

COMMUNITY SETTING

Regional Context

The Town of Walpole is located about 19 miles south of Boston and 26 miles north of Providence. U.S. Route 1 and Interstate 95 pass through the southeast edge of Town. State Routes 1A and 27 bisect the Town in opposite directions and intersect in the Town Center. The Franklin-Boston commuter rail line passes through Walpole with a station in the Town Center, and a freight line runs perpendicular to the commuter line.

Walpole has a vital Town Center that provides many retail, medical, financial, and professional services to the residents of Walpole and many of its neighboring towns. It also has both commercial and industrial development along Route 1. East Walpole, South Walpole and Plimptonville constitute significant villages within the Town, and represent distinct components of the Town's character. Walpole is the host Town of the Cedar Junction state correctional facility as well as Norfolk County Agricultural High School, both of which include large open space parcels.

The residential neighborhoods near the Town Center are relatively dense, and help contribute to the Center's vitality. The remainder of the Town still retains much rural character, particularly in the north part of town. This is where rapid development is occurring, however.

The Bay Circuit Trail, currently being pursued by the Bay Circuit Alliance (a private, non-profit organization) passes through Walpole. In fact, the Walpole portion of the trail is virtually complete, and it was dedicated in October, 1995, with an inaugural walk. It provides a connection to Noon Hill Reservation in Medfield and Moose Hill Sanctuary in Sharon. The Walpole portion has the potential to be linked to two rail stops in Walpole. The Trail, which was formerly administered by the Massachusetts Department of Environmental Management, is intended to link parks and open spaces in a semi-circle around Boston from Newbury and Ipswich in the north to Kingston and Duxbury in the south.

Another factor of regional significance is the Metropolitan Area Planning Council's (MAPC) MetroGreen plan. MetroGreen is the Land Resources Protection Element of MetroPlan 2000, the regional development plan for metropolitan Boston. MetroGreen was adopted by MAPC at its May, 1992, meeting. Its four major goals are to preserve and protect critical land resources; to shape the growth of the region; to help preserve and enhance a "sense of place" for the region; and to fulfill the recreational needs of the region's population and to provide access, when appropriate, to the protected open areas. The recommendations of this report are compatible with MetroGreen. It should be noted that Walpole is a member of MAPC, as well as the Three-Rivers Interlocal Council (TRIC) sub-region of MAPC.

The Statewide Comprehensive Outdoor Recreation Plan (SCORP) was last updated in 1988. A new update is currently being prepared. Walpole is included within the Southeastern region of the SCORP.

~~Many of the characteristics discussed above contribute to a desirable quality of life.~~ Therefore, like many of its neighbors, Walpole has seen increased residential growth in recent years.

History

While there are no documented sites of native habitation in Walpole, there is evidence that the productive fishing and hunting grounds at the headwaters of the Neponset River were used by Massachusetts Bay coastal tribes. The rocky uplands and cedar swamps provided a natural buffer between the Neponset tribes on the east and the Wampanoag and Narragansett to the south and west. Artifacts have been found near Plimptonville and Hilltop Farm, and a native village site has been located along the river in South Walpole (Town of Walpole, 1987).

The first European settlers arrived between 1660 and 1670 to live on the high ground between the Neponset River and Spring Brook. They harvested cedar from the cedar swamps, or were subsistence farmers. During the Colonial Period (1676-1776) the population increased to nearly 1000 people, most of whom were engaged in agriculture during the summer and lumbering in the winter. Mills were built on the Neponset and other streams to process local products. Forges and smelters were also constructed to process bog iron. Several two-story central chimney houses and Cape Cod cottages that were built during this period still remain. A lime kiln from this era has also been excavated in West Walpole (Town of Walpole, 1987).

During the Federal Period (1775-1830), the small mills developed into established industries, producing cotton and wool, paper, and Stetson agricultural implements. Villages were created in South Walpole and East Walpole, while the Town center continued to develop (Town of Walpole, 1987).

As railroads developed, commercial and industrial activities grew, as did the population. Trolleys at the turn of the century fostered suburban development (Town of Walpole, 1987), as did the automobile for the remainder of the twentieth century.

Population Characteristics

Population Growth

As shown in Table 1, the Town of Walpole grew rapidly from 1920 to 1970. With the

TABLE 1

WALPOLE POPULATION GROWTH, 1920 TO 1990

<u>Year</u>	<u>Population</u>	<u>Change</u>	<u>% Change</u>	<u>Ave. Annual%</u>
1920	5446	NA	NA	NA
1930	7273	1827	33.55%	2.94%
1940	7443	170	2.35%	0.23%
1950	9109	1666	22.38%	2.04%
1960	14,068	4959	54.44%	4.44%
1970	18,149	4081	29.01%	2.58%
1980	18,859	710	3.91%	0.38%
1990	20,212	1353	7.17%	0.70%

NA= Not Applicable

Source: U.S. Bureau of the Census, various years

TABLE 2

WALPOLE POPULATION GROWTH, 1991 TO 1996

<u>Year</u>	<u>Population</u>	<u>Change</u>	<u>% Change</u>	<u>Ave. Annual%</u>
1991	19,936	NA*	NA*	NA
1992	20,021	85	.43%	NA
1993	20,600	579	2.89%	NA
1994	21,002	402	1.95%	NA
1995	21,762	760	3.62%	NA
1996	21,884	122	.56%	NA
1991-1996		1,948	9.77%	1.88%

NA= Not Applicable

*Not compared with 1990 because figure is from different source.

Source: Walpole Town Clerk, various years

exception of the 1930's, the percentage growth per decade was well into double digits. The biggest growth spurt occurred during the 1950's when the Town grew by 54.44%, an increase of nearly 5000 residents. Another 4081 residents were added in the 1960's for an increase of 29.01%. Thus the Town just about doubled in population between 1950 and 1970.

Growth slowed considerably in the 1970's to just 3.91% for the decade. It picked up in the 1980's, increasing by 7.17% to 20,212 according to the 1990 U.S. Census.

Table 2 illustrates that population growth has increased considerably in the 1990's. The absolute growth of 1948 from 1991 to 1996 is just 114 short of the growth during the entire 20-year period of the 1970's and 1980's. The 9.77% increase from 1991 to 1996 already exceeds the 7.17% increase of the 1980's. The average annual percentage growth of 1.88% during the first half of the 1990's is by far the largest since the 1960's annual average rate of 2.58%.

Density

Changes in density in Walpole is presented in Table 3, while Table 4 compares Walpole's 1990 density with that of the State of Massachusetts, Metropolitan Area Planning Council (MAPC) district of 101 cities and towns, and the MAPC sub-region of 12 communities known as the Three Rivers Interlocal Council (TRIC). As Table 4 illustrates, Walpole's population density is higher than the State as a whole, but substantially (20%) lower than its MAPC sub-region as a whole, and less than half that of the MAPC district as a whole. This attests to the significant open space and rural character that still remains in Walpole.

Table 5 presents the amount of land in various land use categories in 1951, 1971 and 1985 (the most recent data available). It shows that urban land uses increased by 22% from 1971 to 1985. Agricultural land declined by 22%, open land was reduced by 28%, forest land decreased by 9% and wetlands remained relatively stable. Overall, undeveloped (including agricultural) land and recreation land totaled 9553 acres (71% of the total) in 1971. By 1985, it totaled 8704 acres (64% of the total). Even in 1985, 6134 acres, more than 45% of the Town's land area, was listed as forest.

The amount of acreage in agricultural use declined dramatically from 1975 acres to 786 in 1971 and 706 in 1985. This corresponds strongly with the near doubling of the population between 1951 and 1971, and then growing slowly through 1985.

Perhaps the most interesting information from Table 5 is that concerning the amount of land used for residential purposes compared to the growth in population. Table 6 compares the amount of land used for residential purposes in 1951, 1971, and 1985 with the population in those years. The In 1951, a total of 2244 acres was used for the residences of 9510 people. This represents a density on the residential land of 4.24 persons per acre. This overall density on residential land increased to

5.87 in 1971, then declined slightly to 5.10 by 1985.

TABLE 3

OVERALL POPULATION DENSITY IN WALPOLE, 1950-1990

<u>Year</u>	<u>Population</u>	<u>Area</u> ¹	<u>Density</u> ²
1950	9,109	20.53	444
1960	14,068	20.53	685
1970	18,149	20.53	884
1980	18,859	20.53	919
1990	20,212	20.53	985

¹ Square miles ² Persons per square mile

Source: Computed by authors.

TABLE 4

COMPARATIVE 1990 DENSITY, WALPOLE AND VARIOUS REGIONS

	<u>Population</u>	<u>Density</u>
Walpole	20,212	985
Three Rivers Interlocal Council	229,440	1232
Metropolitan Area Planning Council	2,922,934	2082
Massachusetts	6,016,425	726

¹ Persons per square mile

Source: Metropolitan Area Planning Council, 1991

TABLE 5

LAND USE CHANGES IN WALPOLE, 1971 TO 1985 (in acres)

Land Use Category	1951*	1971	1985	% Change, 1971 to 1985
URBAN				
Industrial	107	191	253	33%
Commercial	96	130	206	59%
Multi-Family Res.	--	13	83	518%
Dense Residential	2	8	8	0%
Medium Residential	1239	1906	1968	3%
Light Residential	1003	1176	1676	42%
Transportation	31	90	98	9%
Open and Public	140	142	186	31%
Total Urban	2618	3656	4478	22%
AGRICULTURE				
Intensive	--	639	577	-10%
Extensive	--	115	105	- 8%
Woody Perennial	--	32	24	-26%
Total Agriculture	1975	786	706	-10%
OPEN LANDS	83	696	502	-28%
FOREST	7274	6774	6134	- 9%
RECREATION				
Participation		119	154	29%
Spectator		45	73	62%
Total Recreation		164	227	38%
WETLANDS				
Water		321	335	4%
Fresh Wetlands		812	800	- 1%
Total Wetlands	1380	1133	1135	0%
MINING		229	200	-13%
WASTE DISPOSAL		65	120	86%
TOTAL COMMUNITY		13,502	13,502	

*Categories not strictly comparable to 1971 and 1985 data.

Source: MAPC, 1996, and Town of Walpole, 1987

TABLE 6

DENSITY ON LAND USED FOR RESIDENTIAL PURPOSES, VARIOUS YEARS

<u>Year</u>	<u>Population¹</u>	<u>Residential Acres</u>	<u>Persons Per Acre</u>
1951	9,510	2244	4.24
1971	18,218	3103	5.87
1985	19,062	3735	5.10

CHANGES IN POPULATION AND RESIDENTIAL ACREAGE

<u>Year</u>	<u>Population</u>	<u>Residential Acres</u>	<u>Persons Per Acre</u>
1951-1971	8,708	859	10.12
1971-1985	844	632	1.34

¹The 1951 and 1971 population figures were estimated by increasing the 1950 and 1970 figures by the average annual increase for the respective decades (from Table 1). The 1985 figure was estimated by decreasing the 1986 figure in the 1987 Open Space Plan by that decades average annual growth figure.

Source: Computed by authors.

The more interesting data is inferred from the changes in population and residential acreage. Between 1951 and 1971, the population increased by 8708 people, yet only 859 new acres were added to the residential total. Of this increase, 13 acres of "multi-family" and 6 additional acres of "dense residential" were added. Most of the new development was "medium residential" (667 acres) while "light residential" increased by 173 acres. The density for this new development averaged 10.12 persons per acre.

By contrast, between 1971 and 1985, 500 of the 632 new residential acres were in the "light residential" category. While 70 acres were in the "multi-family" category, none was in "dense residential" and only 62 acres were developed as "medium residential." This overall density averaged 1.34 persons per acre. Thus, while the population increase from 1971 to 1985 was only 9.7% of the increase from 1951 to 1971, the amount of residential land developed to accommodate that growth was 73.6% as much as that developed during the earlier period.

Education

Table 7 compares the education levels in Walpole with the State of Massachusetts, the MAPC region, and the TRIC sub-region. As can be seen, Walpole has a higher percentage of high school and college graduates than the State as a whole. Its percentage of high school graduates is also higher than the MAPC region and just slightly lower than the TRIC sub-region. Its percentage of college graduates is lower than both MAPC and TRIC.

Income

The income levels in Walpole compared to the other regions is shown in Table 8. As can be seen, median household income in 1989 was virtually equal to that of the TRIC subregion, and substantially higher than both the State and the MAPC region. Per capita income was somewhat lower than TRIC, somewhat higher than MAPC, and significantly higher than the State.

Employment

Table 9 presents employment by occupation for Walpole and the other regions. Walpole's occupational profile is very close to that of TRIC and MAPC. The Town has somewhat higher levels of white collar and somewhat lower levels of blue collar residents than the State of Massachusetts as a whole.

Age

As Table 10 illustrates, Walpole has a generally younger population than both the MAPC region and TRIC subregion. A lower percentage of Walpole's population consists of persons in the cohorts of ages 65 and above, while a higher percentage consists of cohorts of ages below 18. While this indicates a tendency for a greater need for youth activities, it should be noted that the 55 to 59

age cohort in Walpole was of a higher percentage than either of the other regions. Since all those

TABLE 7

COMPARATIVE 1990 EDUCATION LEVELS, WALPOLE AND VARIOUS REGIONS

	<u>High School or More</u>¹	<u>College or More</u>¹
Walpole	88.7%	31.7%
Three Rivers Interlocal Council	89.3%	36.9%
Metropolitan Area Planning Council	83.7%	33.5%
Massachusetts	80.0%	27.2%

¹Includes persons 25 years old and older

Sources: Metropolitan Area Planning Council, 1993
U.S. Bureau of the Census

TABLE 8

1989 MEDIAN HOUSEHOLD AND PER CAPITA INCOME

<u>Area</u>	<u>Median Household Income</u>	<u>Per Capita Income</u>
Walpole	\$51,242	\$20,128
TRIC	\$51,420	\$21,994
MAPC	\$40,775	\$19,577
Massachusetts	\$38,952	\$17,224

Sources: Metropolitan Area Planning Council, 1993
U.S. Bureau of the Census, 1990

TABLE 9

1989 EMPLOYMENT BY OCCUPATION, IN PERCENT

	<u>Walpole</u>	<u>TRIC</u>	<u>MAPC</u>	<u>Massachusetts</u>
Managers/Professional/Technical	39.5%	42.9%	40.9%	36.2%
Sales/Administrative Support	32.1%	31.4%	29.5%	28.6%
Service Occupations	10.1%	9.6%	12.2%	12.8%
Farming/Fishing/Forestry	.7%	.7%	.7%	.9%
Production/Craft/Repair	9.3%	8.0%	8.2%	10.0%
Operators/Laborers	8.4%	7.4%	8.6%	11.4%

Sources: Metropolitan Area Planning Council, 1993
U.S. Bureau of the Census, 1990

TABLE 10**1990 AGE COHORTS COMPARISON, IN PERCENT**

<u>Age Group</u>	<u>Walpole</u>	<u>TRIC</u>	<u>MAPC</u>
Under 5 years	7.1%	6.6%	6.4%
5 to 17	16.4%	15.8%	14.0
18 to 20	3.6%	3.8%	5.0%
21 to 24	6.0%	5.8%	7.4%
25 to 34	17.8%	15.9%	19.5%
35 to 44	16.5%	16.1%	15.4%
45 to 54	11.4%	11.6%	10.2%
55 to 59	5.3%	5.1%	4.4%
60 to 64	4.8%	5.1%	4.4%
65 to 74	6.9%	8.1%	7.4%
75 to 84%	3.4%	4.6%	4.4%
85 and over	0.8%	1.5%	1.5%
Median Age	34.6	36.2	33.8

Sources: Metropolitan Area Planning Council, 1991
U.S. Bureau of the Census, 1990

persons would now be in the 60 to 64 cohort, it is one indication for a potential coming need for greater services or facilities for those over 65 during the next five years.

It should be noted that school enrollment projections, performed as part of a School Space Needs Study for the Walpole Public School System (Strekalovsky & Hoit, 1995), indicate an increase from 3404 students in 1994 to 4308 in 2000 and 4616 in 2005.

Growth and Development Patterns

Patterns and Trends

Walpole has developed as a town of several villages with a substantial Town Center as a core and a variety of land uses. As Table 5 demonstrates, more than half of Walpole consisted of forests and wetlands in 1985. The Town also has a range of residential types (primarily of light and medium density, with some of high density and multifamily) as well as significant amounts of commercial and industrial uses.

Development in recent years has been primarily of low density. This has resulted in some blurring of the edges between the traditional villages and neighborhoods of the Town. Walpole has become a relatively more affluent community as both the 1990 medium household income and per capita income levels were above the statewide and metropolitan-wide averages, and below, but close to the average for surrounding towns.

Despite having a four-lane highway (U.S. 1) and a six-lane Interstate Highway (I-95) pass through town, Walpole has maintained a viable downtown area.

Infrastructure

Walpole has substantial networks of the three infrastructure elements that substantially impact development -- transportation, sewer, and water. Each of these is discussed below:

Transportation -- In addition to U.S. 1 and I-95, State Highways 27 and 1A each bisect the Town and intersect in the Town Center. The Town also has an extensive system of town roads (___ miles). There is also both commuter rail service and MBTA service to Boston. A second freight rail line also bisects the Town and intersects the commuter line near the Town Center. A suburban belt commuter rail service has been proposed for this freight line.

Truck lines also operate between Walpole and the Port of Boston as well as Logan International Airport. Both Norwood Municipal Airport and Norfolk Airport are also readily accessible to Walpole.

Sewer -- About 58% of the Town's population is served by the sewer system. The system of

sewer mains is municipally owned, but the sewage flows into the Massachusetts Water Resources Authority regional system for treatment and disposal. A sewer plan prepared in 1981 by a consultant, recommended expanding the sewer through the central portion of Walpole, but did not recommend extending it to the rural areas of the Town. The first two phases of the recommended expansion have been completed. The third phase, which will extend sewer service to South Walpole, is scheduled to begin in the summer of 1996. When completed, about 80% of the Town will have access to sewer service.

Water -- Virtually all of Walpole is served by Town Water. Walpole's municipal water supply is comprised entirely of groundwater from three major aquifer systems. These are School Meadow Brook (which has five wells), Mine Brook (four wells, one inactive due to poor quality) and the Neponset River (two wells). Another aquifer, Traphole Brook, has been determined to be unsuitable as a public water supply due to contamination and poor hydrogeologic properties.

The Neponset River and School Meadow Brook Aquifers have been completely developed. All future development will be in the Mine Brook Aquifer. This will include the reactivation of the currently inactive well, the development of Mine Brook #4, and the development of one additional well at a site known as Area #7.

With the development of these additional wells, the maximum capacity of the system will be 7 million gallons per day (mgd), up from the present capacity of 5.5 mgd. This will be sufficient to accommodate the projected maximum day demand of 7.00 mgd by 2010, assuming a population of 23,000 and no change in non-residential water usage. However, with a 10-20% reduction in unaccounted for water (e.g. leakage, misregistration, fires, etc.) this supply could support a population of 25-28,000.

Long-Term Development Patterns

The primary land use control in Walpole is the Zoning By-Law. Figure 1 illustrates the current zoning districts in Town. The Zoning By-Law provides for four residential districts with minimum lot sizes and frontages ranging from 15,000 square feet and 100 feet to 40,000 square feet and 200 feet. It also designates two commercial districts, two industrial districts, and three special purpose districts (Two of which are overlay districts for water resource and flood plain protection).

The Zoning Bylaw also provides for both Open Space Residential Development and development phasing for both single family and multifamily developments. The Open Space Residential Development provision, which requires a Special Permit from the Planning Board, allows lot sizes to be smaller than normally required in the R and RA Districts while providing open space and thus maintain the same overall density as normally required. The development phasing provision requires the timing for total buildout for certain development projects to be spaced over a

period of up to 10 years depending on size, and other factors.

The Conservation Commission administers the Massachusetts Wetland Protection Act, and the Town of Walpole Wetland Bylaw. A part-time Conservation Agent assists the Commission in its enforcement and administrative duties.

As Tables 1 and 2 indicate, population growth has increased in recent years. This is also reflected in the number of residential building permits issued since 1988 as follows:

<u>Year</u>	<u>Single Family Dwellings</u>	<u>Multi-Family Dwellings</u>
1988	79	20
1989	54	17*
1990	33	0
1991	79	0
1992	91	75
1993	104	34
1994	122	7**
1995	76	4

* One permit for New Pond Village included 148 condo's and 51 assisted living units

**One permit included remodeling commercial offices into 16 apartment units

It is evident that Walpole is undergoing its most rapid period of growth since the 1960's. Figure 2 presents the subdivisions presently before the Planning Board. A status report of the subdivisions in Walpole as of January, 1996, is included in the Appendix.

As for future growth, the Metropolitan Area Planning Council, has projected Walpole's population by age group for the years 2000 and 2010. These projections are presented in Table 11. While MAPC projects a population of only 22,814 by 2010, it should be noted that Walpole passed MAPC's projection for 2000 in 1995 when the population reached 21,762. This was 138 persons higher than the projected figure of 21,624 for 2000. If the average annual growth of the 1990's to date is sustained for the remainder of the decade, Walpole will exceed the population projected for 2010 by 1999 when it passes 23,000.

TABLE 11**EXISTING AND PROJECTED POPULATION BY AGE GROUPS**

<u>Age Group</u>	<u>1990</u>	<u>2000</u>	<u>2010</u>
0-4	1432	1515	1461
5-9	1335	1412	1362
10-14	1270	1781	1930
15-19	1178	1300	1407
20-24	1468	1002	1438
25-29	1697	988	1116
30-34	1895	1687	1178
35-44	3339	4048	3085
45-54	2304	3187	3959
55-59	1075	1173	1666
60-64	977	960	1363
65-74	1389	1508	1618
75+	853	1063	1231
TOTAL	20,212	21,624	22,814

Source: MAPC, 1996