

**wilmington,
ohio**

**LAND USE,
THOROUGHFARE
AND OPEN
SPACE PLAN**

LAND USE, THOROUGHFARE AND OPEN SPACE PLAN
1978-2000
WILMINGTON, OHIO

August, 1978

Prepared for: City of Wilmington, Ohio
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ABSTRACT

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ABSTRACT:

This report contains a set of many technical studies, projections, plans and recommendations regarding community development in the City of Wilmington and the surrounding 3-mile area. Its purpose is to present coordinated guidelines for future growth and development and for the preservation of open space to the year 2000. The Plan includes: guidelines for residential, commercial, industrial, and other land uses; guidelines for major streets and highways (thoroughfares); and guidelines for the preservation of flood plains, park sites, and other open spaces.

The Plan is based on detailed studies of the major components of community development: population and economic characteristics, natural features, existing land use patterns and trends, existing major streets and highways, and existing community facilities and utilities. It also includes a set of community development goals and policies, based on a Goals Questionnaire distributed to local public officials and citizens. A physical map plan is presented along with a discussion of the more detailed guidelines upon which the map plan is based. A discussion of and guidelines for implementation are also presented, including recommendations on zoning, subdivision regulations, capital improvements programming, timing or staging, coordination and evaluation.

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SECTION A

INTRODUCTION

The Wilmington Land Use, Thoroughfare and Open Space Plan is a set of many technical studies, projections, proposals and recommendations regarding community development in the City of Wilmington and the surrounding three mile area. Its purpose is to present coordinated guidelines for future growth and development and for the preservation of open space to the year 2000. The Plan includes: guidelines for residential, commercial, industrial, and similar community land uses; guidelines for major streets and highways (thoroughfares); and guidelines for the preservation of flood plains, park sites, and other open spaces.

The Plan is based on detailed studies of the major components of community development: population and economic characteristics, natural features of the environment, existing land use patterns and trends, existing major streets and highways (the thoroughfares), and existing community facilities and utilities (schools, parks, public buildings, water and sewer lines, etc.). These are presented in Sections B through F of the Plan.

Section G presents a coordinated set of community development goals and policies, based on a Goals Questionnaire distributed to local public officials and concerned citizens. Goals and policies are the focal point of a continuing planning process. They represent the attitudes and desires of the people for a better future, not just for tomorrow or next year, but for several decades or generations to come.

The Plan components in Section H present a strategy for achieving the goals. Section H contains a physical map plan showing recommended patterns for growth and development and a discussion of the more detailed guidelines upon which the Plan map is based. The Plan map and set of recommendations is meant to be flexible, but it should be recognized as the official public policy guide towards future growth and development. Section I presents a more detailed outline of the implementation and use of the Plan. It includes recommendations on coordination, timing, review, and evaluation. It includes recommendations on zoning, subdivision regulations, capital improvements programming, and other community development controls and programs.

The Land Use, Thoroughfare and Open Space Plan for Wilmington is not the first effort in this community to plan for its future. Many years have already been devoted to working out solutions to

current community problems and preparing to meet those ahead. A major benchmark in this process was completed in 1954 with the publication of the Wilmington Master Plan(1) which has served the City well for many years in guiding growth and development. Other efforts have included the City's zoning ordinance, subdivision regulations, detailed utility plans, industrial development plans, housing plans, neighborhood improvement plans, and many others. Hopefully the Land Use, Thoroughfare and Open Space Plan will provide an updated guide for the coordination of these efforts and a new impetus to reaching the community's goals.

(1) A Master Plan for Wilmington, Ohio, Prepared for the City of Wilmington by Metropolitan Planners, Inc., 1954.

SECTION B

POPULATION AND ECONOMIC CHARACTERISTICS

The purpose of this chapter is to provide background information on population growth, population characteristics, and economic characteristics of the City of Wilmington. The Land Use, Thoroughfare and Open Space Plan for Wilmington must be based on the needs of the people as well as on the existing physical characteristics of the area. Most local residents already know much about the people who live here, but for planning purposes, it is desirable to review this knowledge, quantify and tabulate the information as it becomes available, analyze the significance of data to current and projected trends, and consider the possibilities for the future.

The most extensive and reliable source of data available for population and economic characteristics is the U.S. Census. Conducted once every ten years, the census includes a survey of all households in the United States, a sample survey of some households for additional information, and extensive publication of information, within the limits of personal privacy, on all political jurisdictions. Unfortunately, the last census was conducted over 8 years ago and available information is therefore somewhat dated. However, a review of the 1970 census statistics is still very significant in providing a general perspective on local characteristics as well as a basis for comparison with other areas, state-wide averages, and past statistics of earlier decades.

In addition to the U.S. Census, other information is reviewed and tabulated to provide additional understanding on local characteristics. This includes information from the Ohio Bureau of Employment Services, City Building Department permit records, a History of Clinton County, the Ohio Department of Economic and Community Development, and other sources.

This Chapter is divided into several subsections. The subsection on historic growth provides general information on the City from the City's earliest beginnings. Next, detailed statistics are reviewed on 1970 population and economic characteristics, with comparisons to 1960 statistics where relevant. "Recent changes" takes a look at the limited information available on changing trends since 1970. Last, projections are made on the probable or possible population growth trends of the future, to the year 2000.

Historic Growth

According to Beer's History of Clinton County, as summarized in several local brochures, early settlers began arriving in this area in 1799. Many of the early settlers were members of the Religious Society of Friends who came in groups from Virginia and the Carolinas. The Ohio General Assembly created Clinton County in 1810. The Village of Wilmington was officially named as the county seat in 1828. Earlier names for Wilmington were Clinton, Armenia, and Mt. Pleasant. These names correspond to towns in Delaware and North Carolina, states well represented in the local population. In 1810, the town had a population of 600 persons.

Wilmington College was founded in 1870 by the Society of Friends, now a four-year liberal arts college on the east side of town. In 1812 a system of public schools was established by the State Legislature. The first newspaper was the Western Whig, which began in 1838. Many new roads were built and older "trails" improved. In 1853 the Cincinnati, Wilmington, and Zanesville Railroad was completed, which, along with the later completion of the Pennsylvania and the B & O Railroads, was a major impetus to economic growth.

Wilmington businesses were formed and enlarged to meet the needs of a wide market for products grown or manufactured locally. Although the County has been traditionally an agricultural area chiefly noted for corn and hog production, many manufacturing plants have been located in or near the community. Some of these which had their beginnings in the last half of the nineteenth century are Champion Bridge Company, structural steel fabricators and bridge builders; Irwin Auger Bit, manufacturer of wood boring bits; and Farquhar Company, manufacturers of furnaces.

Growth continued through the first seven decades of the twentieth century at a fairly substantial rate, as illustrated in Table I, which compares population growth of the City since 1900 to growth for the County and the State as a whole.

Perhaps the greatest single influence this century has been the Clinton County Airforce Base, located just outside of the City to the southeast. The airbase was operated by the Air Material Command during World War II for glider research, training, and development. Prior to that time, the field had been used as an emergency landing field, and even earlier, back to 1929, as a local landing strip. During the Korean conflict the base was used as an air reserve training center. In 1960 (or thereabouts) Clinton Co. Airforce Base was taken over by the Strategic Air Command and a major construction program was carried out, extending the runway to 9000 feet and adding facilities to accommodate 3100 military personnel. The base was finally closed in 1971. It is now used as an industrial park, the Laurel Oaks campus of the Great Oaks Vocational School District, Southern State College, a two year, state-supported general and technical college, and a military reserve training center.

TABLE I
POPULATION GROWTH, WILMINGTON
CLINTON COUNTY, AND OHIO, 1900-1970

	<u>City of Wilmington</u>	<u>Clinton County</u>	<u>State of Ohio</u>
1900	3613	24,202	4,157,545
1910	4491	23,680	4,767,121
1920	5037	23,036	5,759,394
1930	5332	21,547	6,646,697
1940	5971	22,574	6,907,612
1950	7387	25,572	7,946,627
1960	8915	30,004	9,706,397
1970	10051	31,464	10,652,017

Percentage Growth

1900-1970	178%	30%	156%
1940-1970	68%	39%	54%

Source: U.S. Census of Population, 1900-1970, and Consultant calculations.

During this century, the City has continued to grow as a center of diversified business, industry, county government, education, and social and cultural facilities. Following a review of existing population and economic characteristics, and their recent changes, the future growth of the City will also be considered.

1970 Characteristics and Trends

One of the most basic population characteristics which has a significant influence on the growth and development patterns of a City is the age structure. How many young people are there? How many elderly? How many are school age? How many are in the young work force? How many are near retirement? And so forth. The 1970 age structure is presented on Graph A for the City of Wilmington, as compared with the age structure for Ohio as a whole, and as compared with Wilmington in 1960.

Normally the graph would be expected to resemble a pyramid. The "bar" across the bottom for the age group 0-4 (all persons whose age is between 0 and 4 years old) would be the longest, with each subsequent age group slightly older, and consequently slightly smaller on both ends - both for women and men. The "deviations" from this expected pyramid signify important local characteristics.

In Wilmington perhaps the most noticable age characteristic is the large proportion of elderly women, age 75 or more. This amounts to 7.4% of the female population as compared to Ohio where it amounts to only 4.4% of the female population. It was similarly very large in 1960, indicating that this characteristic is not just a temporary phenomenon. An almost equally noticable characteristic is the large proportion of people age 20-24, and to a lesser extent, of people age 15-19. No doubt this is due to the attendance at Wilmington College.

The overall pattern of the pyramid should also be noted. Both the state pattern and the local pattern (1970) illustrate the national trends of increasing life spans, low birth rates during the period 1930-45, high birth rates shortly thereafter, and more recently decreasing birth rates.

Comparison of the 1960 Wilmington pattern with the 1970 pattern does not suggest any unique trends other than those already mentioned.

In Table II, an extensive description of 1970 population and economic characteristics is provided for Wilmington, for Ohio as a whole, and for "other urban" areas in Ohio. By "other urban"

GRAPH A
POPULATION BY AGE GROUPS
WILMINGTON 1960 & 1970, OHIO 1970

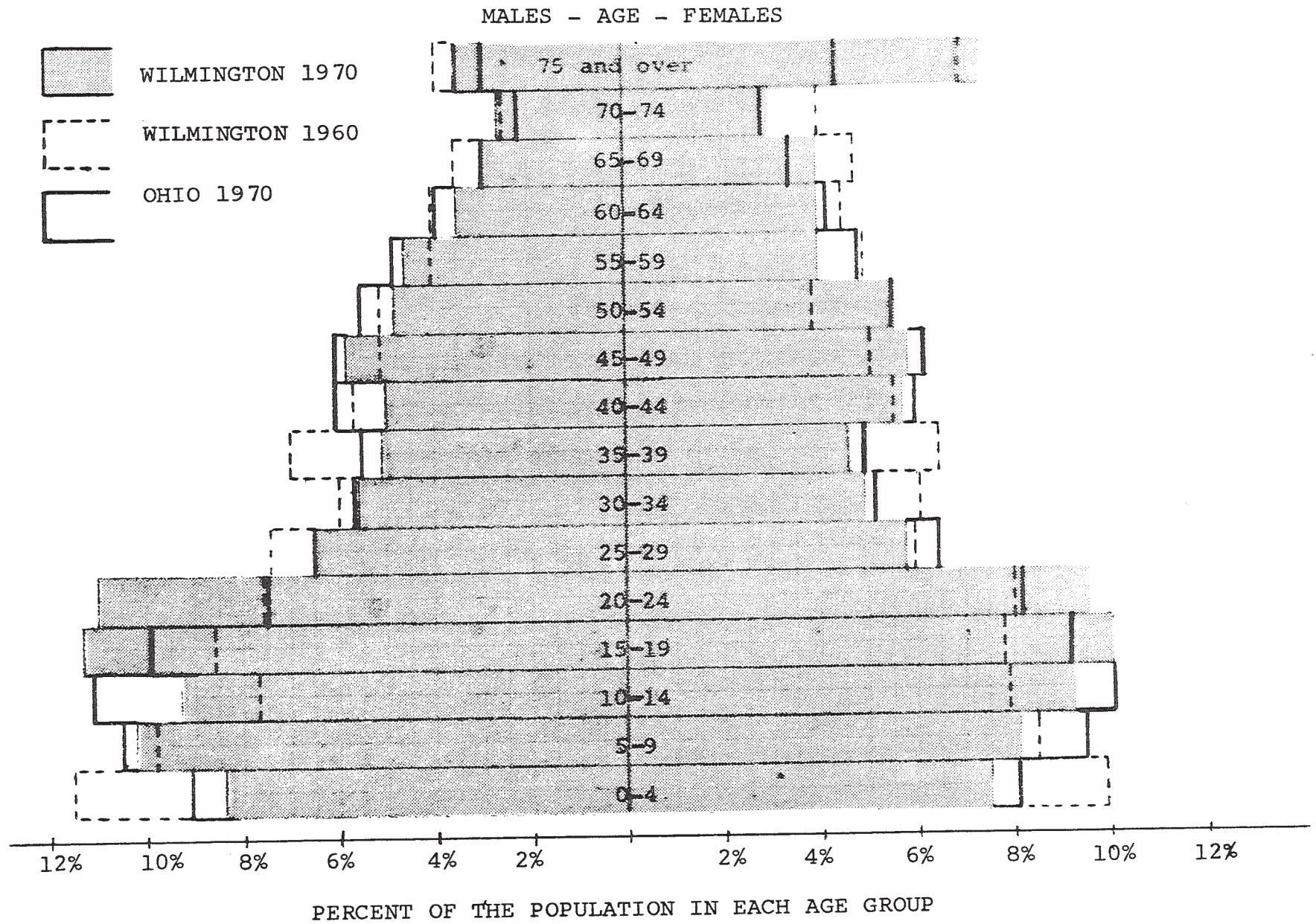


TABLE II
POPULATION AND ECONOMIC CHARACTERISTICS
WILMINGTON AND STATE OF OHIO, 1970

		Ohio	
	Wilmington	"Other Urban" (1) (2)	State (2) Total
<u>Total Population</u>	10,051	1,383,000	10,652,000
<u>Race</u>			
White	9,341	1,334,000	9,647,000
Percent	92.9%	96.5%	90.6%
Negro	680	46,000	970,000
Percent	6.8%	3.3%	9.1%
Other Races	30	4,000	35,000
Percent	.3%	.3%	.3%
<u>Age Groups</u>			
Under Age 18	3,200	459,000	3,738,000
Percent	31.8%	33.2%	35.1%
18-64	5,671	770,000	5,916,000
Percent	56.4%	55.7%	55.5%
65 or Over	1,180	154,000	998,000
Percent	11.7%	11.1%	9.4%
Median Age	27.2	27.6	27.7
<u>Residence</u>			
In Households	9,397	1,324,000	10,407,000
Percent	93.5%	95.7%	97.7%
In Group Quarters	654	59,000	245,000
Percent	6.5%	4.3%	2.3%
Persons Per Household	2.91	3.00	3.16

(1) "Other Urban" = Places of 2500 inhabitants or more, but excluding "urbanized areas" (the latter referring generally to cities of 50,000 inhabitants or more, and surrounding settled territory or incorporated places).

(2) Totals rounded to nearest thousands (000's).

TABLE II, (con't.)

	Ohio		
<u>Families</u>	<u>Wilmington</u>	<u>"Other Urban"</u>	<u>State Total</u>
Total Families	2,510	347,000	2,683,000
With Own Children under age 18	1,341	190,000	1,507,000
Percent	53.4%	54.8%	56.2%
Husband-Wife Families	2,205	306,000	2,354,000
Percent	87.8%	88.2%	87.7%
<u>Residence in 1965</u>			
Total Population, Age 5 or Over	9,234	1,263,000	9,732,000
Same House	4,019	664,000	5,332,000
Percent	43.5%	52.6%	54.8%
Different House, Same County	2,688	323,000	2,534,000
Percent	29.1%	25.6%	26.0%
Different House, Same State	1,153	90,000	613,000
Percent	12.5%	7.1%	6.3%
<u>Place of Work</u>			
All workers	3,938	517,000	3,966,000
Outside County of Residence	557	89,000	618,000
Percent	14.1%	17.2%	15.6%
<u>Education - Years of School Completed</u>			
Male Pop., Age 25 and Over :	2,387	337,000	2,689,000
0-8 Years Completed	535	86,000	709,000
Percent	22.4%	25.5%	26.4%
9-12 Years Completed	1,207	185,000	1,419,000
Percent	50.6%	54.9%	52.8%

TABLE II, (con't.)

		Ohio	
	Wilmington	"Other Urban"	State Total
<u>Education - Years of School Completed (Con't)</u>			
1-3 Years of College Percent	265 11.1%	29,000 8.6%	240,000 8.9%
4 or More Years of College Percent	380 15.9%	37,000 11.0%	321,000 11.9%
Female Pop., Age 25 & Over:	2,899	398,000	3,012,000
8 Years Completed Percent	610 21.0%	95 23.9%	729 24.2%
12 Years Completed Percent	1,679 57.9%	240,000 60.3%	1,819,000 60.4%
1-3 Years of College Percent	321 11.1%	35,000 8.8%	256,000 8.5%
4 or More Years of College Percent	289 10.0%	27,000 6.8%	207,000 6.9%
<u>Employment Status</u>			
Male, Age 16 or Over	3,339	452,000	3,462,000
In Labor Force Percent	2,537 76.0%	346,000 76.5%	2,710,000 78.3
Female, Age 16 or Over	3,827	521,000	3,856,000
In Labor Force Percent	1,729 45.2%	210,000 40.3%	1,545,000 40.1
<u>Occupation</u>			
Total Employed, Age 16 or Over	4,005	528,000	4,064,000

TABLE II
Occupation (con't)

	Ohio		
	<u>Wilmington</u>	<u>"Other Urban"</u>	<u>State Total</u>
Professional, technical and kindred workers	638	72,000	562,000
Percent	15.9%	13.7%	13.8%
Managers & administrators	422	41,000	302,000
Percent	10.5%	7.8%	7.4%
Sales workers	332	35,000	282,000
Percent	8.3%	6.6%	6.9%
Clerical & kindred workers	640	82,000	699,000
Percent	16.0%	15.5%	17.2%
Craftsmen, foremen & kindred workers	600	78,000	614,000
Percent	15.0%	14.8%	15.1%
Operatives, except transport	459	101,000	700,000
Percent	11.5%	19.1%	17.2%
Transport equipment operatives	149	20,000	163,000
Percent	3.7%	3.8%	4.0%
Laborers, except farm	133	25,000	184,000
Percent	3.3%	4.7%	4.5%
Farmers & farm managers	11	1,000	48,000
Percent	.3%	.2%	1.2%
Farm laborers & foremen	34	2,000	22,000
Percent	.8%	.4%	.5%
Service workers, except private household	523	64,000	442,000
Percent	13.1%	12.1%	10.9%
Private household workers	64	7,000	44,000
Percent	1.6%	1.3%	1.1%

TABLE II, (con't.)

	Ohio		
	<u>Wilmington</u>	<u>"Other Urban"</u>	<u>State Total</u>
<u>Income</u>			
Total Families	2,465	348,000	2,691,000
\$0-4,999 annual income	458	60,000	417,000
Percent	18.6%	17.2%	15.5%
\$5,000-9,999 annual income	811	128,000	866,000
Percent	32.9%	36.8%	32.2%
\$10,000-14,999 annual income	766	103,000	827,000
Percent	31.1%	30.0%	30.7%
\$15,000-24,999 annual income	362	47,000	467,000
Percent	14.7%	13.5%	17.4%
\$25,000 or more annual income	68	10,000	114,000
Percent	2.8%	2.9%	4.2%
Median Income	9,849	9,465	10,313
Unrelated Individuals	1,417	156,000	860,000
Median Income	1,795	1,798	2,441
<u>Poverty</u>			
Families with income less than poverty level	248	27,000	205,000
Percent (of all families)	10.1%	7.8%	7.6%
Unrelated individuals with income less than poverty level	401	34,000	287,000
Percent	41.6%	29.3%	37.4%

Source: U.S. Census of Population, and computations by Consultant.

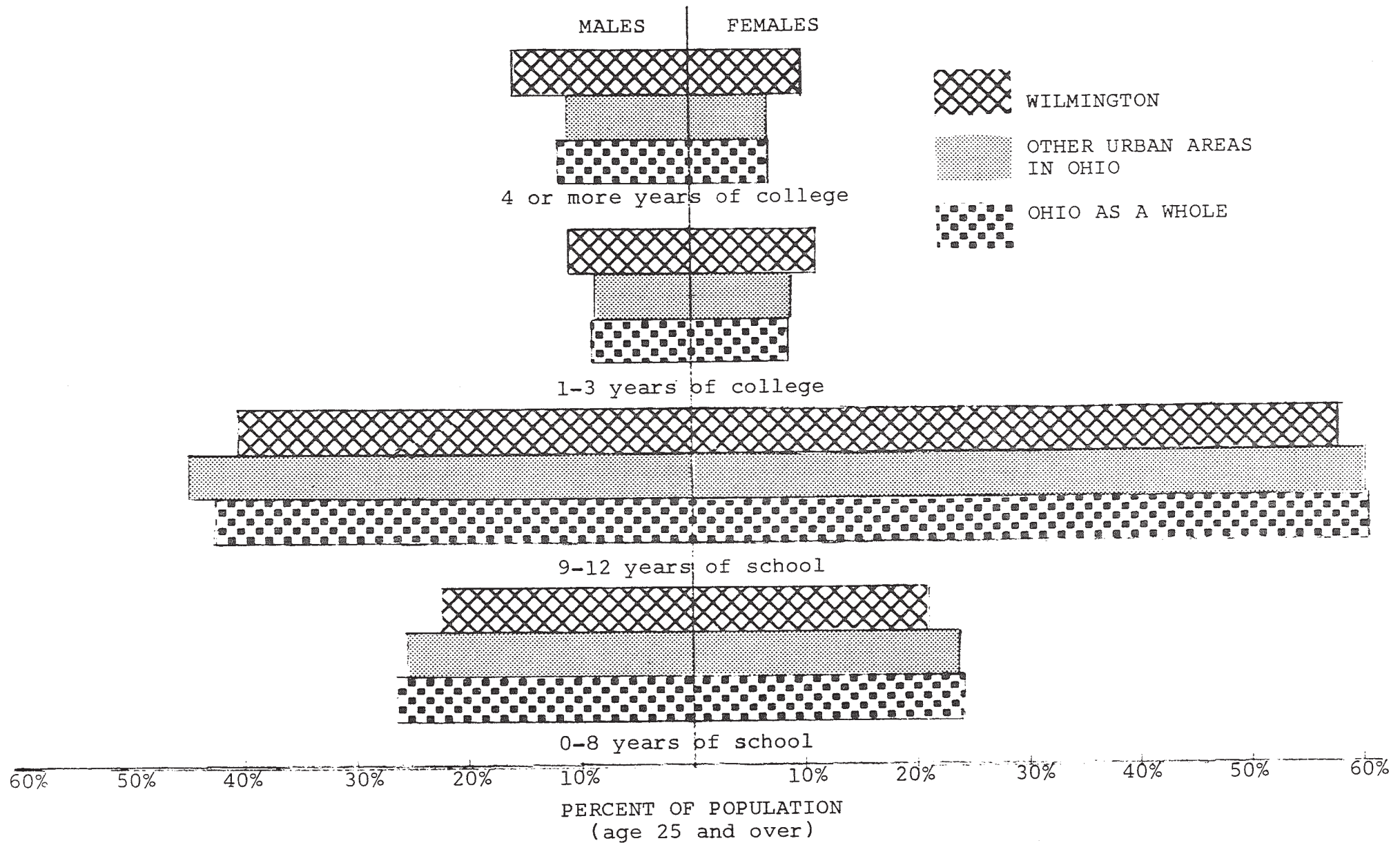
is meant places of 2500 inhabitants or more, but excluding "urbanized areas." "Urbanized areas" generally refers to cities of 50,000 persons or more and closely surrounding settled towns or land. In other words, "other urban" is a special census term with a complex definition, but it normally refers to communities of between 2500 and 50,000 persons outside metropolitan areas. This column of statistics should closely resemble the "average" in Ohio for a City the size of Wilmington.

A detailed discussion of each of the characteristics and its relevance to community growth and development planning is beyond the scope of this project. However, at least several of the highlights should be mentioned. First, it should be noted that Wilmington has a larger proportion of non-white persons than in an average small City in Ohio ("other urban"). This might reflect its close location to several metropolitan areas and the diversity of its economic base and educational institutions. Second, as noted before, there is a relatively higher proportion of elderly in Wilmington. Third, the number of persons residing in group quarters is high, again reflecting the presence of Wilmington College. The number of persons per household is slightly low reflecting the high number of college students and elderly residents. Mobility was indicated as high, as illustrated through the number of persons not living in the same house in 1970 as in 1965. Besides the other factors mentioned above, this might also reflect the presence, in 1970, of the air force base nearby. Surprisingly, the relative proportion of persons working outside Clinton County is small, considering how close the City is to the metropolitan centers of Dayton, Cincinnati, and Columbus. This supports the finding that Wilmington has a strong, diversified local economic base. It should be noted that Wilmington has a relatively high proportion of females in the labor force. Wilmington has a fairly high percentage of families and unrelated individuals with incomes less than the "poverty level" as defined by the census.

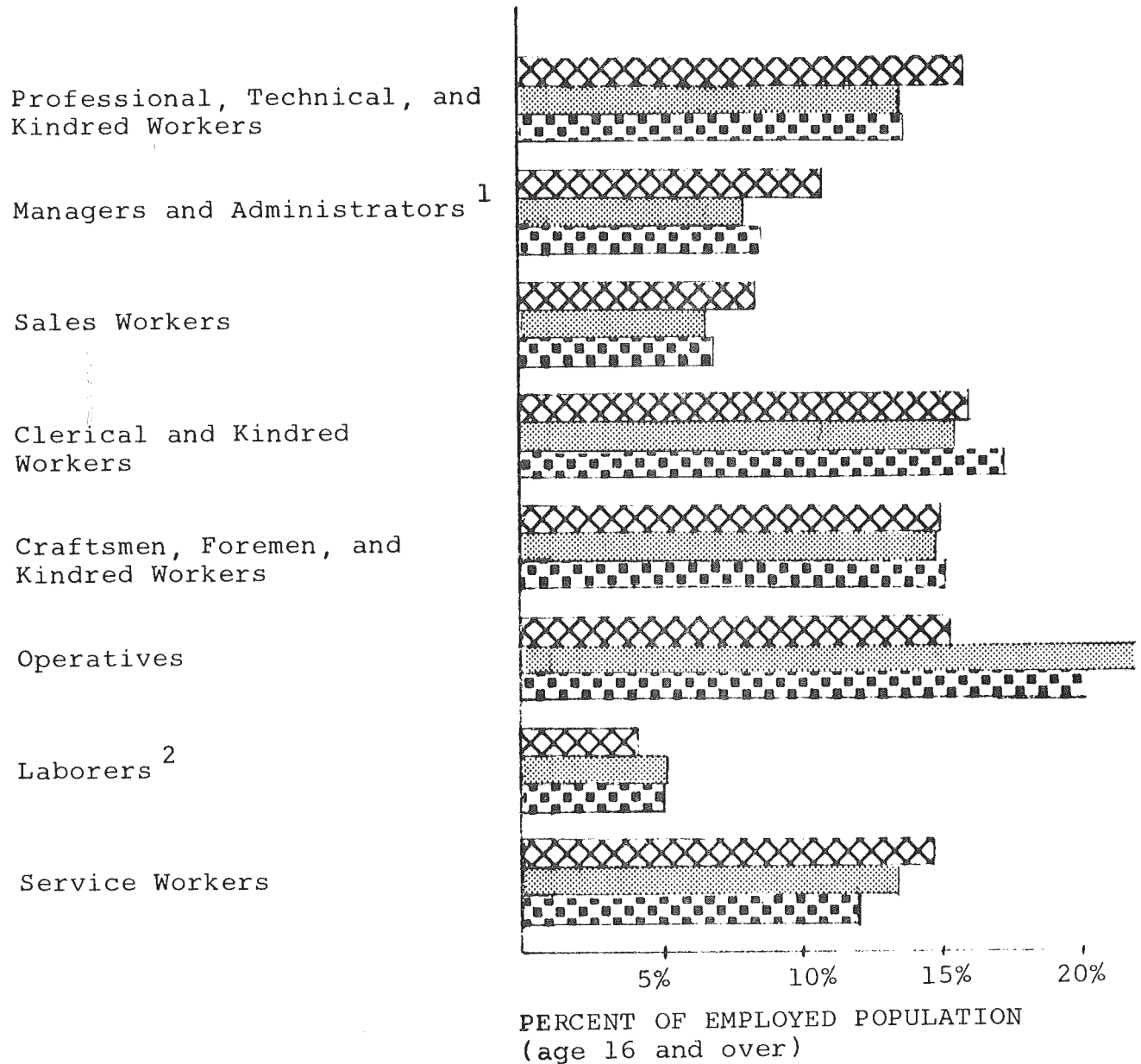
Several of the statistics in Table II are illustrated separately in Graphs B, C, & D. In Graph B, it can be easily seen that the average level of education in Wilmington is significantly higher than for "other urban" areas in Ohio and for Ohio as a whole. Although not necessarily a conclusion, this suggests that Wilmington has a stronger "leadership" base than normal. Graph C indicates that Wilmington is especially strong in certain occupations, namely: professional, technical and kindred workers, managers and administrators, sales workers, and service workers. The City is low in operatives. Occupation patterns are primarily a result of the economic opportunities available, but no doubt also influenced by the skills, education, and interests of the residents.

GRAPH B

YEARS OF SCHOOL COMPLETED
WILMINGTON AND OTHER AREAS, 1970



GRAPH C
EMPLOYMENT BY OCCUPATION
WILMINGTON AND OTHER AREAS, 1970



◆◆◆ WILMINGTON

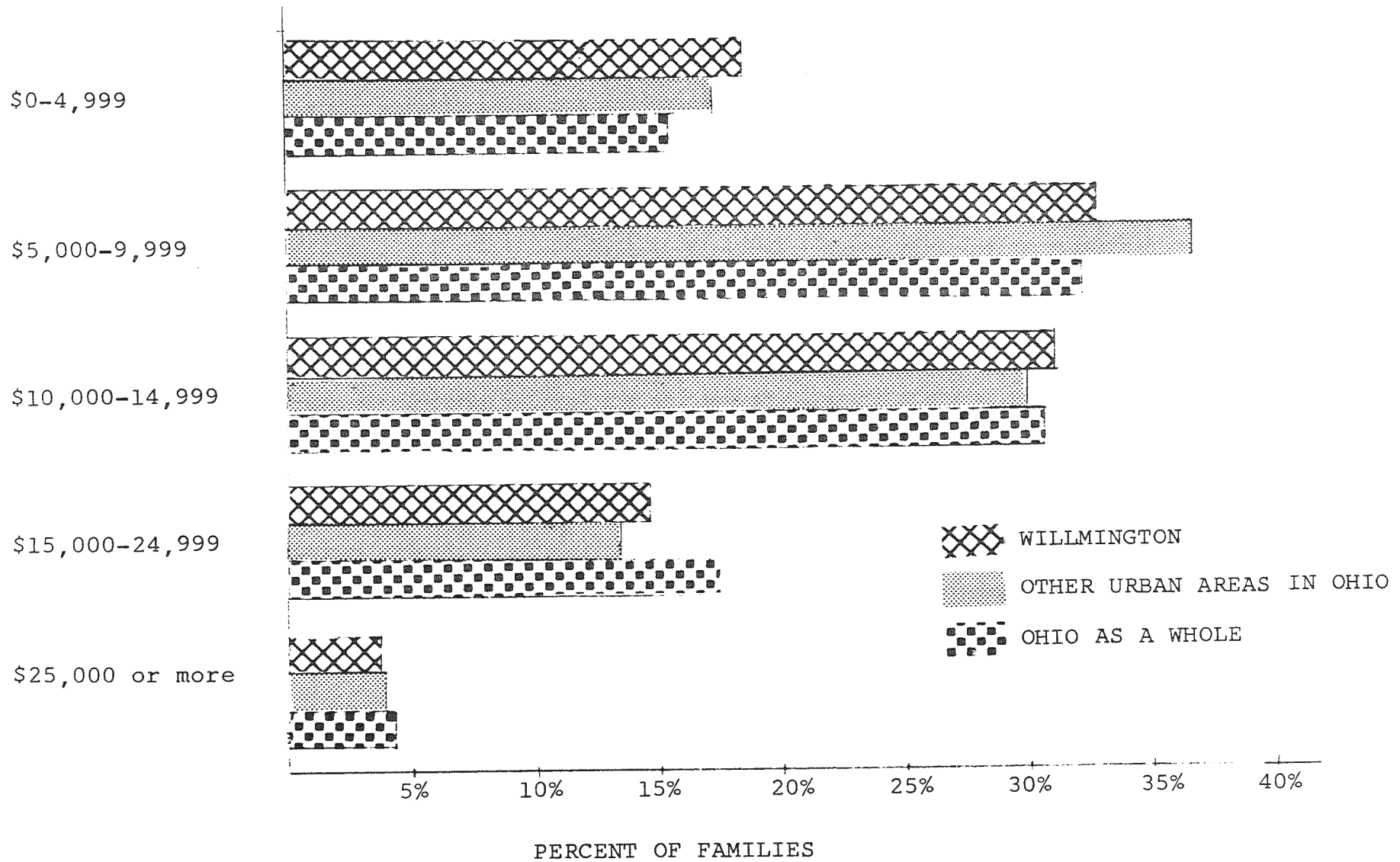
▒▒▒ OTHER URBAN AREAS IN OHIO

▣▣▣ OHIO AS A WHOLE

¹Includes farmers and farm managers

²Includes farm laborers

GRAPH D
FAMILY INCOMES
WILMINGTON AND OTHER AREAS, 1970



Graph D points out some interesting differences in income distribution. Compared to "other urban" areas in Ohio, Wilmington is high in the lowest income group and in the middle and upper middle income groups. Compared to the State as a whole, Wilmington is high only in the lower and middle income groups. Generally, it seems somewhat surprising that a City with higher than average education levels and higher than average proportions of professionals, managers, and administrators, would be lower than average in income. Such a situation might be attractive to prospective new industries needing a well educated and administration-oriented work force.

Table III provides information on Union Township, of which Wilmington is a part. It provides a breakdown of such information by the Township as a whole, Wilmington, and the remainder of the Township outside Wilmington. It also compares the 1970 Union Township data with 1960 data. It should be noted that only a limited amount of census data is available at the township level; thus most of this chapter is oriented towards the City of Wilmington alone. However, it is the purpose of the Land Use, Thoroughfare and Open Space Plan to study not only the City of Wilmington, but the surrounding lands as well, up to three miles from the City limits, and to set forth goals, policies and other guidelines for the entire area. Table III presents a summary of the limited information available for the surrounding 3 mile area, generally corresponding with the limits of Union Township.

In Table III, it can be seen that over 80% of the Township population is concentrated in the City of Wilmington. Referring back to Table I, it can be calculated that while the City increased in population by 1136 persons during the 1960's, a gain of 12.7%, the outlying portions increased by only 112 persons, a gain of only 5.4%.

Concerning general population characteristics it is evident that the outlying areas of the township have a lower percentage of females than Wilmington, a much lower percentage of Negroes, a higher percentage of children, a lower percentage of elderly, and a higher average household size (persons per household). Most of these differences seem to reflect the more suburban or rural life style in the outlying areas.

Regarding 1960-1970 trends for the township as a whole, it can be seen that the percentage of females is increasing, the percentage of non-whites is increasing, the percentage of elderly is decreasing, and the average household size is decreasing.

TABLE III
POPULATION CHARACTERISTICS
UNION TOWNSHIP AND WILMINGTON, 1960-1970

	UNION TWP. 1960	UNION TWP. - 1970		
		TOTAL	WILMING- TON	TWP. REMAINDER
<u>Total Population</u>	10977	12225	10051	2174
Male	5396	5910	4790	1120
Percent	49.2%	48.3%	47.7%	51.5%
Female	5581	6315	5261	1054
Percent	50.8%	51.7%	52.3%	48.5%
White	10417	11497	9341	2156
Percent	94.9%	94.0%	92.9%	99.2%
Negro	539	694	680	14
Percent	4.9%	5.7%	6.8%	.6%
Percent Under Age 18	NA	32.7%	31.8%	36.7%
Percent Age 65 or Over	12.2%	11.1%	11.7%	8.1%
Median Age	NA	27.2	27.2	27.2
Living in Group Quarters	NA	784	654	130
Percent	NA	6.4%	6.5%	6.0%
<u>Total Households</u>	3338	3831	3228	603
Population in Households	10259	11441	9397	2044
Persons per Household	3.07	2.99	2.9	3.39

NA - Not Available

Source: U.S. Census of Population, 1960, 1970, and Consultant calculations.

Recent Changes - 1970-78

According to a survey of building permits issued through the City of Wilmington, there have been 640 new residential dwelling units constructed since 1970 inside the City limits. It is quite probable that some existing dwelling units have been abandoned, destroyed, or converted to another use. As an estimate of this latter item, it might be assumed that the City has lost 1.0% of its housing supply per year (a percentage rate which was obtained from the State average from 1960 to 1970). This would amount to a loss of approximately 280 dwelling units from 1970 to 1978. Combining the gains and the losses, it results in an estimated net gain of 360 dwelling units so far in the 1970's.

Carrying this process one step further, if it is assumed that the average household size for the 360 gain in housing units is approximately 2.9 persons per household, then it is reasonable to estimate that the population of the City has increased by approximately 1044 persons since 1970 and now stands at 11,095.

Given this estimate of population change in the past 8 years or so, it is quite probable that there have been changes in the population and economic characteristics of the City as well. For example, one change for which there is supporting data is in the number of children. According to school district reports, the enrollment in the local public schools, for the district as a whole, has declined by about 10% since the 1970-71 school year. These reports, however, substantiate a nationwide trend of lower birth rates over the past 10 or 15 years, and do not reflect any significant outmigration trends in Wilmington.

Another type of change shows up in County-wide employment statistics. The Ohio Bureau of Employment Services reported that in 1971, in Clinton County as a whole, total employment covered under Bureau authority was 5476, and average weekly earnings were \$122.58. Then in 1976, it reported that total employment (adjusted down by the Consultant to only include the same categories) was 7920 and average weekly earnings were \$170.70. During that time period manufacturing employment increased from 2703 to 4136, a gain of over 50% in 5 years. A large gain was also made in the "Services" employment category, increasing from 444 in 1971 to 961 in 1976, a gain of over 100%. (This category would include some of the educational institutions and probably reflects the establishment of Laurel Oaks and Southern State.)

Other recent information from the Ohio Bureau of Employment Services indicates that local County unemployment was 5.6% (1977), that unemployment has been as high as 10.3% in February, 1975, and as low as 3.2% in May of 1974. Annual average employment data for

1976 revealed that the leading manufacturing industries were fabricated metals, machinery, rubber and plastics, instruments, lumber and wood products, printing and publishing, electric equipment, stone-clay-glass, and primary metals. According to the 1977 Ohio Manufacturers Industrial Directory the largest industrial plants in Wilmington are Cincinnati Milacron, Inc., Ferno-Washington, Inc., Irwin Auger Bit Company, and Textron, Inc./Randall Co. Division, each with an employment of between 300 and 600 persons.

Given this economic growth trend in Wilmington and Clinton County (especially including the efforts of the local Community Improvement Corporation and the establishment of the Industrial Airpark) it is not surprising to learn that average incomes are going up. The U.S. Department of Housing and Urban Development estimated the 1976 median family income for Clinton County to be \$12,800, compared to \$8,804 in 1970. (Of course, some of this increase can be attributed to inflation.)

Many other changes also seem to be occurring, although no data is available for evidence. From observation, it seems evident that population growth is occurring rapidly in the township outside the City limits, with many new homes constructed. Enrollment has been increasing recently at Wilmington College. As mentioned before, the Air Force Base has been closed and its land and facilities converted to industrial and educational activities. More land is still available for new industrial development. It is probable that average household sizes are continuing to decrease as the birth rate stays low. It is also probable that there are more females in the labor force, generally a national trend. These and many other changes will be verified by the 1980 Census.

Population Projections

Projection of future population growth in Wilmington is needed as an indication of the future demands for new housing, commercial and industrial growth, and a wide variety of community facilities, thoroughfares, utilities, and open space. However, no one can foresee the future. The use of population projections is as reasonable as the assumptions made in such projections. Therefore, in this subsection a range of several projections will be presented based on several different assumptions. In planning for the future of Wilmington, it is advised that contingencies should be provided to meet all reasonable assumptions, or projections, of future population growth.

In Table IV and Graph E a series of four population projections are presented for the City of Wilmington. Two of these, Series A and B, are based on "straight line" projections, and two, Series C

GRAPH E
POPULATION PROJECTIONS
WILMINGTON, 1970-2000

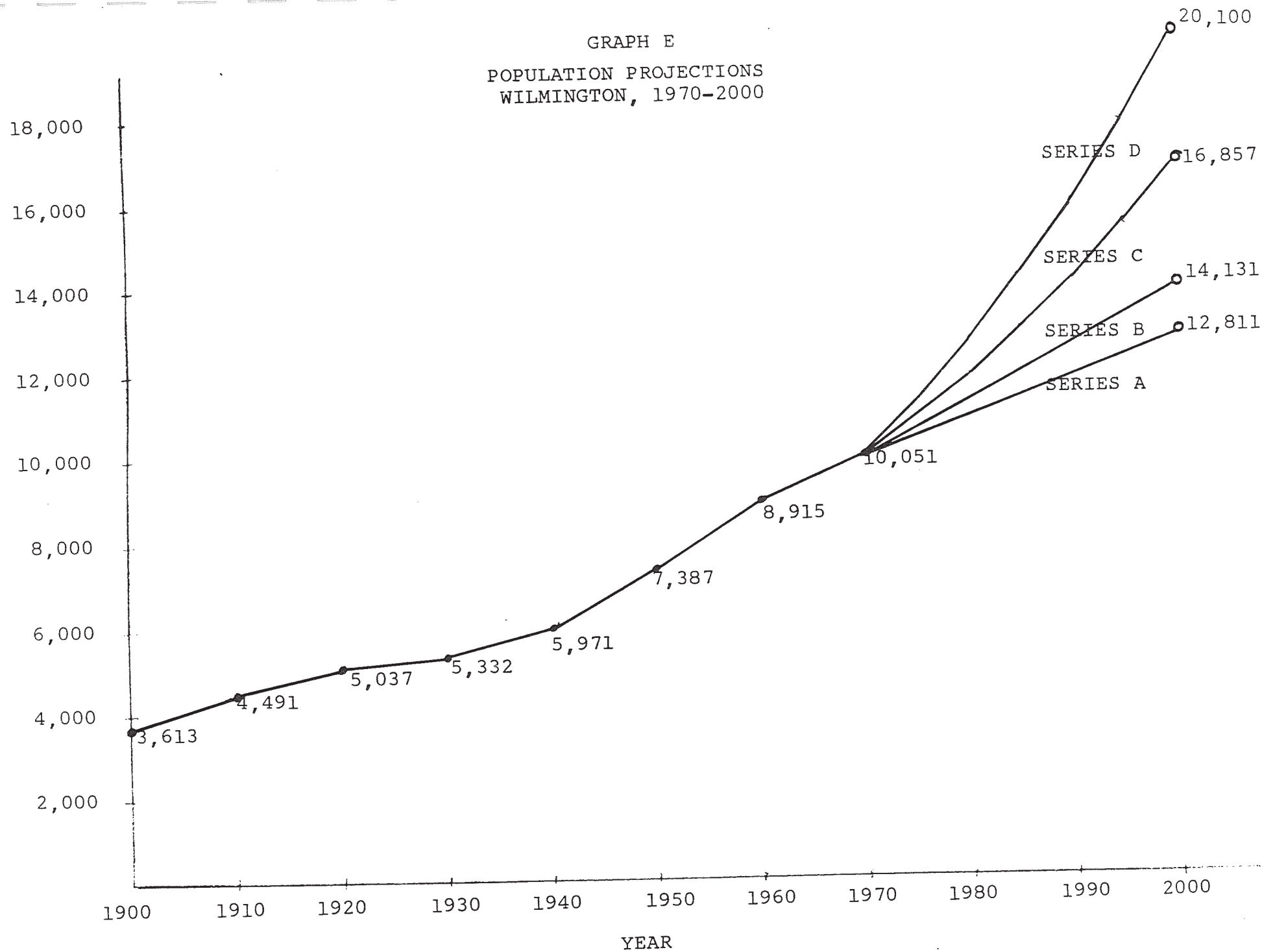


TABLE IV
POPULATION PROJECTIONS
CITY OF WILMINGTON, 1970-2000

	1900-1970 Rate (Series A)	1940-1970 Rate (Series B)	1940-1970 by 5 yr. periods (Series C)	100%, by 5 yr. periods (Series D)
1970	10051	10051	10051	10051
1975	10511	10731	10956	11287
1980	10971	11411	11942	12675
1985	11431	12091	13016	14225
1990	11891	12771	14188	15950
1995	12351	13451	15465	17900
2000	12811	14131	16857	20100
Total Increase 1970-2000	2760	4080	6806	10049

Note: See text for discussion of assumptions.

Source: U.S. Census of Population; assumptions and calculations by Consultant.

and D, are percentage increases. By "straight line" it is meant that the population will increase by a certain constant number each year, or in this case, each 5 years. By percentage increase it is meant that the population will increase by a certain constant percentage each time period, in this case each 5 years. With a constant percentage increase, the projected population will increase a greater amount during each succeeding time period.

The different rates of growth projected for the first 3 series have been based on historical trends. In Series A, it is assumed that the population will increase approximately 460 persons every 5 years, an average established by Wilmington population growth from 1900 to 1970. In Series B, it is assumed that population will increase by 680 persons every 5 years, an average established by the City population growth from 1940 to 1970. This latter time period was chosen as a better reflection of modern trends. In Series C it is assumed that population will increase 9% every 5 years, a rate established by growth from 1940 to 1970. The reasonableness of a percentage rate of growth is based on the idea that as a city gets larger it has an increasing opportunity and increasing assets for additional growth.

Series D is not based on trends. It is provided as an arbitrary "high" projection possibility, namely that Wilmington population could double between 1970 and the year 2000. It is based on an informal review of the population growth of cities in southwestern Ohio of a size or location somewhat similar to Wilmington. For example, Washington Court House grew by 33% from 1940 to 1970 while Franklin increased by 123%. The fastest growth seemed to be the City of Xenia, which increased by 139% in thirty years, from 10,633 to 25,373. It is not probable that the City of Wilmington will grow this fast. However, in planning for the future, a potential growth of 100% by the year 2000 should at least be mentioned as a small possibility.

Returning to our estimate of current City of Wilmington population, approximately 11,100, and checking this against Graph E, it would seem to indicate that existing growth is following the pattern of Series B.

SECTION C

NATURAL FEATURES

Growth and development in and around the City of Wilmington has been influenced by the natural features of the land. There is increasing concern that in the future they must become even more carefully related. Our natural features and resources are irreplaceable. Failure to plan new growth and development in harmony with our natural features and resources will probably result in such problems as air pollution, water pollution, soil erosion, extensive flood damage, structural faults in buildings and public improvements, and visual blight. Success in planning new growth and development in harmony with our natural features and resources most likely will result in a safe, healthful, and beneficial environment for generations to come.

In this section an attempt is made to summarize the key natural features of the environment as they relate to general community planning. Many sources of information were reviewed, including U.S. Geological Survey maps, Ohio Department of Natural Resources Publications, U.S. Soil Conservation Service Soil Survey, and local studies and environmental reviews. More specific sources and references are cited in the following pages. Information should be obtained from these sources for more detailed planning and construction activities.

Geology

According to a geology map report on Clinton County⁽¹⁾, the general topography of the Wilmington area was formed by the "late" Wisconsin glacier, with Wilmington located on a ground moraine between two recessional end moraines known as the Wilmington and Cuba moraines. The Wilmington Moraine generally passes by the City just beyond the corporation limits on the north-east side, running from the direction of Gurneyville, and averages about one mile wide. Beyond to the north-east is another ground moraine. The Cuba Moraine lies generally to the south-west of Wilmington, about one mile out from the corporation limits, running parallel with the Wilmington Moraine and extending in width to just beyond Cowan Lake.

A ground moraine was formed when the glacial ice was melting faster than it was advancing, thus dropping debris in its path of retreat. A ground moraine usually exhibits little topographic expression, usually blanketing the underlying bedrock with a uniform layer of till. End moraines mark successive limits of the ice and have a gently undulating topography.

⁽¹⁾ Glacial Geology of Clinton County, Ohio, by James T. Teller, Ohio Department of Natural Resources, 1967.

The underlying bedrock is Ordovician shale and limestone in the southwest part of the County and Silurian dolomite in the northeast. The Ordovician bedrock outcrops along many of the streams in the southwestern part of the County, but exposures of the Silurian dolomite are rare. Average depth to bedrock ranges from approximately 50 feet east of Wilmington to over 200 feet west of Wilmington.

Concerning the economic mineral resources of Clinton County, the Wisconsin outwash in the lower reaches of the Todd Fork basin is a significant source of sand and gravel (generally just upstream from Clarksville). Important reserves of ground water are present in outwash areas, most significantly in the valleys tributary to Todd Fork. Small amounts of water are obtained from buried gravel in the uplands. The dolomite quarried near Melvin and the rich agricultural soils developed in the glacial drift are also important to the economy of the County.

According to a report on underground water resources⁽¹⁾ Wilmington lies in an area "in which yields of 5 to 25 gallons per minute can be developed." Glacial deposits are largely clay with discontinuous sand and gravel layers. To the east of Wilmington, generally the eastern quarter of Union Township, is an area in which yields of 25 to 100 gallons per minute can be developed. Adequate domestic supplies are available from sand and gravel layers in the drift, and small industrial yields can be obtained from the underlying limestone. It is also interesting to note that an old buried valley is present south of Wilmington. This is a broad, deep channel that was cut into the bedrock by early streams and has since been completely filled with glacial till, up to a maximum of 300 feet.

Drainage

The City of Wilmington is located in the Lytle Creek watershed which in turn drains into Todd Fork of the Little Miami River. Lytle Creek has a total length of 10.1 miles, a slope of 22.5 feet per mile, and a drainage area of 20 square miles.⁽²⁾ The north side of the planning area is drained by Todd Fork, the south side by Cowan Creek.

The topography of the planning area is fairly level with some areas (generally the end moraines as mentioned earlier) gently rolling. The elevations range from approximately 920 to 1100 feet above sea level. Locations of land with a 5% slope or greater are shown on a later map.

(1) Todd Fork Basin Underground Water Resources, by Alfred C. Walker, Ohio Department of Natural Resources, 1960.

(2) Source: Wilmington Planning Area Facilities Plan, Grant, Brundage, Baker, & Stauffer, Limited, Consulting Engineers, 1978.

The following map, entitled "Drainage" points out the locations of major and (selected) minor drainage divides in the planning area, as well as the location of perennial and selected intermittent streams. A major divide is intended to mean the high points between Lytle Creek, Todd Fork, and Cowan Creek. Minor divides are indicated within the Lytle Creek drainage area for more detailed planning purposes. Perennial streams are streams that flow year-round; intermittent streams usually flow only during the rainy season.

This map is especially important in attempting to project reasonable limits to the sanitary sewer service of the City, and therefore to the extent of major community growth and development. Sanitary sewer service requires a major investment of public funds and is often the single most limiting factor on City growth. In order to obtain a unified gravity flow system, development should be organized by drainage areas (watersheds). Of course, drainage divides are not absolute restrictions on urban growth as pumping facilities may be utilized, deep cuts may be provided, or separate waste disposal facilities may be constructed.

Flooding

One very important aspect of the natural drainage patterns of an area which deserves individual attention is flooding. Flooding occurs when a heavy rainfall and/or melting snow cause the banks of a stream to overflow. Nature has provided through the years an area adjacent to a stream to handle excessive stream flow, called a flood plain. Unfortunately, many people think that flood plains are an ideal site for building their home, store, or industrial plant. Then when threatened with flooding, they want the government to build a dam, a dike, or a deeper channel.

According to a local flood plain study⁽¹⁾:

"Recent years have witnessed a continuing increase in the cost of flood damage despite the expenditure of huge sums of money for flood control structures...testimony revealed that 45 out of 48 presidential disaster declarations in 1972 involved flooding, and in general, at least 85 percent of our total national disaster relief expenditures to date, for uninsured property losses, have been in connection with flood disasters'. All this flood damage, on the order of \$1 billion a year, is incurred in spite of an estimated expenditure of \$9 billion on structural flood control measures since 1936..."

⁽¹⁾ Lytle Creek, Wilmington, Flood Plain Information Study, Ohio Department of Natural Resources, 1975.

There are several sources of information which indicate the locations of the floodplains in Wilmington and surrounding areas. The Wilmington Flood Plain Study for 1975 provides detailed information, charts, and maps. Other sources include U.S.G.S. Flood Prone maps, soil survey maps showing flood prone soils, and U.S. Department of Housing and Urban Development (HUD) flood insurance study and maps. Flood plain information for the planning area as a whole is presented on the Soils Map (discussed later in this section.) The following map, entitled Floodplains, shows the 100 year flood areas for the City as defined by HUD. Detailed reports and maps should be consulted for detailed planning.

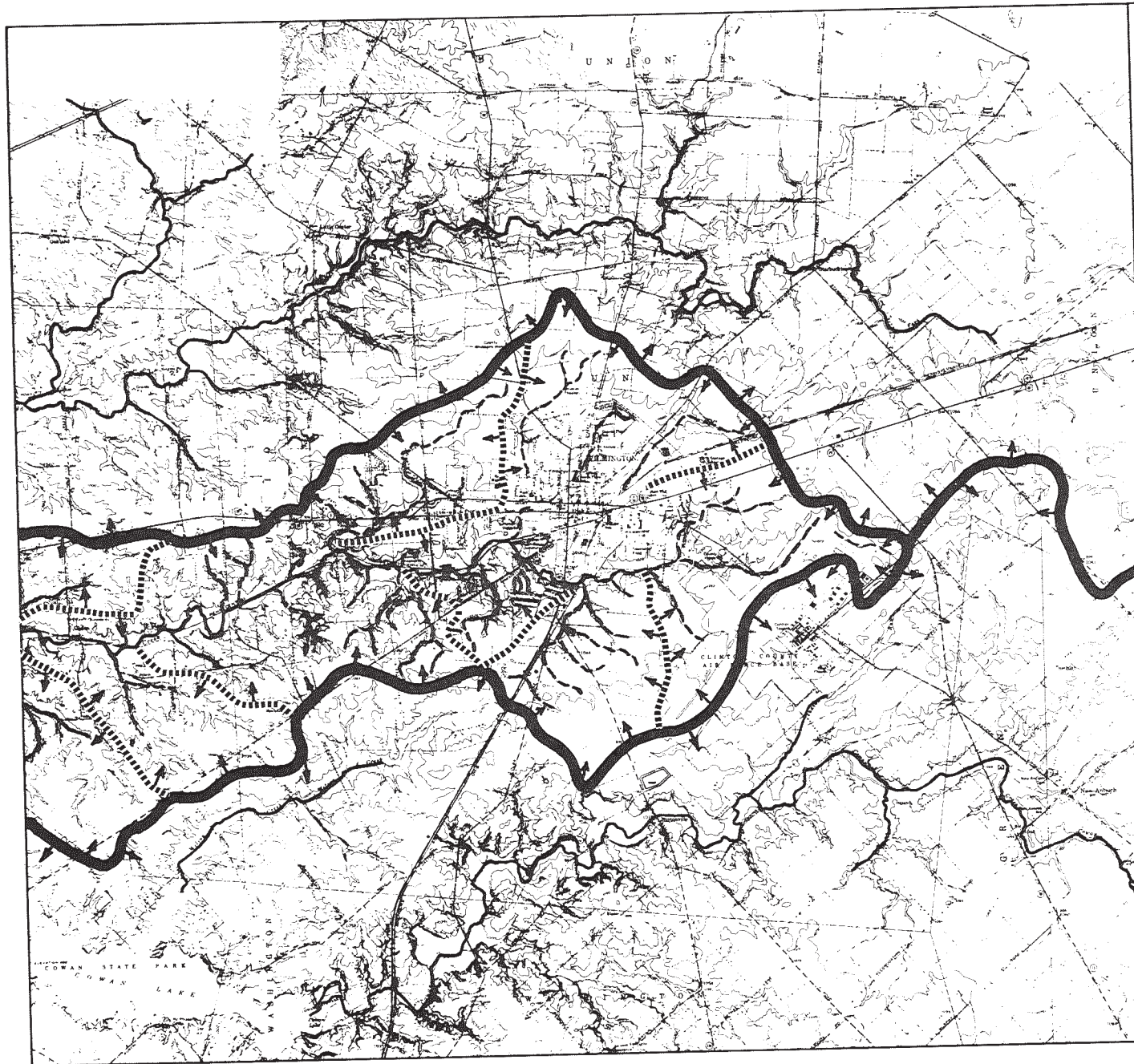
Air and Water Quality

Wilmington is located within the Wilmington-Chillicothe-Logan Intrastate Air Quality Control Region, and the City has an air quality monitoring station at the City Fire Department Station located at 46 East Sugartree. The only air quality (parameter) condition measured at this site is "total suspended particulates". A printout of the Ohio Environmental Protection Agency (EPA) as of October 15, 1977 indicates that Wilmington exceeds U.S. EPA air quality standards at this station. In fact, the standards have been exceeded both in 1976 and 1977, with 1977 measurements even higher (worse) than in 1976. The measurements were 81.8 and 82.4 micrograms per cubic meter for suspended particulates (annual geometric mean), as compared to U.S. EPA standards of 75 (primary standard) and 60 (secondary standard), the latter as the standard accepted by the Ohio EPA.

Through the Ohio EPA permit system, it is expected that as local air pollution sources begin to implement their compliance schedules they should meet the above standard. At this time, apparently no detailed investigations have been conducted to determine the specific sources of the problem. (There are many other places in the state, which have more severe or threatening problems and which are receiving priority attention.) A new air monitoring facility is being planned for the City by the Ohio EPA, and it will have a capacity to measure other pollution parameters such as ozone, hydrocarbons, and nitrogen dioxide.

Water Pollution

It is reported in the "Little Miami River Basin 305 (b) Report" of 1976 by the Ohio Environmental Protection Agency (EPA) that Lytle Creek below Wilmington is one of several local water pollution problem areas. High or problem measurements are indicated for Biological Oxygen Demand (B.O.D.), Dissolved Oxygen (D.O.), Ammonia (NH₃), Total Phosphorus, Zinc, and Lead. Several com-



DRAINAGE

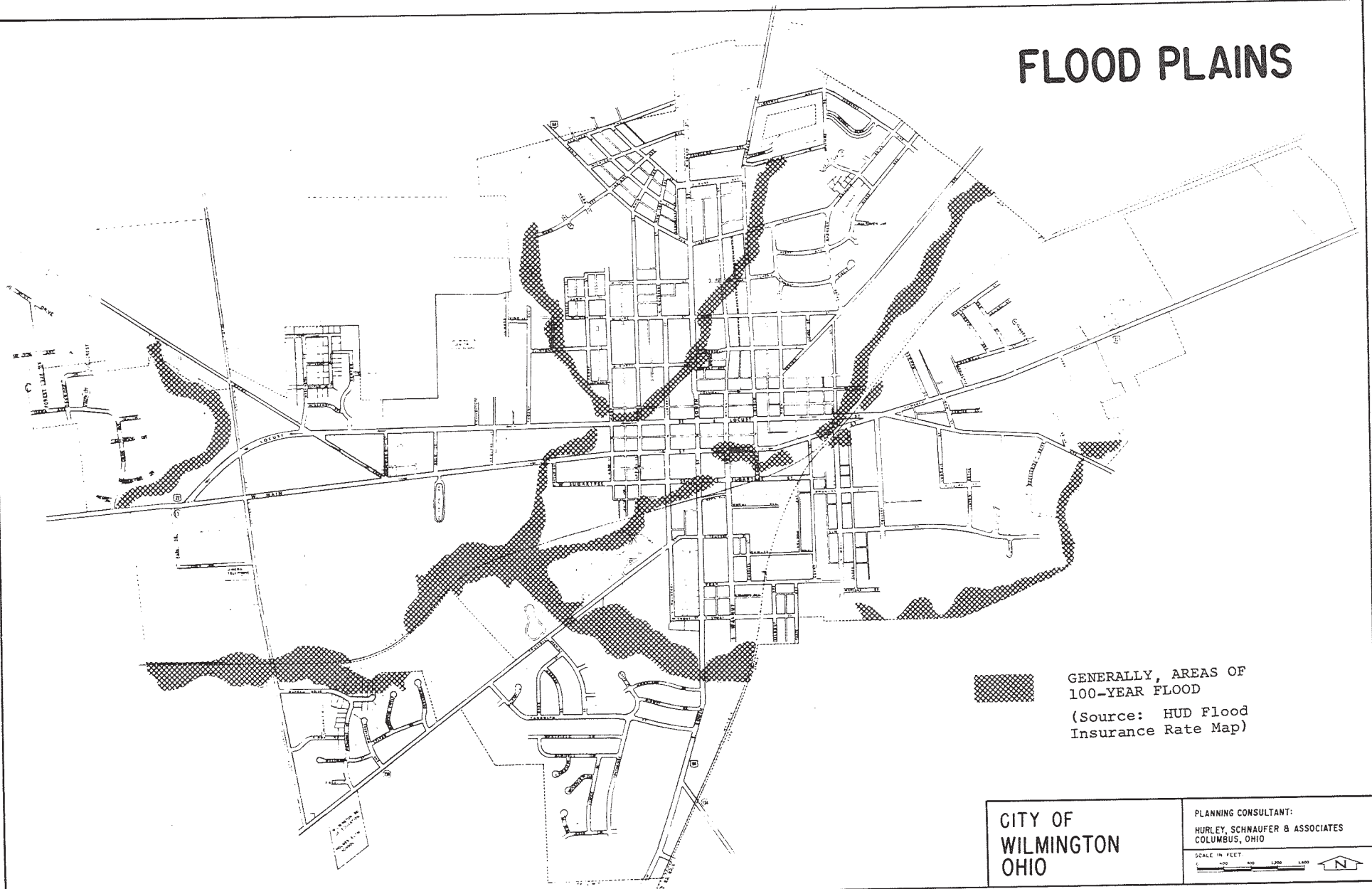
-  MAJOR DRAINAGE DIVIDES
-  MINOR DRAINAGE DIVIDES
-  PERENNIAL STREAMS
-  INTERMITTENT STREAMS (selected)
-  DIRECTION OF DRAINAGE FLOW

CITY OF WILMINGTON, OHIO
PLANNING AREA

PLANNING CONSULTANT:
HURLEY, SCHNAUFER & ASSOCIATES
COLUMBUS, OHIO



FLOOD PLAINS



ments in the report include the facts that: the Wilmington waste water treatment plant receives metal waste products from community industries; stream flows at downstream stations consisted of approximately 50 percent waste water treatment plant effluent; and biological samples show aquatic stream life is severely stressed.

The Wilmington waste water treatment plant has been cited by the Ohio EPA as being unable to meet the "final effluent limitation" as established by the National Pollution Discharge Elimination System (NPDES), and is operating on interim limitations. The City has been funded by the EPA for a Step I Facilities Plan and progress is underway. Ultimately this should lead to the planning, detailed design, and construction of waste water treatment facilities needed to meet EPA standards within the limits of "best practicable technology." Federal funding is to meet 75% of the costs administered according to a statewide priority system by the Ohio EPA.

Soils

Soil surveys are an important source of information not only for the agricultural use of lands but also for urban and suburban uses as well. Some soils are highly suitable for agricultural production and efforts should be made, where reasonable, to save this land for agricultural use. Some soils are subject to periodic flooding and should not be developed in any way which will be hazardous to persons or property, or will increase flooding elsewhere (with fills, or other obstructions.) Other soils have various types and degrees of limitations on housing development, or developments of industry, commerce, public facilities or similar uses which should influence both general plans for urban development patterns and specific plans for property development and construction.

The general pattern of soil locations is presented on the Soils map, based on information from the 1962 County Soil Survey(1). A brief summary of the soil characteristics for the soils indicated on the map is given below. Other soil characteristics from the Survey are presented in Table V. For more detailed information on any individual property, the reader is advised to contact the local Soil Conservation Service office.

The Xenia-Russell soils are light colored, medium acid, and moderately high in productivity. They are formed on

(1) Soil Survey, Clinton County, Ohio, U.S. Department of Agriculture, Soil Conservation Service, September, 1962.

18 to 36 inches of loess on highly calcareous, loam till of Wisconsin age on nearly level to moderately sloping areas. Russell occupies the steeper slopes, and are well drained. Xenia soils are moderately well drained.

Brookston-Fincastle soils formed on 18 to 36 inches of loess on highly calcareous, loam till of Wisconsin age on nearly level to depressed areas. Fincastle soils are light colored, imperfectly drained, medium acid, moderately high in productivity, and nearly level. Brookston soils are dark colored, very poorly drained, slightly acid to neutral, very highly productive, and occur in depressions. These soils require complete drainage.

TABLE V
SOIL CHARACTERISTICS
WILMINGTON PLANNING AREA

	<u>Productivity</u>	<u>Suitability for Septic Tanks</u>	<u>Bearing Value For Foundations</u>	
			<u>Subsoil(1)</u>	<u>Substratum(2)</u>
Xenia	Mod. High	Fair	Poor	Fair
Russell	Mod. High	Fair	Poor	Fair
Brookston	Very High	Poor	Poor	Fair
Fincastle	Mod. High	Poor	Poor	Fair
Reesville	Mod. High	Poor	Poor	Poor
Ragsdale	Very High	Poor	Poor	Poor
Fox	Medium	Good	Fair-Good	Very Good
Williamsburg	Medium	Good	Poor	Fair
Genesee	High	No(3)	NA(4)	Poor-Good
Sloan	Very High	No(3)	NA(4)	Poor

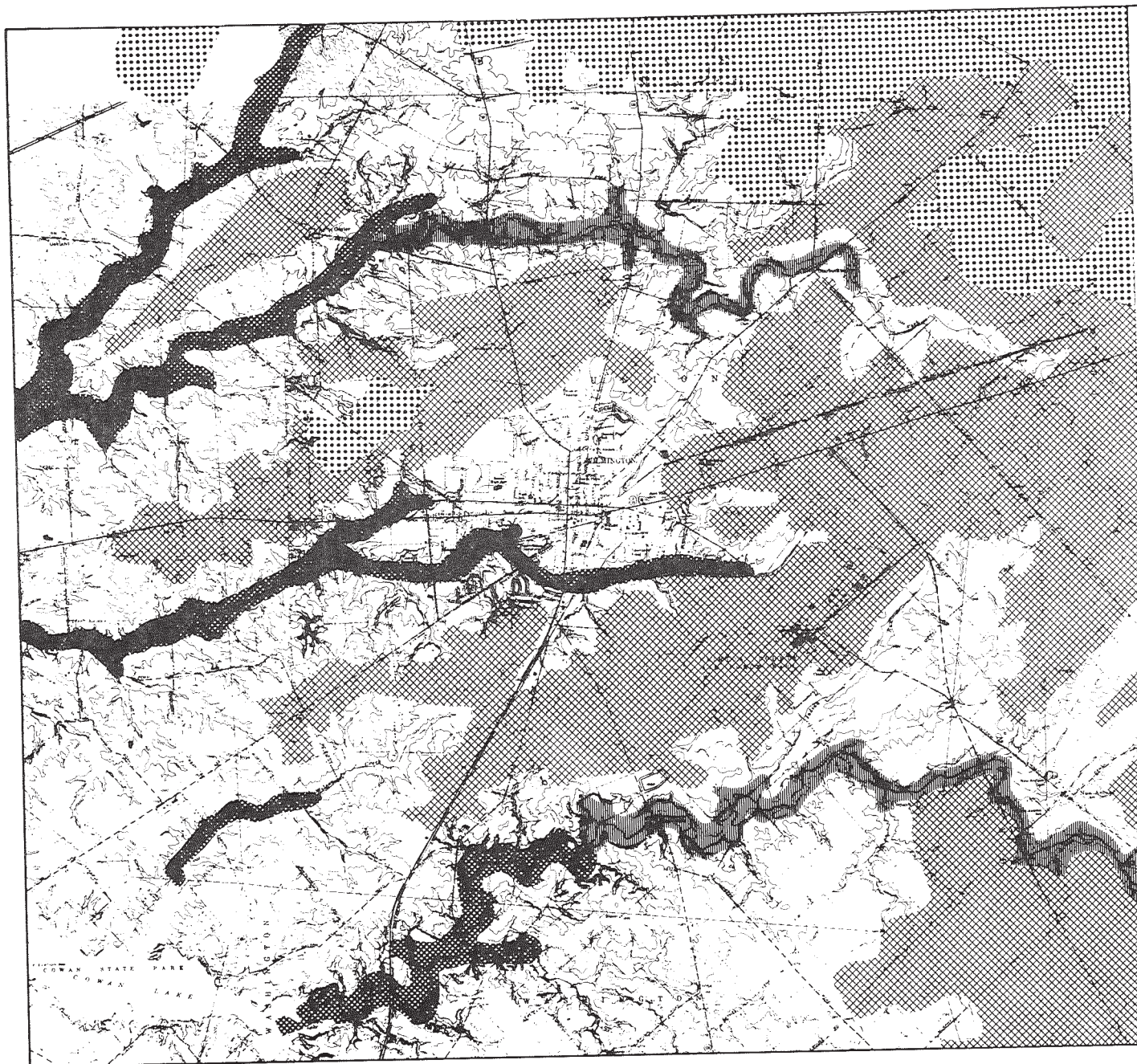
(1) Roughly that part of the "topsoil" below plow depth.

(2) Any layer lying beneath the "topsoil".

(3) Floodplains are not adapted to dwellings.

(4) Ratings for substratum apply throughout depth of soil.

Source: "Soil Areas of Clinton County," Ohio Department of Natural Resources, 1961; and Soil Survey, Clinton County, Ohio, U.S. Department of Agriculture, Soil Conservation Service, September, 1962.



SOILS

-  OPEN XENIA-RUSSELL SOIL AREAS
-  BROOKSTON-FINCASTLE SOIL AREAS
-  REESVILLE-RAGSDALE SOIL AREAS
-  FOX, OCKLEY, WILLIAMS-BURG, GENESEE SOIL AREAS
-  ALGIERS-SLOAN SOIL AREAS

CITY OF WILMINGTON, OHIO
PLANNING AREA

PLANNING CONSULTANT:
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Reesville-Ragsdale soils formed on calcareous, silty deposits on nearly level to depressed areas. Reesville soils are light colored, imperfectly drained, medium acid, moderately high in productivity, and nearly level. Ragsdale soils are dark colored, very poorly drained, slightly acid to neutral, very highly productive, and occur in depressions. These soils require complete drainage.

Fox, Ockley, Williamsburg, and Genesee soils are found along stream beds. Fox soils occur on outwash plains, and a few areas are subject to flooding. Fox soils are light-colored, somewhat excessively drained. Ockley soils also occur on outwash plains and some locations are subject to flooding. These soils are light-colored and well drained. The Williamsburg series consists of light-colored, well drained soils on terraces. Genesee soils are located on nearly level bottom lands and are subject to flooding. They are light-colored and well drained.

Algiers - Sloan soils are found in nearly level or depressed areas on bottom lands and are subject to ponding and flooding. Algiers soils are light colored, very poorly drained alluvium. Sloan soils are dark colored and very poorly drained.

Scenic Features

Several of the natural features in the Wilmington Planning Area should be considered primarily as scenic assets, although under different circumstances they might be considered as limitations to development. For example, in some areas slopes (hillsides) are so steep and extensive that they present many problems to community development. However, in the Wilmington planning area they are normally less than 10% and provide more of an attraction to suburban development, in the way of scenic beauty, than a hindrance (although they might be slightly less economical for large scale developments). Likewise woodlands and water bodies are also primarily scenic features with only minor limitations on nearby development (except for flood plains as discussed before).

These scenic features are shown on the Scenic Features Map.



SCENIC FEATURES



WOODLANDS



SLOPES OF 5%
OR GREATER



LAKES AND
STREAMS

CITY OF WILMINGTON, OHIO
PLANNING AREA

PLANNING CONSULTANT:
HURLEY, SCHNAUFER & ASSOCIATES
COLUMBUS, OHIO



SECTION D

EXISTING LAND USE

The land use inventory for the Wilmington Land Use, Thoroughfare and Open Space Plan was conducted during the Spring of 1978 by means of a field survey of all properties in the City and surrounding three mile area. The inventory maps were also checked against secondary map files, including the highly reliable U.S. Geological Survey (U.S.G.S.) maps, local base maps, and a City aerial photograph. Land use types on the work maps included the following:

*Residential

- Single family residential
- Two family residential
- Three or four family residential
- Five or more family residential
- Rooming house, boarding house, fraternity, etc.
- Mobile home
- Above, with home occupation (commercial)

*Commercial

- Local business (generally following zoning ord.)
- Other business (generally following zoning ord.)
- Mortuary
- Outdoor commercial recreation
- Hotel, motel, tourist home
- Professional office
- Medical care
- Shopping center
- Construction supplies and services

*Industrial

- Light industry (generally following zoning ord.)
- Heavy industry (generally following zoning ord.)
- Junk yard
- Mining, extraction
- Open storage (not closely associated with adjacent use)
- Other

*Public and Semi-Public Facilities

- Cemetery
- Church or temple
- Golf Course
- Library, museum
- Park

Public office
Public service facility (fire station, county garage, etc.)
School

All land use designations were then transferred to a large presentation map for the City, at a scale of 1 inch equals 400 feet, and to a large presentation map for the planning area as a whole, at a scale of 1 inch equals 1500 feet. (These two maps are available for reference.) Some of the categories were combined to facilitate a more useful and readable map. In the case of the planning area map, some small land uses were omitted or combined with larger uses nearby because of the scale of the map. Likewise, in the preparation of existing land use maps for the report (included herein) additional categories were combined and land uses generalized because of the scale of the map.

It also should be explained that the land use map does not necessarily indicate land ownership, and that some land uses could be open to question based on the surveyor's interpretations. Referring to the former, it was the procedure to map land as it apparently is being used (from observation). For example, a commercial enterprise might own 5 acres of land on the edge of town, but the surveyor only observed that the front 2 acres is developed in buildings, parking lots, and landscaped yards. The remaining 3 acres, not observed as an integral part of the commercial enterprise, was classified as vacant.

Referring to other questions regarding the surveyor's interpretation, it is quite possible that the observed use of a parcel of land is not accurate. For example, a house might appear to only contain one family, when in fact there is a separate entrance at the rear or side which was not easily observed. However, every effort was made to obtain an accurate interpretation of the use of all land, including review of all maps by City personnel.

General Findings

General findings from the inventory are presented on the two land use maps and are discussed in the following paragraphs. In addition, measurements were made of the land uses within the City and are presented in Table VI, along with similar measurements prepared for Wilmington in 1953 and presented in the 1954 Wilmington Master Plan.

Residential - According to the land use tabulations, total residential land use has increased by 183 acres since 1953 with

- B. Most New Industrial Development Should Locate In or Around the Industrial Airpark.
- C. Most New Commercial Development Should Locate In the Downtown Business District.
- D. Encourage New Commercial Development with a Variety of Commercial Stores and Services, Especially Major Shopping Stores.
- E. Encourage and Retention, Enhancement, and Expansion of Existing Industrial and Commercial Enterprises in Wilmington.
- F. New Residential Development Should Locate on Vacant Land Within the Community, in Redeveloped Older Areas of the City, and In Closely Surrounding Suburban Areas.
- G. Residential Types Which Should Be Most Encouraged Are Single-Family Homes on Moderate Size Lots, and To A Lesser Extent Doubles, Townhouses, and Apartment Projects.
- H. Special Emphasis Should Be Placed On the Redevelopment Of Older Declining Residential Areas in the Community.

Thoroughfares:

- I. Equal Thoroughfare Accessibility Should Be Given to All Parts of the Community Although Special Emphasis Should Be Considered for the Needs of the Central Business District, Outlying Shopping Centers, Cross-Town Connectors, and Loop Roads Bypassing Most of the Urban and Suburban Area.
- J. Existing Major Arterials Should Be Widened and Through Traffic on Minor Streets Should Be Discouraged or Prevented.
- K. Wide Rights-of-Way and Pavements Should Be Provided Along Commercial, Industrial, and Similar Land Use Developments; Cul-de-Sacs Should Be Discouraged.

Open Space:

- L. Open Space Should Be Preserved in the Form of Small, Scattered Sites Throughout the City and Where They Are Unique or Attractive Natural Features.
- M. Locations Which Should Be Considered Include Those Along the Major Streams and Drainage Ways, and/or Adjacent to Existing Schools and Other Community Facilities.

- N. Types of Open Space Which Should Be Most Encouraged Are Public Parks, Neighborhood Playgrounds, and Woodlands.

SHORT TERM GOALS

(*)- First Year) (**) - Second Year)

Land Use:

- A. Provide a Minimum of 100 Acres of Vacant Land Suitable for Immediate Industrial Development, Including at Least Two Alternative Sites. (*)
- B. Establish a Major Downtown Improvement Program. (**)
- C. Encourage the Availability of a Minimum of 100 Acres of Vacant Land Suitable for Predominantly Single-Family Residential Neighborhood Development Within or Adjacent to the City Limits. (*)
- D. Encourage the Availability of a Minimum of 20 Acres of Vacant Land Suitable for Multi-Family Residential Development, Including Several Alternative Sites. (**)
- E. Establish a Program of Existing Neighborhood Preservation and Revitalization. (*)

Thoroughfares:

- F. Complete the Proposed U.S. 22 East Highway Improvement Project. (*)
- G. Initiate Detailed Plans for a U.S. Route 68 Bypass or Other Bypass Routes as Can Be Related to State Needs and Projections. (**)
- H. Construct Local Street Improvements in Coordination with a Program of Existing Neighborhood Preservation and Revitalization. (*) and (**)

Open Space:

- I. Acquire a Large Parcel of Land for a New Community Park on the South, West, or North Side of the City, in Combination with Unique or Attractive Natural Features. (A Minimum of 25 Acres Is Suggested.) (*)
- J. Acquire Moderate Size Parcels of Land (at Least Two) in Existing or Proposed Residential Neighborhoods for Neighborhood Parks and Playgrounds. (A Minimum of 5 Acres in

Size for Each Is Suggested.) (**)

- K. Prevent Any New Development from Locating in the Flood Plains. Complete Acquisition of Pedestrian Easement Through the City Along Lytle Creek. (*) and (**)

LONG TERM POLICIES

- A. Plan, Coordinate, and Program Major Capital Improvements and Public Land Acquisition on a Five or Six Year Schedule.
- B. Initiate Studies, Reviews, and Programs to Assure Appropriate Levels of Public Services to All Parts of the City.
- C. Encourage and Plan for the Orderly Extension of the City Boundaries to Incorporate All Adjacent Areas of Community Scale and Intensity Development.
- D. Provide for the Establishment and Administration of Regulations to Ensure Good Quality Development, Protection and Enhancement of Existing Development, and Implementation of the Goals for the Growth and Improvement of the City.
- E. Initiate and Implement Progressive Programs of Neighborhood Residential, Commercial, and Industrial Preservation and Revitalization in Older Areas of the City, with Redevelopment to More Appropriate Uses Where Needed.
- F. Initiate and Assist in the Implementation of Programs to Provide Public Information, Education, and Participation in the Local and Area-Wide Planning Process.
- G. Initiate and Implement a Coordination and Evaluation Program of the Land Use, Thoroughfare, and Open Space Plan.

SHORT TERM POLICIES

(To Be Achieved in Approximately Two Years)

- A. Prepare an Initial Capital Improvements Program for the City of Wilmington Incorporating the Recommendations of the Land Use, Thoroughfare, and Open Space Plan.
- B. Review and Revise the City Subdivision Regulations with Special Emphasis on Regulations in the Surrounding Three-Mile Area.

- C. Review the City Zoning Ordinance and Map and Consider Suggestions for Revisions Based on the Recommendations of the Plan.
- D. Prepare Applications for and Carry Out Neighborhood Revitalization Programs under the HUD Community Development Block Grant Program.
- E. Conduct and Prepare Detailed Studies and Plans for the Enhancement and Improvement of the Downtown Central Business District.
- F. Initiate and Carry Out a Public Information and Education Program on the Purpose and General Content of the Wilmington Land Use, Thoroughfare, and Open Space Plan.

SECTION H

LAND USE, THOROUGHFARE AND OPEN SPACE PLAN

The Land Use, Thoroughfare and Open Space Plan presents a strategy for achieving the long range physical development goals of the City of Wilmington to the year 2000. These plans are presented as guidelines for growth and development in the City and surrounding areas and for the preservation of open space. They include: guidelines for residential, commercial, industrial, and similar land uses; guidelines for major streets and highways including principal arterials, minor arterials, and collector routes; and guidelines for the preservation of flood plains, community and neighborhood park sites, and general farmlands. As guidelines they point the way for further action: for zoning, for subdivision regulation, for capital improvements, for public land acquisition, and for similar activities and programs.

The Land Use, Thoroughfare and Open Space Plan is not intended as a rigid set of map proposals and policies which are to be followed precisely and absolutely. The Plan is meant to be flexible. It is meant to present a framework within which a range of choices are available. Even the Plan itself is meant to be open to revision, expansion and refinement as the City gains further experience in planning and implementation activities.

However, the Plan must be recognized as the official public policy guide towards community development and growth. New development should be in conformity with the suggested guidelines as closely as possible. Where major deviations are proposed, those deviations should be carefully reviewed and all problems resolved before the projects are carried out. If not in conformance with the detailed recommendations of the Plan, all projects should at least be in conformance with the general goals, policies and concepts of the Plan, or the Plan should be officially revised.

The Land Use, Thoroughfare and Open Space Plan includes not only the Plan map, but it includes the detailed explanations and recommendations in the text. The Plan map provides a physical manifestation of the growth and development strategy; the text spells out the definitions, specific policy recommendations, and other explanations. The Plan also includes a discussion of and policy recommendations for implementation: i.e., how to put the Plan into action.

Land Use Plan

The proposed future pattern of land use for the Wilmington area as illustrated on the Plan map consists primarily of filling-in and expanding the existing pattern of land use into more distinct residential neighborhoods with "clusters" of higher density uses in appropriate locations. It also includes continuation and strengthening the existing downtown business district and the large industrial airpark on the south east side. It includes identification of the local flood plains, several proposed new or alternative park sites, and a "band" of agricultural and residential development surrounding the proposed built-up areas, a band which should be under at least limited City influence and development control.

Although discussed separately, the land use plan features are closely interrelated with the thoroughfare plan features. In fact some of the thoroughfare plan features form the structure for the land use plan, especially for the location of higher density uses. Higher density uses, including commercial, industrial, and multi-family uses, are proposed to be located along principal or minor arterial routes near their existing or proposed intersections with each other or with collector streets. The proposed land use pattern is also strongly influenced by the natural features of the environment, especially the drainage pattern. For example, the north and south limits of the proposed single family residential areas are intended to coincide generally with the major drainage divide of the Lytle Creek area. Most soils are either poor, or at best fair, in suitability for septic tanks. This reinforces the need for growth of moderate density residential neighborhoods which can be efficiently served by a public sewage system.

The land use pattern and proposed general extent of development is in line with the land use projections of Section D. In Table VII of that section, it is projected that a total of approximately 1100 acres of land (net) is needed for new residential, commercial and industrial development in the next 22 years. The proposals on the land use plan contain 2000 to 3000 acres (gross) designated for residential, commercial, or industrial use, not including the continued development and expansion of the industrial airpark nor the suggested "optional development area." This should allow ample opportunity to meet the land use development needs within the free enterprise system. To plan or prepare for much larger growth areas, or more scattered locations, would be a waste of community resources.

Most of all, the land use plan features are based on the goals of the community as expressed in Section G. For example, the Plan map illustrates several prime locations of industrial development "in or around the Industrial Airpark" (Long Term Goal - B), and for new residential development "on vacant land within the community, through redevelopment of older areas, and in closely surrounding suburban areas" (Long Term Goal - F). The land use plan cannot by itself meet all the proposed goals, but it can make a major contribution to the effort.

A more detailed description of the recommended land use development pattern and recommended policies for development are presented below by major land use types.

Single Family (Moderate Density) Residential. Single family residential areas are primarily meant to include conventional detached single family homes of moderate density, but they also could include a limited amount of low density multi-family housing, churches, and other community facilities, small stores or offices, gardens, and similar uses. These latter uses should be carefully controlled and allowed only if they are compatible with the character and density of the neighborhood, and if adequate site design, neighborhood location, landscaping, buffers and other provisions are made to assure their compatibility.

It is recommended that the density of the proposed single family residential areas be limited to an average of 3 to 7 dwelling units per net residential acre and that all such areas be served with central water and sewerage systems of ample capacity. A total of approximately 1,800 acres has been identified for new single family land use and related development. This compares with a projected total residential land use increase of approximately 550 acres net from 1978 to the year 2000, as presented in Table VII much earlier. An additional 350 acres is identified on the Plan map as an optional development area (see below).

As discussed above, the general pattern of locations for single family residential is proposed to expand on existing neighborhoods, fill-in appropriate vacant spaces, and to establish new neighborhoods within the adjacent areas which can be conveniently served with public utilities. The intent is to organize single family residential development into moderate size neighborhoods which can be interconnected by local streets, served by neighborhood parks and nearby shopping and commercial services, without encroachment from major thoroughfares or large commercial or industrial development. The formation of neighborhood patterns reinforces the opportunities for quiet, attractive surroundings, social interaction, and local pride.

Multi-Family (Higher Density) Residential. Multi-family residential areas are primarily meant to include apartments, townhouses, duplexes, condominiums, and similar housing types of generally higher densities. However, they also may include a limited amount of single family homes, churches, and other community facilities, small stores or offices, gardens, and similar uses. These latter uses should be carefully controlled and allowed only if they are compatible with the character and density of the multi-family development, and only if they do not interfere with the potential for multi-family residential development. Certain sites have a good potential for multi-family development and in the community interest this potential should not be thwarted.

Multi-family residential areas are also meant to include existing mobile home parks, because of their higher densities. Any new mobile home parks would need to be considered on an individual basis, following the principals of location for multi-family residential areas but with special consideration to their needs for generally larger land areas than are proposed on the Plan map. It is suggested that any new mobile home parks have a minimum site size of 25 acres.

It is recommended that the density of the proposed multi-family areas be limited to an average of 16 dwelling units per acre but that higher or lower limits may be appropriate under certain circumstances. For example, higher densities would be appropriate when off-street parking needs are small; lower densities would be appropriate where sites are adjacent to single family housing. A total of approximately 150 acres of new sites for multi-family housing is proposed on the Plan Map, or up to 1800 new multi-family housing units (assuming 25% of the land is used for streets and ancillary facilities) at 16 units per acre. The land use projections in Table VII suggest that only 65 to 70 acres can be expected (and this could include some doubles or small townhouses in the primarily single family neighborhoods).

The locations of proposed sites were based on a strategy of encouraging moderate size clusters with a few on all sides of the community in order to provide a variety of housing opportunities. Moderate size clusters are desirable: large enough to have their own neighborhood identity, special facilities such as tennis courts, game room or utility room, their own special activities, and ample space for attractive landscaping and buffers from surrounding uses; but not so large that they would tend to dominate one side of the City. Generally sites of 10 to 20 acres are suggested. In all cases it is recommended that such land use be located with direct access to a minor or major arterial thoroughfare, existing or proposed, and preferably near the intersection of several thoroughfares.

The locations shown on the Plan map were selected as meeting the goals and strategy. It is possible that alternative locations can be found which meet the same criteria. If good alternative sites are proposed for multi-family development, their approval should be given consideration.

Agricultural and Residential. A large "band" of scattered residential development is identified on the Plan map in recognition of the current trends for rural and open space oriented housing development. This development is expected to be mixed in with the more predominant agricultural (and woodland) uses of the land. This area is not proposed as a major location for residential land use. In keeping with the goals of the City, it is proposed that the large majority of new residential land use be located in the proposed single-family neighborhoods and the multi-family clusters as discussed above. However, since the trend toward some scattered residential development is established, it is important to recognize the situation and attempt to guide its results.

The area proposed for agricultural and residential extends approximately three-fourths of a mile to one and one-half mile out from the proposed pattern of community land use development. Within this area it is suggested that the City has a strong interest in the type, locations, and development characteristics of new development. This interest is the result of the area's proximity to the proposed growth areas of Wilmington, the importance of additional thoroughfare connections in this area, especially as they circumvent the more built up portions of the City, and the possibility of future expansion of the City's growth pattern into these areas (either after the year 2000, or earlier due to unforeseeable trends or needs).

It is proposed that development in this area be generally limited to small groupings of single-family homes, to agricultural uses, or to small scale associated uses such as mobile home parks, churches, cemeteries, and other public and semi-public uses, and rural oriented commercial and/or industrial uses. Special care should be taken to avoid random patterns of roadside development. Small grouping should be encouraged with good accessibility to the thoroughfares, carefully designed and developed to preserve the natural features of the environment and the rural character and scale of the area. If public utilities need to be extended to serve any significant amounts of development in the area, small area land use development plans should be prepared for the affected sites and surrounding properties.

Commercial. Commercial land use is meant to include shopping, services, offices and similar uses. For the purposes of this Plan, commercial land use is divided into two types: Local and General Business, and Other Commercial. Local and General Business is intended to include generally the "local business" category of the Wilmington Zoning Ordinance, e.g., grocery stores, restaurants, beauty shops, drug stores, hardware stores, clothing stores, gift shops, banks, office buildings, etc., plus the special zoning categories of professional office, medical care, and shopping center. Other Commercial is intended to include generally those uses conforming to the zoning category of "general business" which includes storage warehouse, wholesale establishment, radio studios, and kennels, plus some of the "conditional uses" in the zoning ordinance such as commercial greenhouses, motels, outdoor theaters, golf driving ranges, and truck freight terminals.

A total of approximately 300 acres of proposed new commercial land use sites are presented on the Plan map, compared to a projected need of 235 more acres needed by the year 2000 in Table VII. Any additional needs are expected to be filled by expansions in the downtown, filling-in of existing partially developed commercial sites, and a limited number of alternative sites not shown on the Plan map but following the same principals of size and location. The total of 300 acres proposed is divided up with approximately 100 acres for local and general commercial and 200 acres for other commercial, the latter type normally having far greater land needs for each establishment.

Concerning Local and General Commercial land use it is proposed that the downtown central business district (CBD) remain and be strengthened as the primary retail and office center of the City and surrounding areas. The function of the CBD should be increasingly changed from convenience shopping, i.e., a 15 minute trip for a few items, to primary and comparison shopping and the downtown should continue to increase as a major business, office, and local government center. More off-street parking should be provided as needed, traffic patterns should be improved, aesthetics should be enhanced, second story businesses and apartments should be rehabilitated, and signs should be harmonized. Historic buildings and facades should be restored. A detailed and realistic economic, land use, circulation, and historic restoration study and plan is needed to fully explore its potential, recommend needed action, and illustrate design alternatives.

In addition to the downtown CBD, local convenience shopping centers or areas are often desired to serve residential neighborhoods generally within a $\frac{1}{2}$ to 1 mile radius. These centers should typically be 3 to 10 acres in size with some additional

space for later expansions. Typical establishments include grocery and drug stores, dry cleaners or laundries, barber and beauty shops, and branch offices of banks and other institutions. These centers should have convenient accessibility for nearby residents, both by auto and walking; and adequate off-street parking should be provided. Locations at the intersections of arterials and/or collector streets are recommended, with several such locations proposed on the Plan map including three or four on each side of town. It is possible that alternative locations can be found which meet the same criteria and their acceptance should be given consideration. However, it is strongly recommended that no one side of the City be overdeveloped for commercial land use nor that such uses be allowed to locate in long strips or randomly scattered spots of development. Planned unit developments which coordinate the planning and site design for multi-family housing, single family housing and shopping centers should be encouraged.

Concerning Other Commercial land use it is proposed that several moderately large, more isolated locations be designated for these uses. Again, at least one or two locations have been identified on each side of town, for greater convenience to local residents. These uses are generally fairly large and not very compatible with residential development. Likewise, they are not typically suited to shopping center type development. They should be located along principal or minor arterials, but with special care given to the control of access and potential congestion along these roads. Long shallow strips should be prevented while shorter strips with deep lots should be encouraged. Frontage roads or service roads off the major thoroughfares are recommended.

Industrial. Industrial land use is primarily oriented to manufacturing, processing and assembly of materials, but also may include storage, transport, wholesaling, and similar activities. Industrial land for existing and potential new industries is critical to a strong economic base and local prosperity. Sites must offer advantages which are competitive with sites in nearby cities. Site advantages should include good utilities, access to major highways (and to rail lines if possible), large site size, and adequate (and preferably attractive) land features. Sites also should be located where they are relatively isolated from but convenient to nearby residential neighborhoods.

It is proposed that a majority of the new industrial acreage needs be met at the Wilmington Industrial Airpark facility on the southeast side of the City. At present, approximately 100 acres are devoted to industrial land use. The Wilmington

Community Improvement Corporation has recently completed a development plan for the industrial airpark which will expand the total acreage available for industrial land use to over 800 acres, including some adjacent lands not presently owned by the airpark. This planned expansion is incorporated in the proposed land use pattern on the Plan map. Much of the additional land proposed for new industrial development is located on the southwest half of the Airpark, near S.R. 134. Several new thoroughfares are also proposed, as shown.

In addition to the Industrial Airpark, approximately 500 acres are shown on the Plan as industrial land use, about one half of which are already in such use. These sites are proposed for the expansion of existing industries and for new industries which are seeking alternative sites to the Airpark but still in the Wilmington area. Their chief asset in contrast to the Airpark is their location adjacent to existing railroad lines. Although no distinction is proposed in types of industrial land use, it is important that any new industrial development be controlled through the appropriate zoning classification, "light industrial" versus "industrial" depending on the location and type of nearby land uses. In most cases most new industry is interested in "light industrial" type districts with more stringent standards for development, for their own protection as well as for their compatibility with the community in general.

Optional Development Areas. There are two large areas in or adjacent to the City which have a potential and suitability for several different types of community or urban land uses. It is recommended that these two areas be designated as "optional development areas" and that they be encouraged as planned unit developments with carefully designed and staged site plans.

The first of these areas is approximately 350 acres in size, located just beyond the City limits between Rombach and Fife Avenues. Some of its major assets include its location beside a principal arterial, a shopping center, industrial development, a golf course, and the Industrial Airpark. It is gently rolling in topography and is conveniently accessible to public utilities. One of its few liabilities is the extent of higher intensity uses already in the vicinity. There is a danger that the east side of Wilmington could become over-developed for industrial, commercial, and multi-family uses. Suggested future uses for consideration as a low-density research center, a corporate office center, a hotel/recreation and meeting center, an innovative cluster housing neighborhood with common open spaces, a large institutional use, or a combination of several of these.

The second area is located on the west side of Wilmington, northwest of the intersection of Nelson Avenue and Wayne Road, extending both north and west approximately one mile. Again, major assets include moderately level topography, excellent thoroughfare accessibility, convenience to public services and utilities, and proximity to commercial, industrial and residential areas. This location is in the direction of the new Caesar Creek Lake State Park. Suggested future uses for consideration are a community shopping center, multi-family housing, single-family housing, or some of the special uses mentioned above for the other optional development area. In both locations an overall neighborhood site plan should be prepared as local property owners come forward with specific development proposals.

Public and Semi-Public. Large public and semi-public facilities presented on the Plan map, except for parks, are existing facilities such as local schools, Wilmington College, the hospital, County home and court house. Suitable locations for any similar new large institutions or public facilities would be along the major highways near or beyond the edge of urban development. Smaller institutions or public facilities are appropriate within other classifications shown on the Plan map along the major or minor arterials, especially at their intersections with each other or with collector streets. Specific locations should be determined by special studies. Proposals for new parks and other open space sites are discussed later.

Thoroughfare Plan

The basic strategy for achieving an efficient and convenient traffic circulation system in a City or area is to provide a coordinated network of major thoroughfares. Major thoroughfares are streets, roads, and highways which are larger than "average" and are designed and located for the purpose of serving medium to long range trips. Medium to long range trips are relative to the size of the planning area, but for the purposes of the Wilmington plan they are intended to mean trips of approximately one mile or more.

A coordinated network of major thoroughfares, therefore, is needed to carry traffic passing through the planning area, to carry traffic from the rural areas into or out of the urban area, and to carry traffic from one side of the city to another. In addition, small thoroughfares are needed through the residential neighborhoods to "collect" traffic from the local streets and feed it into the larger thoroughfares. Each of

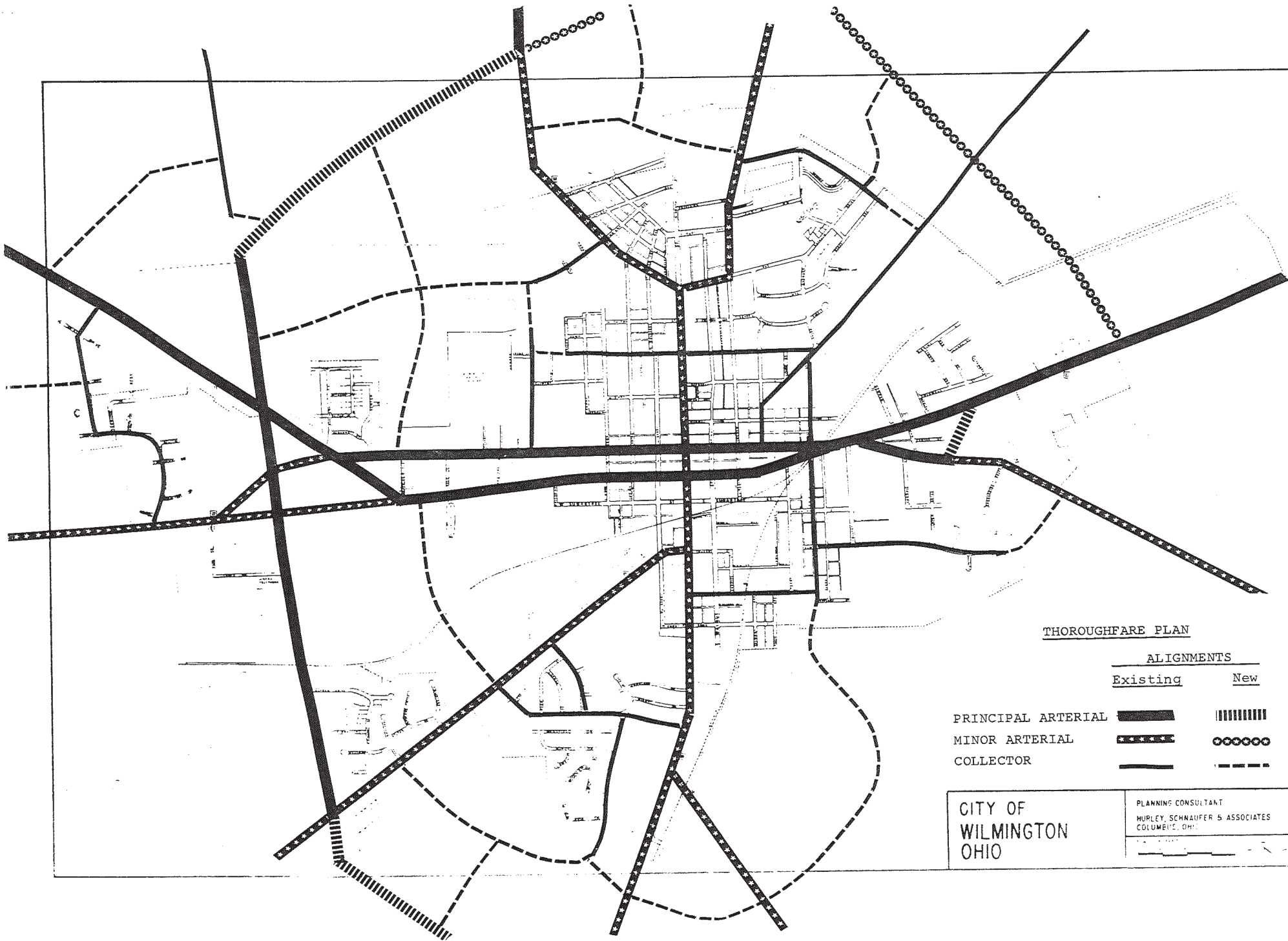
these different thoroughfare needs indicates different sizes and design standards which are appropriate. Thus, the Plan map proposes the classification and construction of principal arterials, minor arterials, and collectors to fulfill the thoroughfare needs.

The overall pattern for thoroughfares proposed on the Plan map is a new loop highway route around the City, improvement of existing major streets through the City, and the establishment of a system of collector streets and roads inside the City and outside the City to serve individual neighborhoods. The proposed loop highway is proposed first as a principal arterial to provide a U.S. Route 68 bypass away from the center of the City, tying in with Nelson Avenue, and thus relieving some of the heavy traffic and congestion in the downtown. In addition, it is proposed that this partial loop alignment for U.S. 68 be continued, as a minor arterial, around the northeast side of the City to U.S. 22 and S.R. 3 and the major traffic origins and destinations in that area, and that the loop alignment be continued, again as a minor arterial, around the south side connecting in with the proposed expansion and development of the Industrial Airpark. The Plan also includes the proposed U.S. 22 east highway improvements and the Rombach Avenue - Fife Avenue connector as currently planned by the Ohio Department of Transportation.

As can be noted on the Plan map, many of the proposed major thoroughfares are already existing as State or Federal highways or are obvious extensions or realignments of same. New construction or major improvements of these routes would depend on the cooperation and support of the Ohio Department of Transportation (ODOT). Although ODOT must make these decision primarily on the basis of regional and state-wide thoroughfare needs, they are open to, and in fact anxious to receive, local proposals for major improvements. Hopefully this Plan will coordinate with ODOT's assessment of regional needs, with possible adjustments, and will be able to proceed.

Many of the other proposed thoroughfares will be at least the prime responsibility of the City, either through new construction, major improvement of existing streets, or regulations and guidelines for new subdivision development. The latter can apply to new subdivisions outside as well as inside the City limits. Some of the proposed thoroughfares will be the responsibility primarily of the County or the Township. Close cooperation between the City, Clinton County, and Union Township will be essential.

A more specific discussion of the proposals for each type of recommended thoroughfare is presented below.



Principal Arterials. The purpose of principal arterials is to carry relatively large volumes of traffic at relatively high speeds over relatively long distances. Principal arterials normally have two to four lanes or more for through traffic. In smaller communities principal arterials are needed only for major state or federal routes passing through the area. In metropolitan areas, principal arterials are also used to connect major employment centers and other large traffic generators. Accessibility to principal arterials from adjacent land uses should be limited to major traffic generators such as industrial, commercial, and apartment complexes. Access should be at infrequent intervals and designed so as not to produce unwarranted disruption of through traffic. Where major traffic generators are at frequent intervals or low intensity uses need access, service or frontage roads should be provided.

In the Wilmington planning area there are two routes which serve as principal arterials through the area. U.S. 22 (and S.R. 3) east from the City and S.R. 73 west connect Washington C.H. (and beyond) with the Middletown area (and beyond). U.S. 68 connects Xenia and the Dayton area with a large, but sparsely populated area south of Wilmington all the way into Kentucky. Each of these routes has an average daily traffic volume of almost 4,000 vehicles or more as it enters or leaves the City, with the highest being an average daily traffic volume of about 6,000 vehicles (see Table VIII). Through the City itself, traffic volumes are as high as 16,000 vehicles per day. As discussed in Section E, it is estimated that the capacity of a 2 lane urban thoroughfare, with traffic signals and average conditions, in an intermediate location, is about 4,000-5,000 vehicles per day.

In order to serve these relatively heavy through traffic needs, it is proposed that U.S. 68 be reconstructed around the major portion of the City, via Nelson Avenue. Nelson Avenue provides a convenient location for this route and has ample setbacks along much of its frontage. Most land uses are compatible with a principal arterial, such land uses including large commercial and industrial land users with a minimum of single family homes. Its length and location would allow almost one-half of the estimated 3.7 mile bypass to be located on an existing right-of-way. However, its existing right-of-way width would have to be expanded considerably, steep grades reduced, and pavement reconstructed. It is recommended that this major highway project be initiated and completed as soon as possible. This project will provide an important stimulus to local development in the area as well as the alleviation of traffic congestion through the town. Failure to initiate the project fairly soon is likely to result in land developments along the proposed route which would block or hamper its eventual construction.

The second route proposed as a principal arterial is U.S. 22 - S.R. 73 (Wayne Road, Main and Locust Streets, and Rombach Avenue). The only major improvement proposed on the Plan map is the Fife-Rombach Avenue connector as discussed before. As planned, this arterial will be rebuilt from the East Locust - Main Street intersection east to the intersection of S.R. 73, mostly with 4 lanes of through traffic. Traffic will be rerouted over parallel sections of Rombach and Fife west of the proposed connector, in a one-way street pattern. West of the East Locust - Main Street intersection, it is projected that traffic continue to be carried over both Locust and Main in one-way directions, to the vicinity of Nelson Avenue. It is recommended that Wayne Road be widened to four lanes of through traffic west as far as the proposed outskirts of community development. Adequate right-of-way width should be obtained. Additional spot improvements should be made to the U.S. 22 - S.R. 73 route through Wilmington to facilitate better movement of traffic, especially at certain key intersections. More detailed recommendations for downtown traffic movements should be made as a part of a comprehensive downtown improvement program.

Minor Arterials. Minor arterials are needed to carry moderately large traffic loads in moderate size cities such as Wilmington and to supplement the principal arterials. They frequently connect a city with the surrounding suburban and rural districts and connect major districts within the city. Roadside accessibility should be moderately limited, i.e. there should not be a proliferation of individual drive-ways entering the road and service or frontage roads should be provided where local accessibility problems are frequent. Parking lanes may be allowed when needed, as long as they do not conflict with the smooth flow of traffic.

A number of existing major streets and roads are proposed for designation and improvement as minor arterials. These include all or portions of South Street (inside the proposed bypass), Lorish Avenue-Lincoln Street (S.R. 134), S.R. 73 (southeast from U.S. 22), Fife Avenue (east from the proposed Fife-Rombach connector), S.R. 134 (southeast of South South Street), Truesdell Street (S.R. 730), and West Main Street (U.S. 22 west of Wayne Road). Each of these streets presently serves moderately heavy traffic volumes and provides important routes for convenience and efficiency. They will become even more important in the future.

New minor arterial routes proposed on the Plan map are routes providing a logical extension of the proposed U.S. 68 bypass, in a loop pattern, around the edge of the City. On the south side such a route will provide an important connection to the Industrial Airpark, carried on through to Fife Avenue. On the northeast side such a route will provide an important connection

to the major origins and destinations on the eastside of the City as existing or proposed. It is especially important that such a link be provided between U.S. 22 east of town and Prairie Avenue to serve the existing and proposed industrial development sites as soon as possible, and before any land development blocks or hinders such a possibility. Several alternative minor arterials are proposed from Fife Avenue near the Industrial Airpark, one possibility leading up to Rombach Avenue, the other connecting over the S.R. 73. A decision on the most suitable alignment should be coordinated with specific site plans for the adjacent "optional development area."

Collector Streets and Roads. Collector streets and roads are needed to collect traffic from the local streets and carry it to larger thoroughfares. Collector streets are also needed to supplement the arterial street system especially for moderate traffic volumes and trips of short to moderate lengths. These types of streets are often the least recognized in a community and the last to be constructed or improved to desirable standards. However, the absence of collector streets often leads to a burden on the arterials, too much through traffic on supposedly quiet residential streets, and difficulty in traveling from neighborhood to neighborhood. They are also vital to safe and efficient police and fire protection and other emergency service. Collector streets need only minimal protection from driveway and local street access and parking lanes are normally appropriate.

Several existing streets and roads are proposed to be upgraded to the status of collectors in the City or surrounding area. This designation and level of service may be especially difficult to attain on certain streets in the urban areas with limited right-of-way widths. For example, both North Wall and High Streets provide important links to Prairie Avenue, a major street running northeast from near the center of town, but both have narrow rights-of-way. It may be desirable to use both these streets for access to and from Prairie in a one-way street pattern linking up with Locust and Main.

Another problem area is in the southeast part of the City. Doan Street provides a moderate capacity route tying in with S. South Street, but Grant is too narrow (46 feet R/W) as a north-south collector. Wall Street, which has a 66 foot right-of-way has been terminated only a short distance from intersecting with Doan. This problem becomes even more critical in relation to the need to extend such a collector southeast from this vicinity into the area across Lytle Creek. The collector streets as proposed on the Plan map, which open up Wall Street south, seem to be the best solution given the information available, but certainly alternative routes might be considered.

These and other collector street situations in the built up areas of the City have no easy solutions. However, it is important that the needs for such collector streets be met. Good collector street patterns are critical to the efficiency of the local street network, to safe and efficient police and fire protection (and perhaps to the establishment of a public bus system someday), to the relief of through traffic on more narrow streets, and in general to the long term vitality of the neighborhood. Improvement of selected local streets to collector type service may cause some inconvenience and difficulties in the short range future, but they provide an important long term benefit to the neighborhoods and the City in general.

Proposed new collector streets on the Plan map which are in the closely surrounding areas of Wilmington should be provided by developers as subdivision plats are established and new construction takes place. Actual alignments could be varied somewhat from the proposed locations to allow greater flexibility for individual circumstances but the general needs should be met as illustrated. It is recommended that the locations as proposed on the Plan map be enforced through the subdivision regulations until such time as a developer proposes a reasonable alternative alignment or set of alignments for the whole general neighborhood. Piecemeal changes should not be considered.

Thoroughfare Standards. Thoroughfare standards are needed to more precisely define each of the proposed thoroughfare classifications. The City is currently following a standard set of street dimensions as prepared through the Southwest Ohio Engineering Association. It is recommended that all new streets and highways be constructed to meet the City specifications. It is recommended that all existing streets and roads proposed as thoroughfares be upgraded to come as close as possible to these City specifications given the critical limitation of right-of-way width. In many cases on existing streets which are proposed as thoroughfares, on-street parking should be restricted as necessary to achieve the standards for through traffic lanes. A summary of the current City specifications is presented in Table IX.

TABLE IX
WILMINGTON STANDARD STREET DIMENSIONS

Street Classification (1)	(in feet)				Minimum R/W Width
	Minimum Lane Width	Parking	Median (2)	Street Width (3)	
Local (Low Volume)	20	14	None	35	50
Local (High Volume) and Collector (Low Volume)	22	18	None	41	60
Collector (Med. Vol.)	22	18	None	41	66
Collector (High Vol.)	44	None	None	45	70
Collector (Industrial or Commercial)	44	None	10	55	80
Minor Arterial	48	None	14-16	65	90
Principal Arterial (Low Volume)	48	None	14-18	52 ⁽⁴⁾	90
Principal Arterial (High Volume)	72	None	14-20	76 ⁽⁵⁾	120

- (1) Based on estimates of projected average daily traffic. See "Source" for full explanation.
 (2) Including left (turn) bay.
 (3) Back to back of curbs.
 (4) 2 roadways at 26 feet each.
 (5) 2 roadways at 38 feet each.

Source: Standard Drawings, Southwest Ohio Engineering Association, prepared by Kraft-Shaw-Weiss & Associates, Consulting Engineers, Dayton, Ohio, March, 1976.

Open Space Plan

To some extent, the Open Space Plan consists of all those areas not proposed for urban development in the Land Use Plan. However, the Open Space Plan must also involve a strong positive commitment to the preservation and enhancement of these areas. The Open Space land is not just leftover land. It is land which is needed as open space. It is needed for farming, gardening, forestry, active and passive recreation, preservation of wildlife, nature study and scenic enjoyment. It is needed for a clear and ample water supply, soil conservation, natural drainage, and fresh air.

Two major elements of open space are presented on the Plan map: parks, and flood plains. Recommendations for each are discussed below. It should be mentioned, however, that other areas of the community contain or will contain important open spaces. For example, many public and semi-public facilities and sites have large lawns and gardens, woodlands, and even recreation areas which contribute to the overall need for open space. Special emphasis should also be placed on the conservation of agricultural land in the proposed "scattered residential and agricultural" areas, and in the surrounding rural areas beyond. It is one of the most basic concerns of community planning that urban and suburban development be guided and encouraged into compact neighborhoods or clusters so that no more farmland than is necessary be converted to such uses.

Parks. There is a big need for more public park space in Wilmington. At present there are only 30 acres or so of public park land. National standards normally recommend 8-10 acres of local parks per 1,000 resident population, not including large regional parks and recreation areas. In the Wilmington planning area this indicates a total need for approximately 100 to 135 acres at present and as much as 200 acres by the year 2000.

It is recommended that Wilmington attempt to meet this projected need primarily through the provision of at least one additional large community park plus up to five additional moderate size neighborhood parks. Smaller neighborhood parks or mini-parks are also desirable in or around moderately high density residential neighborhoods, but their locations are not proposed on the Plan map. Their locations should be based on available opportunities in the existing urban area and on negotiations with developers as new neighborhoods are established. Neighborhood parks, both the large and small ones, should be acquired through uniform dedication requirements in subdivision regulations if possible.

Four alternative sites are proposed for at least one new community park in the Wilmington area. The primary criteria for

their selection were a large vacant piece of land, not too close to the existing Denver Williams Memorial Park, and possessing unique or attractive natural features. Consideration was also given to the probable competition for any such land for private development. Each of the four sites selected is 50 acres or larger in size, and each is located at least partially in a flood plain.

Site A as designated on the Plan map is about 50 acres in size and is located along Lytle Creek east of the B & O Railroad on the south side of the City. It is particularly unique in its valley setting along the stream, its moderately steep hillsides, its small ravine extending south from the Creek, some woodlands, and a nearly level open field. Its primary liability is its isolation from any existing vehicular access. However, such a liability may be an asset in terms of the cost of the site. Future access is proposed via a collector street projected through a proposed new single family residential area to the south and east.

Site B is also about 50 acres in size located between West Main Street and the Penn Central Railroad generally southeast of the County Fairgrounds. It is also unique in its valley setting along Lytle Creek, its moderately steep hillsides, and fairly extensive woods. However, it does not contain any large level open space which could be used for ballfields. It also has the major liability of isolation from vehicular accessibility. Future access is proposed via a collector street proposed to connect Truesdell and West Main in this vicinity.

Both sites A and B are particularly desirable in their location along Lytle Creek as it flows through the City proper. This valley is already being utilized as a nature trail or walkway with pedestrian easements obtained by a non-profit "greenbelt" association. Furthermore, Lytle Creek forms a corridor touching on some of the major "other public and semi-public" facilities and open spaces in the City. Lytle Creek, in a sense, forms an open space link between the Industrial Airpark, the County Home, Denver Williams Park (via a small drainage way to the north), Wilmington College, Sugar Grove Cemetery, Memorial Hospital, and the County Fairgrounds. Additional public parks or open space preservation would further enhance this emerging pattern.

Site C is located south of Wilmington about 2 miles, just east of S.R. 134. It surrounds and includes the larger of the two City reservoirs of about 50 acres in size. The total proposed size of the park site is about 250 acres, extending southeast from the reservoir across Cowan Creek to Jenkins Road. The site has great natural features: the reservoir, Cowan Creek and its meandering valley, woodlands, hillside, and open level fields. Although located away from the City, accessibility is available

from both S.R. 134 and Jenkins Road.

Site D is approximately 70 acres in size located just west of the City limits on the south side of Main St. (U.S. 22/S.R. 3). This land has several small ravines, some trees, and borders on Lytle Creek, just across the Penn Central Railroad line on the south side. Its location bordering the City's sanitary landfill on the southeast side could help to solve a problem at the landfill, namely the growing shortage of cover material available for proper fill operations. Considerable attention would need to be given to the separation and buffering of park spaces from the landfill. Accessibility by automobile would be convenient but pedestrian and bicycle accessibility could be a problem.

All four sites are ample in size for a wide variety of recreational opportunities and scenic enjoyment. It is suggested that a community park should be oriented to activities for all ages and recreational interests, including playground equipment, informal play fields, ball fields, court games, picnicking, landscaped quiet areas, and other features.

The five moderate size neighborhood park sites are proposed with locations central to residential neighborhoods in the City or proposed for development in the closely surrounding areas. Two of these are proposed to be located and developed in close coordination with existing schools in the City, one at the High School and one at Denver Place School. A third one is proposed near the existing Holmes Elementary School, but in a location more central to the residential neighborhood and taking advantage of more attractive natural features. As an alternative, this site could be switched to the back of Holmes School. A fourth site is proposed on a portion of Site A, an alternative site for a community park. If this site is developed as a community park, then it should also serve the need for a neighborhood park. If not chosen for a community park, a portion of Site A should be acquired and developed as a neighborhood park. The fifth site is proposed on the far west side.

It is recommended that each of the neighborhood parks have a site size of from 5 to 10 acres. It is suggested that neighborhood parks be developed with playground equipment, informal play fields, court games, landscaped quiet areas (including gardens), plus special features as are appropriate. A portion of the park site and facilities could be shared with the school where joint locations are proposed. Acquisition of neighborhood park sites, where sufficient land is not already available in school district ownership, should normally be affected through land dedications at the time of subdivision.

Flood Plains. It is recommended that the flood plains of Lytle Creek be preserved as permanent open space in the Wilmington planning area. Flood plains provide a natural channel for serving occasional high runoffs from heavy rains or melting snow. There are several good reasons why they should be preserved as open space.

First, they are a serious hazard to the health, safety, and welfare of any occupants or structures located within. Floods of record in many communities have resulted in deaths and large amounts of property damage.

Second, because of their infrequency, most owners or occupants tend to forget or underestimate the severity of the hazards. They assume that if there are no public restrictions, or if they can get around the restrictions, then the threat must not be significant.

Third, flood waters are generally increasing in most areas because of faster runoffs from urban and suburban development, loss of woodlands, poor land conservation, and siltation of stream beds.

Fourth, random fill and development in the flood plains may be safe for any one particular site, but the combined effect of several developments is likely to displace future flood waters onto someone else's land, not normally in the flood plain area.

Fifth, the flood plains are a unique natural feature with many aspects suited to scenic and recreational enjoyment which should be preserved in the community interest.

Identification of the Lytle Creek Flood Plain on the Plan map is based on the HUD Flood Insurance Program maps indicating areas of 100 year floods (see map on page 29) within the City limits. The extent of the flood plain outside the existing City limits is based on U.S. Geological Survey Department "flood prone" area maps. Several of the flood plains designated by HUD are through already developed neighborhoods in Wilmington. In such cases, their locations on the Plan map were indicated as "diagrammatic only". In all cases, diagrammatic or not, any land use or development decisions regarding flood plain lands or lands near the indicated flood plains should not be made without consulting detailed flood plains maps of the latest flood plain information available.

Appropriate uses for lands in the flood plains in Wilmington would include public parks, public gardens, hiking trail or walkway, bikeway, large lawns and gardens of residential or institutional uses, parking reserves, commercial gardens, commercial outdoor recreation, or similar uses. Those uses which should definitely not be allowed include any structure or use

for human habitation, any structure of importance to the public health or safety (e.g. fire station), any structure or use which might cause serious water pollution or health or safety hazards if exposed to flooding, and any structure or land fill which might impede the natural flow of flood waters and force them to flow more extensively or more excessively elsewhere.

Flood plains of Todd Fork and Cowan Creek are also identified on the Plan map, based on U.S. Geological Survey flood prone area maps. It is being suggested that although these drainage way do not pass through the proposed community development areas of the City, they do pass through the fringe areas of concern to the City (i.e. the "scattered residential and agricultural" areas), and therefore, the City should attempt to preserve them from inappropriate development. Appropriate uses of these flood plain sites include all those discussed in the paragraph above plus more extensive agricultural production, forestry, mining, and large recreational land uses (e.g. golf courses, and wildlife reserves). Again, more detailed maps should be consulted as are available from the City, Clinton County offices, the Soil Conservation Service, and the Ohio Department of Natural Resources.

Schools. As is discussed on pages 57-58 of this report, tentative future plans for the Wilmington public schools involve phasing out 3 elementary schools and retaining all others on their present sites. These plans are in response to a declining enrollment trend over the past several years, in spite of population growth.

In addition to these plans, it is recommended that the community continue to monitor enrollment trends and be aware of changing needs for or attitudes towards neighborhood schools. The Wilmington Land Use, Thoroughfare, and Open Space Plan indicates several areas of projected suburban residential growth which someday could become sufficiently large to justify one or more new neighborhood schools. In addition or as an alternative, some of the existing sites may need to be expanded; or a neighborhood school could be located on the high school property. As any such needs become apparent, it is recommended that the Land Use, Thoroughfare and Open Space Plan be amended or revised to reflect such needs, and that appropriate new or expanded sites be identified and reserved for public use through the City's subdivision regulations.

SECTION I
IMPLEMENTATION

Implementation of the Wilmington Land Use, Thoroughfare, and Open Space Plan will require a strong effort by local government, civic groups and associations, private business, and concerned citizens - on a continuing basis. It will require following the guidelines of the Plan in zoning, subdivision regulations, and capital improvements programming. It will also require special attention to the timing or staging of community growth and development, and to coordination and evaluation. Each of these are discussed below.

Zoning

Zoning is the primary tool for guiding and controlling land use in the City. Zoning divides the City land area into separate districts and defines and limits the ways in which property may be used and/or developed in each of the districts. Districts typically include several types of residential districts, commercial districts, and industrial districts, plus certain special districts for agriculture, flood plains, major public facilities, historic preservation areas or sites, and planned unit developments. The locations of these zones is defined on a large scale zoning map. Provisions in the zoning ordinance text control the specific uses allowed in each district, plus such factors as height, bulk, and density, yard spaces, off-street parking, signs and other concerns.

Zoning is essential not only in the implementation of the Land Use Plan, but it is essential in protecting the value and potential enjoyment of existing properties and neighborhoods in a City. In order to assure that zoning is established and administered in a fair and reasonable manner, it is necessary to have some overall goals and strategy for the growth and development of the City over a long term period of time. Such a need is filled by the Land Use Plan.

The City of Wilmington presently has a zoning ordinance and map which have evolved over a number of years of progressive improvements. With the completion of the Land Use Plan, it is recommended that the zoning ordinance and map be thoroughly reviewed and that suggestions for a comprehensive revision be seriously considered. As an initial input, the following suggestions for possible revisions are presented:

- (a) A flood plain district be established in the text and on the map, with strict limitations on development.
- (b) A light industrial district be established in the text and on the map, with standards for large yard spaces

and a minimum of nuisances.

- (c) The existing zoning map be adjusted to more closely reflect the Land Use Plan map, especially with regard to existing incompatible uses in residential neighborhoods.
- (d) Residential district regulations and/or locations be revised so that large parts of the older, predominantly single family neighborhoods do not allow multi-family dwellings at high densities, at least not without careful review.
- (e) Business district regulations and/or locations be revised so that sites along the major thoroughfares (e.g. B-1 sites) are not allowed to have only a 15 foot setback and up to 45 foot building heights and 90% lot coverage.
- (f) Planned unit development be encouraged, and be expanded to include provisions to allow mixed use developments under certain circumstances.
- (g) Provisions be added to provide for the preservation and protection of any areas or sites of historic interest.
- (h) Other provisions and map locations be reconsidered on the basis of recent local experience, modern planning concepts, and professional advice.

Subdivision Regulations

Subdivision regulations are very important to the Land Use, Thoroughfare, and Open Space Plan for several reasons. First, they ensure high quality in the design and improvements in new residential neighborhoods. Second, they act as a supplement to the zoning ordinance in controlling special problems such as development in the flood plains. Third, subdivision regulations provide for adequate rights-of-way for thoroughfares, as proposed in the Thoroughfare Plan, and reservations of appropriate sites for neighborhood parks.

Subdivision regulations establish standards, guidelines, procedures, and guarantees which control the subdivision of large parcels (i.e. farms) into small parcels (i.e. residential lots). They include detailed required improvements, such as for streets, sewers, and drainage, as well as design standards, such as for street alignments and grades, lots, and blocks. They also include an improvement guarantee - to require the completion of specified improvements or to insure their completion within a reasonable time by bond agreement.

The City of Wilmington presently has subdivision regulations which have evolved over a number of years of progressive improvements. With the completion of the Plan, it is recommended that the regulations be thoroughly reviewed and that suggestions for a comprehensive revision be seriously considered. In such a revision process it is suggested that special attention be given to the provisions for extra-territorial jurisdiction of the regulations.

To be more specific, it is suggested that the City clearly state that they are exercising this option, to enforce the City's subdivision regulations outside the City boundaries, up to 3 miles out from the City boundaries. It is suggested that all City street, utility and similar specifications be applied to all areas proposed on the Plan map as single-family residential, multi-family residential, commercial, industrial, and any other category except "scattered residential and agricultural". It is suggested that the City adopt some type of special provisions or procedures for regarding the areas on the Plan map proposed for "scattered residential and agricultural". It is further suggested that all areas outside the "scattered residential and agricultural" be released from the City's subdivision regulation standards and be required to meet Clinton County subdivision regulation standards.

Regarding the special provisions or procedures for areas on the Plan map proposed for "scattered residential and agricultural", one of several possibilities might be appropriate. One alternative might be to establish a separate set of standards and specifications which are more strict than the County's but less strict than the City's. A second alternative might be to establish a separate set of standards and specifications which are flexible, based on the proposed density and/or lot widths. In any of these three approaches, it is recommended that the City include provisions for review and enforcement of guidelines and standards for thoroughfares and open space. It is also recommended that provisions be placed in the subdivision regulations to allow and encourage flexibility through planned unit developments, both in the City and in the City's extra-territorial jurisdiction.

Capital Improvements Programming

Capital improvements programming is primarily a management tool to assist a community in achieving a coordinated and orderly program for making needed capital improvements. As such, it is an essential in implementing the recommendations of the Plan, especially for thoroughfare and park recommendations. Without

such a program, most communities proceed on an emergency or "crisis" approach. Then they have little time to consider carefully a proper location, alternative sources of funding, such as federal or state aid, or the most efficient building or acquisition techniques. Likewise, they have little time or "ammunition" to build up local understanding needed to pass critical bond issues or building levies.

A capital improvements program (CIP) is a schedule of public physical improvements proposed for a period of several years. Consideration is given, among other things, to priorities of need and to the financial capabilities of the community. The time period is usually 5 or 6 years, long enough to allow careful planning but sufficiently short to address the most immediate needs. Typically, a CIP includes a detailed list of all of the planned capital improvements, estimated costs, projected time for beginning construction, or acquisition, and anticipated or possible sources of financing.

Financing and carrying out a progressive CIP in Wilmington is essential not only to implementation of the Land Use, Thoroughfare and Open Space Plan but to the continued and increased prosperity and happiness of its residents and businesses. New and expanded businesses need new and expanded water and sewer lines, streets and thoroughfares, fire protection facilities, and similar improvements. A continued and increasing level of citizen happiness and prosperity depends on an increasing level of education facilities and programs, library facilities and services, parks, multi-purpose centers, and other improvements. Lack of such improvements is discouraging to private development. It encourages out-migration. The state and the nation are moving ahead rapidly. Wilmington must do so too.

Timing (Staging)

Implementation of the Land Use, Thoroughfare and Open Space Plan depends on timing or staging of development patterns so that capital improvements and other supporting activities can be programmed along with, or in advance of, growth needs. In other words, it is necessary to have some idea of how much development and what type of development to plan for in the first 7 or 8 years of the plan as opposed to the later years.

The preparation of timing or staging guidelines depends on many factors, several of which are difficult to predict. For example, it depends not only on existing development trends and the City's zoning and capital improvement policies, but it also depends on such unpredictable factors as the interest of land owners adjacent to the City to make their land available for development, fluctuations in national economic conditions affecting housing, business and industrial plant construction, and the availability

of financing, including federal and state grants and loans, for major capital improvements.

It is necessary, therefore, to consider any guidelines on timing or staging as fairly tentative and subject to major changes. The following map proposes an initial set of timing guidelines, based on information gathered through the preparation of the Land Use, Thoroughfare and Open Space Plan. It is recommended that these guidelines be revised and detailed periodically as appropriate (see discussion on Evaluation).

Coordination

It is recommended that the role and responsibility of the Wilmington City Planning Commission be continued and expanded to include review of all land use, thoroughfare, and open space planning and implementation activities in the Wilmington planning area, especially including capital improvements programming, zoning, and subdivision regulations, the latter extending beyond the City limits. Close cooperation should be encouraged between the City and Union Township for planning and plan implementation. The City Planning Commission should have continued support and assistance from the City Administration.

It is also recommended that the City support and actively participate in the Clinton County Regional Planning Commission for guidance in the coordination of land use, thoroughfare and open space planning and implementation activities, especially between nearby townships within the area, and for technical assistance.

Evaluation

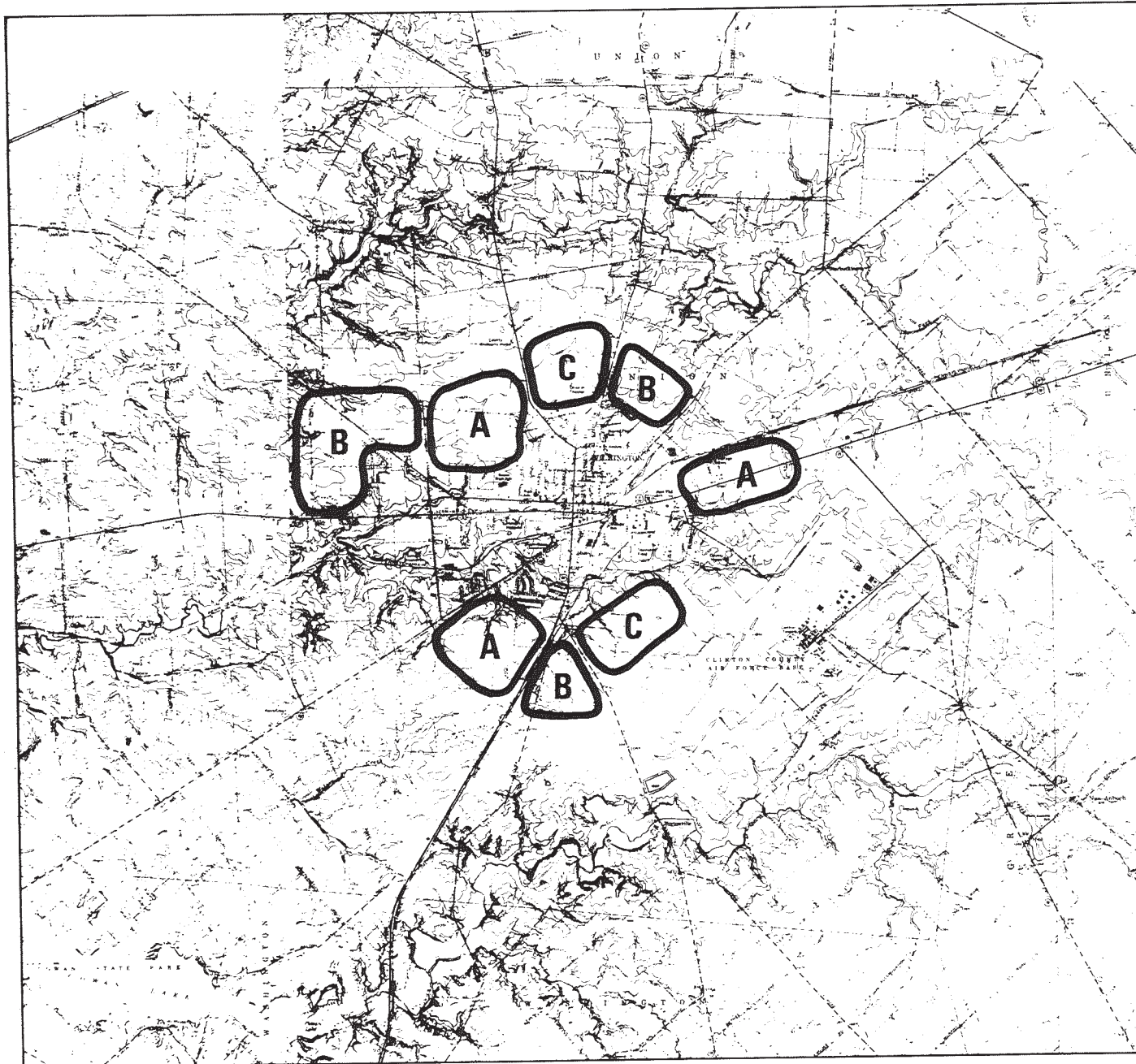
It is a requirement of the Community Development Act of 1974 that in order to be eligible for additional "701" funds in subsequent years a community or county must establish and document a procedure that requires public officials to review the land use plan at least once every two years. The review must include an evaluation of plans to determine: (1) their adequacy in reflecting present realities; (2) the need to update or change sections; (3) if goals and objectives are being met as described in the plan.

The following procedure is recommended to meet the above requirement.

SUGGESTED EVALUATION PROGRAM

- Every Two Years -

1. Submit a notice to the local newspaper describing the intentions of the City Planning Commission to review the Land Use, Thoroughfare and Open Space Plan for Wilmington and the surrounding area, setting a date for a public hearing on the review of the Plan, and inviting public comments and suggestions on the adequacy of the Plan and current implementation programs.
 2. Request a brief report from the City Administration on the progress of implementation activities directed toward or related to the goals and policies of the Plan. Such report might include descriptions (by type and location) of building permits issued, zoning amendments, variances and other changes, subdivision plat reviews, annexations, major capital improvement projects, federal grant applications, and similar activities as they would relate to Plan implementation.
 3. Request a brief letter or report from the RPC regarding changes in countywide land use and community development trends, opportunities, state and national goals, laws, programs, and similar factors.
 4. Conduct the announced public meeting and any necessary working sessions prior to or following the public meeting. Make public the results of the above reports. Answer questions from the public and listen to and record their comments and suggestions.
 5. Prepare a brief report summarizing the conclusions of the City Planning Commission as to the current adequacy of the Land Use, Thoroughfare and Open Space Plan, the adequacy of current implementation programs and timing guidelines, and any recommendations for improvement. Submit this report to the Wilmington City Council and make copies available for the public.
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GENERAL GUIDELINES FOR DEVELOPMENT TIMING

APPROXIMATELY

A	1978 - 1985
B	1986 - 1993
C	1994 - 2000

Note: Subject to changing development trends and opportunities.

**CITY OF WILMINGTON, OHIO
PLANNING AREA**

PLANNING CONSULTANT:
HURLEY, SCHNAUFER & ASSOCIATES
COLUMBUS, OHIO



APPENDIX

ENVIRONMENTAL AND HISTORIC PRESERVATION ASSESSMENT

Environmental Assessment

According to the Ohio DECD Program Administration Guide for FY 1978 Comprehensive Planning Assistance, planning activities supported by the 701 Comprehensive Planning Assistance program shall be conducted in full accord with the National Environmental Policy Act (NEPA) of 1969 (PL 91-190), and an environmental impact statement must be prepared if 701 assisted activities will result in plans or policies for development.

In general, it should be stated that the Wilmington Land Use, Thoroughfare and Open Space Plan is oriented towards general goals and policies which do not set forth specific plans for development. However, these general goals and policies have been prepared with strong consideration to the natural and man-made environment and it is appropriate to review the relationship. The DECD format is followed.

- (1) The environmental impact of the proposed plans or policies, if they are implemented.
 - (a) The proposed Plan will provide residential, commercial, industrial, and open spaces and thoroughfares ample for a planning area population increase of at least 6,800 persons, with optional locations for additional growth if needed.
 - (b) The proposed Plan will encourage a balanced growth of various land use types and open space organized into large neighborhoods, coordinated with the needs for thoroughfares and parks.
 - (c) The proposed plan will minimize the amount of land converted from agricultural and other open space uses and will organize the staging of such conversions in an orderly manner.
 - (d) The proposed plan will retain, enhance and build upon the existing pattern of land use and neighborhood development.
 - (e) The proposed plan will preserve the Lytle Creek flood plain as open space.
- (2) Any adverse environmental effects which cannot be avoided should the proposed plans or policies be implemented.

None.

- (3) Alternatives to the proposed plans or policies.
- (a) No plans or coordinated strategy and guidelines for development.
 - (b) Strong limitations on the growth rate and amount of land use development, or limitations on specific types of land use development.
 - (c) A pattern of land use development which supports and encourages the widespread scatteration of land use types in small parcels; "strip" patterns of development; or other patterns of location.
- (4) The relationship under the proposed plans or policies, between short-term uses of the environment and the maintenance and enhancement of long-term productivity.
- (a) All proposed policies and plans have been prepared in accord with an extensive inventory of the natural and man-made environment, including such elements as existing land use, natural features, transportation, utilities, and community facilities. All proposed plans and policies are intended to benefit the maintenance and enhancement of long-term productivity of the environment.
- (5) Any irreversible or irretrievable commitments of resources involved if the proposed plans or policies are implemented.
- None.
- (6) Applicable controls for environmental protection and enhancement.
- (a) The City of Wilmington already is implementing a strong program of controls for environmental protection and enhancement, including zoning, subdivision regulations, and a building code.
 - (b) It is recommended that the City clarify the jurisdiction of its subdivision regulations in the surrounding 3 mile area outside the City limits, and that the City amend its zoning ordinance to include preservation of the Lytle Creek flood plain as open space.

Historic Preservation Assessment

According to the National Register of Historic Places, February 7, 1978, there is one historic place listed for Wilmington, Ohio:

COLLEGE HALL, WILMINGTON COLLEGE
East of College Street between Douglas St. and Fife Ave.
on Wilmington College campus (4-23-73)

Two additional places are listed for the Wilmington vicinity; however, both were determined to be well outside the planning area of concern. They are: Cowan Creek Circular Enclosure (S.W. of Wilmington), and Keiter Mound (N. of Wilmington).

In general, it should be stated that the Wilmington Land Use, Thoroughfare and Open Space Plan is oriented towards general goals and policies which do not set forth specific plans for specific sites. Therefore, the impact of the Plans on existing historic sites or places is difficult to analyze. However, in keeping with current land use planning guidelines, the following findings are set forth.

(1) The impact of the proposed plans or policies, if they are implemented:

- (a) The Plan will promote more stable neighborhoods and a decrease in land use conflicts. Historic places will have a better opportunity and environment for preservation.
- (b) The Plans will promote a stronger economic base and a more efficient pattern for new land use development, for greater prosperity to local citizens. Again, historic places will have a better opportunity and environment for preservation.
- (c) The Plans will provide a coordinated framework for community improvement programs with widespread citizen participation, including programs for historic preservation.

(2) Any adverse impacts which cannot be avoided should the proposed plans or policies be implemented.

None.

(3) Alternatives to the proposed plan or policies:

- (a) No plans, with the probable result of scatteration of new development and lack of stability in existing developed neighborhoods.
- (b) Plans for the rapid development of the City by all types of urban and suburban development. This would place a huge demand on governmental finances and would result in a loss of the community - scale amenities of the area.
- (c) Plans which attempted to prevent most any new urban or suburban types of land use development and to preserve most all undeveloped lands for farming or forestry. This would have the probable result of a declining population, declining job opportunities, declining prosperity, and citizen dissatisfaction.

- (4) The impact of proposed plans and policies on the long-term maintenance and enhancement of National Register properties:

A better opportunity and environment for historic preservation.

- (5) Appropriate controls or programs for conserving and enhancing historic properties:

- (a) Local zoning
- (b) Capital improvements programming
- (c) Community development block grant programs
- (d) Historic preservation programs (public acquisition, restoration, publicity, maintenance, etc.)

APPENDIX B

FAIR HOUSING ASSESSMENT

Fair housing considerations and responsibilities are becoming increasingly more important in meeting the national goals of our country. As an example, Title VIII of the Civil Rights Act of 1968, as amended, provides for fair housing throughout the United States. Executive Order 11063 directs the U.S. Department of Housing and Urban Development to take all action necessary and appropriate to prevent discrimination in housing and related facilities provided with Federal financial assistance and in the lending practices with respect to residential property and related facilities of lending institutions, insofar as such practices relate to loans insured or guaranteed by the Federal government.

By executing a certification of assurance for Title VIII and Executive Order 11063, as required under certain federal programs, a community commits itself to promote maximum choice within the community's total housing supply, lessen racial, ethnic, and economic concentrations, and facilitate desegregation and racially inclusive patterns of occupancy and use of public facilities. In keeping with these responsibilities, the Wilmington Land Use, Thoroughfare, and Open Space Plan has been prepared with due consideration to the goals of fair housing.

There are several aspects of the Plan which can be pointed out as promoting maximum choice within the community's total housing supply, and meeting related concerns. First, the recommended pattern of land use development places strong emphasis on the variety of locations and types of housing opportunities throughout the City and into the surrounding areas. At least 20 locations are identified for multi-family housing (and/or mobile home parks), with several in each quadrant of the community both in the older areas and the newly developing fringes. Two additional locations are identified as "optional development areas" specifically encouraging planned unit developments with innovative housing or development types and patterns. The pattern of single-family residential land use favors growth in all directions around the City, generally in large neighborhood patterns conducive to a variety of housing densities and costs.

Second, the recommended pattern of thoroughfares, parks, and other public facilities supports a balance and variety of development and housing opportunities in all parts of the community. The proposed thoroughfare system does not favor any one portion of the urban area and promotes convenient

accessibility to all neighborhoods. New park locations are recommended on all sides of the City and are generally situated close to both older and newer areas of development. Although no new school sites are proposed, the Plan recommends "that the community continue to monitor enrollment trends and be aware of changing needs or attitudes towards neighborhood schools".

Third, the Plan recognizes that the implementation of the land use, thoroughfare and open space guidelines will depend on many important decisions regarding zoning, subdivision regulations, capital improvements programming, and similar tools or programs. The Plan specifically identifies suggestions for possible revisions to the existing City zoning ordinance, including the following:

- * The existing zoning map be adjusted to more closely reflect the Land Use Plan map, especially with regard to existing incompatible uses in residential neighborhoods.
- * Residential district regulations and/or locations be revised so that large parts of the older, predominantly single-family neighborhoods do not allow multi-family dwellings at high densities, at least not without careful review.
- * Planned unit development be encouraged.

APPENDIX C

BIKEWAY PLAN

The need for local bikeways is recognized in many cities as an important aspect of planning for both transportation facilities and recreation. Although detailed planning for bikeways was not included as an element in the preparation of the Land Use, Thoroughfare, and Open Space Plan for Wilmington, a local citizens group, the Wilmington Bikeway Committee, has prepared a Bikeway Plan for Wilmington which should be recognized as a major contribution towards planning for the City's future.

It is explained by the Bikeway Committee that 38% of the population of Wilmington is under 18 years of age, suggesting a high degree of bicycle usage, without excluding riders over age 18. According to the March, 1973, Miami Valley Regional Bikeway Plan: "In Ohio, the currently estimated 2.5 to 3 million bicycle riders will multiply to 4.5 to 5 million by 1978."

According to the Bikeway Committee, transportation bikeways should be established connecting specific destinations where major activity centers draw bicycle traffic, to provide safe alternatives to automobile transportation. Destinations identified by the Committee include:

- Wilmington Central Business District
- Hermann Court - Family YMCA
- Denver-Williams Memorial Park
- Clinton County Swim Club
- Wilmington Public Library
- Wilmington College
- Wilmington Public Schools
 - Denver
 - Locust St. Elementary
 - Wilmington High School
 - Holmes Elementary
- Shopping Centers
 - Wilmington Plaza
 - Southridge
- Population Centers
 - Southridge
 - Denver Addition
 - Lakewood
 - North Xenia Ave.
 - Warren Knolls
 - Brownberry Apartments
- Medical complex, west end
- Prairie View - Quaker Apartments

There are five categories of bikeways or bikeway improvements proposed on the Bikeway Plan map connecting these important destinations. Each of the categories needs some explanation. Bikeways as Part of Pedestrian Ways are intended to have a minimum width of 8 feet, 4 feet for pedestrians distinguished by painted stripes from 4 feet or more for bike lanes. The bike lane or path is intended as part of a capital improvement to an existing route, or involving existing pedestrian pavements (e.g., at the College). Bike Lanes as Part of Street Pavements are proposed to have minimum widths of 7 feet for two-way and 4 feet for one-way bike lanes on existing streets in the City with the bike lanes separated from (automobile) driving lanes by painted stripes and pavement reflectors. "BIKES ONLY" should be painted in the lanes, and appropriate signs should be provided at crossings.

Bike Lanes or Paths on State Routes are proposed to have 6 foot widths for one-way or 8 foot widths for two-way bicycle routes, plus a 2 foot divider bordered by painted stripes separating the bikeway from driving lanes, again with signs and markings as above. Bike Lanes or Paths with New Construction are intended to be flexible with design criteria depending on financing and nature of construction. On proposed arterials, the bike lanes are intended to be separated from driving lanes by a physical barrier. Several of the routes identified in this category are proposed as the responsibility of developers of new subdivisions along new collector streets, or in at least one case a bike path only (unrelated to street right-of-way). Critical Crossings - Signs or Signals Needed are proposed at high volume intersections without existing signal lights. "YIELD FOR BIKE" signs and pavement markings, and perhaps flashing yellow lights, should be provided.

It is recommended by the Bikeway Committee that long-range bikeway programming, like long-range plans for thoroughfare construction, should adhere to the comprehensive plan now being adopted. The Committee asks that as the Wilmington Planning Commission reviews capital improvements as part of their subdivision review process, it should require that bikeways be included according to the Wilmington Bikeway Committee's policy of connecting important rider destinations.

BIKEWAY PLAN

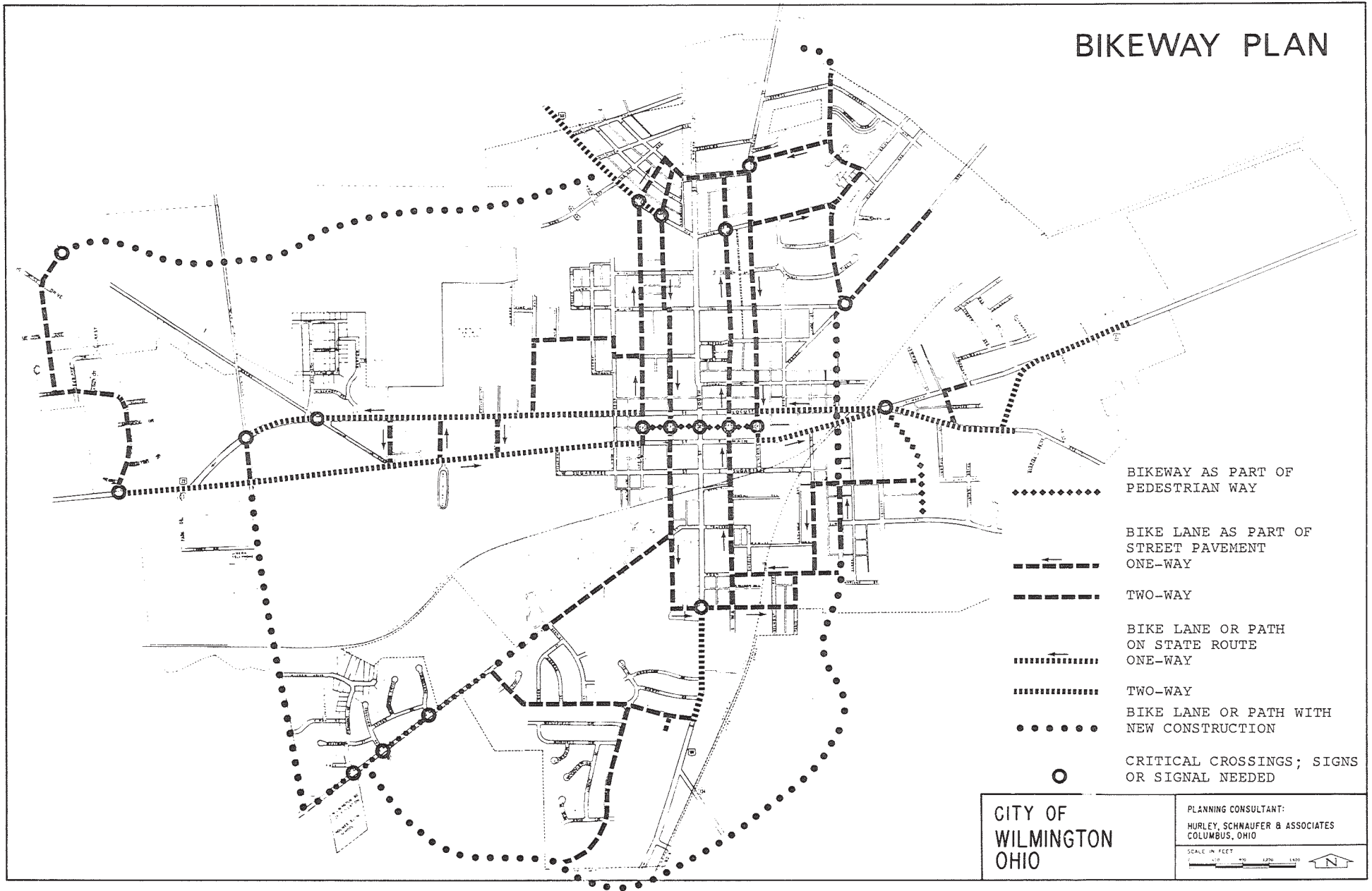


TABLE VI
LAND USE TABULATIONS
CITY OF WILMINGTON, 1953, 1978

	<u>Land Area in Acres</u>		
	<u>1953^(*)</u>	<u>1978</u>	<u>Difference</u>
<u>Residential</u>			
Single Family	465	640	+175
Multi-Family and Mobile Homes	72	80	+8
2-4 Family	-	20	-
Other Multi-Family	-	48	-
Mobile Homes	-	12	-
Total	537	720	+183
<u>Commercial</u>			
Local Business	-	70	-
Prof. Office & Med. Care	-	16	-
Other Commercial	-	102	-
Total	41	188	+147
<u>Industrial</u>			
Total	104	130	+26
<u>Public & Semi-Public</u>			
Parks, Cemeteries	-	117	-
Public Service Fac's.	-	53	-
Other	-	97	-
Total	246	267	+21
<u>TOTAL URBAN LAND USES</u>	928	1305	+377

(*) Omitted where detailed classifications do not correspond with 1978 classifications.

Source: A Master Plan for Wilmington, Ohio, Metropolitan Planners, Inc., 1954; and 1978 Consultant survey and tabulations.

most of this increase attributable to increases in single family residential land use. It is surprising that the residential categories other than single-family do not show a greater amount of increase given the fairly large amount of multi-family construction in the past 10 years or so. The discrepancy appears to be in 2-family dwellings which the 1954 Plan reports to be 51 acres. The 1978 survey only indicates a total of 20 acres for 2-4 family dwellings. Either there has been a large loss in the number of these types of dwellings or there was an error in measurement or calculation.

The general pattern of residential land use shows a strong concentration in and closely surrounding the City of Wilmington with only scattered residential development farther out from the City, generally in strips along the existing roadsides or in small subdivisions. In the unincorporated areas most residential uses are single family homes, with very few multi-family housing. There is a moderate number of mobile homes, including 4 or 5 sizable mobile home parks; and generally the proportion of mobile homes has been increasing, both locally and nationally.

Within Wilmington, most single-family residential land use is organized into moderate size neighborhoods consisting of one or more subdivisions. Some of the newer neighborhoods are fairly well defined and are free from the nuisances of incompatible development. However, in other areas, especially in the older areas of the City, residential neighborhoods are bisected by major streets and contain or are bordered by higher density uses.

Two, three or four family residential land use is scattered in small groupings or individual sites throughout the City. Although larger multi-family residential uses are generally more concentrated, but they are also located somewhat at random. Most are located adjacent to a major street. There is one moderately large mobile home park in the City which is on the far west side. There are no mobile homes on individual sites.

Commercial - Commercial land use has increased greatly in the past 25 years, by over 350%, in Wilmington. No doubt some of this increase as tabulated may reflect a difference in survey interpretations, but the statistics reflect a nationwide trend towards larger commercial sites in suburban locations. Larger sites are needed not only for shopping centers, but for drive-in movies, drive-in banks, drive-in restaurants, motor vehicle sales, and other types of businesses. This is not to say that downtown business districts are obsolete. Rather it means

that the downtown business districts may need to concentrate their appeal to a number of small businesses which benefit in their association, rather than being concerned about the larger businesses seeking more space elsewhere.

There is very little commercial development outside the City limits, except perhaps for some businesses just across the corporation line. The only other significant concentration is at the intersection of S.R. 73 and U.S. 22 east of the City.

Inside Wilmington, commercial development has a strong concentration in the downtown and at two shopping centers, one on the east side and one on the south side. In addition there are a large number of commercial uses along the major streets, generally just adjacent to the central business district or out near the suburban fringes. Fortunately, significant commercial development has not been allowed to locate along the main streets in the older established residential areas. There are some scattered locations of small commercial development on minor streets primarily in the older residential neighborhoods.

Industrial - Industrial land use has increased by only 26 acres in the past 25 years according to the land use tabulations, but these tabulations do not include the approximately 100 acres of industrial land use at the Industrial Airpark. When included in the tabulations, this results in an estimated increase of over 100%. Industrial land use, like commercial land uses, is increasing rapidly as more industries look for large sites with ample space for one-floor operations, off-street parking, and attractive landscaping.

There is little industrial development outside the City of Wilmington with the one major exception of the Industrial Airpark. The other exceptions are several small industrial land uses south of Wilmington along or behind S.R. 68, and a fairly new industrial plant on Starbuck Road east of Wilmington (at the railroad).

Inside the City, most industries seem to be in 1 of 3 general locations. One of these is on the west side of the City along Nelson Avenue. A second location is along the Chessie Railroad on the southeast side of the downtown, and a third is along the railroad on the east or northeast side of the City. The first and last of these three have considerable room for additional industrial development on vacant land in the vicinity. The location just southeast of the downtown is closely surrounded by residential and business development and appears to be overcrowded.

Much of the credit for the recent new industrial development in the Wilmington planning area is due to the Wilmington Community Improvement Corporation (C.I.C.). While previously involved in some of the new industrial development on the west side of the City, the C.I.C. has recently been active in the conversion of the abandoned Air Force Base into an industrial park with air freight service, as well as the additional utilization of the Base for educational purposes. Eleven new industries have been established in the Industrial Airpark. The C.I.C. has completed a plan for additional development involving a total of 827 acres proposed for industrial use, with a total employment of more than 7000 employees.

Public and Semi-Public - Public and semi-public land uses are discussed in a later section. It should be noted here that total land use acreage has increased only a small amount in the City of Wilmington because most large new uses have been located outside the City (e.g., the new vocational and technical education facilities at the airpark). Most public and semi-public land uses in the City and surrounding area not only provide important services to local residents, but they are valuable for their attractive architecture, open space, and landscaping. Their locations provide an important part of the land use pattern.

Land Use Projections

Land use projections are made based on the population projections in Table VI, and estimates and calculations by the Consultant. From Table IV it was assumed that population would increase at the rate described in Series C, that is to a total of 16,857 by the year 2000. Although at present it seems to be increasing more in line with Series B projections, the next highest series was chosen to allow for contingencies in meeting the future needs.

From Table VI, land use rates were calculated in terms of acres per 100 population for 1953 (population estimated at 7800) and for 1978 (population estimated at 11,100), with certain adjustments made to correct discrepancies. These adjustments included multi-family residential land use, which was adjusted lower in 1953 to account primarily for the unexpected decline in 2-family land use acreage; and industrial land use, which was adjusted higher in 1978 to reflect the increase in industrial land use just outside the City limits (i.e., the Industrial Airpark).

Additional judgement was used in projecting these rates of land use forward to the year 2000. For example, single family

TABLE VII
LAND USE PROJECTIONS
CITY OF WILMINGTON, 1978-2000

<u>Year</u>	<u>Single-Fam. Resid.</u>		<u>Multi-Fam. Resid.</u>	
	<u>Rate (*)</u>	<u>Acreage</u>	<u>Rate (*) (1)</u>	<u>Acreage</u>
1953	6.00	465	.45	35
1978	5.80	640	.61	68
1980	6.00	714	.62	74
1985	6.25	812	.67	87
1990	6.50	923	.71	101
1995	6.75	1046	.76	118
2000	7.00	1183	.80	135

<u>Year</u>	<u>Commercial</u>		<u>Industrial</u>	
	<u>Rate (*)</u>	<u>Acreage</u>	<u>Rate (*) (1)</u>	<u>Acreage</u>
1953	.53	41	1.33	104
1978	1.69	188	2.07	230
1980	1.75	208	2.15	256
1985	1.95	254	2.30	299
1990	2.10	298	2.50	355
1995	2.30	357	2.65	411
2000	2.50	423	2.80	473

(*) Acres per 100 population, Using population projection Series C from Table IV.

(1) Adjusted in 1953 or 1978; see text.

Source: Table IV, Table VI, and Consultant estimates and Calculations.

residential was increased from 5.80 acres per 100 persons in 1978 to 7.00 acres to reflect known trends toward lower density single-family residential development. The other land use rates were projected forward generally following the measured trends (with adjustments) although the rates of increase were modified slightly to "moderate" the outcome.

The results, as presented in Table VII indicate a significant increase in land use development in the Wilmington area which should be used as guidelines to the land use planning proposals in later sections. It should be noted that no land use projections are made for public and semi-public facilities. These should be planned on the individual basis of need and opportunity.

SECTION E EXISTING THOROUGHFARES

Existing thoroughfares in the City of Wilmington and surrounding areas are meant to include the major city streets, township roads, county roads, and state and federal highways which generally carry the heavier loads of traffic. Thoroughfares also include moderate size streets which serve as the major entrances or exists to large residential neighborhoods. Thoroughfares do not include the minor residential, business, and rural streets and roads which have the primary purpose of providing access to individual properties.

Unfortunately, in many cities most streets were traditionally designed only to serve as minor residential or business streets. Then as the City grew much larger, and perhaps even more importantly as the average use of motor vehicles increased dramatically, some of these streets were needed to serve much heavier volumes of traffic. Certain local access streets began being used as through streets. This leaves most cities with two major problems in thoroughfare planning: one, how to redesign or improve certain existing local streets to meet their new needs (or how to relieve them of their traffic demands); and two, how to locate and design thoroughfares in the newly developing areas of the community which should be able to meet the future traffic demands of these neighborhoods. Growth and development of the City depend on solutions to these two problems.

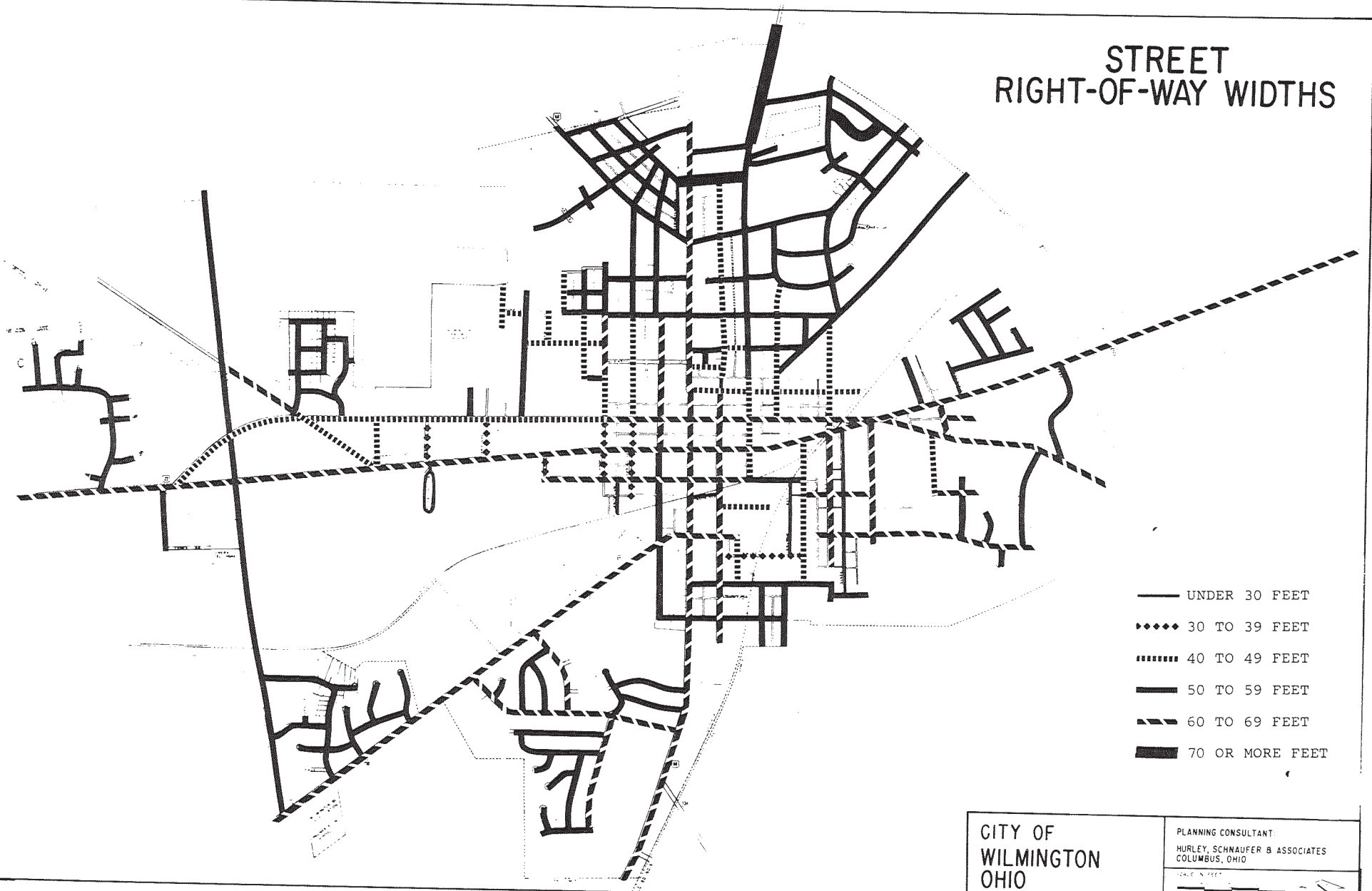
In this section, an inventory is provided of the existing local street and highway system in the planning area, including such factors as existing right-of-way widths, pavement widths, traffic volumes, and existing plans for major improvements. Primary sources of information were the City of Wilmington Service Department and the District 8 office of the Ohio Department of Transportation. The information presented on the following pages can be used as a general planning base for future improvements.

Local Streets

Local streets in Wilmington are shown on the City base map. Rights-of-way and pavement widths are shown on the special maps on the following pages.

Right-of-way is the publically owned land through which the actual roadways are constructed. They also frequently include land for water lines, sewer lines, gas lines, electric and

STREET RIGHT-OF-WAY WIDTHS



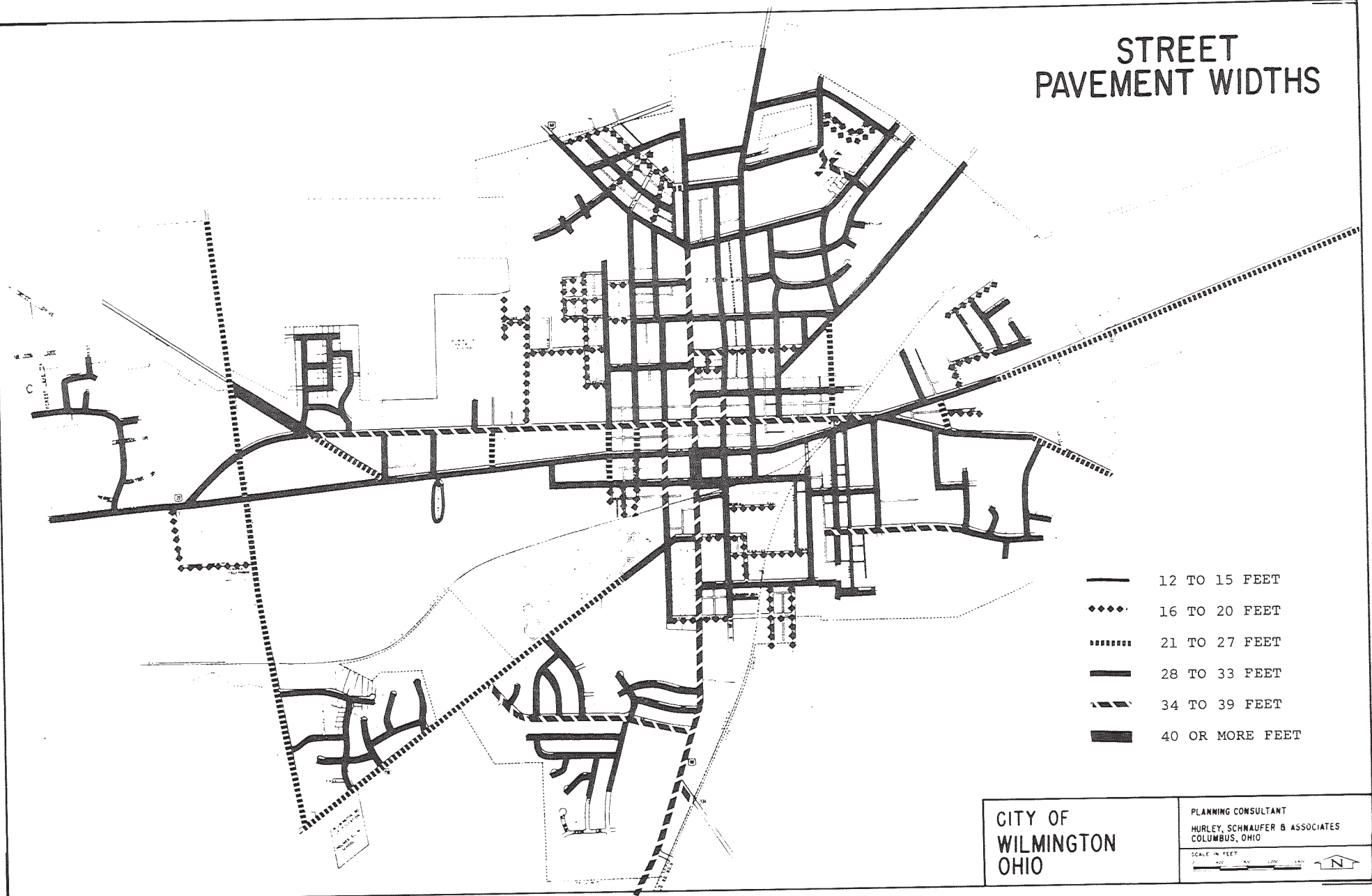
- UNDER 30 FEET
- 30 TO 39 FEET
- 40 TO 49 FEET
- 50 TO 59 FEET
- 60 TO 69 FEET
- 70 OR MORE FEET

CITY OF
WILMINGTON
OHIO

PLANNING CONSULTANT:
HURLEY, SCHNAUFER & ASSOCIATES
COLUMBUS, OHIO

SCALE: 1" = 100'

STREET PAVEMENT WIDTHS



CITY OF
WILMINGTON
OHIO

PLANNING CONSULTANT
HURLEY, SCHNAUFER & ASSOCIATES
COLUMBUS, OHIO

SCALE IN FEET
0 50 100 150
N

telephone lines, and other utilities, and sidewalks. Often they contain trees and other vegetation which are maintained by the adjacent private property owners.

In Wilmington right-of-way widths vary from less than 30 feet to more than 70 feet. The smaller widths are totally inadequate to meet the needs even of smaller residential streets. Larger than average widths are needed where 4 or more traffic lanes are necessary or are likely to be necessary in the future.

Many right-of-way widths in the older areas of Wilmington are 66 feet, including several of the major streets extending out of town. Such rights-of-way are quite adequate in meeting normal traffic situations as well as being a desirable feature for neighborhood living or business operations. Many other rights-of-way are in the 50-59 foot range which is also generally considered adequate for low to normal traffic situations, although too small for thoroughfares. Below 50 feet most rights-of-way are too small for typical needs unless some special circumstance makes such a small width appropriate. Apparent examples of inadequate street right-of-way widths are Clark Street, Hawley Avenue, Hale Street, Farquhar Street, and Applegate.

Certain other streets seem to have inadequate rights-of-way widths given the above average traffic demands placed on them at present. These include Xenia Avenue (S.R. 68), Prairie Avenue, Nelson Avenue, and Locust Street west of Wood. Other streets may also prove to be less than desirable after additional study as will be indicated in the Plan recommendations.

Pavement widths on City streets also vary considerably, ranging from less than 15 feet to more than 40 feet. Normal standards call for a minimum of approximately 10 foot widths for travel lanes (on minor streets) and 7 foot widths for parking lanes. Therefore a street would need to be approximately 27 feet wide to provide one lane of travel in each direction and only one parking lane, or 34 feet wide for parking on both sides. (Recommendations on standards for street right-of-way and pavement widths will be presented in a later section). It is apparent, therefore, that certain streets in Wilmington are inadequate to meet normal needs, e.g., Thorne Avenue, Clinton Street, East Birdsell Street, Columbus Street (west of Oak), Clark Street, Hawley Avenue, Short Street, and others.

Certain other streets seem to have inadequate pavement widths when consideration is given to their above average traffic demands. For example, Rombach Avenue generally is only two lanes wide but carries an enormous amount of traffic (see later

discussion under "State and Federal Highways"). Likewise, Truesdell Street, Nelson Avenue, Wayne Road (between Locust and Main), and perhaps several others should be of concern.

With the establishment of City subdivision regulations and "Standard Plans and Specifications" for streets and other improvements, all new streets in Wilmington must have a minimum right-of-way width of 50 feet and a minimum pavement width of 35 feet (measured from the outside of curbs). Streets with higher expected traffic volumes are required to have wider widths. For example, low volume collector streets are required to have 60 foot right-of-way widths and 41 foot pavement widths. Four lane principal arterials are required to have 90 foot right-of-way widths and 52 foot pavement widths. Other types are also specified. These classifications, standards, and methods of determination are set forth in a set of Standard Drawings(1). The classifications are determined by expected traffic volumes and range from under 2000 vehicles per day to 30,000 vehicles per day.

State and Federal Highways

The Wilmington planning area is served by two federal highways, U.S. 22 (and SR 3) and U.S. 68, and by three State Routes, S.R. 73, S.R. 134, and S.R. 730. All these routes converge on and/or pass through downtown Wilmington. Interstate Route 71 passes by the area only 5 miles distant from Wilmington north via U.S. 68, or 7 miles from Wilmington north-west via S.R. 73. U.S. 22 east from Wilmington, U.S. 68 north and south from Wilmington, and S.R. 73 north west from Wilmington are shown on the Ohio Transportation Department Highway Map as "Principal Through Highways."

The City of Wilmington thus has excellent regional highway accessibility to nearby cities and other attractions, to the major metropolitan areas of Cincinnati, Dayton, and Columbus, and beyond to the regional and national highways of the U.S.

In Table VIII of this report, traffic volume statistics are presented for the state and federal highways in the Wilmington planning area as determined through actual counts during 1974 and 1975. The highest traffic volumes are being experienced along U.S. Route 22, at the junction of Main Street, Locust Street, and Rombach Ave., with an average of more than 16,000 vehicles per day, including almost 10% large commercial vehicles. Other streets and locations with fairly high traffic volumes are Main Street at South Street and Locust Street at South Street (both being one way segments of U.S. 22 through the center of the downtown), South Street from the south side through the center of town, and Wayne Road at the

(1) Standard Drawings, Southwest Ohio Engineering Association, Kraft-Shaw-Weiss & Associates, Consulting Engineers, 1976.

TABLE VIII
TRAFFIC VOLUMES ON
STATE AND FEDERAL HIGHWAYS
WILMINGTON PLANNING AREA, 1974-75

<u>Route and Location</u>	<u>Passenger and Small Commercial Vehicles</u>	<u>Larger Commercial Vehicles</u>	<u>Total Vehicles</u>
U.S. 22 (& S.R. 3) Main St. and Rombach Ave.			
at Twp. Rd. 202	3900	330	4230
at Nelson Ave.	3600	250	3850
at Wayne Rd.	5630	400	6030
at Wood St.*	6820	470	7290
at Mulberry St.*	8000	540	8540
at South St.*	8630	670	9300
at Rombach Ave.*	14600	1480	16080
at Fife Ave.	12640	1280	13920
at Wilmington Plaza	9430	1000	10430
at S.R. 73	5260	720	5980
at Co. Rd. 11	3900	580	4480
U.S. 22 (& S.R. 3) Locust St.			
at Nelson Ave.*	2420	200	2620
at Wayne Rd.*	5270	440	5710
at Wood St.*	6820	480	7300
at Mulberry St.*	8370	520	8890
at South St.*	9260	600	9860
at High St.*	6650	740	7390
U.S. 68 South St. & Xenia Ave.			
at S. Corp. limit	3400	350	3750
at Cuba Pike	3950	500	4450
at S.R. 134	7170	670	7840
at Truesdell St.	7550	640	8190
at Main St.	7550	500	8050
at Xenia Ave.	4980	400	5380
at N. Corp. limit	4600	370	4970

* - One way traffic

TABLE VIII, (con't.)

<u>Route and Location</u>	<u>Passenger and Small Commercial Vehicles</u>	<u>Larger Commercial Vehicles</u>	<u>Total Vehicles</u>
S.R. 73 Wayne Road			
at Twp. Rd. 202	5000	600	5600
at W. Corp. limit	6000	600	6600
at Nelson Ave.	5170	480	5650
at Locust St.	3450	250	3700
S.R. 73 (east side)			
at U.S. 22	5330	470	5800
at Ind. Park	4000	250	4250
S.R. 134 (south side)			
at S. Corp. limit	3200	200	3400
S.R. 134 (north side)			
at N. Corp. limit	1050	40	1090
S.R. 730 Truesdell St.			
at Co. Rd. 37	2100	100	2200
at S.W. Corp. limit	3540	140	3680
at Mulberry St.	2260	110	2370

Source: Traffic Survey Report of the State Highway System -
District 8, Ohio Department of Transportation, 1975.

west corporation line. Other locations on U.S. 22 could also be mentioned as this is generally the heaviest used set of streets in the City.

Analysis of traffic volume statistics should be performed by traffic engineers giving special attention to many other factors involved, such as road widths, presence of on-street parking, traffic signals and their timing, curb-cuts, and hourly traffic breakdowns. However, for the purposes of this study, analysis will be limited to several generalized observations. First, it is estimated that a "design hour traffic volume" (one of the busier hours of the year) is normally about 15% of the average daily traffic volume. Second, it is estimated that the capacity of a 2 lane urban thoroughfare with uninterrupted flow under ideal conditions is about 2000 passenger cars per day using the 15% estimate). However, most thoroughfares do not have "ideal conditions." It is estimated that the capacity of a 2 lane urban thoroughfare, with traffic signals and average conditions, in an intermediate location (i.e., not downtown; not in the suburbs), is about 650 vehicles per hour or 4350 vehicles per day.

Referring back to Table VIII, it is obvious that many of the state and federal routes in Wilmington already are exceeding the estimated capacity of the street. Of course, this does not necessarily present any major problems. It may only point out that during "peak" hours traffic will have to slow down, or wait a few extra minutes at traffic lights. The problem can be alleviated by increasing the green time of the traffic signal for the major street, progressive timing of signals, one-way streets, parking limitations, or other improvements where necessary. However, it should be obvious that when traffic volumes exceed 4,000 or 5,000 vehicles per day, that some thought should be given to long range solutions to meeting the needs; and when traffic volumes begin to double or triple the estimated capacity for peak hours, then the problem needs immediate attention.

Although the above estimates apply to intermediate locations, it should be mentioned that congestion usually occurs first in the downtowns. Special studies are needed to determine the problems and needs in the Wilmington downtown. The one-way street pattern east and west is certainly helping the flow of traffic considerably, but additional improvements may be needed.

A second type of information available on the state and federal highways in Wilmington is the Ohio Transportation Departments functional classifications of local streets and highways.

According to a recent federal highway department publication: "Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide." (1) The report lists 4 basic types of functional systems:

Principal Arterials - divided into two categories, the Interstate System, and other principal arterials. In small urban areas these normally are limited to extensions of rural arterials primarily serving substantial statewide or inter-state travel and interconnecting larger urban areas.

Minor Arterials - should interconnect with and augment the principal arterial system and provide service to trips of moderate length. Ideally they should not penetrate identifiable neighborhoods. Spacing may vary but should normally be not more than one mile in fully developed areas.

Collectors - provides both land access service and traffic circulation within residential neighborhoods, and commercial and industrial areas. Arterials may penetrate residential neighborhoods, distributing and collecting traffic.

Local Streets - serve primarily to provide direct access to abutting land and access to the higher order systems. Service to through traffic movement usually is deliberately discouraged.

The Ohio Department of Transportation, Division 8, has prepared a map showing approved functionally classified routes in the Wilmington Urban Area (this map also shows federal aid routes), dated 1975. The following streets are classified by the functional classification system:

Other Principal Arterials: Wayne Road, Main Street, Locust Street, Rombach Avenue, and South Street - Xenia Avenue.

Minor Arterials: Truesdell Street, Lorish Avenue (South Street to Lincoln Street), and Lincoln Street (north of Lorish Avenue.)

(1) Highway Functional Classification - Concepts, Criteria and Procedures, U.S. Department of Transportation, Federal Highway Administration, July 1974.

Collectors: Randolph Street, South Walnut - Doan - Grant (as connected together and into Locust Street), Fife Avenue, North Wall-Prairie Avenue, and Nelson Road.

A third type of information regarding state and federal highways is the existence of known plans for highway improvements. There is one major improvement presently planned for implementation in the Wilmington area. This is for a project on the east side of Wilmington involving U.S. Route 22 (& S.R. 3). Following is a project description summary as provided in the Draft Environmental Impact Statement:

"The proposed project will be built in two sections. Section I deals primarily with the improvement of the intersection of East Main Street and East Locust Street. Section II involves the rerouting of one-way eastbound traffic from Fife Avenue onto Rombach Avenue and the widening of Rombach Avenue to five lanes from the proposed Fife-Rombach Connector eastward to the city limits. From there the proposed roadway tapers to four lanes and continues at this width to the intersection of USR 22 (Rombach Avenue) and S.R. 73 where Section II ends."⁽¹⁾

The proposed work on Section I, the intersection of East Locust Street and East Main Street, consists of minor widening and improving the geometrics, and drainage. The total length of Section I is approximately 800 feet. Existing Rombach Avenue is to become a one-way westbound street and the existing Fife Avenue is to become a one-way eastbound street. These streets are going through residential areas where no work is planned.

Approximately 2000 feet from the intersection of Rombach and Fife Avenues a Connector is proposed. This Connector will carry three lanes of eastbound traffic back to Rombach Avenue (USR 22). From the junction of the Connector and Rombach Avenue, the project runs along the centerline of Rombach Avenue (USR 22) eastward to its intersection with S.R. 73. The first 2800 feet goes through a commercial area and the road to provide two lanes each direction and one turning lane. The remaining distance, 6200 feet, will be improved from a two-lane road to a four-lane road. The intersection of USR 22 and S.R. 73 will be improved with required turning lanes. The latter stretch of road goes through an area of farmland."⁽²⁾

(1) Later changed to 5 lanes all the way out to S.R. 73.

(2) CLI-22-9.45, City of Wilmington, Clinton County, Ohio, Administrative Action Draft Environmental Impact Statement, U.S. Department of Transportation, Federal Highway Administration and Ohio Department of Transportation.

SECTION F

PUBLIC FACILITIES AND UTILITIES

In this section of the Wilmington planning report the existing community (public) facilities and utilities are described and their locations (or patterns) mapped. Community facilities include: schools, parks and recreation areas, fire and police stations, libraries, hospitals, cemeteries, governmental offices, and similar facilities. Information on location, size, and service area are needed for analyzing the current situation as well as for planning future expansions and new sites. The dominance of schools and parks, both in the number of sites and in the acreage used, and the tendency for these facilities to have a neighborhood orientation, warrants the most detailed attention.

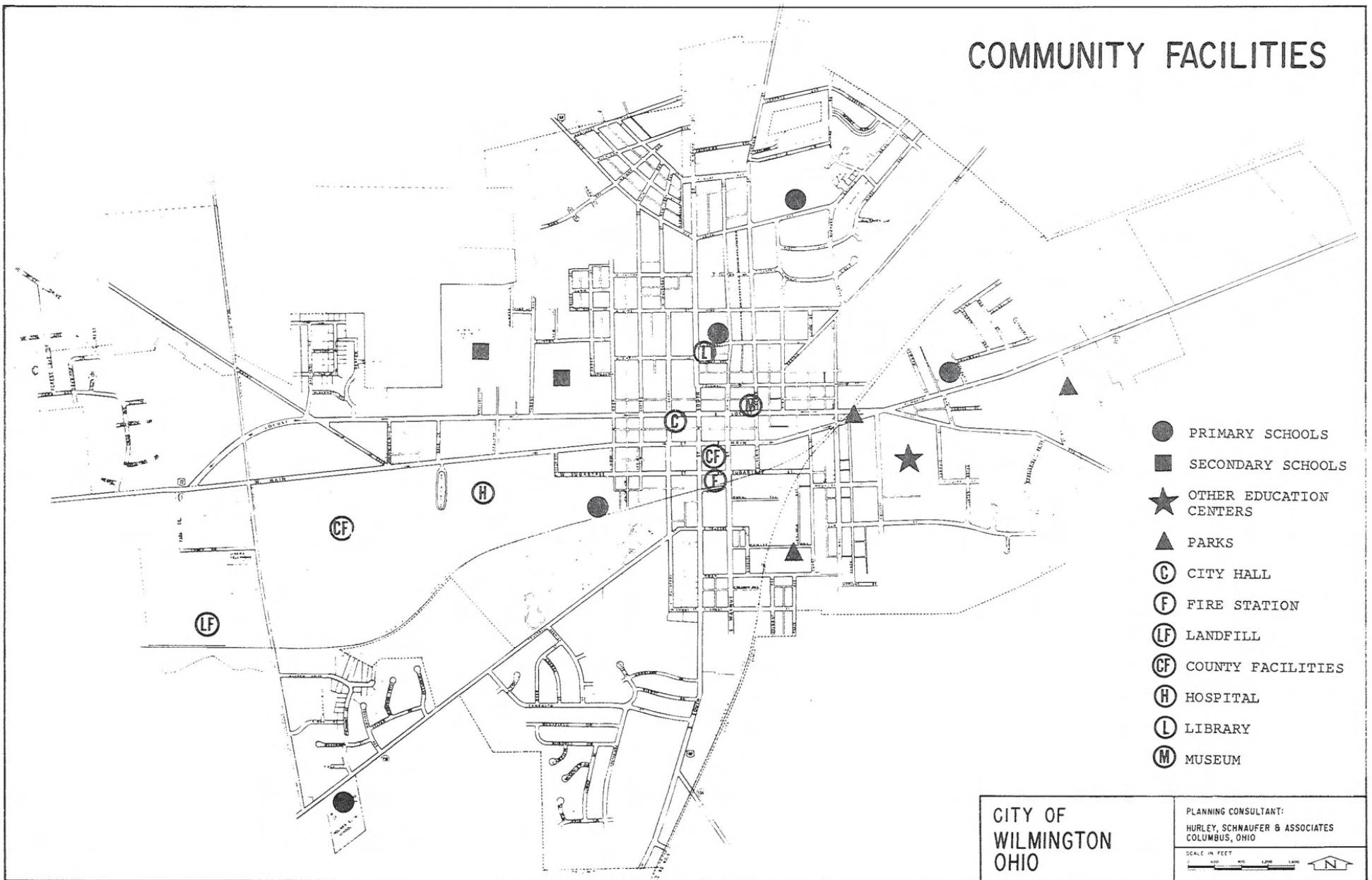
Sewer and water facilities are also examined separately because of their major importance to community growth and development. Without these two utilities, development is limited to a very low density, and some larger commercial uses, industrial plants, and residential subdivisions are impossible. Current plans for public utility improvements and extensions are critical factors in planning for land use patterns of growth.

Schools

Schools can serve a community in a variety of ways. First and foremost the school is an educational institution. However, this usually includes facilities for social and physical development as well as academic instruction. Playgrounds, indoor and outdoor recreation areas and facilities, and auditoriums are often available for public use after school hours. Many times the school and/or school site is a neighborhood or community focal point.

The Wilmington School District serves public schools grades K through 12, has 7 schools in Wilmington, and 1 school (Martinsville elementary) outside the City (and outside the planning area). The school district consists of 180 square miles, including all of the City of Wilmington plus a large surrounding area. For attendance purposes, the City is divided approximately in half by Locust Street and the railroad tracks. Children living north of this line attend Smith Place Elementary, Denver Place Elementary, Locust Street Junior High and the Senior High. Those living south of this line attend East End Elementary, Main Elementary, Holmes Elementary, Locust Street Junior High and the Senior High.

COMMUNITY FACILITIES



CITY OF
WILMINGTON
OHIO

PLANNING CONSULTANT:
HURLEY, SCHNAUFER & ASSOCIATES
COLUMBUS, OHIO

SCALE IN FEET
0 100 200 300 400 500 600 700 800 900 1000

The public schools in Wilmington presently consist of the following (locations are shown on the Community Facilities map):

- One high school - grades 9 through 12 (1126 pupils).
- One middle school - grades 7 and 8 (556 pupils).
- One primary elementary school - Smith Place - grades K-3 (423 pupils).
- One intermediate grade center - Denver Place - grades 4-6 (396 pupils).
- One primary elementary - East End - grades 1 and 2 (233 pupils).
- One primary intermediate elementary - Main - grades 3-5 (271 pupils).
- One intermediate elementary - Holmes - grades 5-6 (187 pupils).

District enrollment has been declining over the past few years due to changing age patterns and birth rates. (See earlier section on population characteristics.) Enrollment in 1970-71 was 4035 compared to 3570 students in 1976-77. Most of the decline has been in the lower grades, e.g., in grades 2 through 6.

Future plans for the Wilmington schools were summarized in a letter from the Superintendent to the Consultant, dated March 26, 1978, as follows:

"As for future plans and needs, we are presently starting a \$2.5 million building program which will provide two equal elementary schools for grades K-6, each accommodating approximately 700 pupils. Our target date for completion is September 1979. There is a possibility that these two buildings, plus the Martinsville School, will be the only elementary schools in operation from that date forward. Plans would be to phase out Smith Place, Main and East End buildings if the pupil population is such that all students can be housed in the Denver Place and Roy E. Holmes buildings. Tentative plans call for selling Smith Place and Main properties and holding the East End property in reserve in case it is needed at a future date, with the possibility of utilizing the building for central office and storage area during the interim period. Future needs have been discussed and it is generally agreed that recreation facilities and athletic fields are among the greatest needs in the foreseeable future. Should the sale of the two aforementioned buildings generate sufficient funds, it is anticipated that these needs could be taken care of in this fashion. There is also needed, additional physical

education facilities at the high school and additional storage space. One other item included in plans for the future is that of the creation and development of a pupil transportation complex for bus maintenance and storage."

The Laurel Oaks Career Development Campus, located on the former Clinton County Air Force Base, is located approximately five miles east of Wilmington and serves as a joint vocational school for the high schools for Clinton, Highland, and Fayette Counties. The enrollment at LOCDC is limited to juniors and seniors and offers a variety of courses to meet the needs of students wanting to gain skills for employment immediately following high school careers.

Southern State College operates a "North Campus" on the former Clinton County Air Force Base east of Wilmington, as well as the "South Campus" in Brown County. Total enrollment is approximately 750 students, the enrollment almost equal at each campus. Southern State was chartered by the Ohio Board of Regents, July 1, 1975, as a state-supported, two-year, general and technical college. Programs offered include arts and sciences, pre-business, pre-education, a wide variety of technology programs such as business management, farm management, library science, social service, and drafting-design, plus adult continuing education. Special features include general education courses at Wilmington College, the Franklin Learning Center, an adult basic education program, and the only college level truck-driver training course in Ohio.

Wilmington College was founded in 1870 by the Religious Society of Friends and is still affiliated with that organization. The campus contains 86 acres on the east side of town. Wilmington College, a four-year liberal arts college, has about 800 students taking courses offered in 21 academic departments.

In a recent interview with the President of the College, additional information was obtained on current problems, needs, and plans. In 1970 Wilmington College reached an enrollment of about 1000 students, 65% of which were from out-of-state. From 1970 to 1975 enrollment declined to only 520 students. Since that time the College has been in the process of redesigning their mission. There has been a new emphasis on career oriented education, including a coop work program. Next year they are starting a continuing education program. There is more emphasis on serving students from the area rather than nationwide. So far the new mission seems to be successful. Enrollment has increased up to 782 students. The goal is to reach an enrollment of 1000, considered to be the full capacity of the college campus and its facilities.

Several other items were discussed with the President. The College owns about 1000 acres of farmland away from the main campus, in several separate locations. Most of this land is an important part of the college agricultural education program, but some smaller parcels, especially those in or closely surrounding the City could be sold for private development. The College has no plans to build any new buildings. They would like to find new ways to make better use of certain facilities they have, for example Herman Court. Although not a specific plan, it was mentioned that the College could use more space for parking close to the heart of the campus, and that one possibility some day might be to purchase the housing on the east side of Ludovic Street.

Parks

The City of Wilmington owns one major park facility, located on the far east side between Rombach Avenue and Fife Avenue, called the J.W. Denver Williams Memorial Park. It is about 30 acres in size and has a wide variety of recreational facilities including 4 lighted ball diamonds, several other ball fields, 4 tennis courts, 1 basketball court, rest rooms, one large shelter house and several small ones, a picnic area, playground apparatus, a scenic lake, open grasslands, off-street parking and a through drive. The park seems to be in very good condition and well maintained.

The City owns several other very small parks, including one lot on Hawley Avenue and one lot at the intersection of East Locust and East Main. The Hawley Avenue lot was dedicated to the City by the Wilmington Jaycees. It is only about one-fifth of an acre in size and contains several pieces of playground equipment. At present, the park is not well maintained, and has little physical separation from neighboring yards. The small parkland at Locust and Main is a narrow triangular lot maintained with attractive landscaping.

The City Recreation Board employs a summer recreation director, playground leaders, and officials for ball games. The City's recreation program is based primarily at the Memorial Park and includes a variety of baseball, horseshoe, tennis and other leagues. Summer supervised play is normally scheduled at some of the public school playgrounds. Limited swimming instruction has been available through a private swim club.

A greenbelt association in Wilmington has provided land for a hiking trail along Lytle Creek generally from Wilmington College to Nelson Avenue. Agreements have been reached with most property owners along this route to allow hiking along the Creek

although ownership has remained in private hands. A "rough" hiking trail has already been established.

Other recreation facilities in the immediate area are the Wilmington College facilities which include an indoor swimming pool, facilities at the vocational school and Southern State, 2 golf courses, 1 country club, 2 swimming clubs, and the County Fairgrounds.

Not far outside the planning area there are several major recreation areas. These include Cowan Lake State Park, 720 acres with boating, swimming beach, camping, cabins, hiking trails, and picnicking -- 7 miles southwest of Wilmington, Rocky Fork State Park -- 15 miles west, and John Bryan State Park -- 30 miles north. A 2830 acre reservoir is being built about 12 miles northwest of Wilmington on Caesar Creek.

Other Community Facilities

Many other community facilities and/or sites should be mentioned.

There are 22 churches located in the City, representing all or most all major denominations and faiths. Most churches are located on attractive sites in or near residential areas. There is one large cemetery in the City, Sugar Grove, with approximately 50 acres of land located on the southwest side of town, plus several small cemeteries generally outside the City but in the planning area.

The Clinton County Court House is located on an attractive site of approximately 3.2 acres in the center of the downtown. The County also has the County Infirmary, a home for the aged and infirm, located on the extension of Fife Avenue, east of the City limits; the county engineer and road maintenance facility adjacent to the Infirmary; the County Fairgrounds; and the Children's Home, one mile north of the City on State Route 68.

Wilmington City Hall is located downtown, as is the Wilmington Fire Station. The City Hall, on Locust Street is an old building in need of repair and modernization, or replacement. The City Hall houses the police department and city jail, as well as courts and administrative offices. The fire station, on Sugartree Street, houses a staff of up to 18 full time firemen, plus a two man emergency squad. Major equipment includes 3 pumpers (plus 1 more on order), 2 emergency squad vehicles, and 2 chief's cars.

The City has a relatively new maintenance and service center located on the southside adjacent to S. Walnut and Short Street, and a sanitary landfill on Nelson Avenue near the Penn Central

railroad line. The site is approximately 18.5 acres in size, and is considered adequate in size for another 15 or 20 years. However, there is a severe shortage of cover material available at this site. An additional source of material must be acquired very soon. It has also been suggested that land surrounding the landfill be acquired or somehow reserved so that it will not be developed. If developed, there could be problems of compatibility with the odors and dust from the landfill.

The Clinton Memorial Hospital is located on Main Street on the City's west side. It has a 155 bed capacity and includes an intensive-care/cardiac-care unit and a physical therapy department as the primary emergency medical care center, as well as general hospital, it generates a large flow of traffic.

The Wilmington Public Library, located on the near north side, has a well-rounded selection of approximately 35,000 volumes plus an additional 17,000 volumes in the bookmobile collection. The library includes a reading room for adults, a children's room, and a room devoted to Ohio History. It has several special collections and offers programs of special activities and services.

Rombach Place, 149 East Locust, is a local museum operated by the Clinton County Historical Society. Rombach Place was formerly the home of General James W. Denver, Representative to Congress, Indian Commissioner, Governor of the Kansas Territory, and Brigadier-General for the Union in the Civil War. Exhibits consist of the Denver collection and of early American antique furnishings, ornaments, costumes, tools, farm implements and household items from pioneer days.

Sewer and Water Facilities

Wilmington presently uses a 20-acre and a 55-acre upground storage reservoir for its municipal water supply with a total reservoir storage capacity of 450 million gallons. Water stored in the reservoirs is pumped from Cowan Creek(1). The City has a lime soda softening, raw water treatment plant with a 2 million gallon per day capacity and a total storage capacity for treated water of 980,000 gallons. Present usage is approximately 1.2 million gallons per day. The first phase of the existing system was constructed in 1946 with major improvements made in 1963 and 1964. Additional improvements are

(1) As further discussed in the Wilmington Facilities Plan: The Southwest Ohio Water Plan lists 2 potential reservoir sites near the Planning Area. The first is northwest of Wilmington on Todd Fork; the second is southwest on Cowan Creek. Tentative plans call for the construction of a regional water treatment and distribution facility using the Caesar Creek Reservoir (being built) as a water supply. Wilmington could be part of this regional system.

expected to be completed between now and 1982.

The existing water distribution system consists primarily of 4", 6", and 8" mains of transite, cast iron, or ductile iron, leading out from the water treatment plant along Wall Street north of Locust (see map). A 500,000 gallon underground storage tank is located at the water treatment plant, and a large storage tower is on Nelson Road, south of Main. A 12 inch water main connects the treatment plant with the reservoirs south of town. Some water lines extend outside the City, for example along Truesdell Street out to Osborn Road, and along Fife Avenue to the industrial airpark. Water service is provided from the airpark north to an industrial development along Washington C.H. Pike. There is a serious need to tie this line back west on Washington C.H. Pike to other City mains.

The City of Wilmington owns and operates the wastewater treatment plant and sanitary sewer system that serves the City (1). Most of the developed areas in the City are served by the system. The system was placed in service in 1937 and was expanded in 1958 and 1963 to a treatment capacity of 2.0 million gallons daily (MGD). The municipal sewage treatment plant is located at the southwest corporation line and discharges into Lytle Creek.

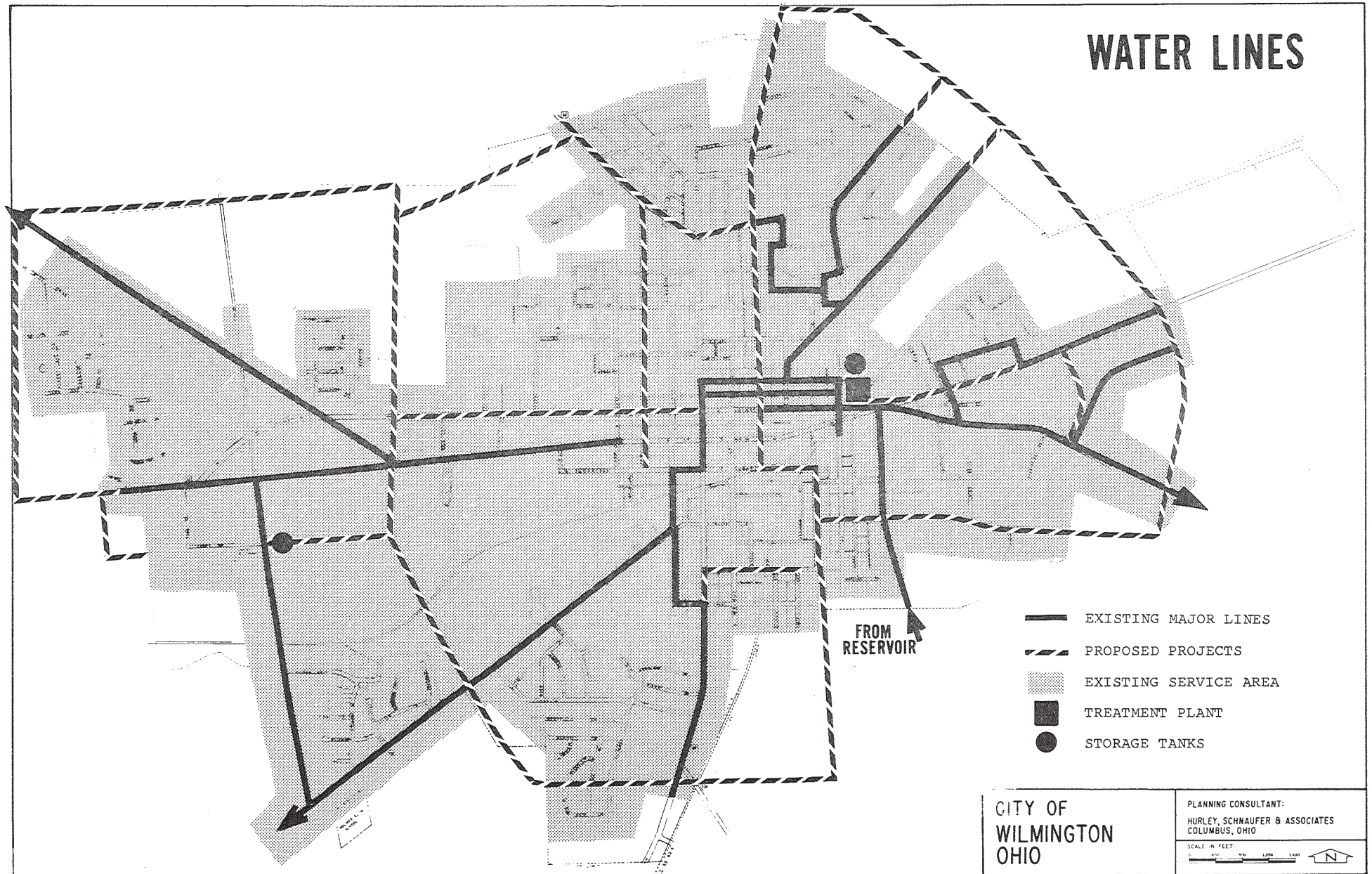
The sanitary sewer system consists of approximately 48 miles of pipe, including force mains (see map). The sewer pipes range in size from 6 to 24 inches in diameter, with 8-inch diameter being the most common. The oldest lines were installed in the 1930's. The service area is generally limited to inside the City limits.

The treatment plant consists of two parallel activated sludge plants preceded by common screening and preaeration. The solids handling units are common to both plants. The first plant was originally designed and constructed for primary treatment around 1937. In 1954 a secondary treatment plant and the common screening and preaeration units were added. A common chlorination chamber was added in 1970.

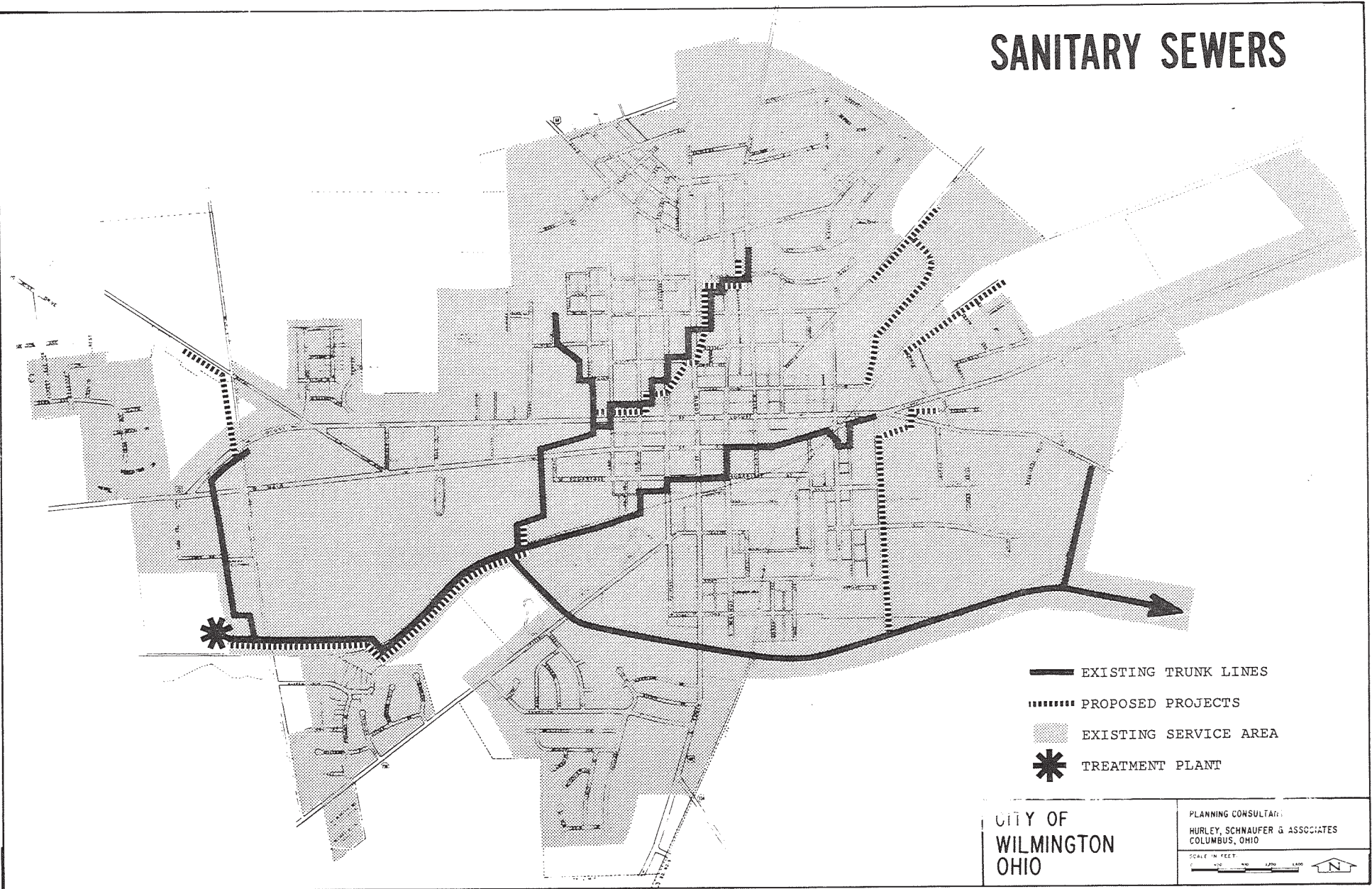
Wilmington is in the process of completing a "Facilities Plan" a study being prepared by a private consultant to determine overall needs of the existing sewage system. Preliminary recommendations call for the construction of 6 new sewers, 4 of which are interceptors, and 2 of which are small collector sewers. The collectors are for the Prairie Avenue and Higgins Street areas. Recommendations also call for the improvement of

(1) See Wilmington Planning Area Facilities Plan.

WATER LINES



SANITARY SEWERS



the treatment plant, both in treatment quality and capacity (to 3 million gallons per day). The Facilities Plan is the first step towards achieving needed improvements, as set forth by EPA regulations and funding programs. The City does not presently meet EPA regulations (as discussed previously under Natural Features) and is operating under an Interim OEPA Permit.

SECTION G

GOALS AND POLICIES

Goals are needed to set directions for plans. Goals are the reasons for trying to make community improvements. By expressing goals, consideration can be given to the long range implications of development needs and desires as well as to the present circumstances and day-to-day decisions. People can talk about what they want for their community or area for the 2, 10, or 25 year future.

Policies are needed to provide a strategy on how the goals should be carried out by the respective local government jurisdictions. Policies provide a framework through which projects can be planned, laws and regulations proposed, programs established, and guidelines and standards set forth to help the community or area achieve its goals.

The following long term goals are based on a Goals Inventory Questionnaire completed by local community leaders. A wide variety of choices were presented on the questionnaire and only those responses are indicated below which received a clear majority of support from all persons who completed the questionnaire.

Short term goals, long term policies, and short term policies, as formulated by the planning consultant have been added in order to provide a more complete program of planning activities. They are also essential in establishing a continuing program of coordination and evaluation as discussed later. Community planning must be considered as a continuing process with periodic review and revisions and continuous efforts of coordination and implementation.

Please note that by "short term" is meant those goals and policies which should be achieved or carried out in a period of approximately 2 years. In order for a planning program to be successful, rather specific target dates should be set and strong efforts made to meet those targets.

LONG TERM GOALS

Land Use:

- A. Encourage New Industrial Development with a Variety of Industrial Types, Especially Light Industry.

- B. Most New Industrial Development Should Locate In or Around the Industrial Airpark.
- C. Most New Commercial Development Should Locate In the Downtown Business District.
- D. Encourage New Commercial Development with a Variety of Commercial Stores and Services, Especially Major Shopping Stores.
- E. Encourage and Retention, Enhancement, and Expansion of Existing Industrial and Commercial Enterprises in Wilmington.
- F. New Residential Development Should Locate on Vacant Land Within the Community, in Redeveloped Older Areas of the City, and In Closely Surrounding Suburban Areas.
- G. Residential Types Which Should Be Most Encouraged Are Single-Family Homes on Moderate Size Lots, and To A Lesser Extent Doubles, Townhouses, and Apartment Projects.
- H. Special Emphasis Should Be Placed On the Redevelopment Of Older Declining Residential Areas in the Community.

Thoroughfares:

- I. Equal Thoroughfare Accessibility Should Be Given to All Parts of the Community Although Special Emphasis Should Be Considered for the Needs of the Central Business District, Outlying Shopping Centers, Cross-Town Connectors, and Loop Roads Bypassing Most of the Urban and Suburban Area.
- J. Existing Major Arterials Should Be Widened and Through Traffic on Minor Streets Should Be Discouraged or Prevented.
- K. Wide Rights-of-Way and Pavements Should Be Provided Along Commercial, Industrial, and Similar Land Use Developments; Cul-de-Sacs Should Be Discouraged.

Open Space:

- L. Open Space Should Be Preserved in the Form of Small, Scattered Sites Throughout the City and Where They Are Unique or Attractive Natural Features.
- M. Locations Which Should Be Considered Include Those Along the Major Streams and Drainage Ways, and/or Adjacent to Existing Schools and Other Community Facilities.

- N. Types of Open Space Which Should Be Most Encouraged Are Public Parks, Neighborhood Playgrounds, and Woodlands.

SHORT TERM GOALS

(*)- First Year) (**) - Second Year)

Land Use:

- A. Provide a Minimum of 100 Acres of Vacant Land Suitable for Immediate Industrial Development, Including at Least Two Alternative Sites. (*)
- B. Establish a Major Downtown Improvement Program. (**)
- C. Encourage the Availability of a Minimum of 100 Acres of Vacant Land Suitable for Predominantly Single-Family Residential Neighborhood Development Within or Adjacent to the City Limits. (*)
- D. Encourage the Availability of a Minimum of 20 Acres of Vacant Land Suitable for Multi-Family Residential Development, Including Several Alternative Sites. (**)
- E. Establish a Program of Existing Neighborhood Preservation and Revitalization. (*)

Thoroughfares:

- F. Complete the Proposed U.S. 22 East Highway Improvement Project. (*)
- G. Initiate Detailed Plans for a U.S. Route 68 Bypass or Other Bypass Routes as Can Be Related to State Needs and Projections. (**)
- H. Construct Local Street Improvements in Coordination with a Program of Existing Neighborhood Preservation and Revitalization. (*) and (**)

Open Space:

- I. Acquire a Large Parcel of Land for a New Community Park on the South, West, or North Side of the City, in Combination with Unique or Attractive Natural Features. (A Minimum of 25 Acres Is Suggested.) (*)
- J. Acquire Moderate Size Parcels of Land (at Least Two) in Existing or Proposed Residential Neighborhoods for Neighborhood Parks and Playgrounds. (A Minimum of 5 Acres in