree with the current development pattern (Question 52), and a strong majority of survey respondents felt that the Township should maintain its semi- rural character (Question 35). However, newcomers tended express higher levels of satisfaction with the current development pattern (31.8% of residents for less than 1 year were "moderately satisfied" compared with 19.7% overall, and 20.0% of those resident in Chester Township for 1 to 3 years were "very satisfied" compared with 13.8% overall). In terms of age divisions, younger residents tended to express less satisfaction (only 5.7% of 26 to 35 year olds and 8.3% of 36 to 45 year olds were "very satisfied" compared to 13.8% for all responses).

A majority of all respondents strongly agreed that living near **undeveloped land** was important, although residents in central Chester Township (green surveys) showed somewhat lower levels of agreement (only 42.4% compared to 56.1% overall - Question 29). Most respondents also strongly agreed with the continued protection of productive farmland from development (Question 39). The preservation of historic and cultural features received strong agreement from most survey respondents, with the exception of residents under the age of 25 who expressed slightly lower levels of support (Question 14).

In terms of **residential lot sizes**, most survey respondents felt that large residential lots (over five acres) would be the best way to maintain the semi-rural nature of the Township, although residents in central Chester Township tended to express higher levels of dissatisfaction with this method of preservation (13.4% compared to 6.5%

overall who “slightly disagree” - Question 28). The majority also strongly disagreed with attempts to find alternatives to large lot development (Question 1).

However, a majority of survey respondents did express favorable opinions regarding the process of determining lot sizes by the available type of waste disposal (Question 23), and by the supply of ground (well) water (Question 31). Long-term Township residents (over 20 years) demonstrated higher levels of support with 38.3% choosing “strongly agree” for determining lot sizes by type of waste disposal compared to 28.0% overall, and 37.6% “strongly agree” for determining lot sizes by the basis of ground water supply compared to 25.3% overall.

In regards to **developers** and new developments, a strong majority of survey respondents expressed the desire to keep large scale developers (subdivisions of more than 20 homes) out of the Township (Question 18). When asked about the preservation of open space, a strong majority of survey respondents felt that the Township should collaborate with “others” to preserve open land (Question 22), but survey respondents strongly rejected the idea of rewarding developers with density bonuses if they preserved sensitive areas as open landscape (Question 17).

Survey respondents expressed strong opinions regarding **environmental responsibility** and development in the Township. A strong majority were in agreement with the idea of using conservation easements within new developments to protect flood plains, wetlands, and water ways (Question 33). A strong majority also *disagreed* with the idea that “environmental responsibility should *not* be a primary consideration for new development” (Question 37).

4. Parks

Survey responses regarding the issue of **provision of park spaces** were contradictory and strongly divided according to length of residency and age. While most survey respondents were very satisfied with the number of Township parks for recreational activities (Question 49), levels of satisfaction were markedly lower for newer residents (less than one year) and for residents than had lived in the Township for 7 to 10 years. Overall responses showed that a majority also agreed that additional active (recreational) and passive parks (e.g. nature trails) should be developed in the Township (Questions 27 and 36). Newcomers to Chester Township (resident for 1 to 3 years) were strongly in favor of active parks (36.7% “strongly agreed” compared to 24.9% overall). Respondents in the 36 to 45 year old age group were also strong supporters of active parks (38.7% “strongly agreed”). As for passive parks, newcomers (resident of 1 to 3 years) were again much more in favor relative to the overall responses (37.0% compared to 26.8%).

Surprisingly, however, most survey respondents felt that development of the parks should not be supported by a **tax levy** (Question 34). When examined by length of residency was a factor in the survey responses, with strongest relative support for a levy from newer residents of Chester Township (17.9% of those resident less than 1 year and 15.0% of those from 1 to 3 years “strongly agreed” compared to 8.4% for all survey

responses). The strongest relative levels of resistance to a levy came from older respondents (49.7% of the residents over 65 and 48.5% of residents between the ages of 56 and 65 responded "strongly disagree", compared to 42.2% overall).

5. Commercial / Industrial land use

Most survey respondents were either "very satisfied" or "moderately satisfied" with the distance to **commercial activities** (Question 48), and a strong majority was satisfied with the amount of commercial (Question 50) and **industrial development** (Question 51). Younger respondents (under 25 years old) were particularly satisfied with the amount of commercial development in the Township, with 50.0% answering "very satisfied" compared to only 32.5% overall.

Most survey respondents felt that commercial development in the Township should not be encouraged (Question 10), even if it helped to expand the tax base (Question 30). Resistance to expansion for the purpose of expanding the tax base was relatively stronger amongst residents who had lived in the Township for 1 to 3 years, and those who were in the 26 to 35 year old age group (7.6% and 8.2 percent compared to 16.1% who "strongly agreed" with the expansion).

Given these opinions, it is not surprising that survey respondents were strongly against the expansion of the Commercial District (Question 5) and the Restricted Industrial District (Questions 8 and 16). Newcomers to Chester Township (resident for 1 to 3 years) also expressed relatively lower levels of support for expansion of commercial district, but surprisingly expressed higher levels of support for an increase in the restricted industrial district (23.1% who answered "moderately agree" compared to only 14.8% overall).

6. Water / Waste treatment

Most survey respondents agreed that there is an adequate supply of **ground (well) water** in their area of the Township (Question 24), and survey respondents were satisfied with the quality of ground (well) water (Question 53). Survey responses differed considerably according to length of residency in the township, with newer residents of Chester Township tending to express somewhat lower levels of satisfaction. For example, only 30.7% of residents for less than 1 year were "very satisfied" with the quality of ground water compared to 41.3% of all residents.

Not surprisingly, most survey respondents also felt that there was little need for the replacement of ground (well) water with a public water system (Question 25). However, once again responses differed substantially according to both length of residency in the township and age of the respondent. In particular, younger and newer residents tended to be much more in favor of a public water system (20.7% of residents for less than 1 year, and 20.0% of residents under 25 years old "strongly agreed" compared to 11.5% overall).

Despite the relatively high levels of satisfaction expressed above, most survey respondents felt that ground (well) water pollution was still a concern in the Township and that water quality should be monitored on an ongoing basis (Questions 9 and 20).

When water resource issues were linked with development concerns, most survey respondents indicated that they strongly agreed with the idea that **septic systems** in the Township provide a viable option for continued residential development (Question 2). However, respondents who have lived in the Township from 4 to 6 years expressed much less agreement over the use of septic systems (only 35.6% "strongly agreed" compared to 46.3% overall). Respondents between the ages of 26 and 35 were also less in agreement (only 28.8% who "strongly agreed").

Survey Respondents also expressed very strong feelings for the need to have **minimum lot sizes to ensure adequate ground (well) water** and room for septic systems (74.9% "strongly agree" – Question 13), but the lower levels of support from younger residents stood out (only 50.0% of those under 25 years old "strongly agree"). Most survey respondents disagreed with the idea of using centralized sewer connections as the preferred method of residential sewage treatment in the Township, although respondents who had been residents for less than 1 year were much more in favor (25.0% compared to 13.9% overall "strongly agree" - Question 4). In addition, most survey respondents also felt that **stormwater drainage** was not a problem in their area of the Township (Question 11). Responses from long-term residents in particular expressed markedly higher levels of agreement, with 67.5% who "strongly agree" compared to 55.6% overall.

6. Township Roads

A strong majority of survey respondents expressed satisfaction with the Township's efforts related to **road maintenance** (Question 47). However, respondent opinion was almost evenly split in regards to **traffic flow**, with only a slight majority (52.9%) expressing some degree of satisfaction (Question 40). Not surprisingly, there were strong divisions according to location of residence, length of residence, and age of the respondent. Respondents who had lived in Chester Township for 1 to 3 years expressed higher levels of "very satisfied" (22.9%) and well as those who were under 25 years old (30.0%) compared to the overall level (10.9%). The results for location differences showed that respondents who lived in central Chester Township (green responses) tended to express higher levels of dissatisfaction (20.4% "totally dissatisfied" compared to 13.3% overall).

A slight majority of survey respondents disagreed with the idea that "**unimproved roads** help to maintain the Township's semi-rural character", although respondents who live in central Chester Township (green survey results) tended to express higher levels of disagreement (40.5% "strongly disagree" compared to 33.4% for all responses – Question 38). Not surprisingly, most respondents agreed to some degree that all unimproved roads in the Township should be paved (Question 12). However, respondents from northern Chester Township tended to be less enthusiastic (25.1% "strongly disagreed" compared to 19.8% overall).

As for changes to **Mayfield Road** (State Route 322), most survey respondents disagreed with the idea that it should be widened to five lanes (Question 19).

In relation to the provision of **snow plowing** services, most survey respondents felt that service to State Route 306, State Route 322, and other Township / County roads was satisfactory (Questions 44, 45, and 46). Strong levels of satisfaction with snow plowing on State Rough 306 was particularly evident among respondents under the age of 25 (44.4% "very satisfied") and those over 65 years old (45.0% "very satisfied").

7. Government Services

Most Chester Township survey respondents disagreed with the idea of changing Chester Township to an incorporated form of government (Question 6), preferring to retain the current government form (Question 32). In terms of service provision, most survey respondents were satisfied with Fire Protection, Emergency Medical, and Township Police services (Questions 41, 42, and 43).

However, most survey respondents felt that there was little obligation for Chester Township to provide affordable housing opportunities (Question 21). Most survey respondents were also satisfied with the Township's job in providing general information, especially those respondents over age 65 (24.3% "very satisfied" compared to 13.8% overall - Question 54).

Most respondents were also satisfied with the amount of information available regarding the use of residents' tax dollars for the provision of government services (Question 55). The highest levels of satisfaction came from older respondents (over the age of 65) with 23.4% replying "very satisfied" compared to only 13.8% for all responses.

Qualitative Results

1. A Healthy Environment or Community?

Survey responses indicate a division between those residents who express primary concern with the natural environment and those who express concern with community relations. And whereas these concerns are not inherently exclusive, a general impression is formed that residents perceive the issue from an either/or stand-point.

Those residents concerned primarily with the 'health' and 'vitality' of the environment stress the rural, idyllic atmosphere of the community. One resident explains that the community must "...keep a rural atmosphere. We have enough fast foods, bars, drugstores, etc. We need to encourage more upscale restaurants, churches, conserving open spaces and historical sites." Another resident expressed concern that decisions are "overwhelming the character and natural beauty of [the] community." Still another resident writes that "Preservation of open/green space is high priority to me...." This same individual elaborates: "A 'senior center' and/or 'community center' is a move toward 'commercial development' and hence, I oppose it." For these residents, clearly, development is opposed to the maintenance of a healthy natural community. This is

reflected in this statement: "Too many fast food places have been allowed to spring up...and it looks like a honky-tonk area as you drive through.... It's better to have the trees."

In contrast to those who place a priority on the health of the environment, other respondents indicate the need to address the health of the community. One respondent explains that "We feel [community centers are] important for the provision of positive activities (family, youth and senior)." Another resident contends that "A recreational facility ... would be beneficial for the community over all and to improve the health of our citizens." Echoing these attitudes, one resident writes "A sports/rec. center helps produce a healthier population. Adults would have access to fitness. Students would have a healthy place to be, more fit and less time to spend in 'unhealthy' activities."

To be sure, these sentiments are far from unanimous, as exhibited by this statement "I don't believe [the community center or performing arts center] are necessary or vital to a healthy community." Not surprisingly, it is common for two diametrically opposed arguments to be used for any particular facility, such as a community center. For some respondents, these would improve the residents' quality of life; others believe they would not.

Intangible qualities, such as 'spirit' and 'cohesion' are also identified as positive factors that result from the development of community and senior centers. One resident believes, for example, that "community centers encourage community spirit and cohesion" while other contends that a "community center is the most desired place to get to know the people in this town and learn about our town."

Economical rationalizations, not unexpectedly, buttress both views. Those residents not in support of further development believe that "Aggressive residential development, lowcost housing and desecration of open land will create slums." Other statements echo these sentiments: "We want to keep the semi-rural atmosphere. [The businesses] are rundown and poor visually. We are very concerned about the fast food strip look– this is a very inappropriate use of land in a historical town." Of interest, also, is the sentiment that the 'rural' character that is desired is itself losing its meaning. One resident, for example, writes "Apparently, 'semi- rural' has come to be synonymous with 'shabby', not maintained...."

These respondents, in general, express concern that the region is becoming more urbanized. As one resident writes, "We moved here to get away from growth and development." Residents believe that amenities such as community centers are available elsewhere. According to one respondent, "If you want these services I suggest you move to a more populated area...." In agreement, one resident explains that "the reason we moved to Chester Township was to get away from the city and the heavy traffic. Why do you want to destroy this area....?" Yet another resident explains: "If you find them important, move to a big city. We are a small rural community and wish to stay that way. Why do you think we moved out here? You are missing the point." The following statement perhaps best captures these attitudes: "Quit trying to become a city!"

Residents more amenable to the development of community centers also identify economic reasons. One resident, for example, writes that "A community center/pool for our families.... would offer summer jobs to many of our youth." In this way, centers would potentially bring needed monies into the communities. Other monies may be saved within the community, as this resident explains: "An outdoor community pool would prevent many home owners from installing their own pools–which use a lot of water."

Concurrently, these facilities would prevent the movement of monies out of the community. This is identified by the following resident: "It would stop our school district from spending monies to rent other facilities for its commencement/graduation ceremonies." For example, a number of residents lament that families and schools must go elsewhere and use other facilities. This respondent explains that "It's a shame commencement has to be held at Lakeland Community College or Mentor's School Center." Another respondent indicated that "It is a shame that a school system the size of West Geauga has no real stage/auditorium for its students to perform in and for ceremonies such as graduation...." Apart from school facilities, sports parks and pools are also of concern. "It is unfortunate," one resident writes, "that we must drive out of our home area to swim in the summer...." Of interest is that this issue contributes to broader concerns over community pride. As one respondent indicates, "We have one lighted baseball diamond in all of Chesterland! That is almost unheard of! Look at Munson Township and how nice all their fields are with our high taxes." Another resident writes "It's a shame that we do not have these facilities when neighboring communities and communities with comparable housing values do."

2. The Demographic Divide

Survey responses reveal a palpable division based primarily on age cohort, but also income. The statement "It looks like Chester only wants high income people" expresses this latter concern. Consequently, personal decisions are often based on self- interests (e.g., those with children advocate child-related facilities). Residents also exhibit a belief that only selected groups are being addressed by community decisions. One resident feels that "This town is a full spectrum and not just a place for 'suburbanites' escaping pressures of a dual income household, that need to raise its disaffected and disrespectful progeny" while another believes that "A community includes all ages in it's embrace though it seems that those with children ... Have more energy, wealth and natural political power to direct 'town' resources towards education."

The most stark division appears to be between (or those supporting) seniors and those families with small children. Many respondents in both groupings frame issues based on an oppositional, dualistic perspective. For example, one resident explains that "Seniors are the largest population. A senior center would be great." Another resident suggested that officials "need to pay attention to the demographics of the area. There is a large percentage of residents who are empty nesters." Arguments framed on broader, national trends are also used a justification, as indicated in the statement: "The population of America, in general, including Chester/Russell is aging. Take care of the 'needs' first and 'wants' later." Accordingly, those respondents expressing a 'senior'

focus would tend to support 'senior' facilities, thus "A school with a senior center and recreational facility would open the building up to more than the children of this community thus generating funds and interests beyond families with children."

Those respondents with large children, or who favor child-related concerns, identify the need for familial facilities. "The needs of the children should always come first," one resident writes, continuing that "I don't have children of my own–but the community's children are my priority." The statements "Township desperately needs a pool for children and adults" and "A place [like a community pool] for our families to go and interact with each other and our kids can spend time with friends from the area" are also not uncommon responses. Another responded explains forthrightly, "The children should have first priority." This attitude conforms with those respondents who believe that schools should provide for children and not other groups.

These divisions bisect seemingly cohesive groups, such as school-aged children as well. The following statement, for example, reveals a perception that only *some* students benefit from community programs: "The system seems to only cater to the smart students and jocks and not the needs/education of all students to do well after graduating." Another resident is concerned with the allocation of funds toward selected teams or students: "An intramural program in the schools FOR ALL STUDENTS, regardless of their athletic ability, would be a better use of tax dollars and resources...."

Those in support of community centers, conversely, believe that these facilities will help eradicate social divisions. Indeed, a dominant, and often strongly expressed feeling, is a sense of community. One resident laments that "There is nowhere for people to go that represents a sense of community." "Community center would be good for all" and "Community center ... would be great for all in the community: singles, families, retirees" are two responses that also reflect this attitude. Still others write that "Emphasis on culture and community will create cohesion and working compatibility within the community" and that "We as a township will come together as a community better!"

The support for particular facilities, such as swimming pools or performing arts centers, therefore, are framed often within an argument of inclusion rather than exclusion. "A community center which would bring older citizens and younger people together...." and "Community center... all residents benefit" are two representative statements. These attitudes reflect the sentiment that "We need to ask what is good for everyone—young and old.

In opposition to the necessity of community centers are a multitude of viewpoints that coalesce around the belief that other means of community cohesion are available. "This community comes together on a regular basis in so many ways and in many different places," explains one resident. These attitudes are similar to those advocating a need to maintain a separation of education and community issues. One resident explains that "I believe sports, recreational facilities and performing arts should be self-sustaining. I don't understand why schools should be supporting senior centers or community centers. Did you stick those in with the schools to get more support for

raising our tax dollars?" In agreement, another resident responds that "I don't think it is the school's job to build centers for the community in general."

Questions of inclusion and exclusion are often rendered to economics. There is a sense among certain residents that they must pay for the 'benefits' of others. Exhibiting an 'anti-welfare' attitude, these residents belief that some groups are not pulling their fair share. One resident, for example, writes: I am paying way too much every month for these schools. I don't care if there are cut backs in staff and programs. It wouldn't hurt the 'little darlings' to flip burgers at McDonald's to pay for their own sports and extra activities." This response, though, is countered by respondents who criticize that students spend too much time, for example, selling cookies door-to-door, raising funds, to pay for extra-curricular activities.

One issue which seemingly cuts across all spectrums and interests is the condition of the roads. One resident complains that "I can't believe you have not paved all roads for safety reasons if nothing else or charged those residents the cost of maintenance of their gravel roads." A number of respondents identified the ineffectiveness of 'chip-and-seal' practices, as well as 'questionable' salting and snow plowing practices.

3. Placing People

Having identified a perception of social divisions, another theme that emerges revolves around the question of 'where' people are believed to belong. The geographies of youth, for example, permeate the survey responses. Youths sometimes are portrayed as outsiders, deviants, or not as members of the community presumably because they are not paying taxes, hence are excluded). Perhaps the most vitriolic statement against youth was expressed in this statement: "No one has the balls to teach respect of discipline to the kids in this community.... [The youth] are self- indulgent, spoiled and expect everybody owes them, with no responsibility."

It is not uncommon for the problems of the community to be blamed on the youth, as expressed in the following statement: "I do NOT support taxes to fix schools the students have destroyed." However, this respondent also wrote "I have a great interest in education. I am a teacher myself."

The 'proper' place of youth in the community is paramount on the minds of many residents. One resident writes, for example, that "Sports programs and recreational facilities provide activities for the kids which will keep them out of trouble". This statement resonates with other comments, such as "How about a skateboard park to get them off store sidewalks?", "Community center would benefit preteen and teenage population as a place of activity" and finally, "Kids have no place to really go." A dominant theme thus emerges that, as a resident explains, "We need an area for our teens, kids and young adults to go. There is nowhere for them to go to 'hang out' in a safe environment." Accordingly, the provision of these facilities, will "keep kids out of trouble." These arguments are related to questions of socialization, as expressed in the following two statements: "Children need a center for their maturation process–a place for social activities" and "There is a need for a center for children to 'hang out' at which

would help them interact positively in a good environment instead of on the street." Lastly, one resident writes that "A community center ... can be a gathering place for kids to get together and socialize."

Interesting, though, it is not just the youth who are perceived to be currently 'out of place'. One resident, for example, contends that "We definitely need some place for our senior citizens." These arguments are commonly couched in the health of the community. For example, one resident writes that "senior centers are great for decreasing depression and social isolation." Housing for the elderly is also a concern among residents, as typified in the statement that there exists a "Need [for] senior housing and facilities." "Senior Center is very important to keep our people in this town to look forward to help the elders and build the hope (for) future seniors." Admittedly, some respondents may only be concerned with 'senior' issues because they recognize that they themselves will someday be elderly. Consider, for example, the sentiment expressed by this resident: "Let's not forget our senior citizens–we are going to be one someday."

4. Neglected Concerns

A benefit of open-ended questions is that respondents have an opportunity to voice their opinion on issues not covered in the questionnaire. Many of these issues are exceptionally specific, as the following two statements indicated: "Really would like to see a traffic light at the intersection of Rt. 306 and Sherman Road" and "Speed radar needed to increase on Wilson Mills." Other times, though, largely issues do surface. One resident, for example, asks "Why weren't there any questions on noise pollution caused by motorcyclists who remove mufflers from their motorcycles?" Still another respondent writes "None of the things listed are needed. [The community] should use cooperative funds to improve infrastructure, retain teachers, and create better programs for handicapped and gifted kids."

Open-ended responses also suggest that there is an undercurrent of distrust among some residents. Some respondents, for example, express concern that they have been, and continue to be misled on financial issues. Representative statements include "We do not feel the Township Trustees listen to the residents' wishes on several issues" and "They [township communicators] have not been honest and upfront. They seem to have their own agenda." Accordingly, other respondents used this opportunity to forward their own solutions: "Our children learn from adults, but adults need to learn like a child. We need communication and a better government."

Conclusions

It is evident in both the quantitative and qualitative results that there is a general degree of satisfaction with the quality of life in Chester Township, and substantial concern regarding future development patterns. Resident opinion tended to emphasize a desire to preserve the rural nature of the Township, and therefore there was little desire to improve or expand infrastructure that would facilitate rapid growth. There were, however, substantial differences in resident opinion along age and residency divisions. These divisions were particularly evident in relation to park spaces and ground water issues.

CHESTER TOWNSHIP COMMUNITY SURVEY

RESIDENT SATISFACTION, LAND USE AND TOWNSHIP FUTURE

Section 1

In this section you are asked if you Agree or Disagree with a statement. Each statement is followed by six choices plus a no opinion choice (N/O).

A – Strongly Disagree
B – Moderately Disagree
C – Slightly Disagree
D – Slightly Agree
E – Moderately Agree
F – Strongly Agree

Land Use – Zoning

7. Churches / Houses of Worship should remain a use in residentially zoned areas.

Strongly Disagree	19.8%
Moderately Disagree	6.4%
Slightly Disagree	6.8%
Slightly Agree	14.9%
Moderately Agree	21.5%
Strongly Agree	29.8%
No Opinion	0.8%

15. Current zoning regulations should be adequate to control new residential development in Chester Township.

Strongly Disagree	12.6%
Moderately Disagree	11.3%
Slightly Disagree	9.5%
Slightly Agree	19.9%
Moderately Agree	23.6%
Strongly Agree	22.2%
No Opinion	0.9%

26. Economic value should be the only consideration for determining zoning in the Township.

Strongly Disagree	52.9%
Moderately Disagree	14.8%
Slightly Disagree	11.3%
Slightly Agree	10.1%
Moderately Agree	4.3%
Strongly Agree	5.7%
No Opinion	0.9%

Land Use – Development Patterns

1. Alternatives to large lot residential development should be considered ……...

Strongly Disagree	58.0%
Moderately Disagree	11.0%
Slightly Disagree	3.8%
Slightly Agree	8.6%
Moderately Agree	7.0%
Strongly Agree	11.3%
No Opinion	0.3%

3. Growth control is not necessary for Chester Township

Strongly Disagree	65.3%
Moderately Disagree	12.0%
Slightly Disagree	4.6%
Slightly Agree	5.3%
Moderately Agree	3.9%
Strongly Agree	8.8%
No Opinion	0.1%

14. Preservation of historic / cultural features is important.

Strongly Disagree	4.1%
Moderately Disagree	1.4%
Slightly Disagree	2.3%
Slightly Agree	12.8%
Moderately Agree	21.8%
Strongly Agree	57.5%
No Opinion	0.1%

17. Developers should be rewarded with density bonuses (more homes per acre) if they preserve sensitive areas as open landscape.

Strongly Disagree	60.1%
Moderately Disagree	12.3%
Slightly Disagree	5.7%
Slightly Agree	7.4%
Moderately Agree	6.4%
Strongly Agree	7.9%
No Opinion	0.2%

18. Keeping large scale (subdivisions greater than 20 homes) developers out of this Township is important to me.

Strongly Disagree	8.8%
Moderately Disagree	4.6%
Slightly Disagree	4.2%
Slightly Agree	6.5%
Moderately Agree	12.1%
Strongly Agree	63.1%
No Opinion	0.7%

22. The Township should collaborate with others to preserve open land.

Strongly Disagree	4.3%
Moderately Disagree	1.8%
Slightly Disagree	2.1%
Slightly Agree	11.2%
Moderately Agree	19.4%
Strongly Agree	61.1%
No Opinion	0.1%

23. Lot sizes should be determined on the basis of the available type of waste disposal (i.e. septic, sewers, package plants).

Strongly Disagree	22.9%
Moderately Disagree	8.6%
Slightly Disagree	4.4%
Slightly Agree	14.9%
Moderately Agree	20.3%
Strongly Agree	28.0%
No Opinion	0.9%

28. Large residential lots (5 acres +) is the best way to maintain the Township's semirural environment.

Strongly Disagree	7.5%
Moderately Disagree	5.3%
Slightly Disagree	6.5%
Slightly Agree	12.2%
Moderately Agree	18.5%
Strongly Agree	49.9%
No Opinion	0.1%

29. Living near undeveloped open land is important to me.

Strongly Disagree	4.0%
Moderately Disagree	3.7%
Slightly Disagree	4.2%
Slightly Agree	12.4%
Moderately Agree	19.3%
Strongly Agree	56.1%
No Opinion	0.3%

31. Lot sizes should be determined on the basis of ground (well) water supply.

Strongly Disagree	20.1%
Moderately Disagree	8.1%
Slightly Disagree	6.5%
Slightly Agree	18.4%
Moderately Agree	21.1%
Strongly Agree	25.3%
No Opinion	0.5%

33. Conservation easements (meant to preserve land) within new developments should be encouraged to protect flood plains, wetlands and water ways.

Strongly Disagree	3.5%
Moderately Disagree	1.3%
Slightly Disagree	1.9%
Slightly Agree	8.6%
Moderately Agree	24.9%
Strongly Agree	59.3%
No Opinion	0.5%

35. The Township should maintain its semi- rural environment.

Strongly Disagree	1.7%
Moderately Disagree	1.3%
Slightly Disagree	2.0%
Slightly Agree	6.3%
Moderately Agree	12.9%
Strongly Agree	75.7%
No Opinion	0.1%

37. Environmental responsibility should not be a primary consideration for new development.

Strongly Disagree	56.3%
Moderately Disagree	14.4%
Slightly Disagree	7.8%
Slightly Agree	7.4%
Moderately Agree	6.2%
Strongly Agree	7.8%
No Opinion	0.1%

39. Productive farm land in the Township should be protected from nonagricultural development.

Strongly Disagree	6.1%
Moderately Disagree	3.1%
Slightly Disagree	3.6%
Slightly Agree	11.8%
Moderately Agree	17.8%
Strongly Agree	57.4%
No Opinion	0.2%

52. Current development pattern in the Township.

Totally Dissatisfied	18.6%
Mostly Dissatisfied	11.4%
Slightly Dissatisfied	13.3%
Slightly Satisfied	22.8%
Moderately Satisfied	19.7%
Very Satisfied	13.8%
No Opinion	0.4%

Land Use – Park Spaces

27. Additional active (recreational) parks should be developed in the Township.

Strongly Disagree	21.9%
Moderately Disagree	8.3%
Slightly Disagree	7.8%
Slightly Agree	19.7%
Moderately Agree	17.1%
Strongly Agree	24.9%
No Opinion	0.3%

34. Chester Township should consider a tax levy to assist in the development of Township parks.

Strongly Disagree	42.2%
Moderately Disagree	12.6%
Slightly Disagree	9.3%
Slightly Agree	16.5%
Moderately Agree	10.9%
Strongly Agree	8.2%
No Opinion	0.3%

36. Passive parks (e.g. nature trails) should be developed in the Township.

Strongly Disagree	16.5%
Moderately Disagree	7.2%
Slightly Disagree	7.7%
Slightly Agree	23.1%
Moderately Agree	18.3%
Strongly Agree	26.8%
No Opinion	0.3%

49. Number of Township parks for recreational activities.

Totally Dissatisfied	5.8%
Mostly Dissatisfied	5.5%
Slightly Dissatisfied	10.3%
Slightly Satisfied	17.5%
Moderately Satisfied	25.5%
Very Satisfied	34.9%
No Opinion	0.5%

Land Use – Commercial / Industrial

5. Expansion of the Commercial District would be beneficial.

Strongly Disagree	52.7%
Moderately Disagree	10.8%
Slightly Disagree	7.3%
Slightly Agree	11.2%
Moderately Agree	7.2%
Strongly Agree	10.5%
No Opinion	0.3%

8. An increase in the Restricted Industrial District should not be encouraged.

Strongly Disagree	16.1%
Moderately Disagree	7.7%
Slightly Disagree	6.6%
Slightly Agree	11.1%
Moderately Agree	14.8%
Strongly Agree	42.9%
No Opinion	0.8%

10. Commercial development within the Township should not be encouraged.

Strongly Disagree	13.7%
Moderately Disagree	6.4%
Slightly Disagree	10.2%
Slightly Agree	10.9%
Moderately Agree	14.6%
Strongly Agree	44.0%
No Opinion	0.2%

16. Some increase in the Restricted Industrial District would be beneficial.

Strongly Disagree	32.6%
Moderately Disagree	10.5%
Slightly Disagree	7.5%
Slightly Agree	18.0%
Moderately Agree	15.9%
Strongly Agree	14.7%
No Opinion	0.8%

30. The Township should improve the existing tax base by encouraging commercial/light industrial development.

Strongly Disagree	32.8%
Moderately Disagree	11.9%
Slightly Disagree	8.1%
Slightly Agree	18.2%
Moderately Agree	12.6%
Strongly Agree	16.1%
No Opinion	0.3%

48. Distance to commercial activities.

Totally Dissatisfied	2.2%
Mostly Dissatisfied	2.0%
Slightly Dissatisfied	3.7%
Slightly Satisfied	10.7%
Moderately Satisfied	33.8%
Very Satisfied	47.3%
No Opinion	0.5%

50. Amount of commercial development in the Township.

Totally Dissatisfied	10.9%
Mostly Dissatisfied	6.5%
Slightly Dissatisfied	8.9%
Slightly Satisfied	19.7%
Moderately Satisfied	21.3%
Very Satisfied	32.5%
No Opinion	0.2%

51. Amount of industrial development in the Township.

Totally Dissatisfied	7.2%
Mostly Dissatisfied	5.9%
Slightly Dissatisfied	9.6%
Slightly Satisfied	20.4%
Moderately Satisfied	23.9%
Very Satisfied	32.1%
No Opinion	0.9%

Water / Waste Treatment

2. Septic systems provide a viable option for continued residential development

Strongly Disagree	9.9%
Moderately Disagree	5.2%
Slightly Disagree	5.1%
Slightly Agree	11.5%
Moderately Agree	21.6%
Strongly Agree	46.3%
No Opinion	0.4%

4. Centralized sewer connections should be the preferred method of residential sewage treatment in the Township.

Strongly Disagree	50.3%
Moderately Disagree	9.9%
Slightly Disagree	7.1%
Slightly Agree	9.8%
Moderately Agree	8.6%
Strongly Agree	13.9%
No Opinion	0.4%

9. Ground (well) water pollution is a concern in the Township.

Strongly Disagree	10.3%
Moderately Disagree	8.0%
Slightly Disagree	6.0%
Slightly Agree	16.8%
Moderately Agree	18.3%
Strongly Agree	40.2%
No Opinion	0.4%

11. Stormwater drainage is not a problem in my area of the Township.

Strongly Disagree	8.1%
Moderately Disagree	4.8%
Slightly Disagree	3.8%
Slightly Agree	7.1%
Moderately Agree	20.1%
Strongly Agree	55.6%
No Opinion	0.5%

13. Minimum lot sizes are needed to ensure adequate ground (well) water and room for septic systems.

Strongly Disagree	5.3%
Moderately Disagree	1.0%
Slightly Disagree	1.2%
Slightly Agree	4.6%
Moderately Agree	12.8%
Strongly Agree	74.9%
No Opinion	0.2%

20. The ground (well) water supply should be monitored on an ongoing basis.

Strongly Disagree	7.7%
Moderately Disagree	3.5%
Slightly Disagree	4.2%
Slightly Agree	15.7%
Moderately Agree	21.3%
Strongly Agree	47.4%
No Opinion	0.2%

24. There is an adequate supply of ground (well) water in my area of the Township.

Strongly Disagree	6.0%
Moderately Disagree	3.4%
Slightly Disagree	5.2%
Slightly Agree	14.5%
Moderately Agree	28.1%
Strongly Agree	41.9%
No Opinion	0.9%

25. Chester Township should consider replacing ground (well) water systems with a public water system.

Strongly Disagree	55.5%
Moderately Disagree	9.8%
Slightly Disagree	6.2%
Slightly Agree	9.6%
Moderately Agree	7.2%
Strongly Agree	11.5%
No Opinion	0.2%

53. Quality of ground (well) water in my area of the Township

Totally Dissatisfied	5.7%
Mostly Dissatisfied	3.7%
Slightly Dissatisfied	6.3%
Slightly Satisfied	12.1%
Moderately Satisfied	30.8%
Very Satisfied	41.3%
No Opinion	0.1%

Roads

12. All unimproved Township roads should be paved.

Strongly Disagree	19.8%
Moderately Disagree	7.9%
Slightly Disagree	5.4%
Slightly Agree	14.1%
Moderately Agree	13.4%
Strongly Agree	38.9%
No Opinion	0.5%

19. Mayfield Road (State Route 322) should be widened to 5 lanes.

Strongly Disagree	43.7%
Moderately Disagree	9.5%
Slightly Disagree	5.2%
Slightly Agree	8.6%
Moderately Agree	10.0%
Strongly Agree	22.7%
No Opinion	0.3%

38. The unimproved roads in the Township help maintain the semi-rural character.

Strongly Disagree	33.4%
Moderately Disagree	11.3%
Slightly Disagree	8.7%
Slightly Agree	12.5%
Moderately Agree	12.1%
Strongly Agree	21.3%
No Opinion	0.7%

40. Traffic flow in the Township

Totally Dissatisfied	13.3%
Mostly Dissatisfied	13.9%
Slightly Dissatisfied	20.1%
Slightly Satisfied	16.4%
Moderately Satisfied	25.6%
Very Satisfied	10.9%
No Opinion	0.0%

44. Snow plowing on State Route 322

Totally Dissatisfied	5.4%
Mostly Dissatisfied	5.1%
Slightly Dissatisfied	6.2%
Slightly Satisfied	11.9%
Moderately Satisfied	34.0%
Very Satisfied	37.3%
No Opinion	0.1%

45. Snow plowing on State Route 306

Totally Dissatisfied	6.6%
Mostly Dissatisfied	5.9%
Slightly Dissatisfied	7.1%
Slightly Satisfied	12.1%
Moderately Satisfied	32.9%
Very Satisfied	35.3%
No Opinion	0.1%

46. Snow plowing on Township and County roads

Totally Dissatisfied	4.8%
Mostly Dissatisfied	5.9%
Slightly Dissatisfied	7.1%
Slightly Satisfied	14.4%
Moderately Satisfied	32.4%
Very Satisfied	35.2%
No Opinion	0.2%

47. Road maintenance on Township roads

Totally Dissatisfied	3.4%
Mostly Dissatisfied	4.0%
Slightly Dissatisfied	7.0%
Slightly Satisfied	13.7%
Moderately Satisfied	39.0%
Very Satisfied	32.8%
No Opinion	0.1%

Government Structure / Service Provision

6. A change to incorporated (city) government should be considered for Chester Township

Strongly Disagree	49.7%
Moderately Disagree	10.1%
Slightly Disagree	6.0%
Slightly Agree	9.7%
Moderately Agree	8.5%
Strongly Agree	15.3%
No Opinion	0.7%

21. Communities such as Chester Township have no obligation to provide affordable housing opportunities.

Strongly Disagree	8.5%
Moderately Disagree	4.9%
Slightly Disagree	5.3%
Slightly Agree	9.3%
Moderately Agree	14.5%
Strongly Agree	56.8%
No Opinion	0.7%

32. Our present Township form of government is preferred.

Strongly Disagree	12.6%
Moderately Disagree	6.2%
Slightly Disagree	7.5%
Slightly Agree	15.3%
Moderately Agree	21.3%
Strongly Agree	36.5%
No Opinion	0.6%

41. Fire Protection Service

Totally Dissatisfied	1.7%
Mostly Dissatisfied	1.0%
Slightly Dissatisfied	2.7%
Slightly Satisfied	8.7%
Moderately Satisfied	36.9%
Very Satisfied	48.5%
No Opinion	0.5%

42. Emergency Medial Service

Totally Dissatisfied	1.4%
Mostly Dissatisfied	1.1%
Slightly Dissatisfied	2.3%
Slightly Satisfied	9.3%
Moderately Satisfied	32.8%
Very Satisfied	52.3%
No Opinion	0.8%

43. Township Police Protection Service

Totally Dissatisfied	4.0%
Mostly Dissatisfied	2.9%
Slightly Dissatisfied	4.4%
Slightly Satisfied	11.0%
Moderately Satisfied	32.8%
Very Satisfied	44.7%
No Opinion	0.2%

54. Chester Township officials do a good job of getting information about the Township to the residents.

Totally Dissatisfied	14.0%
Mostly Dissatisfied	9.9%
Slightly Dissatisfied	13.0%
Slightly Satisfied	22.2%
Moderately Satisfied	26.9%
Very Satisfied	13.8%
No Opinion	0.2%

55. I feel well informed about how Chester Township is using my tax dollars for Township public services, such as police, fire, emergency rescue, roads and streets

Totally Dissatisfied	16.1%
Mostly Dissatisfied	10.1%
Slightly Dissatisfied	14.3%
Slightly Satisfied	21.5%
Moderately Satisfied	24.2%
Very Satisfied	13.7%
No Opinion	0.1%

56. What is the approximate size of the parcel on which you live?

0 acres to 1.5 acres	38.6%
1.6 acres to 3 acres	31.7%
3.1 acres to 5 acres	16.1%
5.1 to 10 acres	10.9%
10.1 to 25 acres	1.8%
25.1 acres or more	0.9%

57. How long have you lived in the Township?

Less than 1 year	2.0%
1 to 3 years	5.7%
4 to 6 years	7.6%
7 to 10 years	10.1%
11 to 20 years	24.9%
Over 20 years	49.7%

58. What is your present age?

Under 25 years	0.7%
26 to 35 years	5.5%
36 to 45 years	21.6%
46 to 55 years	25.5%
56 to 65 years	22.3%
Over 65 years	24.4%

59. Do you own or rent?

Own	99.0%
Rent	1.0%

APPENDIX B CHI-SQUARE TEST RESULTS

Question	Theme / Topic	Location	Length of Residency	Age
	Land Use - Zoning			
7	Zoning for Churches/Houses of Worship	**0.002**	0.082	**0.000**++
15	Current zoning is adequate	0.328	0.425	**0.032**
26	Economic value should determine zoning	0.570++	**0.003**	0.717
	Land Use – Development Patterns			
1	Residential development alternatives	0.082	0.333	0.431
3	Growth control is necessary	0.300	0.614++	0.402++
14	Preserve historic sites	0.782	0.108	**0.030**
17	Density bonuses for developers	0.560	0.096	0.060
18	Keep out large-scale developers	0.627	**0.044**++	**0.023**++
22	Collaborate to preserve open land	0.566	0.364	0.069++
23	Lot size based on waste disposal system	0.233	0.890	**0.002**
28	Large lots will preserve semi-rural environ.	**0.019**	0.104	0.384
29	Living near undeveloped land important	**0.045**	0.149++	0.549++
31	Lot sizes determined by well water supply	0.641	0.056	**0.000**
37	Eviron. responsibility & new development	0.692	0.232	0.088
33	Conservation easements to protect environ.	0.194++	0.764++	0.100++
35	Maintain semi-rural environment	0.719++	0.659++	0.803++
39	Protect productive farm land from develop.	0.798	0.568++	0.119++
52	Current development pattern	0.255	**0.004**	**0.033**
	Land Use – Park Spaces			
27	Recreational parks needed	0.718	**0.000**	**0.000**
34	Levy to develop township parks	0.707	**0.004**	**0.000**
36	Passive parks should be developed	0.444	**0.009**	**0.006**++
49	Number of parks for recreation	0.314	**0.000**	**0.000**++
	Land Use – Commercial / Industrial			
5	Expansion of commercial district	0.596	**0.000**	0.192
8	Restricted industrial district increase	0.660	**0.006**	0.374
10	Encourage commercial development	0.710	0.134	0.195
16	Increase in restricted indust. dist. beneficial	0.969	**0.024**	**0.005**
30	Encourage commercial/light indus. develop.	0.514	**0.043**	**0.038**
48	Distance to commercial activities	0.693	0.168++	**0.040**++
50	Amount of commercial development	0.285	0.141	**0.002**
51	Amount of restricted industrial development	0.301	0.122	0.054++

APPENDIX B CHI-SQUARE TEST RESULTS (Cont'd)

Question	Theme / Topic	Location	Length of Residency	Age
	Water / Waste Treatment			
2	Septic systems are viable	0.383	**0.044**	**0.002**
4	Centralized sewer connections	0.487	**0.027**	**0.003**
9	Ground water contamination	0.247	**0.049**	0.109
11	Stormwater drainage	0.772	0.142	**0.002**
13	Minimum lot sizes for septic systems	0.927	0.168	**0.001**
20	Monitor ground water	0.218	0.608++	0.523++
24	Adequate supply of well (ground) water	0.590	0.365++	**0.001**++
25	Add public water system	0.867	**0.013**	**0.017**
53	Quality of well (ground) water	0.970	**0.026**	**0.000**++
	Roads			
12	Pave township roads	**0.000**	0.607	0.372
19	Widen Mayfield Road	0.494	0.161	0.107
38	Unimproved roads keep rural character	**0.004**	**0.036**	0.686
40	Traffic flow	**0.001**	**0.013**	**0.019**
44	Snow plowing on State Route 322	0.902	0.091	0.004++
45	Snow plowing on State Route 306	0.670	0.082	**0.000**
46	Snow plowing on township/county roads	0.169	0.222	**0.000**++
47	Road maintenance	0.419	0.487++	**0.000**++
	Government Services			
6	Incorporation	0.545	0.159	0.446
21	Provide housing opportunities	0.128	0.976	0.192
32	Present township government preferred	0.055	0.123	0.122++
41	Fire protection service	0.379++	0.441++	**0.000**++
42	Emergency medical service	0.523++	**0.031**++	**0.000**++
43	Township police protection service	0.051	0.170++	0.002++
54	Township officials provide adequate info.	0.275	0.333	**0.000**
55	I feel well informed about use of tax dollars	0.563	0.416	**0.000**

Note: Statistically significant results are in boldface type.
++ indicates an insufficient number of responses for a reliable chi-square test.

CHAPTER VII

RECOMMENDATIONS

Basis For Recommendations

The following recommendations are meant to guide the decision-making process with respect to zoning issues and related matters. The land use plan map (see Map 68) illustrates the various districts discussed.

Items considered in the process to prepare recommendations entailed the land capability analysis included in this plan, the township questionnaire results, recognized planning and zoning principles, and the input obtained from meetings with township officials.

Zoning Resolution

- Initiate a program to periodically review the zoning resolution in accord with the latest version of the "Model Township Zoning Resolution" and include any statutory changes in order to enhance its defensibility.

- Examine permitted uses, particularly in the commercial zone, to determine if some of the more intensive uses allowed should be reclassified as conditional.

- Consider regulations for public "active" recreation and/or "passive" (open space) zones.

- Explore zoning regulations related to riparian protection.

- Review the current zoning regulations relative to erosion and sediment control.

Zoning Map

- Devise and adopt legal descriptions for each zoning district shown on the official zoning map to assist the zoning inspector with enforcement issues.

- Study the creation of a new public "active park" zoning district.

- Consider the creation of a public "passive" open space zone to be applied to the property held by the Geauga Park District, the township, and similar entities.

- Maintain the current boundary of the commercial zone to contain future "strip" commercial development. Adjust the commercial zone boundaries, where feasible, to follow recorded lot lines.

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- Install the zoning map on the township's computer system, as a part of the Geographic Information System (GIS) program.

Environmental Issues

- Implement the EPA Phase II Stormwater Program Plan for the township (effective March 6, 2003).

- Work closely with the Geauga Soil and Water Conservation District on erosion/sediment control and stormwater management issues related to development activities.

- Educate the public with respect to "best management practices" to protect riparian corridors and examine zoning regulations for such corridors.

- Encourage developers to create conservation easements over sensitive lands to preserve and protect them.

- Support the continuation of the United States Geological Survey (USGS) study of groundwater quality and quantity.

Roads

- Monitor ODOT and NOACA activities related to future state highway planning and funding programs.

- Maintenance of existing roads should remain a top priority.

- Access management criteria, particularly along state routes in the commercial district, should be taken into consideration during the site plan and development review process.

- Continue to bring existing roads up to current design and construction standards, when feasible, for safety purposes.

Agriculture

- Apprise landowners of the CAUV, agricultural district, and forestry programs available through the Geauga County Auditor's Office.

Historic Resources

- Identify and map historic buildings and structures using the GIS program.

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Land Use Plan

- Utilize the land use plan as a general guide for decision-making and periodically update it as conditions may warrant.

- Load the land use plan on the township's computer system and refer to the environmental maps contained in it when advising property owners regarding zoning and related development issues.

Table 65

Land Use Plan Map Legend
Chester Township

Category	Acres	Percent
R: One Family Residential	3,792.38	25.2%
R3A: One Family Residential	4,796.04	31.8%
R5A: One Family Residential	6,087.77	40.1%
C: General Commercial	258.36	1.7%
SC: Shopping Center	9.37	0.1%
I: Restricted Industrial	132.05	0.9%
Active Public Recreation	86.43	0.6%
Passive Public Open Space	164.34	1.1%
Surface Water	70.1	0.5%
Environmentally Sensitive Land	2,383.75	15.8%

Revised August, 2008
Source: Geauga County Planning Commission

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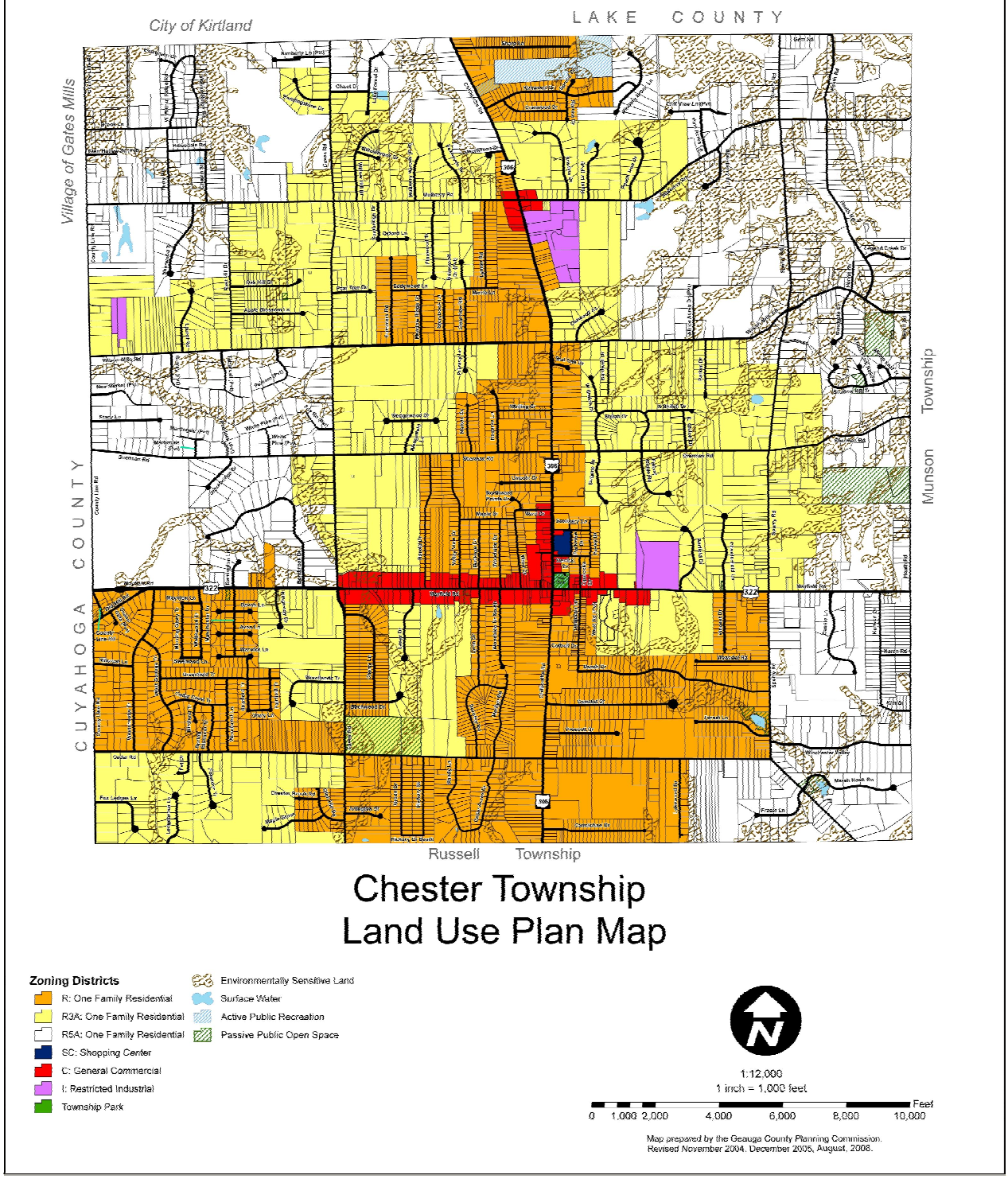
Map 68



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