

Section 2

Land Use

Goal: To direct growth and development which is consistent with the carrying capacity of the natural environment and which is consistent with the character of the Town.

INTRODUCTION

Hanover's land use is dominated by an extensive commercial sprawl along Route 53 at the eastern edge of Town, a limited industrial presence at the southwestern section of Town, and a predominantly residential character throughout the rest of Town. Although the intensity of the land use has changed since the 1963 Master Plan, the general land use scheme has not. The most dramatic changes in land use over the last thirty-five (35) years has occurred in the amounts of developed land versus undeveloped land, both commercial and residential, as shown on Table 2-2.

Hanover is located in the coastal region of southeastern Massachusetts, within the watershed of the North River. The Town is bordered by Norwell to the north and east, Pembroke and Hanson to the south, and Rockland to the west and northwest, and is located approximately 17 miles north of Plymouth and 23 miles southeast of Boston. The Indian Head and North Rivers form the southern town line with the Towns of Hanson and Pembroke, while the Third Herring Brook serves as the eastern boundary between Hanover and Norwell.

Hanover occupies 15.72 square miles, making it one of the smaller towns in Plymouth County. Located within 25 miles of Boston, many residents commute to the city for work. Expansion of metropolitan Boston southeastward along the "South Shore" has been rapid since 1940, when towns consisted of small centers with a business zone along the principal road network. Figure 2-1 illustrates the Hanover region. This trend towards "suburban sprawl" and the resultant increase in population has also increased the demand for water, while the amount of land available for water supply has decreased to the point where many local water agencies are having difficulty in locating and developing additional water supplies.¹

¹ Williams, John R. and Gary D. Tasker. 1974. Water Resources of the Coastal Drainage Basins of Southeastern Massachusetts, Weir River, Hingham to Jones River, Kingston. United States Geological Survey.

Figure2-1: Regional Location

Four State highways travel through Hanover: Routes 3, 53, 123 and 139. Route 3, a limited access highway traveling north-south, traverses the northeastern corner of town and provides easy access to both Cape Cod and the Boston metropolitan area. Route 53 (also known as Washington and Columbia Streets) intersects with Route 3 in the northeastern section of town, and extends in a southeasterly direction in the eastern quadrant of the Town. The entire length of Route 53 in Hanover is commercially zoned, with the exception of the southerly portion, which is business zoned. Historically, most of the Town's commercial development has occurred in the Route 3 interchange area, including the Hanover Mall. Most of the existing commercial development has been designed and developed as "strip malls," with numerous driveways onto Route 53, buildings set back and the majority of parking located in front of the buildings.

Route 139 (also known as Rockland and Hanover Streets) travels in an east-west direction through the mid-section of Town. Small areas along the roadway in West Hanover are presently business zoned, as is the area in the vicinity of the Route 53/139 intersection. The remainder of the roadway is currently zoned residential.

Route 123 runs in an east-west direction through the northern portion of Hanover. Most of the roadway is residentially zoned except for the areas adjacent to Route 3 and at the junction of Route 53, which are zoned light industrial and commercial, respectively.

GROWTH AND DEVELOPMENT PATTERNS

Population Trends

Hanover's population began to increase rapidly after World War II, and businesses flourished along Route 53. In 1948, zoning laws were instituted. In 1950, the Town's population was 3,389 and several large farms and woodland areas were targeted for development. Three large housing developments were built in West Hanover, in the Walnut Hill area, and the Indian Head development on the former airport site. By 1960, the population had nearly doubled to 5,923.

The period from 1950 to 1970 was a time of significant population, residential, and business growth. By 1950, many cleared fields that had reverted to woodlands were cleared once more for housing and business development. Route 3 was constructed across the northeast corner of the town, making Hanover more accessible to Boston by automobile, and many town citizens chose to commute to the metropolitan area. Between 1950 and 1970, Hanover's population grew dramatically, from 3,389 to 10,107 people.² The Town's last Master Plan was completed almost thirty-five (35) years ago in 1963. The population at that time (1960) stood at 5,923. By the time the Town completed the Master Plan update in 1969, the population had risen to almost 9,000 persons, an almost 50% increase.

² Town of Hanover. 1993. Population Study Town of Hanover Analysis and Projections 1970 to 2020. Hanover Planning Board, Hanover, Massachusetts.

Table 2-1: Comparisons of the 1963/1997 Master Plan Factors			
Factor	1963 Master Plan	1997 Master Plan	Percent Change
Population (Persons)	5,923	12,858	+118%
Persons Per Household	3.60	3.14 ³	-13%
Acres Per Person	1.66	0.77	-118%
Households (Dwelling Units)	1,779	4,170	+134%
Minimum Single-Family Lot Size In Square Feet	30,000	30,000	0%
Buildable Vacant Land In Acres	4,000	12,312 ⁴	-70%
Total Build-Out Projections Under Existing Zoning (Persons) ⁵	25,265	19,758 ⁶	-22%

The estimated population for Hanover as of September 1996 was 12,858. Hanover's population trends since 1930 are detailed in Table 2-2.

Table 2-2: Population Changes 1930 - 1995			
<i>Year</i>	<i>Population</i>	<i>Increase Over Previous Period</i>	<i>Median Age</i>
1930	2,808	----	----
1940	2,875	2.39%	----
1950	3,389	+12.3 %	----
1955	4,258	+25.6 %	----
1960	5,923	+39.1 %	35.9
1965	7,862	+32.7 %	----
1970	10,107	+28.6 %	24.3
1975	10,533	+ 4.2 %	----
1980	11,358	+ 7.8 %	28.9
1985	11,500	+ 1.3 %	----
1990	11,912	+ 3.6 %	34.1
1995	12,588	+ 5.7 %	----

Source: U.S. Census and Hanover Town Clerk

With the rapid increase in population during the 1960's, the median age decreased due to the influx of young families with children moving into new homes, usually located in recently subdivided land. Since then, the median age of Hanover residents has increased. This is in part due to a stabilizing population, construction of fewer new homes, increases in life span,

³ As of 1990, according to the United States Census Bureau.

⁴ An additional 2,090 acres is considered underdeveloped residential land which could potentially be developed as single-family housing units.

⁵ Note: Total buildout would require development of all "developable" land, which is unlikely to occur within the next 25± years

⁶ Based on 3.0 persons per household.

decreases in family size, and the cost of purchasing and maintaining a home. There is no reason to assume that the median age will not continue to increase and that those sixty-five and over (65+) will be the fastest growing segment of the Town's population. In the next twenty-five (25) years, the sixty-five and over (65+) population will increase from approximately ten percent (10%) of the total population to over nineteen percent (19%), which correlates with national trends. This changing composition of a predominantly young family oriented population to a more mature makeup will result in several housing and municipal facilities and service needs that are not currently in place. These include:

1. providing smaller housing for those individuals who desire to remain in Town but do not wish to maintain a large home.
2. providing assisted-living opportunities for those who may need special assistance to remain independent.
3. providing additional municipal senior facilities and services (e.g., senior center(s), senior day care, and recreation, such as tennis, etc.)

If the overall population trend of an increase of four and one-half percent (4-1/2%) every five years over the past twenty-five (25) years were to continue, the population would increase from the current population of 12,858 to approximately 15,686 residents by 2020. Other population projections have been conducted by the Metropolitan Area Planning Council (MAPC), Massachusetts Institute for Social and Economic Research (MISER), and the Town of Hanover through the 1993 Hanover Population Study.

Table 2-3: Population Projections			
	<i>2000</i>	<i>2010</i>	<i>2020</i>
Hanover Master Plan (1996)	13,154	14,365	15,686
MAPC (1996)	12,885	13,139	NA
M.I.S.E.R. (1994)	12,192	12,000	NA
Hanover Population Study (1993)	NA	NA	15,573

It is interesting to note that MISER actually predicted a decrease in population between the years 2000 and 2010. However, without changes to the current land use controls (e.g., zoning) construction of smaller/assisted-living type developments will be nonexistent in Hanover, and the older population may look elsewhere for housing which better meets their needs. All population projections for Hanover are based on the limited amount of developable land and the existing land use controls. Therefore, it is safe to assume that without any major land use or land use control changes, Hanover has seen its greatest period of expansion.

According to the 1990 US Census, Hanover's population was comprised of 11,912 people living in 3,742 households. Average household size was 3.14 people, with a median (household) income of \$54,759. Approximately 32% of Hanover's population was between the age of 25-44 years, with approximately 27% of the population under 18 years of age. The median age was 34.06 years.

A Population Study prepared by the Hanover Planning Board in 1993 projected growth over the next three decades. The following excerpt from this report offers a sense of the likely implications of growth:

Currently, a large segment of those moving into Hanover are young families in the 30-39 age group, bringing with them pre-school or primary school age children . . . This has significant implications for Hanover’s tax base. The average assessed valuation in Hanover is approximately \$200,000 and the tax rate is \$13.79 per \$1,000 valuation (note: 1996 tax rate is \$14.66 per \$1,000 valuation) . . . Thus, the average residential tax bill is \$2,758. Many of the new homes in Hanover, however, are in the \$250,000 to \$300,000 range. The \$300,000 home [owner will] pay \$4,137 in taxes annually. In contrast, the average annual cost to school a pupil in Hanover is close [to] \$5,000 . . .

While growth has been more incremental in the last two decades than in previous years, and only moderate growth is projected over the next 30 years, overall impact to the community will be great. It is projected that the population will increase by 30% by the year 2020, which will dramatically increase the need for town services and reduce the amount of open land available for passive and active recreation. More specifically, water, solid waste, fire/police protection, roads and schools are the community services that are most likely to be strained by future growth. Additionally, it is projected that the average age of Hanover’s residents will increase, resulting in the need for additional elder services.

Table 2-4: Seniors in Hanover*			
	<i>1960</i>	<i>1990</i>	<i>2020</i>
Total population	5,923	11,912	15,573
Age 60+	663	1,524	3,710
Percent age 60+	11.2%	12.8%	23.9%

* Age 60 and over, as defined by the Council on Aging

Population Density

Due to Hanover’s desirable location on the “South Shore” and its proximity to Boston, large numbers of professional people who work in Boston or along Route 128 have moved to Hanover. As a result, there has been a significant increase in property values and population. As mentioned previously, much of Hanover’s growth actually occurred between 1950 and 1970, due to convenient vehicular access to Boston, Cape Cod and other popular destinations after Route 3 was constructed (1959-60). Another factor was the trend towards suburbanization. Despite the fact that development has slowed since the 1970’s, new construction continues to result in the loss of valuable open space and recreation land.

Table 2-5: Population Density Trends		
Year	People Per Square Mile	Percent Change
1990	763.1	4.88%
1980	727.6	12.37%
1970	647.5	70.66%
1960	379.4	74.76%
1950	217.1	17.86%
1940	184.2	----

Source: Metropolitan Area Planning Council, Data Center

PHYSICAL CHARACTERISTICS

The total surface area of Hanover is approximately 10,060 acres. Almost 20% of this area is comprised of water bodies and water-related land forms (approximately 70 acres are made up of open water, and another 2,000 acres are wetlands). Due to the fact that the Town lies within the North River Watershed, Hanover is rich in water resources, and has a varied natural landscape that includes streams, ponds, wetlands and wildlife habitats. Many acres of wetland are protected within town and private conservation lands. That wetland acreage not protected within conservation land is severely limited in its development potential. Wetlands contain soils and drainage conditions that are unsuitable to support development without major disturbance and filling of wetlands. Wetland areas are vital for protection of both surface and ground water quality, fisheries and wildlife habitat, and provide flood storage as well. The Wetlands Protection Act and regulations set forth in 310 CMR 10.00 pursuant to the Act protect these swamps, bogs, and wet meadows from development. Major wetland systems in Hanover include areas adjacent to the many brooks and streams found in Hanover and are scattered through the town.

Certain soil types are not suitable for development. For example, because they are very poorly drained and have a high water table, some soils restrict the future development options for these parcels. This restriction often results from an inability to provide sewage disposal due to poor drainage and/or high water table. Other types occur on steep slopes (greater than 15%) or where bedrock is close to or at the surface. Topography can also limited development as the cost of overcoming topographic constraints can be cost prohibitive for development. For more detailed information on soils and topography, refer to the Natural and Cultural Resources element (Section 5).

In 1962, Hanover was the subject of the first comprehensive community soil study, entitled “Soils Interpretation for Community Planning”⁷. The purpose of the study was to present

⁷ Prepared by the United States Department of Agriculture, the Massachusetts Department of Commerce Division of Planning (now Department of Housing and Community Development), and Thomas Associates, (now Thomas Planning Services, Inc.)

information about how soil maps and interpretations can be used in making land use/planning decisions. The report was organized around a general soils map, interpretative maps and detailed soils maps. The findings were used in developing the land use plan and various other elements of the 1963 Master Plan. This study has been the basis of subsequent work in the field using soils information for urban planning purposes, and is on file in the Planning Board office.

LAND USE

A breakdown of Hanover’s land use categories confirms the Town’s primarily residential character (see Table 2-6). Almost half (4,261 acres or 46%) of Hanover’s total land is dedicated to residential use. In terms of parcels, 3,734 parcels, or 76% of all parcels are used for residential purposes. Another 24% of the town’s land is currently vacant, of which 19% is presently zoned for residential. The third largest land use is that of tax exempt properties; almost 25% of the town’s land area is occupied by tax exempt organizations. Finally, it should be noted that relatively small amounts of land are occupied by commercial and industrial uses, i.e., 5% and 3% respectively.

Table 2-6: Summary of Current Land Uses (based on Principal Assessors Land Use Classification Codes)				
Land Use	Number of Parcels	Percent of Total Parcels	Area (Acres)	Percent of Total Acres
Total Residential Uses (100)	3734	76%	4261	46%
Total Commercial Uses (300)	248	5%	510	5%
Total Industrial Uses (400)	57	1%	238	3%
Total Tax Exempt Uses (900)	253	5%	2032	22%
Total Chapter 61 Uses (600/700)	5	0%	155	2%
Total Vacant Residential Parcels (130-132)	548	11%	1732	19%
Total Vacant Commercial Parcels (390-391)	47	1%	274	3%
Total Vacant Industrial Parcels (440/441)	39	1%	144	2%

Source: Town of Hanover Assessor’s Database (1996). See Table 2-8 for more detailed breakdown.

Current Land Use Controls

The Town of Hanover has taken a number of steps to protect its natural resources and community character. Because of the existing land use pattern and lack of sewers, there are few options for future development without redevelopment. Presently, there is only one district for residential development in Town. This district (Residence A) requires a minimum lot size of 30,000 square feet. Table 2-7 indicates the zoning districts and their present land use controls. See Figure 2-2 for the locations of zoning districts.

Table 2-7: Existing Land Use Controls

Approximate District	Principle Uses Allowed	Minimum Lot Size in Sq. Feet
Residence A	Single-family dwellings, farming and horticulture, orchards and nurseries, barns, stables, kennels, accessory uses, and home occupation.	30,000
Planned Shopping	Uses and use on Special Permits allowed in the Commercial District.	44,000
Business	Retail store or service, professional offices or banks, restaurants, parking areas/garages, membership clubs, accessory uses, agriculture and horticulture.	44,000
Commercial	Uses allowed in the Business District, museums, and gift shops.	44,000
Industrial	Uses permitted by Special Permit in the Limited Industrial District, plus boat storage and repair.	44,000
Limited Industrial	Research laboratories, office buildings, and light industry.	44,000
Fireworks Overlay Zone	Uses permitted by Special Permit in the Limited Industrial and Industrial Districts.	44,000

Regional Trends/Influence

As with Hanover, much of the northern section of the South Shore region experienced rapid residential growth and development from 1950 to 1970. Growth in the Hanover region of the South Shore has slowed for several reasons. First, the most readily developed land (land with minimal environmental constraints and good access) has already be developed. Also, suburbanization continues to push outward towards the Route 495 beltway (and beyond). Finally, increasing traffic congestion along major commuter routes, such as Route 3, makes other more accessible areas more desirable. Hanover does differ from surrounding communities in that the Town has a substantial amount of retail/commercial development. As the hub of neighboring towns, with the Hanover Mall as its centerpiece, Hanover is a retail center with a strong presence of retail and other service industries along Route 53. This is the most visible sector of the local economy and provides over one-half of the jobs located in the Town. It is interesting to note, however, that active commercial land uses occupy only 5% of the Town’s land area; another 3% is commercially zoned but is presently vacant.

South Shore communities to the south of Hanover have recently begun to experience growth pressures due to imminent expansion of the commuter rail to Boston, with rail stations proposed in communities such as Kingston and Plymouth. These communities have an abundant supply of readily developable land and improved commuter access, resulting in a flood of residential building that will most likely continue throughout this decade and into next.

Figure 2-2: Zoning

BUILD-OUT

Buildout Analysis

Figure 2-3 illustrates the current land use pattern as of August, 1996. This map was prepared as a manual update to a map done by the Town of Hanover in 1989. Building Department records were utilized to “fill the gap” by adding new development to the old plan. It is interesting to note that the land use pattern is similar to that shown in 1963 (see Figure 2-4). Over the past 33 years, Hanover has gained significant numbers of new residences, and has seen its commercial strip extended. As growth pressures continue, it is helpful to consider the theoretical buildout situation, in which the majority of all buildable land would be developed. Following is a description of our methodology, assumptions and findings.

Methodology

The build-out analysis for the Town of Hanover was prepared by utilizing the Hanover Assessor’s data (updated January 1996). The results illustrate the development potential which Hanover might expect to experience if current land use patterns, zoning districts, and positive economic conditions continue. It should be noted that full buildout is rarely reached, but the potential for development of land not otherwise constrained from development at some time in the future is high.

The Assessor’s data was initially sorted by Massachusetts Land Use Classification (LUC) Codes. Land use codes indicating potentially developable land were then selected for assessment for consideration as potentially developable land. These land use types included vacant residential, commercial and industrial land; private non-profit organizations; and property under MGL Chapter 61, 61A and 61B restrictions as the land is without permanent protection.

The parcels were then grouped to reflect industrial, commercial, and residential uses. Although there may be existing non-conforming uses within zoning districts, for this analysis it is presumed that the land use classification also reflects current zoning.

Several assumptions were applied to the data to derive a maximum number of developable lots. First, to account for the roadways and utilities required to service new development 10% of the undeveloped land was subtracted. Second, another 20% of the undeveloped land was deducted to account for land with environmental constraints such as property with wetlands, soils unsuitable for supporting septic systems, and land within the Flood Plain and Water Resource Protection Districts. The remaining acreage was then divided by the minimum lot sizes allowed by the Hanover Zoning By-Law for each use to determine buildout.

Figure 2-3: Current Land Use

Figure 2-4: 1963 Land Use

Assumptions

1. It is assumed that many of the individual residential lots which remain vacant have some development capability. Since these lots are generally independent and not held in common ownership, it is likely that one residential unit per lot is possible. It is understood that some of these parcels may be completely constrained by roadway access or physical constraints such as wetlands, open water, topography or geology rendering the lots unbuildable for natural or financial reasons. For this assessment we have assumed that the majority of all residentially zoned vacant parcels are buildable.
2. All property owned by the United States, the Commonwealth of Massachusetts, or the Town of Hanover is assumed to be protected for the purposes of this analysis. Certainly there are means of removing these properties from public ownership; however this type of change in use would require public scrutiny and is not considered in this analysis.
3. Chapter 61, 61A and 61B land is assumed to be without permanent protection. Although these properties currently benefit from reduced taxes, this status can be removed.
4. It is assumed that residential parcels of three or more acres have additional buildout potential which can be estimated by consideration of existing zoning, physical or environmental constraints, and other regulatory or deeded restrictions.

Limitations

The methodology and assumptions explained above yield figures representative of a realistic potential for future development within Hanover. The figures are intended to be utilized for Town-wide assessment - this study is not intended to be used for evaluation of individual parcels. The information provided herein has much greater accuracy on a cumulative level than on a site specific level, especially as applied to smaller parcels which were evaluated solely on statistics related to parcel size, land use, and occupancy (structures or vacant) and not site-specific conditions.

Some parcels may have greater development potential and others may have less based on actual site conditions. In addition, significant reliance has been given to Assessors' information which may include some errors in identification of land use. There are two types of potential errors in these records: human error in data entry, and mis-classification of land use. For example, land assumed to be non-developable may have development potential. Occasionally these lands become subject to development when none was assumed feasible. We assume that these errors are minimal and have made note of both erroneous land use codes and changes in land use of which we are aware.

Buildout of Residential Land

Residential build-out was assessed in four distinct categories: 1) Improved land greater than three acres, 2) Developable, 3) Potentially Developable, and 4) Undevelopable land. Each vacant parcel's "buildable acreage" was divided by the minimum allowable lot size (30,000 sf) to determine the number of additional potential residential lots. As noted above, a total of 30% of the lot area was deducted to account for roads, utilities and environmental constraints. Larger improved residential parcels were subjected to an additional 30,000 sf deduction to accommodate the existing structure. To get a better locational picture of where this buildout

potential is, Hanover was divided into four areas representing blocks of assessors maps in the North, East, South and Central parts of Town (see Figure 2-5).

In addition the so-called Chapter 61 land - including forestry, agricultural/horticultural and recreational parcels - are currently restricted from development under State law. However, since this land is not permanently protected we assessed the buildout on this land as well. Generally these parcels are located in residential zoning districts and become subdivisions if developed.

Remaining Vacant Land in Residential Areas. A total of over 1,700 acres of land is classified as vacant residential (developable or potentially developable) in Hanover. This translates to a potential for approximately 1,350 residential lots, given existing zoning, at some time in the future. “Non-developable” land represents a potential for 139 additional lots, if buildable. Smaller improved residential parcels (less than 3 acres) are not critical to the analysis since it is unlikely that many these parcels will support either subdivisions or Approval Not Required (ANR) lots.

Larger improved residential parcels of greater than three acres totals just over 1000 acres in Hanover. These parcels are distributed generally in the north part of town. It is estimated that the development of these lots could add approximately 950 additional housing units within the Town in the future.

Buildout of Commercial and Industrial Land

Commercial and Industrial development potential was estimated assessing all parcels of vacant commercial and industrial land. The number of potential lots was determined by dividing the estimated buildable land area by the minimum allowable lot size of 44,000 sf. Industrial zones are generally located within the southwest quadrant of town in the Fireworks District between King and Winter Streets, as well as along the rail spur just south of Route 139. The main commercial strip runs along Route 53 with additional commercial/retail space along Route 139. There are several scattered small industrial or commercial parcels located throughout town.

Remaining Commercial Land. Vacant commercial properties are located primarily along Hanover Street (Rt. 139) and Washington Street (Rt. 53). Of the 47 vacant parcels, lot sizes range from 0.14 acres to 94.66 acres. In all, there are approximately 270 acres of vacant commercial land. Given one-acre lots, this land could be expected to yield another 160 or so lots. Applying an estimate of 5,800 gsf per acre (13.3%) for commercial land in Hanover, the Town has the potential to attract an additional 928,000 sf of commercial space. These numbers can be directly applied to determine the tax benefit to Hanover by utilizing comparable per square foot values.

Remaining Industrial Land. Approximately 144 acres of vacant industrial land remains in Hanover with an estimated buildout of 79 one-acre lots. However, this figure may be high as many industrial users require greater than one acre. Much of the available vacant land is located in the recently subdivided Factory Pond Road subdivision (17 lots totaling 62.4 acres with lots ranging from one to 11 acres). Brockton Edison owns other parcels that may never be developed (7 parcels totaling 28.2 acres and ranging from 0.1 to 18 acres). If these factors are applied, a

total of only 28 new lots are possible. This assumes that Brockton Edison controls land that might otherwise support 17 potential lots and that the Factory Pond Road subdivision which contains 19 existing vacant lots will not be re-subdivided to larger lots. At 12,000 sf per buildable acre it is estimated that an additional million sf of industrial space could be anticipated in Hanover, as follows.

Potential in Factory Pond Subdivision	675,000 sf
Potential on other vacant lots	280,000 sf

It should be noted that a significantly larger buildout could occur if all industrial properties were improved or expanded to the maximum allowed by regulation. Note that in 1994 the estimated industrial buildout was 3.5 million square feet (*Hanover Industrial Area Revitalization Study*).

Protected Land

Levels of Protection and Risk of Development “Protected land” falls into several categories, with varying levels of protection against future development. As mentioned in the “assumptions” section, we assume that publicly owned property is the most highly protected from future development. Although it is entirely possible for the Town, Commonwealth or United States to remove public land from public ownership, this scenario is unlikely and would require public scrutiny if it were proposed.

Land that is currently taxed under the exemptions allowed by M.G.L. Chapters 61, 61A, or 61B have significantly less protection. Property under these designations allows the Town a right of first refusal on the land should the property owner intend to take the land out of the restricted status. The designation of private parcels as Forest lands (Chapter 61), Farm lands (Chapter 61A), or Private Recreation lands (Chapter 61B) restricts the use of land in exchange for significant reduction in taxes. Forest Lands require a minimum of ten contiguous acres which can be classified by a state forester and a forest management plan. Once the application has been received and approved the classification statement functions as a lien upon the land for taxes levied under the provisions of M.G.L. Chapter 61. The landowner must refile every ten years or the land shall be removed from classification by the Assessor. Farm Lands and Private Recreation land must have a minimum of five acres and the status must be renewed every year.

Land may be taken out of Chapter 61, 61A or 61B classification by notifying the Town and paying a withdrawal penalty tax. However, such land may not be sold for, or converted to, residential, commercial or industrial use while taxed under the classification without written notification of the municipality in which it is located. The Town has 120 days to exercise its right-of-first-refusal option to purchase the land. Should this time period pass and/or the Town state in writing that it will not act on its option, the land may be developed for alternative use(s), removing it from its “open” status as farm, recreation or forest land.

Agricultural, Recreational and Forest Land (Chapter 61 property). The parcels that are currently under limited tax status as forest, agricultural or recreation lands are only minimally protected from future development - and protection is only ensured if the Town is able to act on its right of first refusal to purchase when the property owner makes a decision to remove the coverage under M.G.L. Chapter 61, 61A or 61B. Therefore it is critical to assess the property that is currently listed under these Chapters to identify those parcels which are most likely to be subjected to development pressure in the near future. This is a role that the Conservation Commission or Open Space and Recreation Committee can play.

It is beyond the scope of this study to review each private property individually to determine if and when the property owner might consider development. However, some generalizations can be made. Hanover currently has only five parcels of land (155 acres) in restricted uses. The Cervelli property on King Street is a 66-acre farm. In addition, four parcels are classified as forest land under a 10-year management plan. These properties are located at the intersection of Main and Hanover Streets and off Circuit Street. If these properties were all developed, assuming a 30% land area reduction for roads and environmental constraints, 150 additional house lots could be expected.

Table 2-1 provides a summary breakdown by land use for Hanover based on data provided by the Assessor's Office; Table 2-8 offers more detail on land use categories and uses within each category. Appendix B contains the spreadsheets used to calculate buildout potential. Included in the spreadsheet are the number of acres which are susceptible to further development and the number of potential building lots the land could support given the current local zoning regulations.

This level of analysis has helped to understand likely buildout, given constraints of the land. It is important to reiterate that any buildout analysis is intended to be taken as a whole, and that the site specific information used was generally in the form of maps and not detailed site inspection. In no case should the parcel specific figures be utilized to determine actual development capability of individual parcels.

OTHER LAND USE ISSUES

The Planning Board utilizes the Design Review Board, which was established in 1992, to assist in the review of all large-scale non-residential development proposals. In addition, the Planning Board, through the Town Planner, requests input from some of the various municipal agencies affected by land use decisions, e.g., Board of Health, Department of Public Works, Conservation Commission, Fire Department, and Building Department. In an effort to expedite and provide a greater level of proficiency to the planning, design and technical review process, expansion of this process to include input from the Police Department and the Design Review Board of all non-residential development, as well as proposed Planned Residential Developments, should be considered. Additional, weekly or bi-monthly meetings with department heads and/or their

representatives may be appropriate to discuss proposed developments and/or other land use related issues with the Town Planner.

The primarily vacant land zoned for Limited Industrial west of Route 53 between Hanover Street and Old Washington Street is surrounded on three sides by land zoned for residential purposes. A residential use, such as the proposed Planned Residential or Assisted Living Developments, may be more appropriate for this area; therefore, this land may be suitable for rezoning to residence.

Performance Standards, now only required in the Limited Industrial District, require development to adhere to “Conditions for Development”, which include regulations for odor, dust, smoke, noise, head, glare, vibration, exterior lighting, and storage. Expansion of these requirements to all districts would be appropriate to safeguard all land uses.

**Table 2-8: Current Land Uses
(based on Assessors Land Use Classification Codes)**

Land Use (land use code)	# of Parcels	Area (Acres)	% of Total Parcels	% of Total Acres
Residential Uses				
Number of Single Family Residences (101)	3627	4087.36	73.56%	43.73%
Number of Condominiums (102)	1	0.00	0.02%	0.00%
Number of Mobile Homes (103)	3	3.28	0.06%	0.04%
Number of Two-Family Homes (104)	69	87.79	1.40%	0.94%
Number of Three-Family Homes (105)	13	15.99	0.26%	0.17%
Improved Accessory Land (106)	7	37.11	0.14%	0.40%
Multiple Houses on One Lot (109)	9	13.43	0.18%	0.14%
Apartments (4-8 units) (111)	4	2.19	0.08%	0.02%
Apartments (9+ units) (112)	1	14.20	0.02%	0.15%
Total Residential Uses (100)	3734	4261.35	75.73%	45.59%
Commercial Uses				
Nursing Homes (304)	1	1.83	0.02%	0.02%
Retail Oil and Gas Storage Lots (310)	11	34.99	0.22%	0.37%
Lumber Yards (313)	1	1.98	0.02%	0.02%
Truck Terminals (314)	1	3.10	0.02%	0.03%
Other Storage (316)	4	13.12	0.08%	0.14%
Commercial Green Houses (318)	1	3.19	0.02%	0.03%
Retail-building materials, hardware & farm, etc. (321)	1	12.66	0.02%	0.14%
Discount Stores, Department Stores (322)	77	114.59	1.56%	1.23%
Shopping Malls (323)	9	135.25	0.18%	1.45%
Small Retail & Service Store (325)	2	4.95	0.04%	0.05%
Restaurant/Club/Bars (326)	16	22.99	0.32%	0.25%
Automotive Sales & Service (330)	2	9.56	0.04%	0.10%
Automotive Supply Stores (331)	9	22.46	0.18%	0.24%
Automotive Repair Shops (332)	16	42.49	0.32%	0.45%
Gas Stations (Fuel only) (333)	1	0.61	0.02%	0.01%
Gas Stations (Service) (334)	10	5.01	0.20%	0.05%
Car Wash (335)	1	0.69	0.02%	0.01%
Parking Lots (337)	1	0.52	0.02%	0.01%
Office Buildings (340)	65	26.40	1.32%	0.28%
Banks (341)	5	3.97	0.10%	0.04%
Medical Office Building ((342)	8	3.70	0.16%	0.04%
Postal Service Land (350)	1	2.52	0.02%	0.03%
Day Care Facilities (352)	1	1.68	0.02%	0.02%
Funeral Homes (355)	1	14.90	0.02%	0.16%
Miscellaneous Public Service (356)	1	0.16	0.02%	0.00%
Fairgrounds & Amusement Parks (368)	1	24.07	0.02%	0.26%
Bowling (370)	1	3.10	0.02%	0.03%
Total Commercial Uses (300)	248	510.49	5.03%	5.46%

Land Use (land use code)	# of Parcels	Area (Acres)	% of Total Parcels	% of Total Acres
Industrial Uses				
Industrial Factory (400)	28	124.96	0.57%	1.34%
Warehouses for Manufactured Products (401)	26	89.05	0.53%	0.95%
Industrial Offices (402)	2	16.30	0.04%	0.17%
Electric Generation Plants (422)	1	7.52	0.02%	0.08%
Total Industrial Uses (400)	57	237.83	1.16%	2.54%
Tax Exempt Uses				
Commonwealth of Massachusetts (901)	4	7.94	0.08%	0.08%
Counties (902)	2	37.97	0.04%	0.41%
Municipalities (903)	92	1017.01	1.87%	10.88%
Charitable Organizations (Private Hospitals, etc.) (905)	12	74.29	0.24%	0.79%
Churches, Synagogues, Temples (906)	8	29.18	0.16%	0.31%
121A Corporations (907)	4	16.38	0.08%	0.18%
Housing Authorities (908)	2	6.70	0.04%	0.07%
Religious (909)	69	211.05	1.40%	2.26%
Charitable (910)	52	601.10	1.05%	6.43%
unknown (911)	3	4.51	0.06%	0.05%
Non-profit (920)	5	25.61	0.10%	0.27%
Total Tax Exempt Uses	253	2031.74	5.13%	21.74%
Chapter 61 Uses				
Chapter 61 - Forest Land (601)	4	88.13	0.08%	0.94%
Chapter 61A - Agricultural Land - Truck Crops (712)	1	66.63	0.02%	0.71%
Total Chapter 61 Uses	5	154.76	0.10%	1.66%
Vacant Residential Parcels				
Vacant Residential Parcels (Developable) (130)	285	962.36	5.78%	10.30%
Vacant Residential Parcels (Pot. Developable) (131)	183	599.28	3.71%	6.41%
Vacant Residential Parcels (Undevelopable) (132)	80	170.49	1.62%	1.82%
Total Vacant Residential Parcels	548	1732.13	11.11%	18.53%
Vacant Commercial Parcels				
Vacant Commercial Parcels (Developable) (390)	23	154.80	0.47%	1.66%
Vacant Commercial Parcels (Pot. Developable) (391)	11	85.47	0.22%	0.91%
Vacant Commercial Parcels (Undevelopable) (392)	13	33.75	0.26%	0.36%
Total Vacant Commercial Parcels	47	274.02	0.95%	2.93%
Vacant Industrial Parcels				
Industrial Vacant Parcels (Developable) (440)	26	99.14	0.53%	1.06%
Industrial Vacant Parcels (Pot. Developable) (441)	13	45.06	0.26%	0.48%
Total Vacant Industrial Parcels	39	144.20	0.79%	1.54%
TOTALS	4931 Parcels	9346.52 Acres		

RECOMMENDATIONS

There are four major land use issues which the Town of Hanover will be facing in the near future. These include:

1. *Increased business and circulation development along and adjacent to Route 53.*
2. *Changing demographics, e.g., an aging population which will need smaller housing types, and added senior services and facilities.*
3. *New and/or expanded public facilities, e.g., Schools, Police, Fire, Senior Center.*
4. *Added passive and active open space and recreation opportunities, e.g., along the river and brook corridors.*

The following land use recommendations have been selected to address each of these issues. Other land use recommendations follow the four discussed below.

Route 53

In an effort to ease traffic/congestion, plan for future development, provide greater uniformity in signage, landscaping and building design, and provide a better access to the Town as a whole, and a better appearance, the Town, through the Planning Board and other Town agencies, should:

- Establish a Policy Statement for Route 53, to include reviewing/planning this major Town/regional commercial thoroughfare by segments, and enunciating appropriate land uses and design for each.
- Cooperate with the Metropolitan Area Planning Council (MAPC) in preparation of a Route 53 corridor study which reviews land use and traffic along each segment of Route 53. The study should identify appropriate traffic control measures, land use policies and design elements for each segment.
- In conjunction with the Route 53 Corridor Study, revise and/or adopt an Overlay District with specific design guidelines for this corridor to be more responsive to business, circulation, and aesthetic needs.
- Expand the role of the Design Review Board to include implementation of design guidelines, if deemed appropriate, and utilize this Board to review all non-residential development in Town.
- Rezone the Limited Industrial District west of Route 53 between Hanover and Old Washington Streets to residential.

Changing Demographics

To allow for a greater flexibility in housing styles which would meet the needs of seniors, without jeopardizing the overall character of the residential community, the Planning Board should do the following:

- Propose Planned Residential Development to the Town. The Board should review the Planned Residential Development zoning prepared in connection with this Master Plan, and amend if necessary; and, bring the Planned Residential Development zoning amendment to the Town for Town Meeting for adoption.
- Propose Assisted Living Residence and Continuing Care Retirement Community zoning. The Board should review the Assisted Living and Continuing Care Retirement Community zoning suggested in this Master Plan, and amend if necessary; and, bring the Assisted Living and Continuing Care Retirement Community zoning amendment to the Town for Town Meeting for adoption.

Public Facilities

In an effort to coordinate and prioritize acquisition and public facility planning efforts, the Board of Selectmen should:

- Appoint a single Building Committee to coordinate all public facility planning efforts on a Town-wide basis. [See discussion of Public Facility needs in the Public Facilities and Services Section.]
- Revise the rate of development section of the Zoning By-law to be more inclusion and to ensure that there is adequate infrastructure in place to support growth.

Open Space and Recreation

Following are land use issues related to open space and recreation. Concurrent to the preparation of this Comprehensive Plan, the Town of Hanover also prepared an Open Space and Recreation Plan (OSRP). These recommendations are excerpted from this plan, and are discussed in more detail in the OSRP:

- The Town of Hanover should make its conservation lands more accessible to its residents for passive recreation.
- The Town of Hanover should formulate and implement a plan for a “greenway” that links open spaces.
- The Town should establish a land trust (a non-profit group that would not be a part of town government) to facilitate the acquisition and holding of undeveloped properties.
- The Town of Hanover should begin setting aside funds to purchase key preserve open space and conservation lands as they become available. The Town should also

establish a ranking system of lands currently classified under Chapter 61 of the Forest Protection Act, as well as other significant parcels, so as to prioritize the importance of these lands.

- The Town of Hanover should develop partnerships with conservation agencies such as the “North and South River Watershed” to protect land for conservation purposes.
- Hanover should encourage developers of new subdivisions to provide greater open space.
- The Town of Hanover should be more active in the protection of groundwater supply and surface water (ponds and streams).
- The Town of Hanover should be more active in the monitoring of pollution from septic tanks.
- The Town of Hanover should be more active in analyzing potential conservation land impacts from new residential housing developments.

In addition to the above, specific zoning and/or other regulatory measures are recommended to improve administration of land use controls and to adopt zoning changes needed to cover new land uses and statutory changes for:

- Telecommunication and Cellular Tower Regulations
- Performance Standards throughout all districts
- Adult Uses
- Lot shape
- Revised rate of development zoning bylaw (sample has been provided to the Planning Board)