MASTER PLAN

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MASTER PLAN



MAY 1980

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CHAPTER I

INTRODUCTION

A. Purpose

This Master Plan for the development of the Town of Brentwood, New Hampshire, is designed expressly to insure the efficient, cost-effective and orderly development of our town. Its purpose is to establish policy and provide guidance designed to secure the welfare, health, morals, safety, prosperity, convenience and general welfare of its present and future residents.

As generally prescribed under RSA 36:13, it seeks to attain conditions in the community that support the efforts of each of its citizens to improve the quality of his or her life. It seeks to avoid chaotic development with its potential for damaging the welfare of the many in exchange for the welfare of the few. Instead, it seeks to provide for orderly and natural growth commensurate with the town's ability to properly support that growth both in terms of service and in terms of facilities. It seeks to judiciously protect the general welfare of both the many and the few and do so with a minimum of restraint.

B. Organization

The organization of this Master Plan is straightforward. Each chapter builds upon the substance of the prior chapter. Chapter I introduces the reader to the document by stating first the purpose; second it offers a description of its organization; and third, it describes the methodology used in its generation.

Chapter II presents a town history enabling the reader to develop an understanding and empathy for the community of Brentwood as it has evolved through the years. Chapter III follows in the natural order with a look at the town as it exists today. Chapter IV goes from the present into the future. In so doing, it looks at the future in terms of both current trends and several optional courses of development deemed desirable by the majority of its citizens.

Chapter V makes recommendations designed to fulfill the declared purpose of this document and seeks to promote that fulfillment in the form and manner expressed as the lawful and legal will of its citizens.

CHAPTER II

HISTORY OF BRENTWOOD

Brentwood is located near the center of Rockingham County. It is bound on the north by Epping, on the east by Exeter, on the south by Kingston and on the west by Fremont. It is watered by the Exeter River, by the Little River and by Dudley Brook, formerly referred to as Deer River.

Originally, Brentwood was a part of Exeter, incorporated as a separate Parish until June 26, 1742.

The church was an important factor in the lives of Brentwood people, although other factors had an equal influence on the shaping of its history.

Settlement was determined by many conditions, among them the quality of the land. Very early in our history, farming was a main occupation.

The Exeter River played an important part in the lives of our people for it offered the power needed to operate the many mills that were present throughout the 1800's and on into this century. These mills have all disappeared, leaving the river as a wild area much used by the people for fishing and recreation.

From the far western part of town at Copy Hold to the falls just near the Exeter line, powerful mills grew up to offer employment and to invite new residents. In the center of activity of the town at Crawley's Falls at the intersection of Old Route 125 and Middle Road (Route 111A), three mills existed. Two are pictured in the HISTORY OF BRENTWOOD, prepared by the town's Historical Society in 1967. At least one employed 29 or more people at one time.

The Rockingham County Map of 1857 shows us that, by then, commercial activity also was thriving in our town. The map leads us to believe there were "general stores" serving as mini town centers in each section of town. Other records tell us that as early as 1775, with 1,100 people in town, the many sections of town were serviced not only by "general stores", but by many specialized business enterprises such as blacksmith shops, tanneries and at least two coopers, one near Kingston on South Road and one on North Road.

As the town grew and as a generous mix of commercial, industrial, farm and residential activity developed, cultural needs were not neglected. In 1831 at Crawley's Falls, Captain Josiah Dudley and Jonathan Morrill built a two story building to serve as a store. In 1836 a small room in the upper story was furnished for a "singing school" and other social activities.

In many ways, Brentwood's history is the story of a slow coming together of scattered communities. Wetlands are interposed throughout the town separating the various areas of productive farm lands. The slowness and difficulty of transportation promoted mini community centers. However, as transportation has improved, a gradual completion of the movement to synthesis has become paramount. Even though at one time served by five separate post offices and split into five separate school districts, the people themselves in their own way have moved towards unifying their self-support efforts.

Today, also, we see the raising of the town's first official town office building. It is being built principally through the efforts of volunteer labor and with the use of volunteered equipment. Even food and drink to nourish the workers are donated.

Much can be said about the changes in recent years. No longer are we principally a town of farmers and general stores and tanneries and blacksmiths and mills. Like much of today's rural America, most of our inhabitants work outside of the town. Most of our residents commute to jobs and businesses elsewhere. Yet, some do find their full livelihood right here in Brentwood. And many that do not supplement their income with a small business activity out of their homes. Few full time farms remain. Yet the rural flavor remains. The town "looks" like a farming community. And on the many occasions when the people have been asked through surveys at large and questionnaires at special official and unofficial meetings, the people have said loud and clear, "that's the way we want to keep it".

CHAPTER III

CURRENT STATUS

A. Today we are a community of 491 dwellings, housing 2,064 people in family units of diverse occupations and means. Contained within the town are several independent small business structures as well as many, many business activities, large and small, managed and operated out of individual homes. In addition to the dwellings and business structures, it contains still another 8 buildings such as the Fire Hall, the Highway Department Garage or shelter, the Library and the Brentwood Youth Organization's meeting hall. Among the 8 is a 33,686 square foot brick, concrete block and steel school building that services 174 students in grades 1 through 6.

We are a town today that is fast unifying. The extensive wetlands are still present, but the changes transportation brings about have turned this feature into an asset rather than a liability. No longer do they divide, but rather they unify. Because of restrictions on development forced by these wetlands, much of the town's rural flavor has remained and is jealously defended by its citizens old and new. Transportation arteries, in the main, link the large blocks of prime land and generally avoid the wetlands or traverse them at their narrowest points.

The natural use of land continues to see the high, well-drained areas as growth centers. In the southwest quadrant, the two prime roads, Routes 125 and 111A, both state-owned, intersect near the center of the largest block of land classified as suitable for development on the Development Suitability Map produced in 1977 by the Southeastern New Hampshire Regional Planning Commission as a result of the then-current soil survey. Near that point the town office building was constructed.

Again, today that region is fast manifesting itself as the natural functional center of town. Not only do we see the town office building rising there, but additionally, the area contains the town's prime physical structures, its school building and its fire house. Contained within that same quadrant is the Library, the Brentwood Youth Organization's hall, the Highway Department's shelter, the Grange Hall and both the large modern housing developments, Riverside and Brentwood Forest.

Industrial development has tended to concentrate in the northeast quadrant. It produces by far a greater industrial tax revenue than any of the other sections of the town. Town tax records show that in 1977, structures in that section other than dwellings and farm buildings, generated $18,443.86 in taxes. Tax revenue from similar structures in the entire balance of the town was $5,117.13. Of course, these figures exclude many full time industrial/commercial activities not valued separately on the tax books from the associated residences. They do not include the $16,557.57 received in the right-of-way taxes from Public Service Company and the New Hampshire Electric Company.

The primary North-South artery in town is Route 125. The official State of New Hampshire Traffic Flow Map of 1975 traffic shows a 24-hour average daily traffic count varying from 5,120 to 5,400 vehicles. It is fast becoming a major funnel for traffic flowing from the New Hampshire Massachusetts border region into both the lakes and mountain regions because alternate routes are reaching capacity. It is also a major commuter route. That same survey map notes that the rural state average for 1976 shows a 6.2% increase over 1975.

East-West traffic through the town is carried by South Road in the southern part of town, Middle Road or State Route 111A through the central portion, and a combination of North Road and State Route 101 in the northern section.

Current State plans call for the relocation somewhat southward of that portion of Route 101 located in Brentwood. In the relocation of the Epping-Brentwood-Exeter portion of Route 101, the state projects an expenditure of $3,600,000.

Other roads that serve less as throughways and more as regional access roads are Lake Road, Haigh Road, Prescott Road, Pickpocket Road, Pine Road, Deer Hill Road, and Scrabble Road. Shorter roads are Mill Road, River Road, old Danville Road, and several roads developed by subdivisions but still not showing on town maps.

Haigh Road, a connecting link between South Road and Middle Road has been less than fully serviceable because of an impassable bridge. That bridge is being reconstructed this year at a total cost of $120,000.00, $20,000 of which is being provided by the town and the balance by the Federal and State governments.

Exhibit II shows that town expenditures for non-school purposes for the year 1977 were $131,492.77, almost double the $70,795.35 expended in 1970. Increases have been about 6 to 9 thousand per year with only one year (74-75) showing a minor decrease (less than $2,000).

Police Department expenses have risen from $3,484 in 1970 to $18,482 in 1977. This figure is a bit misleading, however, for of that amount, $11,153.49 was covered by Manpower Funds and was utilized to provide, on an experimental basis, a full time police officer. Thus the true tax based cost of the department was $7,328,51. Similarly, the minor rise in the Fire Department budget from $3,654 in 1970 to $5,857.91 in 1977 does not give the true picture, as $2,500 of the 1977 expense, covered by Revenue Sharing Funds, was used to augment the department's equipment inventory.

Road maintenance is subject to wide budgetary swings principally because of the impact of the weather.

The school budget constitutes by far the largest tax expenditure. In 1976-1977 it amounted to $454,143 with over one-half, or $254,943, being paid in public tuition for 224 junior and senior high school students attending Exeter schools. The 174 elementary students, down 4 from the

1976-1977 enrollment, are accommodated in the 33,686 square foot Swasey Central School on Middle Road, one mile east of Route 125. The facility has a total of 12 classrooms with the potential of 13 by use of a single partition. Overall the space is considered by the School Board to be sufficient for 275 students.

The kitchen is equipped to serve easily 135 meals per day or 150 with a moderate amount of juggling. There are 110-120 lunches currently being served daily. The cafeteria seats 96 students at a time now, but could easily accommodate 32 more and with some degree of strain up to 48.

Aside from a library of some 2,600 books, the school possesses approximately $800 worth of audio-visual equipment including a movie projector, tape recorders, overhead viewers, TVs and filmstrip viewers. A yearly maintenance program has kept these items in good repair although some have reached old age and will need replacement soon.

The building itself meets all Federal requirements for access by the handicapped.

The outside area or the grounds provide what is deemed by the School Board to be adequate playing space for 175 students at recess, or for organized games. The driveway and parking zones need resurfacing, with parking zones reorganized and extended. A typical morning will have 21 cars parked at the school for staff only.

As noted in Chapter II, Brentwood residents are served by a people's Fire Department. The Firemen's Association is a volunteer body that has, since 1942, provided the town with a highly professional fire fighting capability. The association, through volunteer efforts, constructed the town's first fire station in 1949 and expanded the same structure in 1968. It consists of approximately 3,650 square feet at an upper level, reached from an extensive parking lot in the rear of the building, and 3,400 square feet at the lower level with direct street access.

Through the years, the association, together with the Ladies Auxiliary, has contributed not only the building, valued at $45,000, but an additional inventory of equipment valued today at over $11,000.

The total equipment inventory including that provided by the town as of 1977 is extensive and impressive.

The Department is organized into three companies with a total manpower of 9 officers and 28 firemen. Jim Fralic has served as Chief of the Department since 1967.

The competence of the Department is attested to by the fact that it carries an E-3 I.S.O.,(Insurance Service Office) rating. That rating means that any structure within three road miles of the Fire Station receives insurance coverage at a premium rate--the best possible rate in an area not served by a Fire Hydrant system. Many homes in the eastern and northeastern parts of town would benefit from this favorable insurance rate, were a

EXPENDITURES

Title of Appropriation	1970	1971	1972	1973	1974	1975	1976	1977
Town Officers Salaries	$ 2,787.34	3,731.90	4,974.52	7,448.05	8,205.70	8,375.87	9,651.00	9,090.40
Town Officers Expenses	$ 3,483.27	2,236.06	3,132.37	3,480.07	4,485.57	3,383.23	4,592.51	5,495.16
Election and Registration Expenses	$ 837.95	598.72	916.27	613.56	1,078.16	602.80	1,289.53	364.60
Expenses Town Buildings	$ 193.73	329.27	1,280.35	1,074.58	949.74	1,021.58	1,564.03	1,056.92
Police Department	$ 3,484.62	4,637.33	5,507.85	7,187.48	8,160.04	8,204.72	15,733.16	18,482.95
Fire Department	$ 3,654.15	3,730.20	4,118.18	4,020.66	5,207.42	5,029.92	6,116.15	5,857.91
Insurance	$ 2,085.18	2,186.53	2,865.18	2,824.65	2,927.15	3,094.80	3,556.05	5,920.05
Planning & Zoning	$ 541.12	23.18	646.52	396.23	362.40	1,707.22	1,528.19	4,234.34
Legal Expenses	$ 375.00	437.36	1,360.00	1,135.41	3,894.07	5,667.58	4,222.82	3,099.10
Civil Defense	$ 707.01	554.13	779.92	436.66	424.15	349.77	1,252.84	558.55
Health, Exeter Nursing Association	$ 701.00	1,430.00	1,430.00	1,430.00	1,430.00	1,430.00	1,430.00	1,722.00
Vital Statistics	$ 24.00	24.27	0	0	19.75	27.75	16.50	24.25
Town Dump - Kingston	$ 1,600.00	2,350.00	2,350.00	2,750.00	5,925.00	8,250.00	8,250.00	8,400.48
Total Maintenance Summer	$12,043.62	35,537.49	21,215.79	15,065.55	16,343.18	22,701.11	22,643.40	22,956.19
Total Maintenance Winter	$13,883.07	0	17,205.39	13,461.20	10,658.81	14,052.70	16,338.96	17,812.11
Street Lighting	$ 39.35	0	106.53	116.34	118.63	145.67	103.63	162.26
General Expenses Highway Department	$ 321.72	221.56	822.35	1,450.87	419.36	1,898.11	538.32	429.46
Town Road Aid	$ 3,980.72	3,920.41	3,419.76	3,470.25	3,463.84	449.93	3,409.35	439.60

EXHIBIT II

(Continued)

(Expenditures, page 2)

Title of Appropriation	1970	1971	1972	1973	1974	1975	1976	1977
Libraries	$ 0	0	300.00	400.00	675.00	750.00	750.00	850.00 @
Town Poor	$ 556.27	668.81	512.91	216.99	116.81	730.13	36.95	572.34
Old Age Assistance	$ 2,158.37	1,846.50	3,459.91	4,445.75	3,096.30	2,811.37	5,835.70	2,989.05 @
Memorial Day Flags	$ 16.00	16.00	24.00	22.40	28.80	33.05	42.00	52.16
Cemeteries	$ 74.00	20.00	75.00	25.00	85.00	95.00	30.00	100.00
Interest & Long Term Notes	$ 916.30	1,274.12	360.75	12,604.50	6,753.50	0	0	3,802.89
Tax Anticipation Interest	$ 0	0	0	243.75	4,872.00	0	3,373.50	0
New Equipment Fire Truck	$ 9,185.00	0	0	0	0	0	25,227.00	0
Rockingham County	$ 0	0	13,237.45	17,724.11	25,165.00	25,856.19	25,579.18	0
Tax Map	$ 0	0	0	4,000.00	8,500.00	4,750.00	0	0
TOTAL	70,795.35	72,669.79	90,101.00	106,019.06	123,367.38	121,418.50	163,110.77	131,492.77

SYMBOLS:

1. ± Crime Commission Funds ---------$2,224.00
2. #1 Highway Subsidy Funds ---------$5,497.70
3. #2 Highway Subsidy Funds ---------$1,837.11
4. #3 Highway Subsidy Funds ---------$1,962.10
5. % State Share of Town Road Aid ---$3,012.03
6. * Capital Reserve Funds (part of '72 Revenue Sharing)---$4,000.00
7. @1 from Revenue Sharing ---------$5,000.00
8. @2 from Revenue Sharing ---------$5,000.00
9. @3 from Revenue Sharing ---------$2,500.00
10. @4 from Revenue Sharing ---------$4,500.00
11. √1 Manpower Funds ---$11,153.49
12. √2 Manpower Funds ---$ 2,484.00
13. θ^1-θ^5 Revenue Sharing-$14,113.00
14. RS Revenue Sharing Offset -----$19,430.00

substation established somewhere along Middle Road at its junction with Deer Hill Road or Pine Road.

No description of the Fire Department is complete without taking note of its pre-eminence as a center for both official and unofficial town activities. Its upper level provided the regular meeting place for both the Board of Selectmen and the Planning Board. Town meetings and all elections make use of the same facility, and Bingo games are a scheduled weekly activity. In addition, it has been the scene of dances of special occasions and many times has been utilized as a meeting hall from whence county or state groups could address the Brentwood citizenry.

Many factors other than internal ones must be included in a list of current status descriptions. Among those factors are the regional activities that will impact in one way or another on the destiny of Brentwood.

Cognizance must be taken of the following if a true picture of the town's current status is to be realized:

1. Neighboring towns are being connected in the media with the term "oil refinery". Oil Refinery-Neighbors-Brentwood----whether viewed as a negative or a positive force----it is certainly a force to be aware of.

2. Well contamination by dumps in Exeter--first suspect and then proven--does it offer a signal that landfills are out, and soon? Brentwood counts totally on the Kensington landfill dump immediately adjacent to its borders, and residences. Are there dangers? Certainly this is a legitimate question. The final report by Dr. Philip Gidley on the Exeter dump does, in fact, state that one pollutant from that dump is moving toward Brentwood.

3. Water supply problems are expected by many adjacent towns.

4. Development pressure is extremely heavy in all of Rockingham County.

5. County responses to population pressures include a new jail, courthouse, and proposed expanded services for the elderly at the county complex in Brentwood. Any of these could significantly transform the private development of that immediate area.

6. The local town highway network will be severely impacted through increased usage resulting from not only an increase in population, but from a change in industrial-commercial activity.

Chapter IV that follows will try to inter-relate both the internal conditions described somewhat extensively in this chapter and these external pressures and problems just noted. Through the use of historical experience as revealed by records and through the inter-relations above noted, it will offer an analysis of the future as it appears to be developing.

B. The committee throughout its process was guided by maps which portray the various natural features of the town. Factors considered included topography, slope, soils and wetlands.

1. Topography:

Topography is the shape of the land: its ups and downs, hills, valleys, ridges and plains. In a community planning context these features impose a natural order on the land that, in turn, influences the pattern of land use. An awareness of topography in a community may show why the existing pattern of land use developed as it did, and may also suggest ways in which future patterns could evolve.

Topographic maps utilize the community base map, superimposing contour lines which show differences in land elevation. Topography influences land use in very elemental ways: often hills are like walls, and valleys are like corridors. These simple conditions affect travel, commerce, vision and even social relationships.

In this part of New Hampshire, the hills are low and their sides generally not steep. The valleys are flat and often wetland. Consequently, development first took place along the crests of the hills where land was dry and could be tilled. The roads connected the farm houses and subsequent houses were built along these roads. A look at the topographic map shows clearly how topography has shaped the road patterns of Brentwood. Wetlands are crossed at their narrowest points reducing the amount of fill that had to be placed.

As is typical of any of the area towns, Brentwood's roads were developed along the path of least resistance. The main roads in town are along relatively flat areas. New subdivisions are beginning to appear in some areas of moderate slope. Generally, the topography in Brentwood has not created any specific barriers to development.

2. Slope:

The influence of slope on land use depends on its steepness and on its relationship to soil, water and vegetation conditions. Variations in steepness affect such things as the amount of cutting and filling necessary to build roads or to prepare building sites, road maintenance and snow removal, and utility construction and service. Whereas moderate slope conditions present few inherent limitations to most uses, the cost and difficulty of many development activities are likely to increase in steeper areas. Opportunities that steeper areas present for unique recreational or residential use, however, may override basic cost considerations.

Soil drainage characteristics are important under any slope condition. In steep areas, however, soils usually are shallower, absorption capacity of soil is often very limited. Though erosion potential tends to increase with steepness, soil type also has a direct influence on the erodibility of sloped areas and can lessen or magnify erosion potential.

Because of complicating factors on steep slopes, active land uses should be planned and undertaken with caution in such areas. In areas of greater than 25 percent slope, the erosion potential is severe, and adequate and safe septic effluent disposal is extremely difficult and costly; active use of these areas often poses problems to the developer, to the purchaser, to land owners down the slope, and ultimately to the community; the same problems are likely to be encountered in areas of 15-25 percent slope.

Slope may become a factor at the other extreme as well--in flat areas where there are poorly drained soils, water may pool at or near the surface. Special engineering and construction techniques may be needed to prevent structural or septic tank problems in these areas. Well-drained, flat to gently sloping areas are suitable for almost any land use.

Slope Map: Brentwood is characterized by its basically flat areas with a 0-8 percent slope, and gently rolling hills with an 8-25 percent slope. There are relatively few areas of steep slope, over 25 percent. To the west of Deer Hill Road, north of the power line, is the largest area of steep slope in Brentwood. There are small steep slope areas scattered between Route 125, North Road, Prescott Road and Scrabble Road which do not appear to have had any effect on development. North of the Exeter River in the Route 125 area is a stretch of steeply sloping land. The only other areas are near Michael Bennett Road and Pickpocket Road. Some of the above slope areas are created by gravel pit operations and will change from time to time by excavation.

Slopes do not present any major problems or barriers to development in the town of Brentwood.

3. Soil:

Soil is the ingredient of the land itself--the ground on which land use happens. Because it is the foundation for all uses, the condition of the soil is an important factor in all land use decisions.

The soil has different meanings to different people: the potential homeowner often thinks of soil merely as a place to build a house and grow a lawn; engineers commonly consider soil as all the unconsolidated material overlying bedrock; soil scientists consider soil as a natural body that has both depth and surface area. For planning purposes, the soil scientist's definition is used, because the greatest source of soil information available to communities is scientists working for the Soil Conservation Service (SCS) of the U.S. Department of Agriculture.

A soil scientist is concerned primarily with the condition of the soil within four feet of the surface. According to SCS soil scientists, "soil is a dynamic three-dimensional body. Its upper surface is the surface of the land; its lower boundary is parent material or bedrock; and it is bounded on its sides by other soils. The properties of a soil represent the integrated effect of climate and living matter on the parent material, as conditioned by relief and time."

"Soil survey" is a general term for the systematic examination of soils in the field and in laboratories--the description, classification and mapping of soil types, and the interpretation of their adaptability for different uses.

Soils Map: Brentwood's soil survey is based on the Rockingham County Soil Conservation Map, dated 1956. Similar type soils have been combined so that there are six groups of basic soil conditions on the map.

a) Wetland Soil Conditions--these are poorly and very poorly drained soils that are wet most of the year. Water table is at or near the surface seven to twelve months of the year. Some of these soils are ponded or have standing water on them most of the year.

There is a considerable amount of wetland soils in Brentwood. Many of these areas are of significant size. They are a definite deterrent to development of any type. Some of these areas should be left in their natural state to serve as wildlife habitat, open space, natural barriers, and collection and storage areas for water.

b) Seasonally Wet Soil Conditions--included in this group are moderately well-drained soils, that have a water table one to two and a half feet below the ground that keeps the soil wet from late fall to late spring and during wet periods of the year.

There are scattered areas of these soils in Brentwood, usually adjacent to wetland areas. In most cases, they should be handled in a similar manner to Wetland Soils.

c) Sandy and Gravelly Soil Conditions--this group consists of well-drained to excessively drained soils formed in sand and gravel. Slopes range from nearly level to very steep.

There are several large areas of these soils. One is located in the northeast part of town to the east of Deer Hill Road. Others are located on both sides of the Exeter River between Route 125 and Haigh Road. Others are in scattered places in the southwest part of town.

Generally these soils have little or no limitations for development as the slope is less than 8%. They are suitable for septic systems, and pose no problems in the construction of buildings or roads.

d) Shallow to Bedrock Soil Conditions--this group consists of shallow to bedrock soils mixed with pockets of deeper soils. The shallow soils predominate and have formed in a thin mantle of glacial till underlain by bedrock at about twenty inches. In some places bedrock is four or five feet below the ground surface and in other places the bedrock is exposed at the surface as rock outcrops. Slopes range from gently sloping to steep.

The largest area of these soils is northeast of Rowell Road and south of Route 111A on the west side of Dudley Brook. There are scattered patches along Scrabble Road, Prescott Road, and between Lake Road and Haigh Road.

The best uses for these soils are for forestry and wildlife. Depending on the depth to bedrock, the types of trees the soils will support are limited. Shallow to bedrock soil conditions are unsuitable for residential, industrial or recreational uses.

e) Deep Stony Soil Conditions--this group consists of well-drained sandy and loamy soils that formed in stony glacial till. Slopes range from gently sloping to steep. The water table is commonly more than four feet below the ground surface throughout the year. Surface stones range from less than five feet to more than thirty feet apart.

Several areas of these soils are found throughout the town. The southeast corner and the northwest corner have a significant amount of these soils. Other areas also on both sides on Rowell Road.

These soil conditions are most suited to forestry uses. Stoniness imposes moderate to severe limitations for recreational, residential and industrial uses.

f) Clayey and Loamy over Clayey Soil Conditions--this group consists of well-drained soils that form in loamy or silty material, generally two to three inches thick, overlying clayey sediments. Slopes range from nearly level to moderately steep. Water generally moves down slope over the clay layer and comes to the surface as seep spots especially after prolonged rains.

The largest area is located on Route 111A between Prescott and Deer Hill Roads.

Soils having a high clay content often swell when wet, and shrink when dry. This can result in cracked foundations and roadways, which make them unsuitable for residential and industrial uses. They are also poorly suited for common cultivated crops because of wetness.

Within each of these soil classifications can be found inclusions, which are areas of different types of soils. On-site inspections are necessary for an accurate classification of soils in a specific area.

4. Wetlands:

"Wetlands" refers to the group of soils and miscellaneous land types that are commonly found in a water-logged condition. Wetland soils include muck and peat, marsh, and mineral soils that are poorly or very poorly drained, as defined by the SCS. In a wetland the water table is typically at or near the ground surface for seven to nine months of the year or more; some of these soils are ponded or have standing water on them most of the year. Although some wetland conditions can be overcome, thereby making them suitable for development, they usually should be classified as preferred for open space. Buildings on them often suffer from shifting foundations, inoperable septic systems, flooded cellars, and other problems inherent in a wet location. Wetlands almost always provide habitats for wildlife, and often serve as aquifer recharge areas. Their economic value to a community is typically greater when they are kept as open spaces; therefore, major wetlands are here recommended for open space designation.

Wetlands cover broad areas in the Town of Brentwood, and can be found almost everywhere to some degree.

5. Flood Hazard Areas:

Floods are a natural and normal phenomenon; they become a problem to man only when he competes with streams and rivers for the use of floodplains. During normal stream flow, water is carried in the channel; but in times of high runoff, water rises over the banks and flows onto the floodplains, frequently damaging structures located there.

There are two broad solutions to the flood problem: the protective solution which utilizes structural features such as dams, levees, and other construction techniques to minimize flood damage; and the preventative solution, which relies on regulation of land uses to keep flood-damageable property out of flood hazard areas. For many years, the protective solution has been relied on to avert flood damage; this alone has not done the job, and the emphasis is now on the preventive approach. The new strategy is being implemented through the National Flood Insurance Program, in which the Federal government requires that a community regulate construction in flood hazard areas in order to qualify for the sale of flood insurance. Failure of a community to participate in the program renders all property owners in that community ineligible for federally-subsidized flood insurance. The National Flood Insurance Program has made land management in flood hazard areas a virtual necessity for many New Hampshire communities.

The map shows the areas designated as Flood Hazard Areas by the U.S. Department of Housing and Urban Development, Federal Insurance Administration. They occur mainly along the major rivers and adjoining areas.

6. Existing Land Use:

The existing pattern of land use in a community has a direct effect on decisions about its future development. The location and extent of farms, residences, businesses and industries--and their relation to each other--are important community features; the road network determines ease or difficulty of access; the location of fire stations, health facilities, community centers, schools, town wells, and sewage treatment plants all affect the ease with which public services can be provided to different areas of the community.

An existing land use study begins with the identification, location and mapping of land uses in a community.

In many communities, the land use maps show a pattern that is characterized by a town center surrounded by a sparsely populated rural area. Brentwood has been characterized by the lack of a town center. The school and the new town office building may provide the nucleus of a town center.

Residential Light Density (one or less dwelling units per acre) is the major land use in town.

Residential Medium Density (two to five dwelling units per acre) can be found mainly in the southwest corner of Brentwood. There are also two areas of this density along North Road and on Rowell and Haigh Roads.

Residential High Density (six or more dwelling units per acre) is found only at the County Farm.

Industrial--the most areas of industrial use are along Pine Road. There is another industrial area on Scrabble Road and four small industrial areas in southwest corner of Brentwood.

Commercial--the area lining Route 125 has the most commercial land uses. Route 101 also has some commercial uses, as do most of the other major roads in town.

The remainder of the land is undeveloped. There are several gravel pits throughout the town, with the highest concentration being along Pine Road.

7. Vegetation:

The vegetation map consists of ten categories:

a) Wooded--mixed coniferous and deciduous. These are well-stocked forested areas. Most of Brentwood is in this category. The largest are located between Middle and South Roads.

b) Wet Wooded--includes low land hardwoods and other forested areas. There is a large area of wet wooded land north of the power line extending from Prescott Road and to the west of Route 125 adjoining Fremont. It also continues south beyond the Exeter River. Another strip occurs east of Deer Hill Road north of the power line. Several areas are scattered along South Road.

c) Wet Scrubby--areas consisting primarily of shrubs, grasses and ferns. There is a long strip of "wet scrubby" land along Dudley Brook, also to the west of Route 125 at Smith Road, and a few areas along Middle Road and South Road. There is a short stretch along Little River to the west of Haigh Road.

d) Abandoned Land--this includes such areas as recently cut-over forested land, abandoned old fields, and urban land with early successional vegetation. It also includes the unused, non-forested land under power lines.

There are patches of abandoned land along most of the roads in Brentwood. The largest concentration is along Pickpocket Road, and north of the power line between Prescott and Deer Hill Roads.

e) Vegetated Urban--commercial, industrial or residential areas of more than an acre. The residential areas have a density of more than one dwelling unit per acre. There is some vegetation in these areas.

North Road, Route 101, South Road west of Route 125, and around the junction of Route 111A and Route 125 are the major vegetated urban areas. Marshall's Corner also is in this category.

f) Field and Pasture--open areas usually used for grazing animals. Some are large yards. Deer Hill Road, North Road, and Middle Road have the largest areas in this category. There are also scattered areas along South Road, Lake Road, and Pickpocket Road.

g) Cropland--areas planted or plowed for crop cultivation. The County Farm has the largest area of cropland in Brentwood. Pickpocket Road and South Road have several patches. There are just a few other areas scattered around town.

h) Orchard--fruit trees of sufficient number, reasonable order, and apparent healthy condition. There are very few orchards--one on Rowell Road, two off South Road and another in the Smith Road area.

i) Gravel Pits--those in use and abandoned. There is a large area on Pine Road.

j) Open Water--lakes, ponds and rivers.

8. Land Use Analysis:

An evaluation of existing land use should go beyond an observation of the present pattern to address the question of how future growth can best be accommodated. The most important factors in this analysis are: road networks, municipal services, regional growth patterns, and compatibility of land uses.

In many communities, road maintenance expenses are a major budget item; the location of future development can have a significant impact on highway construction and maintenance expenses. When development occurs in a sprawled pattern, the community is faced with upgrading and maintaining the many miles of rural road, but when development is concentrated, these expenses are minimized. The existing road network may suggest that certain areas of the community are preferred for growth because they are already served by a good road. On the other hand, a community can sometimes direct growth into an area by upgrading the road access.

Location of extension of public services can be used to reinforce the existing land use pattern or to change the pattern: a common method of encouraging a desired pattern of growth is to allow a greater density of development in areas served by municipal water or sewer. If there are no services at present, or if the existing services are being used at capacity, a community may wish to provide new services in areas where it wishes to encourage growth.

Regional land use affects the pattern of community land use: development in one town often has a direct effect on neighboring towns. For example, if growth in a town is moving toward a common boundary, it may encourage growth in the neighboring community as well.

9. Development Suitability:

By overlaying the maps illustrating slope, soils and flood hazard areas one derives a map showing overall capacity for development. For Brentwood, this map was divided into three categories--"most suitable", "suitable", and "least suitable".

This map shows that about 31% of Brentwood (or 3,297 acres) falls in the "most suitable" category; 13% (or 1,390 acres) in the "suitable" category; and 56% (or 6,065 acres) in the "least suitable" category.

Given two-acre house lots, and assume 25% of the land is devoted to other uses, about 1,750 dwelling units could be constructed. At three persons per household, this would yield a population of about 5,300.

Since there is a goodly amount of vacant land in the "most suitable" and "suitable" categories, there has been little pressure to date to build on the unsuitable places. Such construction has taken place in adjacent Exeter and other nearby communities and will be sought in Brentwood in time.

10. Zoning Map:

Brentwood has designated two zoning districts:

a. Residential/Agricultural
b. Commercial/Industrial

One Commercial/Industrial district extends 500 feet from the right-of-way on each side of Route 125 from the Kingston to the Epping lines. The second area extends 500 feet from the right-of-way on each side of Route 101 and includes the land between the Route 101 by-pass and old Route 101. The third area extends 500 feet from the right-of-way on each side of Pine Road to a point 1,300 feet north of Route 111A at Marshall's Corner. Minimum lot requirements are 120,000 square feet and 300 feet of frontage.

The remainder of the town is classified as Residential/Agricultural with a lot requirement of 80,000 square feet and 200 feet frontage.

11. Public Facilities Map:

Brentwood's public facilities map includes the new town office building, fire station, school, public works garage, library, church, community hall, cemeteries and campgrounds.

12. Historic Map:

The historic map for the Town of Brentwood includes two categories:

a. Houses dated from 1700-1799
b. Houses dated from 1800-1899

Both categories are pretty well distributed along the main roads in town. At present there is no designated historic district.

C. Socioeconomic Profile:

Brentwood has been growing at a steady rate since 1960. That rate is just over 3% per year, which is greater than New Hampshire's rate for the same time period. Considering New Hampshire's rate of growth is greater than any of the other northeastern states, gives one a sense for the magnitude of population growth relative to other areas in the country.

Table 1 indicates the annual percentage growth rate and population totals in neighboring towns for various time periods.

The 1960 population of the town was 1,072. The 1970 population was 1,468--an increase of 396 individuals.

In 1977, the Office of State Planning estimated that there were 1,822 individuals living in town, or an increase of 354 people. One can see that the town has been growing at a very steady rate since 1960.

It is estimated by the Strafford Rockingham Regional Council that the 1978 population for the town was 1,906 individuals which includes 323 at the County jail and nursing home. This is indicated in Table 2.

The Office of State Planning has projected Brentwood's population to the year 2000. These projections indicate that the town will continue at its steady rate of growth if present trends continue. By the year 2000, they estimate there will be 4,830 people living in Brentwood. This is indicated in Table 3.

Where have all these people been coming from? Table 4 indicates that nearly 28% of the town's residents, or 535 people, have moved to Brentwood from outside New Hampshire. This trend is similar to that experienced by other southern New Hampshire towns.

How long have the residents of the town lived at their present residence? Table 5 indicates that 1,025 (or 53%) of the town's residents have lived at their present address five years or less. Even though some of these individuals are residents of the county facilities, young children or individuals who have moved from another address within town, one cannot escape the fact that many of these 1,025 people have moved to Brentwood from outside of Brentwood.

Where do Brentwood residents work? Table 6 indicates most of those who work do so in Brentwood. The second most frequent site for Brentwood residents is in neighboring Exeter or in Massachusetts. The number of Brentwood residents commuting to Massachusetts again reflects a trend followed by southern New Hampshire communities. The rest of Brentwood workers are scattered around other New Hampshire locations.

What are the types of housing that is currently located in Brentwood? Table 9 indicates that most of the housing in town is single family. It is estimated that 430 are of this type during 1978. There are also 47 mobile homes, 25 apartment units and 6 duplex units.

What are the family incomes for Brentwood residents? Table 8 indicates the distribution of family incomes. There are a wide range of family incomes from no income to those with incomes of $50,000 or greater. The median income for the town, or that which falls at the 50th percentile is $14,803. Using this as a measure of the town's relative wealth, Brentwood can be considered as an "average" southern New Hampshire town. The median income for Brentwood is greater than that of Exeter and Epping, but less than Stratham, Kensington and Plaistow.

How old are Brentwood's residents? Table 9 gives some indication, although it does include individuals residing at the county nursing home, and distorts the results for other Brentwood residents. The table indicates 95 individuals in the 0-4 years category. These children can be expected to enter Brentwood's schools in the next five years. In addition, there will be others moving to town during this time. Therefore, the actual number depends upon net gain in population growth during this time.

TABLE 1

Population Growth: Selected Communities

Town	1960	1970	1975	1977	% Annual Growth '60-'70	1970-77
Brentwood	1,072	1,468	1,686	1,822	3.14	3.09
Exeter	7,243	8,892	9,535	10,429	2.05	2.28
E. Kingston	574	838	846	1,046	3.78	3.17
Kingston	1,672	2,882	3,607	3,803	5.44	3.96
Fremont	783	993	1,200	1,269	2.38	3.50
Epping	2,006	2,356	2,363	2,701	1.61	1.95
State of NH	606,787	737,578	833,461	877,488	1.95	2.48

(Source: Office of State Planning; Strafford Rockingham Regional Council)

TABLE 2

1978 Population, Brentwood, N.H.

Household Population	1,607
Institutional Population	323
Total Population	1,930

(Source: Strafford Rockingham Regional Council; Rockingham Strafford Census Project)

TABLE 3

Population Projections, Brentwood, N.H.

1980	1985	1990	2000
2,170	3,000	3,880	4,830

(Source: Office of State Planning)

TABLE 4

Place of Last Residence, Brentwood, N.H. (1978)

Category	Estimated Number	Percent of Total
None	154	8.0
Other residence, Brentwood	226	11.7
Other residence, Rockingham County	867	44.9
Elsewhere, N.H.	149	7.7
Outside N.H.	535	27.7
	1,930	100.0

(Source: Strafford Rockingham Regional Council; Rockingham Strafford Census Project)

TABLE 5

Years Living At Present Residence, Brentwood Residents (1978)

Category	Estimated Number	Percent of Total
Less than 6 months	164	8.5
1 year	278	14.4
2 years	187	9.7
3 years	191	9.9
4 years	147	7.6
5 years	58	3.0
6-10 years	448	23.2
11-15 years	179	9.3
16-20 years	127	6.6
21 or more years	152	7.9
	1,930	100.0

(Source: Strafford Rockingham Regional Council; Rockingham Strafford Census Project)

NOTE: Sum may not add to total due to rounding

TABLE 6

Place of Employment, Brentwood Residents (1978)

Category	Estimated Number	Percent of Total
Kingston	15	2.55
Brentwood	168	28.94
Exeter	97	16.67
Hampton	15	2.55
Portsmouth	24	4.17
Massachusetts	97	16.67
Elsewhere	165	28.47
Total	580	100.00

(Source: Strafford Rockingham Regional Council; Rockingham Strafford Census Project)

NOTE: Sum may not add to total due to rounding

TABLE 7

Housing Types, Brentwood, N.H. (1978)

Category	Estimated Number	Percent of Total
Single Family	430	84.8
Duplex	6	1.1
Apartment	25	4.9
Mobile Homes	47	9.2
Total	507	

(Source: Strafford Rockingham Regional Council; Rockingham Strafford Census Project)

NOTE: Sum may not add to total due to rounding

TABLE 8

Household Income, Brentwood Residents (1978)

Category	Estimated Number	Percent of Total
No Income	2	.4
$2,000 - 3,000	15	2.9
3,000 - 4,000	22	4.4
4,000 - 5,000	13	2.6
5,000 - 6,000	26	5.1
6,000 - 7,000	8	1.5
7,000 - 8,000	30	5.9
8,000 - 9,000	11	2.2
9,000 -10,000	37	7.3
10,000 -12,000	33	6.6
12,000 -14,000	30	5.9
14,000 -16,000	67	13.2
16,000 -18,000	31	6.2
18,000 -20,000	47	9.2
20,000 -30,000	89	17.6
30,000 -40,000	30	5.9
40,000 -50,000	9	1.8
50,000+	8	1.5
	507	

Median Household Income: $14,803

(Source: Strafford Rockingham Regional Council; Rockingham Strafford Census Project)

NOTE: Sum may not add to total due to rounding.

TABLE 9

Age of Brentwood's Residents

Category	Estimated Number	Percent of Total
0 - 4	95	4.9
5 - 9	131	6.8
10 - 14	141	7.3
15 - 19	178	9.2
20 - 24	112	5.8
25 - 29	116	6.0
30 - 34	131	6.8
35 - 39	120	6.2
40 - 44	112	5.8
45 - 49	93	4.8
50 - 54	58	3.0
55 - 59	52	2.7
60 - 64	81	4.6
65 - 69	89	4.6
70 - 74	79	4.1
75 - 79	93	4.8
80 - 84	93	4.8
85 - 89	68	3.5
90 - 94	58	3.0
95 - 99	23	1.2
99+	10	.5
	1,930	

(Source: Strafford Rockingham Regional Council; Rockingham Strafford Census Project)

NOTE: Sum may not add to total due to rounding.

CHAPTER IV

THE FUTURE, AN ANALYSIS

Any analysis of the future of Brentwood must address in one fashion or another five basic components of the town. They are as follows:

A. Industrial
B. Commercial
C. Residential
D. Institutional/Municipal/County
E. Open Land -- including farmland, wetlands, timberlands, etc.

Certainly it is true that many other dissections are valid and perhaps supportive of an in-depth analysis; however, regardless of the organization of the analysis, these five areas must be incorporated. And as one begins to analyze each of these sections, the interaction among the five begins to cloud any division at all. Indeed, the industrial condition, the commercial condition, the residential condition, all are locked in the same harness and the movement and direction of each affects the direction of all others. Consequently, as each of the five categories is addressed, one must constantly incorporate reference to one or more of the others.

A. Industrial Development:

Fremont Furniture, John Iafolla C., Custom Cast Concrete Products, Brentwood Box, Rila Precast Concrete Products, Sanborn Metal Products, Brentwood Lumber and Bob's Used Parts are the current industrial base for which statistics are available at the time of this analysis. Their contribution to property tax revenues is $13,291.87, for an average of $1,661.48 per industrial establishment. The town's total property tax receipts are $537,518.66. Industry presently accounts for 2.5% of those receipts.

For industrial development to reduce the tax rate by $1.00, the present amount of industry would have to be doubled.

I. Benefits of Industrial Development:

The benefits which Brentwood would gain from industrial development are:

a. Tax Revenues: These are limited to taxes on the buildings and improved sites. Neither machinery nor profits are taxable by the towns. Thus securing a positive tax benefit from an Industry is a direct factor of the quality and size of the structure erected to accommodate that Industry.

b. A Stronger Local Employment Base: At present, most people doing industrial work commute out of town. As fuel prices rise, this will become more burdensome. Possibly a stronger local employment base would give Brentwood a more stable population with a resulting strengthening of town affairs.

c. Employment Opportunities For Part Time Work or Cottage Work: By attracting certain kinds of industry, employment can be obtained for members of families who cannot be employed far from home or on full time shifts.

d. A Share in the Benefits as well as Costs of Areawide Development: Industrial development is likely in the area with a resulting increase in demand for housing with the costs that it involves. If Brentwood were to receive only the residential development, it is possible that area development would place a greater tax burden on Brentwood. For if Brentwood were to get considerable school population growth, for example, as a result of major industrial development in Fremont or Epping, taxes on new residences would not necessarily pay for increased school expenditures. Thus, to avoid a disproportionate share of the cost associated with area development, some of the direct tax benefits generated by that development must be realized.

e. Land Would be Removed from the Residential Market: It is argued that industrial development of land removes housing sites with their capacity for generating school-age population. This is certainly true, but it does not follow that the school population will be kept down as a result. There is enough land to meet existing housing demand in Brentwood even if all the land zoned industrial/commercial is excluded. If this is true, then industrial development might simply produce more demand.

f. Service Would Be Partially Developed: If the town had an industrial park with water service, then when and if a town water system became needed, part of it might already be developed.

II. Liabilities of Industrial Development:

Liabilities of industrial development in Brentwood are:

a. Increased Growth in the Residential Sector as a Spin-Off From Industrial Growth: It can be argued that in any case this residential growth is offset by revenues from the industrial plant. However, this is not necessarily so. Suppose two new homes resulted from a plant which paid $2,000 in taxes. If there were four children, the school bill would be about $5,000. The tax revenue from the two homes would have to average $3,000 to balance the expenditures. Again, the significance of securing only those industries that would require a facility of high value becomes apparent.

b. Increased Services: If increased development occurs in the northeast part of Brentwood and along Pine Road, there will be increased demand for fire service. Perhaps the same is true for police services. Our waste disposal cost could be significantly increased. Even road maintenance could be driven upward.

c. Increased Pollution: Increased pollution in the form of both noise and air particulates could result, depending on the kinds of industry and how development was restricted.

d. Increased Traffic: Traffic on the town roads would increase, especially if the industry were large enough to import jobs. Thus, the location of industry becomes extremely important if hazardous traffic patterns are to be avoided.

e. Increased Population: The development of industry would increase migration of workers and families into the area. This will occur whether the industry is located in Brentwood or nearby. Increased industrialization in highly visible locations would further move Brentwood and the surrounding area away from its rural appearance. Given the results of the questionnaire circulated a few years ago, most people see this as a deterioration of the quality of life. Thus the location of such development becomes highly significant.

III. Requirements for Development:

Paul Gilderson, head of the New Hampshire Industrial Development Commission, asserts that Brentwood is presently unattractive to industry because of a lack of municipal services. Generally speaking, the following requirements must be met if the town wishes to attract industry:

a. Adequate Labor Pool for Industrial Development: In the opinion of Mr. Gilderson, the labor pool along Routes 125 and 101 is sufficient to make Brentwood competitive with other areas in southern New Hampshire, notably Nashua and Manchester.

b. Water Supply: Industries need a water supply to keep down fire insurance costs. Brentwood has no such supply. This need could be met by developing a fire pond or by building a standpipe or by negotiating a long term contract with Exeter to supply an industrial park. All of these suggestions are most feasible for the industrial park concept. The last suggestion has the result of beginning a regional water system or beginning a local water system.

c. Sewerage Disposal: The disposal of sewerage can be handled on individual sites or collectively in an industrial park. Mr. Gilderson believes that this lack is not serious.

d. Electrical Service: Providing electrical service to any industrial development is not seen as a serious problem.

e. Industrial Waste: Industrial waste including chemical, noise and other forms must be strictly controlled.

The industrial park concept is the most feasible way of meeting these requirements and at the same time maximizing control over the potentially negative factors. It is not economically feasible for the town to duplicate the services industry requires at different sites. On the other hand, letting each industry fend for itself would most likely be a serious deterrent to industrial growth. Not only is this true but spasmodic development makes town control of traffic hazards, noise and pollutant problems difficult. There are at least four ways of developing such a park:

1. Raise money through a bond issue for the town to develop its own industrial park. This gives the town maximum control, but it is also the most costly.

2. Seek federal funds for development through some agency like Farmer's Home Administration in the Department of Agriculture.

3. Have the town work in partnership with a non-profit local corporation of citizens who would sign the notes for development costs.

4. The State Industrial Development Authority can guarantee bond issues for private corporations of various sizes in Brentwood.

IV. Desirable Kinds of Development:

Certain kinds of industrial development are precluded by the lack of sewerage and adequate water supply. That leaves a wide variety of possibilities:

a. Industries providing part-time or cottage jobs
b. Industries supporting other area industries
c. Service industries employing office workers
d. A major plant like Sylvania Electric or the like.

V. Other Considerations:

The nature of development can be influenced by planning. It is possible to require:

a. Scenic setbacks
b. Landscaping
c. Restricted road entrances
d. Industrial parks rather than haphazard development
e. Certain sizes and types of buildings so as to encourage long term use
f. Buildings easily convertible to other uses is there is business turnover
g. Adequate space allotment for expansion of services like water, sewerage, parking and roads
h. Deep buffer zones that shield the activity visually.

Certainly whatever industrial development occurs should be required to meet strict environmental standards regarding noise, water, air, and scenic considerations.

Name of Business and Address	Owner	Years in Business	# People Employed	# Full Time	# Part Time	# of Family Employees	# Employees Residing In Brentwood
Ken Smith Tractor Sales, Rt. 125	Ken Smith	3	5	3	2	X	2
Brentwood Camping Area, Rt. 101	Daniel Sesnovich	2	Summer-4 Winter-2	X	All	X	X
NH Stove Co. Jct. Rts. 125-111A	Colin Galliger	3	4	3	1	1	X
Liz's Place Rest. Rt. 125	Elizabeth Cullity	1	1	X	1	1	1
Rifle Musket Shop Rt. 125	Fred Norton	7 months	1	1	X	X	X
Shelter Enterprises Rt. 125	David Roberts	1	11	11	X	1	1
Brentwood Feed Rt. 125	Ken Cowan	1½					
Kimblewick Equestrian Center, Rt 125	Ken Cowan	1½	13	13	X	5	
Custom Haybailers Rt. 125	Ken Cowan	1½					
Exeter Tree Service Rt. 101	R.J. Parenteau	28	4	4	X	2	2
Spinning Wheel Yarn & Craft Supply Rt. 125	Lee Cail	3 months	X	X	X	X	X
Atkinsons Antiques Jct. Rt. 125 & South Road	Mr. Atkinson	6	X	X	X	X	X
Loch Ness Kennels Rt. 125	B. Lates	5	4	1	3	X	X

NOTE: Several additional businesses exist, but owners could not be contacted at time of survey.

Name of Business and Addresss	Owner	Years in Business	# People Employed	# Full Time	# Part Time	# of Family Employees	# Employees Residing in Brentwood
Lindys Market Rt. 111A	Bob Wilson	2½	3	X	3	3	3
Paul Viviers R.E. Jct. Rts. 125 & 101	Paul Viviers	1	5	2	3	1	X
Brentwood Auction Gallery, Rt. 125	Norman Goss						
H & D Evans Plant Shop, Rt. 125							

BUSINESS EXPANSION PLANS

Company	Plans
Ken Smith Tractor Sales Rt. 125	One building presently under construction. Possibly others next year.
Brentwood Camping Area Rt. 101	None
New Hampshire Stove Company Jct. Rts. 125 & 111A	Yes
Liz's Place Restaurant Rt. 125	None
Exeter Tree Service Rt. 101	Building in Manchester, N.H.
Kimblewick Equestrian Center Rt. 125	
Brentwood Fern Rt. 125	
Custom Haybailers Rt. 125	
Rifle Musket Shop Rt. 125	None
Shelter Enterprises Rt. 125	Yes
Atkinson Antiques Jct. Rt. 125 & South Road	None
The Spinning Wheel Yarn & Craft Supply, Rt. 125	Larger building
H & D Evans Plant Shop Rt. 125	
Brentwood Auction Gallery Rt. 125	
Loch Ness Kennels Rt. 125	None

(Business Expansion Plans)

Company	Plans
Lindys Market Rt. 111A	None
Paul Viviers Real Estate Jct. Rts. 125 & 111A	None

B. Commercial:

From the survey conducted on commercial activity in Brentwood, several conclusions can be drawn. They are as follows:

1. Within the past three years there has been an explosion of activity in the commercial areas.

2. Commercial activity is concentrating on Route 125.

3. At least five businesses plan to expand their current operations; of these, two plan a larger physical facility at their current location.

4. Employment figures point out that these activities must be considered significant. Commercial establishments are providing some income to at least 57 individuals. This does not include at least five owners (four of whom live in Brentwood) not counted among the total employees as reported to the surveyor. In like manner, it does not include other commercial activities carried on from residences without the benefit of a separate business structure. In that category at least five full-time employees can be identified, four of whom live in Brentwood. Thus, the minimum number of individuals engaged as owner or employee in a Brentwood commercial activity is 62. Of this number, 17 are residents of Brentwood.

Two activities considered commercial could not be contacted at the time of the survey. Considering that each has an owner-employee the total number of employees then becomes 64 with 19 of them being Brentwood residents. If the reported 38 full-time employees are combined with the five owner-employees of those same businesses, full-time employment can be pegged at a minimum of 43. Add to this the two listed businesses not surveyed (two employees) and the three businesses not using separate structures (five employees) and we have at least fifty full-time employees.

These figures do not address those activities that may be classified in the broadest sense as industrial. In like manner, it does not include the many at-home commercial activities that, though generating some dollars, by external appearances do not constitute a significant part of the town's commercial activity.

5. Several of these commercial activities add appreciably to the town tax base, but require very little in returned services.

C. Residential:

The foremost prerequisite for sound planning is a clear understanding of where Brentwood wishes to go. In that respect, town or municipal planning seeks to sustain an environment in which each individual can maximize the quality of his or her life as that individual interprets the word quality. In a survey conducted in 1975, and in a similar survey conducted in 1977 by the Sounding Board, the majority of the citizens have indicated that this can best be supported by maintaining a rural atmosphere.

We seem to have in mind what might be described as a typical New England town. Such a town has had not only woodlands, fields, and farmland, but a balanced population according to age and income; the young, middle-aged, and elderly; the wealthy and those of moderate or low income. This has been relatively true about Brentwood as reported in the national census. The average age has been dropping, but is still higher that the state or national average, with approximately 24% under 14 years of age; 34% ages 15-44; 35% ages 45-64; and 7% over 65 years of age.

Many of the provisions of the Zoning Ordinance have been developed to protect homes regarding adequate construction and placement, surrounding land use, and overcrowding.

The experience of requiring two-acre lots, with the rapid increase of land values in this area of the state, and the present mortgage money market raises the question whether the ratio of children to adults to older persons can be maintained.

Will it be possible for young couples starting their families to buy or build a home? This applies also to single persons. Few or no rentals are available or financially feasible. With more and more state services reverting to towns and being financed by increasing the property tax, will those on fixed retirement incomes be able to retain their homes?

If we are to have the balance of youth to age, which has helped make Brentwood so desirable to us, something must be done to make possible, first, the establishment of homes and, second, the retention of homes by both the young and the elderly.

I. Possibilities:

a. Cluster Housing: Cluster housing would permit shorter frontage while retaining the two acres per house. This could accomplish three things:

1. small first homes for single persons or young couples and houses for the elderly

2. less road to be maintained by the town

3. the "extra" land would use some areas of wetlands and conserve a green area.

b. Temporary Certificate of Occupancy: Use of the provision in Section 103.2 of the 1976 edition of the National Building Code of a "Temporary Certificate of Occupancy" would make it possible for single persons, young couples, or the elderly to have a physically safe portion of a house built and then move in. They would finish off the rest over a stated period of time.

c. Mobile Homes: Mobile homes can provide economical housing for the young and elderly. In 1970, of 47 mobile homes in town, 20 were occupied by those with the head of the family under 30, and 18 with those over 65.

d. Composting Toilets: The Zoning Ordinance could be amended to take advantage of the State Law...where in certain instances sufficient area is not available for a complete leach field, but enough for a composting toilet.

e. Study Commission: A study commission could be appointed to determine the feasibility of smaller lots (other than clusters) under special circumstances for small houses for single persons or the elderly.

f. Town Policy: In order to encourage the elderly to remain with us, programs for the elderly could be conscientiously promoted, such as: using the Visiting Nurse (153 home visits were made in 1977); Meals on Wheels; rural transportation through the Community Action Program; use of available Federal subsidies, food stamps, fuel payments, rental subsidies, etc.; full amounts of legal elderly tax exemption according to the law (in 1977 it was only at 60%); daily telephoning, etc.

TAXES LEVIED ON NEW DWELLINGS

1972-1976

	1972*	1973	1974	1975	1976	1977
New Units	25	16	12	17	15	25
$ Total Value	24 511,560	13 447,240	10 149,100	16 367,350	13 275,600	3 75,500
Tax $	24 13,506.34	12 8,842.19	10 6,222.72	15 15,585.65	13 13,491.24	3 3,221.35
Average Tax	562.76	736.85	622.27	1,039.04	1,037.79	1,073.78
Average Value Cost Unit	21,311	36,711	14,910	22,959	21,200	25,167

25,811

AVERAGE VALUE/TAX NEW DWELLINGS

1973-1977

Value	Tax	Percent
23,784	$901.95	38%

*Excluded from average; Tax Base for Current Evaluation in 1973.

NEW DWELLINGS

Tax By Year By Unit

1975		1976		1977	
Value	Tax	Value	Tax	Value	Tax
41,100	1,662.51	20,900	990.09	5,800	173.88
18,600	912.00	14,100	806.74	41,100	1,748.58
32,500	1,326.71	39,550	1,688.93	28,600	1,298.89
28,450	1,318.92	23,500	1,073.08		
39,800	1,835.00	34,900	1,518.91		
10,800	480.32	39,900	1,706.12		
12,850	702.81	14,100	721.82		
20,400	912.00	13,700	702.70		
35,950	1,623.13	37,350	1,617.34		
30,300	1,216.61	4,200	372.67		
16,750	817.96	12,900	642.69		
25,100	1,097.33	3,100	223.88		
13,950	781.65	17,400	1,426.27		
25,850	898.70				
15,000					
367,350	15,585.65	275,600	13,491.24	75,500	3,221.35
	1,039.04		1,037.79		1,073.78
Total units Started	17		15		25
Total units Valued	16		13		3
Total units Taxed	15		13		3

NEW DWELLINGS

Tax By Year By Unit

1972		1973		1974	
Value	Tax	Value	Tax	Value	Tax
36,300	1,195.08	37,550	1,257.93	12,250	570.75
18,700	534.80	9,950	422.35	12,000	510.25
18,900	532.48	5,900	304.85	42,500	1,448.25
6,750	186.30	27,600	1,157.43	12,700	651.63
18,350	671.93	33,150	1,214.63	6,200	341.25
31.400	938.72	24,350	936.33	10,500	405.00
61,900	1,683.68	22,100		18,300	705.25
22,700	705.84	35,450	1,343.35	3,950	216.13
21,450	746.64	25,600	807.60	14,750	730.33
21,800	718.08	7,850	233.08	15,950	643.88
7,600	367.20	13,450	641.78		
11,110	301.92	5,400	132.58		
20,600	662.32	11,650	390.28		
7,900	168.96				
35,600	629.68				
37,000	1,006.40				
2,900	80.24				
13,450	458.32				
9,300	467.84				
1,600	198.25				
17,250	736.50				
6,000	201.00				
11,550	314.16				
4,700*	0.00				
511,560	13,506.34	447,240	8,842.19	149,100	6,222.72
	562.76		736.85		622.27
Total units Started	25		16		12
Total units Valued	24		13		10
Total units Taxes	24		12		10

GAIN/LOSS, UNITS ON TOWN TAX BOOKS

Year	In	Out	Net Gain	Net Loss	
1971	11	5	6		2.1%
1972	62	59	3		1.0%
1973	52	33	19		6.0%
1974	36	37		1	
1975	32	28	4		
1976	45	33	12		
1977	49	25	24		
TOTAL			68	1	Net Gain=67

Net Change Per Year: +6.7 or 24% increase based on 281 units in 1970

D. Institutional/Municipal:

Of all municipal services and functions provided by the town, education of our young people is the most costly. Annually, it consumes over 50% of our budget (and a much higher percentage of our property tax dollar). Thus, since it is such a great part of the whole, any unexpected or unplanned change in the dollars required to carry out that responsibility can immediately and seriously impact on each tax-paying citizen's personal and household budget. The sudden discovery that the school walls are bulging outward, and that staffing and equipment is grossly below minimal requirements can easily cause a budget panic. And, if that happens to the town budget, it ricochets through each household budget in town.

Consequently, some reasonably sound expectations for what the future holds in terms of school population (above and beyond the 4-year projection by the school committee) must be developed. Given the necessity for avoiding all surprises, rather than gambling on a precise prediction, it is far better to develop a "range" of possible populations for each of the time frames involved.

Many methods present themselves as valid approaches to arriving at the desired projections. In the initial stages of this analysis, two sets of figures were developed:

1. a projections based on recent school growth (see Table A)

2. a projection based on the housing growth rate limit imposed by the 1978 electorate (see Table B).

Once these two sets of figures were calculated, a third table (Table C) was developed by taking the lowest and highest figure appearing in either of the two tables as the probable range for each of the given time frames.

To further guard against the unexpected, a ± 25% error was assumed. Based on the application of that percentage to both the low and high end of each range, our final table (Table D) in the initial stage of this analysis was constructed. Assuming that countywide/areawide growth pressure continues unabated, it is deemed to be a safe and sound broad range basis for viewing future schooling requirements. Contingency plans must be developed to handle without too much shock, the supportive facilities, equipment and staff required by both the low and high figures in each time frame as displayed in this table.

Because of the significance of the school population and its attendant budgetary impact on the town, a further analysis was made of the historical relationship between occupied single unit non-mobile dwelling structures in town and actual school population. Since growth in the number of children in town must certainly be a product of continued gorwth in dwelling units, it seemed reasonable to establish an historical relationship between the two.

Table E depicts that relationship as it existed from 1970 through 1976, the years for which figures are available at the time of this analysis. By examining this Table, it can be seen that at no time did school population exceed 105.7% of the total dwellings and at no time was it less than 94.7% of those dwellings. Additional analysis reveals growth in total dwellings over that same period to be a the rate of 8%, varying year to year from 3.1% to 11%.

From this it seems reasonable to expect the 4% growth ceiling implemented by the 1978 electorate to at least be closely approached each year.

When the prior observations are factored with this assumption, it then becomes possible to develop the projections shows at Table F. By assuming 1976 as a base, the dwellings that may be expected to exist in Brentwood in 1981, 1986, and 1991 were arrived at by compounding a 4% growth rate at five-year intervals. By applying both the high (105.7%) and low (94.7%) percentages surfaced in Table E, we arrive at a set of figures that would put future school population in harmony with the actualities of the past. That figure expressed as a planning target is a mid-range figure between the expressed high and low. It is assumed that by targeting accommodations to that specific figure on a long-range basis, the error percentage will be relatively inconsequential. It will be noted that this method produces a somewhat narrower range of figures than did our first approach.

Broad scope plans of a general nature can be based on the results of that first analysis. However, the narrower or the more definitive elements should take cognizance of the second projection and, more specifically still, the planning target figure.

Of course, the application of our 4% growth limit compounded at five-year intervals assumes an actual growth percentage of slightly less than the full potential.

Indeed, if we were to compound our 4% growth rate as applied to dwellings on an annual basis and do the same for the historically low growth rate of 3.1% (rounded to 3) the probable validity of our mid-range planning target can be supported rather nicely.

Using this method to develop the number of dwellings expected to exist (Table G) in any given year and applying the percentile relationships established by Table E, one then begins to see in Table H both a confirmation and a refinement of figures developed by the two earlier approaches. Note the relationships on the graphic display at Exhibit I. The overlap of the 3%/4% bars for 1981 clearly reinforces our target planning figure. Fifteen years from now the 3% bar seems to confirm our planning figure, but the 4% seems to indicate a too-low expectation. However, if one considers the fact that with a 4% ceiling rigidly enforced, the likelihood of attaining that rate compounded annually for fifteen years seems rather remote. Thus, it can be assumed that a five-year compounding cycle (Table H) is more nearly valid at that distance. With this assumption, again there seems to be confirmation of our target figure as being not unreasonable. Certainly the ranges established by Table H appear from examining our total analysis as shown graphically on Exhibit I to offer valid considerations for the planning effort. And in a like manner, as the planning process moves forward, at least a sensitivity should be maintained to the ranges established by Table D.

At the risk of being overly cautious, we must here acknowledge that the base line chosen from the 1970 census; that is, 281 occupied permanent (non-mobile) single unit dwelling structures, may be subject to challenge as a valid base line. That choice was made simply because that is the current mode of growth in Brentwood. If one examines those census figures (see Appendix A-7), however, and selects still another base line to represent dwellings and applies the same principles here applied, the results still carry the same implications. Table E-E through H-H, and Exhibit I-I in fact do just that.

The total occupied dwelling structures (multiple and single) coupled with mobile homes provides a base line of 354. In this series of calculations, an even more stable relationship between dwellings and homes emerges with a maximum variance of 7.4% over the past years. Though, of course, the percentage values are different, the resulting projections again confirm our initial findings. Most obviously the current school facilities will not suffice far beyond 1986.

As a final word on the subject of school population, this analysis must take cognizance of underlying implications in a statement of the housing committee..."In 1940, there were 160 occupied houses--this after 200 years and more. But it took only 30 years for the next 205, and only 7 years for the next 110. At the present rate of approximately 25 units per year, another 100 will be added every 4 years".

Extend this simple straight-forward analysis of historical fact to 1968, couple it with the approximately one-to-one relationship between single unit permanent dwellings and school population, one then sees that 1986 could well see Brentwood with over 675 dwellings and an equal number of young people in our schools.

The broadest range at Exhibit I shows school population at 540 to 700 and a strong possibility that it will at least be very close to 600.

It would seem prudent to plan facilities, equipment, and staffing to accommodate no less than that number of students after 1986.*

*Based on the school board's statement that space is sufficient for 275 students and on the current ratio of elementary to high school students, the current facility would be saturated at this point.

SCHOOL POPULATION PROJECTION

Brentwood, New Hampshire

(Base 281 Single Unit Permanent Dwelling Structures, 1970)

D Table D: 6%-4% growth factor applied to 1976 school population compounded at 5-year intervals

F School population expressed as percentile range (94.7%-105.7%) of single unit, non-mobile dwelling structures. Dwelling units were projected from a base of 281 units in 1970 and subsequent building permits.

H Percentile as above with annual compounding of dwelling growth at 3% and 4%

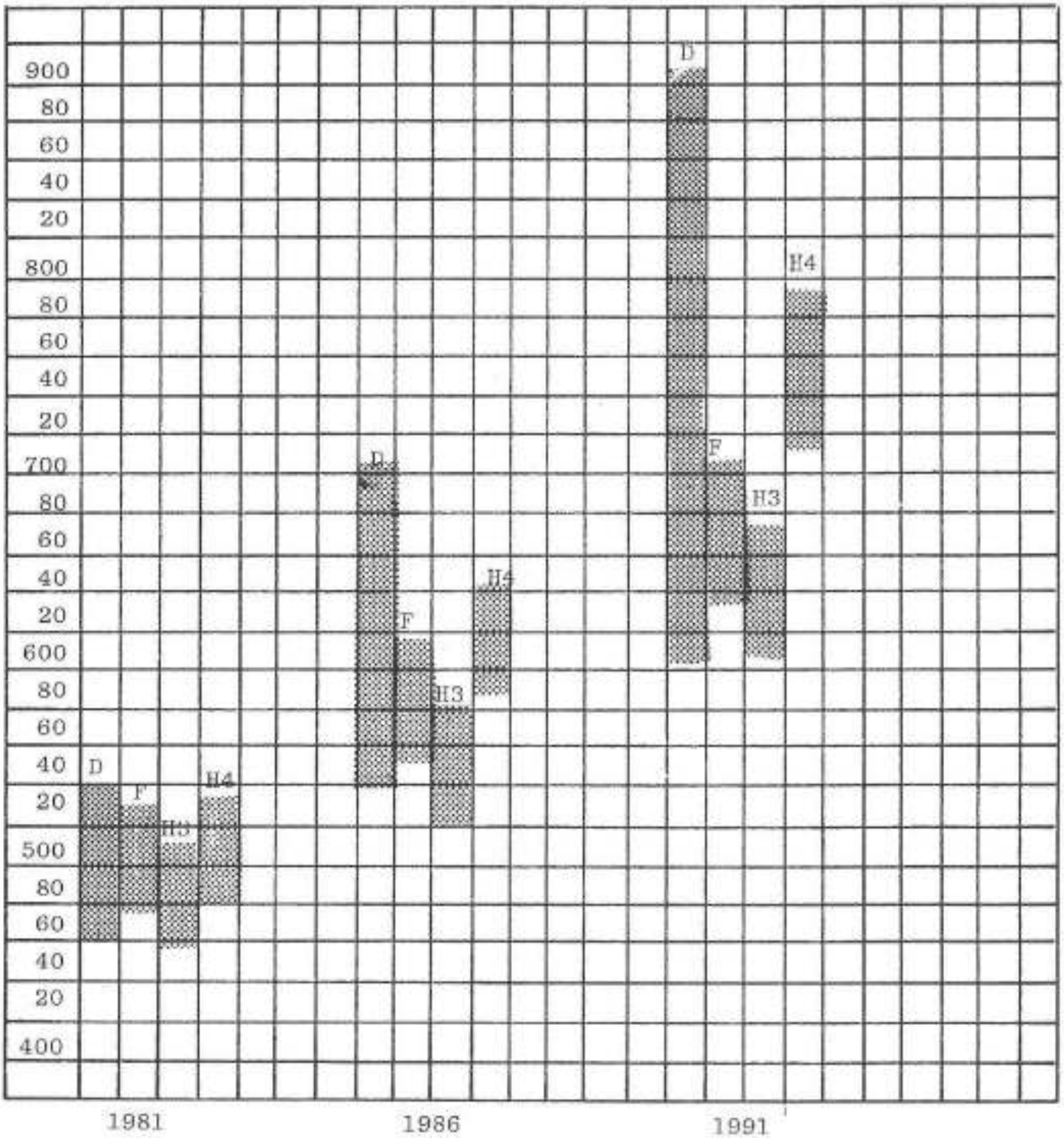


Exhibit I

SCHOOL POPULATION PROJECTION

Brentwood, New Hampshire

(Base 354 dwelling structures, 1970)

D Table D; 6%-4% growth factor applied to 1976 school population compounded at 5-year intervals

FF Table FF; school population expressed as a percentile range (79.9-87.3%) of town dwelling structures. Dwelling structures were projected from a base of 354 in 1970 plus building permits through 1977 and thereafter compounded at 5-year intervals by a 4% growth rate.

HH Table HH; percentile as above with annual compounding of dwelling growth at 3% and 4%.

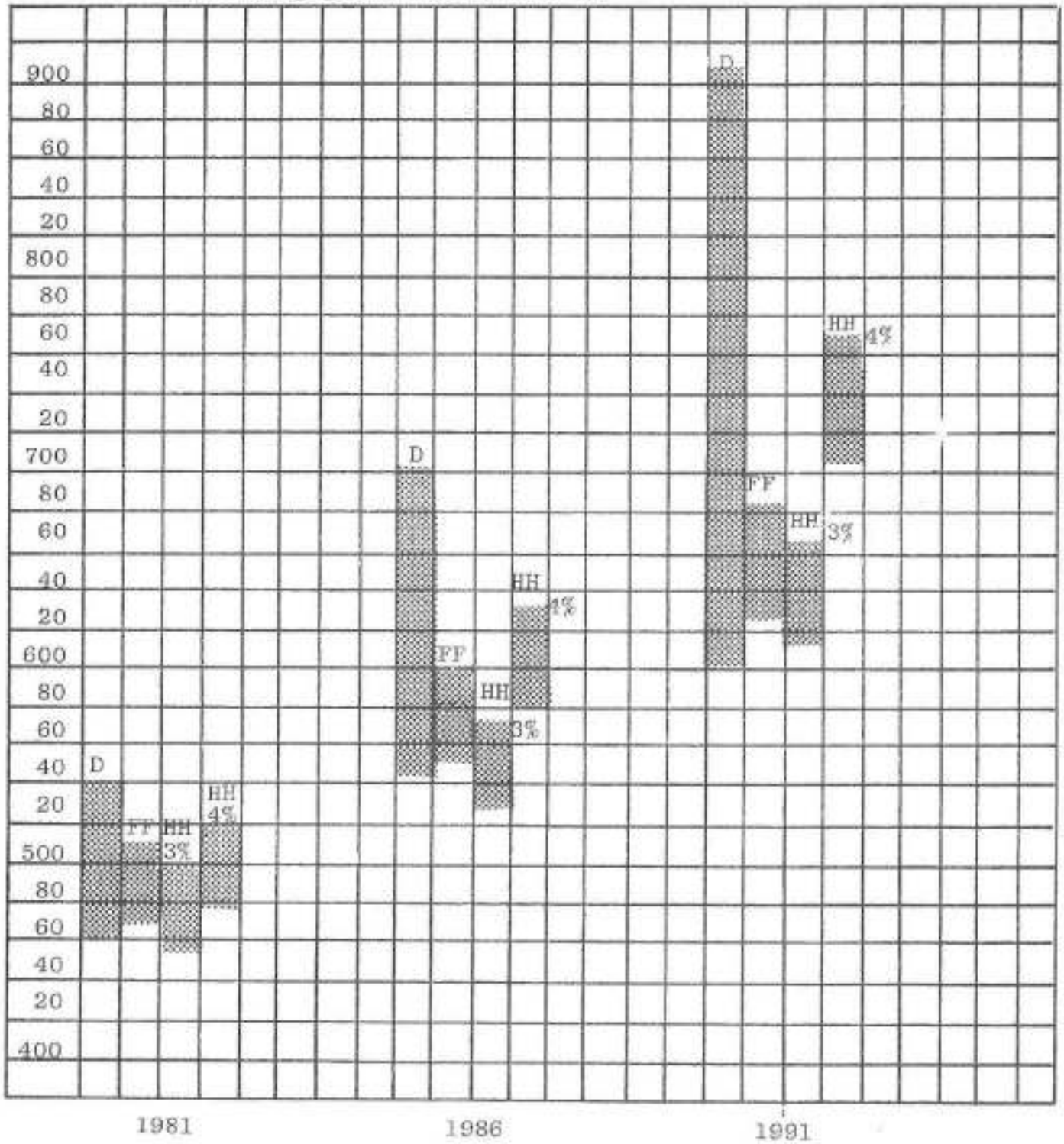


Exhibit I-I

TABLE A

School Population Projections Based On A 6% Growth Rate Per Year (1970-1976 School Growth Rate)

YEAR	SCHOOL POPULATION	% OF 1976	SCHOOL POPULATION	% OF 1981	SCHOOL POPULATION	% OF 1986
1976	400					
1981	512	30%				
1986	632	60%	666	30%		
1991	752	90%	819	60%	865	30%

TABLE B

School Population Projection Based On 4% Per Year (Maximum Increase Dwellings, Allowed As A Result Of 1977 Election)

YEAR	SCHOOL POPULATION	% OF 1976	SCHOOL POPULATION	% OF 1981	SCHOOL POPULATION	% OF 1986
1976	400					
1981	480	20%				
1986	560	40%	576	20%		
1991	640	60%	672	40%	691	20%

TABLE C

School Population Based On Low And High Figures From Tables A & B

LAPSED TIME	YEAR	LOW	HIGH
5 years	1981	480	512
10 years	1986	560	666
15 years	1991	640	865

TABLE D

School Population Based On Modifying Table C To Accommodate An Error Of ± 25% In Each 5-Year Increase

LAPSED TIME	YEAR	LOW (-25%)	HIGH (+25%)
5 years	1981	460	540
10 years	1986	540	706
15 years	1991	600	915

TABLE E

Historical Relationship Between School Population

And Residential Dwellings

YEAR	DWELLINGS[1]	SCHOOL POPULATION	SCHOOL POP. RELATIVE TO DWELLINGS	+%*	-%*	$\frac{SP}{\%D}$ +
1970	281++	297	+16	5.7		105.7%
1971	312	312	+15	4.8		104.8%
1972	337	355	+18	5.3		105.3%
1973	361	379	+18	4.9		104.9%
1974	382	380	-2		.5	99.5%
1975	394	373	-21		5.3	94.7%
1976	417	400	-17		4.0	96.0%

[1]Prior year's dwellings plus that year's house and trailer permits

*School population expressed as a ± percentage of number of dwellings

+School population expressed as a percentage of number of dwellings

++1970 Census, occupied single unit dwellings, non-mobile

TABLE E-E

Historical Relationship Between School Population

And Occupied Residential Dwelling Structures

(Includes single unit structures, multiple unit structures, Mobile Homes

YEAR	DWELLINGS[1]	SCHOOL POPULATION	SCHOOL POP. RELATIVE TO DWELLINGS	+%*	-%*	$\frac{SP}{\%D}$ +
1970	354	297	-57		16.1	83.9%
1971	385	327	-58		15.1	84.9%
1972	410	355	-55		13.4	86.6%
1973	434	379	-55		12.7	87.3%
1974	455	380	-75		16.5	83.5%
1975	467	373	-94		20.1	79.9%
1976	490	400	-90		18.4	81.6%

[1]Prior year's dwellings plus that year's house and trailer permits

*School population expressed as a $\pm$ percentage of number of dwellings

+School population expressed as a percentage of number of dwellings

TABLE F

Projected Dwellings/School Population

LAPSED TIME	YEAR	TOWN DWELLINGS	SCHOOL POP. LOW[1]	SCHOOL POP. HIGH[2]	PLANNING TARGET
5 years	1981	500	473.5	528.5	501.0
10 years	1986	584	553.1	617.3	585.6
15 years	1991	667	631.6	705.0	668.3

[1]Based upon percentile relationship between dwellings and school population established in Table E

[2]Based on 4% per year increase applied as flat accumulation.
i.e., 5 years (20%) (1970 dwellings) + 1976 dwellings
10 years (40%) (1976 dwellings) + 1976 dwellings
15 years (60%) (1976 dwellings) + 1976 dwellings

TABLE F-F

Projected Dwellings/School Population

LAPSED TIME	YEAR	TOWN DWELLINGS[2]	SCHOOL POP. LOW[1]	SCHOOL POP. HIGH[1]	PLANNING TARGET
5 years	1981	588	469.8	513.3	
10 years	1986	686	548.1	598.8	
15 years	1991	784	626.4	684.4	

[1]Based upon percentile relationship between dwellings and school population established in Table E-E (Low 79.9%; High 87.3%)

[2]Based on 4% per year increase applied as flat accumulation.
i.e., 5 years (20%) (1976 dwellings) + 1976 dwellings
10 years (40%) (1976 dwellings) + 1976 dwellings
15 years (60%) (1976 dwellings) + 1976 dwellings

In this chart, number of dwellings in 1970 is construed to mean all structures housing one or more family units including mobile homes, single family permanent structures and multiple family (or unit) permanent structures. That figure for 1970 was 354 per 1970 Census. See Table E-E.

TABLE G

TOWN GROWTH # OF DWELLINGS COMPOUNDED	4%	ANNUALLY	TOWN GROWTH # OF DWELLINGS COMPOUNDED	3%	ANNUALLY
1976		417	1976		417
1977	16.68	433.68	1977	12.51	429.51
1978	17.35	451.03	1978	12.88	442.39
1979	18.04	469.07	1979	13.27	455.66
1980	18.76	487.83	1980	13.66	469.32
1981	19.51	507.34	1981	14.07	483.39
1982	20.29	527.63	1982	14.50	497.89
1983	21.10	548.73	1983	14.93	502.82
1984	21.94	570.67	1984	15.08	517.90
1985	22.82	593.49	1985	15.53	533.43
1986	23.73	617.90	1986	16.00	549.43
1987	24.68	641.90	1987	16.48	565.91
1988	25.67	667.57	1988	16.97	582.88
1989	26.70	694.27	1989	17.48	600.36
1990	27.77	722.04	1990	18.01	618.37
1991	28.88	750.92	1991	18.55	636.92

TABLE G-G

TOWN GROWTH # OF DWELLING COMPOUNDED	4%	ANNUALLY	TOWN GROWTH # OF DWELLINGS COMPOUNDED	3%	ANNUALLY
1976		490	1976		490
1977	19.60	509.60	1977	14.70	504.7
1978	20.38	529.98	1978	15.14	519.84
1979	21.20	551.18	1979	15.60	535.44
1980	22.05	573.23	1980	16.06	551.50
1981	22.93	596.16	1981	16.55	568.05
1982	23.85	620.00	1982	17.04	585.09
1983	24.80	644.80	1983	17.55	602.64
1984	25.79	670.59	1984	18.08	620.72
1985	26.82	697.41	1985	18.62	639.34
1986	27.90	725.31	1986	19.18	658.52
1987	29.01	754.32	1987	19.76	678.28
1988	30.17	784.49	1988	20.35	698.63
1989	31.38	815.87	1989	20.96	719.59
1990	32.63	848.50	1990	21.95	741.18
1991	33.94	882.44	1991	22.24	763.42

TABLE H

4% Growth Rate (Dwellings) Annual Compounding

YEAR	DWELLINGS	SCHOOL POPULATION HIGH (105.7%)	LOW (94.7%)
1981	507.34	536.25	480.45
1986	617.22	642.40	584.50
1991	750.92	793.72	711.12

3% Growth Rate (Dwellings) Annual Compounding

YEAR	DWELLINGS	SCHOOL POPULATION HIGH (105.7%)	LOW (94.7%)
1981	483.39	510.94	457.77
1986	549.43	580.74	520.77
1991	636.92	673.22	603.16

TABLE H-H

4% Growth Rate (Dwellings) Annual Compounding

YEAR	DWELLINGS	SCHOOL POPULATION HIGH (87.3%)	LOW (79.9%)
1981	596.16	520.45	476.33
1986	725.31	633.20	579.52
1991	882.44	770.37	705.07

3% Growth Rate (Dwellings) Annual Compounding

YEAR	DWELLINGS	SCHOOL POPULATION HIGH (87.3%)	LOW (79.9%)
1981	568.05	495.90	453.87
1986	658.52	574.89	526.16
1991	763.42	666.47	609.97

Rockingham County Complex:

Though not under the direct control of town management, the Rockingham County Complex is an institutional function within the physical boundaries of Brentwood and is of extreme importance in the future of our town.

The complex of buildings including the nursing home, farm, jail, fire control school, and Cooperative Extension Service is set on 300 acres on North Road. The bulk of that acreage is in rolling pastureland. Grazed by a magnificent herd of cattle, it very much supports the rural appearance of our town.

Of the average of 300 residents of the nursing home, four are from Brentwood. Of the approximately 400 employees at the complex, about 10% are Brentwood residents. At the present time, that portion of the land and buildings which can be legally taxed by Brentwood are assessed for $242,850; the 1977 property tax paid by the County was $9,373.91.

Brentwood, of course, like all other towns in the County, pays its proportionate share of County expenses. For 1977, it was $26,006; for 1978 $22,000--a decrease of about 15%.

Communication among the County Commissioners, the Brentwood Selectmen and the Planning Board of Brentwood is improving.

Four projects are underway, or being considered:

1. Housing for the elderly and a facility for day care of elderly is being planned on 4.1 acres in back of the nursing home. It will be built in three phases of 56, 56 and 25 units over a period of three years. This will be built by Berkshire Buildings, Inc., a private enterprise, thus adding approximately one million dollars to the property assessment of the town. Thus, they would be the town's largest taxpayer.

The development will be a cluster of one-story units. Of the 56, five will be for use by residents with wheelchairs; four are two-bedroom; and the rest single bedroom, separated by 60-foot wide courtyards. The 560 square foot units will be connected to a community building. They will use congregate services from the nursing home, therapy, etc. It will also include an elderly day care center which the County will operate.

Many in the present nursing home are able to care for themselves to a large extent and their moving into the cluster units will relieve pressure, for there is a waiting list of 51 now. In addition to the relief thus provided, another 100-bed extension is seen as a necessity within 5 to 10 years.

With open space incorporated in the plans, the Master Plan sees the possibility of joining it with some adjacent land for a parkland development for the use of the townspeople. Assisting in the program could be some of the elderly, thus continuing our "small town" balance of youth and age working and playing together. Federal money would be available for part of the cost.

2. A new jail complex is being planned to go north of the present buildings. It will be financed by a 15-year bond issue of five million dollars. There will be accommodations for 136 prisoners and facilities for the Sheriff's Department, which will be moved from Exeter.

3. The County Commissioners are studying the feasibility of a sanitary landfill, land reclamation project, with the idea that at the end of some ten years, there would be 20 acres or so of level graded land reverting to the Town for parks, recreation, commercial or other uses.

4. The County is installing a 500,000 gallon water tank. This will meet the needs of the expanded facility and will also increase the fire protection. They are studying the possibility of the County purchasing and servicing a ladder truck, which would be managed by the Brentwood Volunteer Fire Department and available for their use wherever needed in the town.

All of the four projects are seen as very supportive of the goals of our town.

Obviously the introduction of special housing for the elderly will help solve one of the most pressing problems faced not only by Brentwood, but by our whole social order. This particular location is especially appropriate, as it allows for immediate attention to their special needs when emergencies arise. Not only does it offer a physical solution to their residency and service requirements, but it has the potential for supporting at least a portion of their emotional needs. The need to be useful is an essential element in the human conditoin. Indeed, if a town park were established adjacent to this area, it would offer these people the opportunity to be of great service to the town of Brentwood. Supervision of play areas, direction and participation in special programs and, perhaps, even physical labor involved in park maintenance would be only some of the ways in which they would prove to be a great asset. Officials questioned feel strongly that government funding would definitely be available for such a program. This very positive integration of the young citizens of Brentwood with the elderly citizens supports the age mix that our people see as desirable.

The probable cost to the town of a well-conceived project supported by federal funding sould barely dent the total long rage tax gain offered by the program.

The second of the four activities envisions moving the County Sheriff's Department from Exeter to Brentwood. Again, the need to police rural areas at a more-intense level has manifested itself through crime statistics over a number of years. Brentwood is not, by any rationale, immune to that need. Certainly, the mere presence of a uniformed, highly-visible police activity in a community must serve as a deterrent at least to petty criminal activity. Thus, the activity of the County Sheriff's Department, though not directly related to town policing needs, will most definitely lessen those needs through its deterrent effect.

Again, as in the first two projects, the actions noted in Items 3 and 4 must be viewed as positive movements, yet great caution must be exercised. The technical resources needed to build a safe sanitary landfill project of this magnitude located over a large aquifer are not clearly available. Nevertheless, this or some other alternative is needed. The Kingston dump will be someday filled to capacity or perhaps it suffer the same failures as the Exeter dump.

It must be noted, however, that this type of waste disposal is viewed by most authorities as an interim solution to what must be viewed as an areawide problem.

It is generally accepted that some kind of refuse-to-energy or recycling approach must be taken.

E. Open Land:

By open land is meant wild lands, timber lands, farm lands, and sizeable open fields not currently being used for farming. At present, Brentwood has extensive land in this state, much of which should remain so because of geological characteristics. Much of this land is held by a few individuals so that their decisions have great impact on the development of the town. If the town is to be assured of maintaining open land for conservation purposes, for farming and timbering, and eventually for park areas, policies must be set to manage the way in which such land is converted to industrial, commercial and residential uses and to assure that a desirable portion of land now open remains so.

The most significant open land belonging to the town is the town forest now managed by the Conservation Commission. This land, composed of two parcels, includes 22 to 31 acres located next to the Swasey Central School. It is the site of the new town office building.

As documented by a Southeastern New Hampshire Regional Planning Commission questionnaire, the most agreed-upon objective in the town of Brentwood, beside keeping taxes reasonable, is preserving the rural atmosphere of the town. For most of us, this means preserving our backyards and the views from the roads, beginning with the stone walls and going back into the fields and woods. The rural atmosphere of Route 125 is rapidly being lost to development. Much still remains in the rest of the town. For the smaller, but still important number of hikers, hunters, and snowmobilers, woods and wetlands still abound. Since it is going to cost something to retain this rural atmosphere, a development policy is needed that will offset costs, minimize the burdens and assure that what remainder there is, is shared equitably.

There are two sets of pressure on open land. The first come from peole who can no longer afford to maintain open land who must sell and people who want to realize sizable profits from the sale of land. There are two types of policies for dealing with this pressure: provide tax relief and make the land less desirable to developers who would normally purchase the land. The second kind of pressure comes from the liquidation of holdings at the death of a major property holder. It is important to note that our current policies address only tax relief, primarily through current use assessment and zoning and building requirements that limit growth. We have no policy dealing with the second kind of pressure.

A policy favoring preservation of open land should be developed in Brentwood for several reasons:

First, people have expressed a desire for open land. Their perception of how they want to live includes open land.

Second, it will help some citizens keep large acreage open for the benefit of everyone in the town.

Third, open land is not a tax burden. It demands no services from schools, and little by way of highway and protection services.

Fourth, if the town develops commercially, industrially, and residentially at current rates, it will be beneficial to set aside areas for future parks. This will be impossible if the land is used up or not available in sufficiently large parcels.

Fifth, the less intensively land is used, the longer the town's options remain open.

Sixth, and perhaps the most important, the frontier is gone. Our present duty as citizens is to conserve some natural resources for future generations. As in the country at large, we have to find a solution to the quandry of how to develop and grow without using up irreplaceable natural resources. (The immediate benefits in the form of preserved beauty are obvious.)

Several techniques are available to towns for preserving open lands. First, encourage adoption of current use assessments, especially at the lower possible rates allowed by the state. Do not tax open land, even on roadsides, as house lots. Second, for land not in current use, do not apply differential rates between road frontage and back lands. Again, do not tax frontage not already divided as a house lot as it if were a house lot.

Third, buy development rights, especially land that could be used for park areas or that should be protected for environmental purposes. Six techniques for doing this are:

1. Direct payments out of tax revenues

2. Bond issues

3. Encourage donation of land to trusts like Audubon, the Society for the Protection of New Hampshire Forests, a local trust, or by accepting the land as town policy

4. Rebate of taxes on land

5. Require that all subdivisions of over five units place 20% of the land into common ownership, or trust, or deed it to the town. Make that land legally undevelopable.

6. Make the land legally undevelopable by purchasing the land outright through bond issues, tax revenues or government subsidies.

CHAPTER V

RECOMMENDATIONS

A. Introduction:

This Master Plan, as frequently noted, must be a working document. Conditions change and plans must be kept workable within those conditions. Thus the recommendations contained in this chapter are designed to accomplish three things:

1. Improve some conditions now working against Brentwood's long term interest;

2. Provide for an orderly implementation of this plan and its update;

3. Guide the town into actions which will assure a quality future twenty-five years from now.

All recommendations are put forth in a spirit that acknowledges growth and change as a welcome aspect of life. The Town of Brentwood not only acknowledges this but willingly accepts its responsibility for insuring that as it grows it will remain always a pleasant place to live. If this responsibility is discharged properly, excessive, rapid population growth with its potential for fiscal destructiveness will not be allowed to occur. Nor will random and indiscriminate mixes of industrial, commercial and residential elements be allowed to destroy the safety and the aesthetics of our town.

Instead, it is planned that all of these elements of growth be accommodated but in a balance that best supports the maintenance of a fiscally sound, aesthetically pleasing rural community providing all of its citizens with a safe and pleasant environment.

B. Immediate Programs:

Items in this category are concerned chiefly with formulating and establishing various ordinances and regulations.

State Route 125 must be rezoned immediately to preclude strip development. Ideally, there should be no direct access allowed to Route 125 from private property. Instead, each side should have a private road to receive all traffic from private property and would itself connect with the prime traffic lanes only at a few limited points and then under control of trip-type traffic lights. Obviously this is not economically feasible at present. The following option, however, is feasible and should be given immediate attention. It should be implemented no later than late summer of 1979:

1. The rezoning of Route 125 should be handled in two phases. Phase I should establish a temporary halt to all development. That halt must not be of an indiscriminate length of time. A comprehensive, well-thought out

plan must be developed that will allow development to continue along rational lines. That plan must be in place and development reopened in conformance with that plan within one year of passage of the ordinance terminating development.

Phase II must formulate the criteria for commercial and residential park development. It must address not only park type developments that may or may not be seen as desirable on Route 125, but must be comprehensive and detailed enough to serve as standards for such park development at any point in Brentwood.

When Phase II has been completed, unless there is countervailing evidence developing, it is recommended that Route 125 be reopened in the following manner. Some of the standards that might be incorporated in Phase II are detailed below.

Industrial development must be prohibited along Route 125. It not only generates heavy private vehicle traffic of employees going to and coming from work but its own working vehicles are generally ponderous and dangerous. Industrial traffic does not mix well or safely with the traffic of local citizens. By far the majority of developing areas isolate this type of development in a manner that permits high control over its mix with local traffic and its aesthetic impact.

Three types of development along this route should be allowed:

a. Single Residential. Frontage requirements should be no less than 300 feet and acreage no less than 125,000 square feet. Setbacks should be no less than 125 feet.

b. Commercial (Retail) Parks (Shopping Centers). No commercial park should have less than 500 feet frontage and none should be allowed more than one direct exit to or entrance from the highway. Such entrance must be of a width that will allow a two-lane entry and a two-lane exit. Applicants for commercial parks should be required to pay the full cost of installing stoplights and other reasonable precautions at anytime before or after construction that such is deemed a requirement by the Town of Brentwood through its Planning Board, or Board of Selectmen. Both cost of installation and continued operation shall be borne by the owner of the commercial park. No such park shall consist of fewer than 15 acres and all must make provisions for at least 10 individual businesses. Another option would be site plan and subdivision standards which would require that commercial development in such areas be laid out in such a fashion that it gives the appearance of a unified shopping center even though various buildings were on separate lots independently built and individually owned. This will encourage small independent initiatives.

c. Condominiums. Frontage requirements must be no less than 300 feet and acreage no less than 250,000 square feet with a minimum setback of 125 feet. Adequate parking requirements must be developed by the Planning Board. Highway entrance and exit requirements prescribed for commercial parks should be required as well.

Here it should be noted that, nationally, over 80% of private condominium owners are without children in the home. The average age of all such families is approximately 45. Thus condominiums serve not only as a positive tax asset, but also seem to provide the type of housing preferred by many couples past the child rearing stage. Condominiums being developed adjacent to the county home will provide for the elderly of very modest means. Others erected along Route 125 can meet the needs of middle age and older couples that require a little more room and enjoy a moderately comfortable income. Furthermore, it must be stated that this recommendation is not to be construed as being supportive of multi-family rental units or apartment buildings. Quite the opposite is intended. The average age of apartment dwellers nationally is 28, and 70% of such families have preschool or school age children. If children are to receive a quality education, a balance must be maintained between tax dollars added to our budget and children added to our school systems. Apartments have a deficit effect; condominiums have a credit effect.

2. Establish that area bound by Pine Road on the east, State Route 101 and North Road on the north, and Deer Hill Road on the west as an Industrial Zone. The southern boundary of that zone must not approach Route 111A closer than 3,500 feet. This will accommodate the need for Industrial property with a depth greater than the current 500 feet and provide the necessary room for Industrial Park development.

A broadened tax base is seen as a necessity if quality schooling and services are to be provided without placing an excess financial burden on present and future homeowners. In support of that need, the development of an Industrial Park is seen as a desirable course of action. The appointment of a committee to pursue that cause is recommended. The town must formulate plans and establish policy supportive of such a development. The land area generally described above seems to be particularly favorable to such a park. It has good proximity to the prime east/west highway in southern New Hampshire, is reputed to have an abundant underground water supply, has a relatively low residential density, contains most of Brentwood's present industrial development and lends itself extremely well to control of the visual, audio and safety impact on Brentwood and surrounding communities.

In supporting the active pursuit of a quality industrial park, enthusiasm cannot be allowed to blind us to certain dangers. Though some precautions were cited in Chapter IV, Section A-II, we feel it not unwise to emphasize them in the context of this recommendation. Industrial waste has the potential for turning the entire project into a catastrophic event. It must be controlled. Not only must state and federal regulations be examined, but authoritative individuals, such as the Center for Institutional & Industrial Development at U.N.H., should be consulted in the course of formulating town policy and controls. Additionally, the concentrated disposal of sewage in this area must be given close scrutiny, particularly so when one considers the possible impact on an underground water supply that will probably someday be the basis for a town water system.

In addition to cautioning against these more insidious threats, a third danger that could easily be overlooked must be noted, and that is traffic flow. It is essential that traffic flow (at least heavy vehicles) be routed toward

Route 101. A degradation of the rural residential character of both Marshall's Corner and the entire length of Route 111A could result if the park were located too far south or heavy industrial traffic were allowed to flow into these areas.

3. Establish a minimum frontage of 300 feet and a minimum acreage of three acres for all building lots fronting Route 111A, South Road and North Road. These roads serve as primary traffic arteries to shopping areas in Exeter and Stratham. Traffic buildup along these roads is a natural product of all Brentwood growth. Safety demands avoiding an excessive number of driveways accessing these arteries, or, in situations where land is to be subdivided for residential construction and internal lots are being created, or in the judgment of the Planning Board, internal lots will be created at some time in the future, no lot should front on any of the above roads, but should front on a new internal (or side) street. Such lots should have no direct access to through streets. This will help maintain the rural character of the town while permitting building to take place.

4. In subdivision plats of five or more building lots, require (or permit) that 20% of such lots have a frontage of 100 to 125 feet and a total size of 40,000 to 50,000 square feet. All other lots should abide by the current minimum of 200 feet frontage and 80,000 square foot acreage. No lot established under the reduced acreage requirements may be allowed to border on a lot of similar minimum size.

This recommendation is supportive of two desirable goals. First and foremost, it will allow a reduced price on a percentage of building lots that approximate in numbers the younger members of our society that are most likely to find cost prohibitive. This hopefully, along with condominium development, will assist Brentwood in sustaining itself as a town of all age groups.

Secondly, it is supportive of the rural appearance seen as so desirable by our citizens in that it promotes variable distance between residences or somewhat of a random openness.

Finally, it must be stated that in any subdivision of property in which this recommendation conflicts with the provisions of recommendation number 3 is to prevail.

5. The hazard of fire must be officially addressed by the town. Thus it is recommended that regulations be established that require all subdivision consisting of five or more building lots be supplied by the developer with fire hydrants and supporting lines to be a reliable and ample water supply. That supply may consist of a pond(s), a drilled well or wells, or a water tower. In the case of commercial parks, condominiums, and the proposed Industrial Park, similar but more detailed requirements must be established.

6. Safety regulations must be established with regard to wood burning stoves. Permits must be required prior to installation, an installation safety code detailed, and inspection after installation provided for.

7. The Fire Department's interest in establishing a substation at or near Marshall's Corner is seen as highly deserving of town support. In addition to providing a safer environment (and probable lowered insurance rate) for development in the eastern section of town, it would support an Industrial Park in the northeast quadrant. This action, coupled with the potential for a county-owned ladder truck on North Road, as noted in Chapter IV, Section D, will provide Brentwood with a fire protection network seldom found in towns of similar size.

8. The housing committee of the Sounding Board probed deeply into the problem of sewage disposal. It is their concensus that though Brentwood currently addressed this problem with excellent safeguards, it must consider the freedom of individuals who wish to take alternative approaches to the problems encountered in building a home. In that spirit, two factors must be included in these recommendations:

a. Recognize and permit, under certain circumstances, dry sewage disposal. Under no circumstances, however, should this type of disposal be used as justification for building on wetland. Land reservation for sewage disposal as now required must continue to prevail for eventual use if the desire or the need develops to convert to the more common method.

b. In recognition of the economies possible and the commendable qualities of character, such efforts indicate, the town is urged to, specifically by regulations, permit occupancy of dwellings prior to building completion and while construction is continuing. To safeguard those inclined to move in this direction, safety factors should be addressed and a time line for completion established. This action is designed in the hopes of insuring that the young find it not impossible to remain in our town.

9. Because a safe and reliable water supply is imperative to any resident, it is recommended that regulations be established to insure that such exist prior to issuing occupancy permits. Thus various well drilling standards must be examined and a set of reasonable standards established. Not only must supply be addressed, but quality, from a health standpoint, must be equally ascertained.

10. Today Brentwood's tax policy belies its respect and love for the aged. If we wish to have a town in which the aged can remain comfortably in our midst, we must provide the maximum tax relief for that group allowable by law.

C. Controlling the Rate of Growth:

Brentwood is a long way from being "full". The town has about 10,700 acres. If it develops in accord with national patterns for suburban communities under the present zoning ordinances, 25% of the land area would be used for streets, institutional, commercial and industrial uses, and open space, leaving about 8,000 acres for residential use, or 4,000 lots. Three people per household could yield a population of about 12,000.

If the recommendations of this plan are followed and wetlands and other unsuitable lands are left open, only about 4,700 acres would be built upon, resulting in about 1,750 dwelling units or a population of 5,300.

Note that this Master Plan does not recommend that Brentwood be built up entirely in two-acre lots, but that smaller lots and condominiums be permitted in certain circumstances, thereby increasing the maximum potential population.

Given this much potential for growth, the question becomes one of a town's ability to cope with growth increases. This ability differs in different towns and under different circumstances.

After much thought, this plan recommends a growth ceiling of 4% per year and has based pertinent recommendations of the Master Plan on this growth rate, particularly the building of additions to the school.

Determining the rate of growth a community can comfortably absorb is difficult. One planner's studies indicate that 3% per annum, compounded, over a several-year period, is the maximum rate a community can support without falling behind in the provision of public services.

The basic problem is that capital infrastructure, roads, schools, water supply, sewers, etc., must be built, and to some extent paid for, at the same time as the population increases. So, a rapid rate of growth can result in staggering costs to build the public facilities necessary to keep pace with suddenly increased demands.

A town with a stable population, on the other hand, may have no major capital expenditures other than for motor vehicles for a period of fity or more years.

In a state such as New Hampshire, where local property taxes are high, a municipality's finances are greatly affected by population growth.

A further fact of municipal life is that, as population rises, the per capita expenditures by local government rises. Volunteers are replaced by salaried employees and services that were formerly done by the property owner on his own land become municipal--municipal water rather than a well, sewers rather than a septic tank, etc. Municipal expenses, per capita, rise.

An obvious signal that a community is not coping with growth is overcrowded schools. Given that nationally the birth rate drastically declined between 1970 and 1977, municipalities with stable populations are now experiencing a decrease in school enrollments. Additional housing, however, can more than compensate for this loss, and has in most municipalities of southeastern New Hampshire.

Each of the major school systems in the area has experienced an overcrowded situation in recent years. Exeter has had too few classrooms; the sixth grade has felt the squeeze for some four years, a result of growth in Exeter and the surrounding towns, including Brentwood which sends pupils to Exeter's Junior High School, where the sixth grade had been housed. The Exeter High School is well beyond design capacity. Two building programs are underway--a regional vocational high school and an addition to the Exeter elementary school. Winnacunnet High School in Hampton is on "extended days"--a modification of double sessions--and has been for several years. Portsmouth High has just completed a major expansion after several years of double sessions. However, the Sanborn School System, which just got off double sessions by building a middle school, one year later is overcrowded in the high school and faces a building program.

Given the form of local government, it takes at least two, and sometimes four years, to decide on and complete a new school building, provided the voters can be convinced to pay for it.

The rate of growth in this area* has been about 2% per year (1970-1977) (see Table 1) and the area has not, by and large, been quite able to cope--witness the overcrowded schools.

TABLE 1

POPULATION

	1960	1970	1975	1977
Brentwood	1,072	1,468	1,686	1,822
Region	58,577	67,438	74,948	78,559

(Source: New Hampshire Office of State Planning)

Brentwood's growth has been about 3% per year (1970-1977). Brentwood itself has coped, but it, in conjunction with surrounding towns, has barely avoided serious Junior High School crowding problems. The state's designation and funding of a vocational/technical high school for the area has avoided a serious problem in the Senior High to which Brentwood pupils go.

This plan projects a required expansion for Brentwood's Swasey Elementary School by 1986 given the present growth rate.

Brentwood has had 126 dwelling units added in the years 1970-1977, or an average of 18 per year. Four percent of the 1977 total (507) would be 20 houses--a number a bit above the average 1970-1977 historical trend. (See Table 2).

*southeastern New Hampshire region

TABLE 2

ANNUAL ADDITIONS TO HOUSING SUPPLY

	1970 Census	'70-71	'72	'73	'74	'75	'76	'77	TOTAL
Brentwood	381	22	25	15	3	17	20	24	507
Region	21,966	1,197	1,704	556	443	411	655	572	27,114

(Source: New Hampshire Office of State Planning)

The recent growth historic rate, therefore, of about 3% per year, has been managed by Brentwood. Setting a maximum of 4% per year is probably reasonable if one were to assume it would not be reached each and every year. Cyclical economic trends, changes in taste, and the random nature of the subdivision business will probably result in a rate that will vary year to year. The ten-year average will probably be somewhat less than 4% per annum.

A limit of 4% per year, is, therefore, reasonable, it being:

a. slightly higher than the real rate of growth of Brentwood from 1970-1977;

b. significantly higher than the rate of growth of the region; and

c. higher than the projected rate of growth for the region for the decade 1980-1990. (See Table 3)

TABLE 3

POPULATION PROJECTIONS

	1980	1985	1990	1995	2000
Brentwood	2,170	3,000	3,880	4,830	5,700
Region	85,300	98,200	111,800	125,000	136,300

(Source: New Hampshire Office of State Planning)

The limit is necessary, however, since the town is projected to grow at over 5% per year, and since it has land area capable of accommodating about 12,000 people under the current two-acre lot zoning, or 5,300 people if building on unsuitable soils is prohibited.

D. Short-Term Program:

Items within this category will require funding (except for Item #4) and in some cases, the laying of very detailed plans. The formulation of those plans should begin immediately with completion of their execution no later than 1986.

1. A plan must be developed that will enable the town to support at least one fulltime police officer by the year 1986. Town population at that time, conservatively, will be at least 2,500 and probably will be closer to 3,000.

2. Immediate steps should be taken to accommodate smoothly the need for expanded school facilities by the end of the 1986-87 school year. The total number of school age children in Brentwood at that time should be close to 600. Based on the expected grade distribution, the current facility will be at maximum capacity. Not only will the building and ground prove inadequate, beyond that point, but an updating of the equipment, the library and the staffing will be required.

3. A redirection of the very conscientious efforts centering around Brentwood's town library is necessary. Program orientation that looks at a schedule of events designed to serve the town is in itself good and useful. However, the overriding need is for state accreditation. A major program must be designed. It must have completion dates assigned for its subelements that support a target accreditation date. Certainly the plan should not encompass more than three years. A front end element of the plan must be a supportive financial section. External financial assistance very well may be available if the program for instance is linked to the school expansion or the educational training needs of the unemployed or indeed to services for the elderly, particularly the housing project on North Road.

Until accreditation is realized, the citizens of Brentwood are not even eligible to receive through their library a state library card, and our tax dollars help support that system.

4. A need may well arise with greater housing density to zone some areas as Residential only as opposed to Residential/Agricultural. Though most residents of Brentwood appreciate and desire the appearance of a rural or farm community, many also would see livestock, such as hogs and cattle, in their neighbor's yard as a degradation of the quality of their life. This is especially true in areas of highest density residential development. Their needs must be acknowledged. The Soils Map expected to be completed in 1981 should provide a sound basis for determining that land least desirable as farmland, but still suitable for development as residential property.

E. Long-Term Program:

Items within this category, except for Items 1, 7 and 10, have two things in common. Each item has the need for developing a very comprehensive and well-thought out plan that addresses in detail its elements and appends a dateline to each of those elements. Items 1 and 7 address the financial aspects of support and the management structure that will be needed in the further development and implementation of this plan. Item 10 concerns itself with developing a cohesiveness of all town elements.

1. The establishment of an Auxiliary Funding Board is seen as a key element in assuring the proper funding of required actions revealed by this Master Plan and those many additional actions that will reveal themselves with the passage of time. The specific function of that board will be to develop and maintain a high level of knowledge concerning auxiliary funding that may be available to support various town projects. Many Federal and State agencies and other non-profit groups provide funding in part or in totality for projects that support goals harmonious with the ends they themselves seek to attain. In the case of Federal and State agencies, this is no more than a return of tax dollars to their source. Brentwood is part of that source. The Selectmen have done well in securing such monies when one considers the unbelievable complexities involved. However, the town cannot expect volunteer, part-time Selectmen to have the level of awareness required to be cognizant of all potential sources of funds for all needed projects. Many towns have hired town managers simply because of their expertise in this area. Our democratic town meeting government will survive only if citizens do the jobs a town manager is usually hired to do. Citizens must develop the expertise sorely needed for Brentwood to meet growing problems with limited resources. An Auxiliary Funding Board would supply to groups pursuing projects information on potential sources for both funds and professional services. It will have a full understanding of the qualifying criteria set up by those sources and will assist in modifying projects to qualify for services or funds needed. Additionally, it will gather the necessary data from project participants, file required papers and actively pursue the needed funds and services.

An area in which paid professional services could be very helpful is in the development of plans for a well-integrated road system. The Library Board of Trustees may very well be able to secure financial assistance in working toward accreditation by orienting part of its program to provide special services to the aged. The Auxiliary Funding Board should be able to tell us if such is possible and, if so, aid in securing the help needed. An excellent example of the use of auxiliary funds can be found in the town of Lee. Their Master Plan is being developed under a $30,000 Federal grant.

2. Brentwood, though having the appearance of being a "quiet little farm town", is fast approaching the point when farming its land will not be a viable alternative to subdividing that land for other purposes. In the course of developing this Master Plan, at least two large parcels have been lost forever to farming. Very few full-time farmers remain in our midst, and those that are part-time farmers are being constantly reduced in number.

An in-depth study must be made of this problem. It is therefore recommended that a committee be established to formulate an aggressive program aimed at the retention of our town's active farms. The committee must develop concrete emergency steps that can be taken to stop the loss of land for farming. Steps taken immediately must be then integrated with a long-term plan that will cultivate Brentwood's growth as a farming community. Once suburban sprawl takes over, farming is lost forever. It is recommended that the committee consult with University of New Hampshire officials, County, State and Federal officials, as well as private organizations, in formulating its full program.

Our goal must not be limited, in fact, to the retention of current farmland. It must aggressively seek to expand the acreage so involved.

Probably the most significant action that can be taken is in the area of taxes. High taxes make land unattractive to those seeking farmland. Thus, land that can be classified as potential farmland must through some classifying device bear a very low tax rate. If land is placed in the current use program, it must be assessed at the rock bottom rate allowed by that program. Each dollar assessed on farmland above that bottom figure is a firm thrust toward subdividing that land. We cannot expect the farmer to pay his dollars to allow the rest of us to look at his land! If we indeed do wish to remain rural and if we indeed do wish to rise by our neighbor's farm, we must pay the piper. We certainly can't ask the farmer to do it.

Tax dollars lost through such a program can be regained through legitimate, well-conceived programs addressing high income usage of non-farm land. Thus, the recommendation for quality condominiums, commercial parks and industrial parks is an integral part of this program. It seeks to offset the cost we must pay to retain our farmland.

The purchase of development rights by the town is one approach the committee may wish to consider in reducing the dollar value, thus the level of taxation on land. Simultaneously, if the town holds those rights it can ensure farmland remains farmland.

Having thus reduced the dollar value on farmland, it becomes much less burdensome on heirs to continue farming a parcel since inheritance taxes are not nearly as likely to force the sale of that land. The pressure to sell when large parcels are involved can be extreme and that pressure must through our program somehow be relieved.

Still another aid to the small farmer would be a local farmers' market. Perhaps an open-sided stall having shelter erected in cooperation with neighboring towns could, in fact, provide a retail (as opposed to wholesale) outlet, thus allowing a greater return on smaller acreage.

Not only are the aesthetics of our environment involved--that is, our wanting to remain rural because it's a nice feeling. There are more significant aspects involved. It is impossible to overemphasize the need to insure a local base for our food supply twenty-five years from now. Major food exporting areas such as California, for instance, are growing so rapidly in population that projections see them as importing foods in a few short years.

Certainly, starvation is not a cry we would be foolish enough to raise here. But quality, price and general availability of many food products can, in fact, be significantly affected by the amount of land locally devoted to farming.

It is felt by the formulators of this Master Plan that the work of the Committee for the Preservation of Farmland will be attacking one of the most urgent problems, as well as one of the most difficult. That Committee is cautioned that immediate steps are required.

3. Once land is removed from its natural state and buildings are erected, it generally is never returned to that state. Thus, while much such land remains in Brentwood, it is necessary to develop a concept of those parcels that must forever remain that way.

Therefore, it is recommended that the Conservation Commission immediately assume the task of developing a comprehensive master plan for the establishment of town recreational areas. This concept envisions not only limited, but appropriate, family-oriented mini-parks to contain beaches, and in some cases playgrounds, but areas to remain in a totally natural state. It must identify and establish areas that twenty-five years from now can still harbor the deer, the fox and the many other wildlife members of our environment.

It must identify woodlands that can be hiked in and land for snowmobiles, as well as land that will provide trails for the cross-country skiers. Scenic roadside spots must be identified that will allow our elderly to pause a moment a safely enjoy the beauty of their still-rural town.

Developed parks, untouched forest, wetlands -- all must be incorporated in the plan. Game preserves certainly must be established.

Not only must the long-range plan identify specific parcels that should be acquired immediately, but also general areas in which parcels must be eventually acquired to complete our system of reserved land.

In addition to identifying specific land parcels to be incorporated within the long-range program, the plan must address financing acquisition of the particular parcels required and their planned usage after acquisition. It must then identify the following:

a. Land to be acquired for formal parks--size and nature of each park;

b. Natural areas/wildlife areas that must be forever reserved in that state:

   1. Meadows
   2. Woodlands
   3. Wetlands

c. Method of financing or establishing control.

As in any plan, it will be necessary to set target dates for all milestones within the plan and make provisions for periodic review of the plan itself.

At this time it seems reasonable to set a target date for completion of that plan. Its level of refinement cannot be expected to be great in that period of time. It can be broad enough to identify generally the phases of the program, some desirable parcels, plus areas that need to be studied. In many instances, the yet-to-be received soil map will be needed. Most important, it can identify and partially evaluate methods for executing the provisions of recommendation number 4, and it can contain target dates for further development of a more refined version of the plan. Hopefully, it can identify a date for its own implementation.

4. Though it must be incorporated within the plan for recreational lands addressed in Item 3, it is felt that this recommendation is significant enough and of such urgency that it must be given stand-alone attention. The banks of the Exeter River and Dudley Brook must be controlled by the town. A study must be performed to determine the best method or methods to accomplish that end. This action is needed to assure not only the preservation of these tremendous aesthetic assets, but also to insure their availability at selected spots to our citizenry. In developing the broad master plan defined in Item 3, this project must be given a high priority and its early implementation scheduled.

5. The two recommendations immediately preceding address the town's attaining direct control of selected natural areas. This recommendation addresses the preservation of those many wooded areas that will not (and should not) be involved in that program. Specifically, we refer to the many woodlots that will remain private property. As in the case of farmland, a tax policy that acknowledges Brentwood's appreciation of these woodlots must be established. Among other things, it must grant the minimum tax assessment possible to large woodlots that are in current usage as timberland. Holders of smaller parcels, that is, those that consist of two, three or even ten acres, must be encouraged to participate in cooperative management of those lots. Guidance in establishing programs supportive of that policy should be obtained from the Society for the Protection of New Hampshire Forests. That organization is headquartered in Concord and will send a representative to address a reasonable assemblage of landowners. Logically, this is a task for the Conservation Commission.

6. Waste and refuge disposal is viewed more than most problems as a regional problem. Thus, this recommendation must be that Brentwood join with neighboring towns on a formal basis to consider a joint approach to a common problem.

7. This recommendation calls for an Economic Analysis of this Master Plan. Maintaining a rural environment, increasing economic opportunity, providing quality education to our children, and constantly upgrading town services can be an extremely expensive combination of goals. It is felt that actively promoting condominium, commercial park and industrial park development, coupled with an active Auxiliary Funding Board and maintaining a reasonable housing growth rate, can offset the cost of attaining those goals. It is felt that the total plan properly administered in its executive will not only pay for itself, but will generate economic opportunities for

residents seeking commercial or industrial employment, as well as those whose livelihood is partially or totally derived from farming and all of this while ensuring we continue to enjoy a rural environment.

To ensure that the plan is a practical one, however, professional services should be obtained in performing a broad economic analysis of the dollar impact of this plan on the town budget. It is felt that such can be obtained through the University of New Hampshire's Community Economic Development Program.

8. Basically, there are two recommendations with respect to Roads Policy. The first concerns what Brentwood must do on its own; it was obliquely referenced in Recommendation Number B.1. The second has to do with recognizing regional relationships and the need for common policy if any of the town's planning for Route 125 is to be successful.

a. At present new roads in Brentwood must meet excellent requirements, but placement of the roads is up to an enterpreneur. As development continues, layout of roads should shift to the Selectmen under RSA 36:16, 17 & 18. The 1981 soils map will provide a basis for their judgment. The first step in planning should be an evaluation of that map and an investigation of possible road sites. It should be undertaken shortly after the soils map becomes available. The cost of the second step, surveying routes preliminary to Selectmen's action, makes its timing dependent on development pressures. It must be undertaken before haphazard development eliminates the opportunity to lay out roads in a sensible way.

b. A vital part of road policy of every town up and down Route 125 must be to prevent overloading of that highway as long as possible. Alternative routes would be highly disruptive of small town life. Setbacks from Route 125 should be made wide enough to assure a quality setback, even after the likely widening of the route to four lanes. The development of Route 125 is one of the clearest examples where intercommunity cooperation is vital, not only for Plaistow, Newton, Kingston, Brentwood, Epping and Lee, but for towns like Fremont which could be severely affected by bypassing Route 125.

9. Master Plan Review: The following policy is recommended for keeping the Master Plan as a working document:

In the first April meeting after the annual town meeting, the Planning Board should set up committees to study ways to implement the Master Plan and ways to update it to meet current conditions. Citizens should be involved in these committees.

In early December, these committees should present written reports with recommendations to an Annual Master Plan Review meeting of the Planning Board, the Selectmen and one representative each from the Budget Committee and the Conservation Commission. An annual joint meeting of these bodies for developing town planning is seen as highly desirable.

The body with legal responsibility for acting on the recommendations should do so in January so that, when necessary, issues can be brought to the town meeting.

10. The final recommendation offered by this Master Plan looks toward the development of a cohesiveness of purpose and effort throughout the town's citizenry. The formation of a Community Council is hereby recommended. It should be composed of a representative from each organization in town, plus two or three not connected with any:

a. to knit together the many efforts to create community;

b. to encourage each organization to offer its best;

c. to bring into community life the energies, talents, and desires of the many who are coming to live in Brentwood; and,

d. to act as a welcoming group to newcomers.

For example, by the use of ad-hoc subcommittees the Community Council could meet such needs as the Vial of Life for the elderly and disabled; the preparation of a leaflet for newcomers giving the activities and services of Brentwood; and the like.

During the past year and a half, something over 200 residents of Brentwood have met, dreamed, thought, and talked to prepare this Master Plan. The Master Plan has been, and should be, in a process of change as new people, new ideas, and new visions of the community as a small town, re-shape what has been seen as a desirable future. Especially, now that it is in print, revision should make it flexible to changing needs. It is the growing edge of our community.

We face the problem (not new) which has been stated as "how to produce a community as distinguished from a collection of isolated residences...the transformation and improvement of the environment for human occupancy...the continual spacial organization or re-organization of a whole community for its better functioning in the future...a program, a blue-print for process...not left to bungling chance or individual caprice and whim". (John Brinckerhoff Jackson, "American Space", pp. 33, 75, 134, 136).

This Master Plan is not a straight-jacket. It is an attempt to present alternatives, develop discussion, encourage exchange of ideas, state priorities, ask for responsible criticism, but above all, plan for the future, while still trying to look beyond what may now be planned.

It is to the process of creating a desirable small town that we are all invited.

The Master Plan, based on discussion and research, seeks to pin-point where we are and where we may go.

What each one of us has to offer of time, talents, energy and vision will be the secret of making Brentwood what we want it to be.

									Projected			
	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80	80-81	81-82
Swasey Grades 1-6	175	195	206	208	212*	192	178	174	171	168	172	181
Jr. High 7-8	52	59	71	73	60	63	86*	72	62	62	67	59
Sr. High 9-12	73	74	82	103	111	112	137	138	144*	142	143	140
Total 7-12 and	125	133	153	176	171	175	224*	210	206	204	210	199
% of grand total	41.66%	40.54%	42.61%	45.83%	44.64%	47.69%	55.70%	54.69%				

*peak enrollment

A-1

1. Elementary and Jr. High enrollments seem to be leveling off at numbers close to what they were 10 years ago. Sr. High numbers have doubled in 10 years but are also leveling off.

2. Projected enrollments include growth rates of 4 per year for preschool classes up to grade 1 entry, and overall growth at upper grades of 4 per year.

3. Over the last 7 years, families moving into existing housing have brought in more school age children than have families moving into new housing.

4. Three developments (Riverside, G.F., Stevens Dr.) show approximately the same number of school age children as there are houses.

	72-73	78-79	% Increase	% Increase Per Year
Tuition per pupil				
Jr. High	794	1,247	36%	6%
Sr. High	1,000	1,417	29%	4.83%
Number of Tuition pupils	153	206	26%	4.33%
Tuition budgeted	142,816	225,613	50%	8.33%
Total school budget	239,751	534,938	55%	9.16%
% of total budget that is tuition	59.5%	53%		

School Population	70-71	77-78	Increase	% Increase	Per Year % Change
	300	384	84	28%	4%

Tax Rate		Converted rate to 100 % Evaluation
1970		
1971	$2.22 per $100 @ 10% valuation	2.22
1972	$2.76 per $100 @ 100% valuation	2.76
1973	$2.72 per $100 @ 95% valuation	2.59
1974	$3.35 per $100 @ 95% valuation	3.18
1975	$3.25 per $100 @ 69% valuation	2.26
1976	$3.67 per $100 @ 69% valuation	2.55
1977	$ per $100 % valuation	

14.8% increase in real tax rate 1971-1976
or 3% per year.

Building Permits Issued for New Dwellings		
1970	57	11 houses, 20 mobile homes
1971	54	14 houses, 11 mobile homes
1972	72	17 houses, 7 trailers
1973	78	15 houses, 6 trailers
1974	59	7 houses, 5 trailers
1975	63	14 houses, 5 mobile homes
1976	92	23 "dwellings"
TOTAL	101 & 54 = 155 dwellings	

School Age Population

Year	Gr. 1	Gr. 2	Gr. 3	Gr. 4	Gr. 5	Gr. 6	Gr. 7	Gr. 8	Gr. 9	Gr. 10	Gr. 11	Gr. 12	Total
1970	48	26	18	33	25	30	23	29	25	18	14	16	297
1971	35	42	29	22	36	29	37	23	26	21	18	9	327
1972	31	34	43	34	25	35	35	36	25	21	20	16	355
1973	37	35	31	42	36	27	31	37	40	24	19	20	379
1974	38	34	33	26	42	36	26	34	36	37	20	18	380
1975	25	31	32	33	26	42	35	27	36	33	36	17	373
1976	33	22	31	28	32	30	45	42	27	39	36	35	400

35% increase over 1970; or 6% per year

STATE OF NEW HAMPSHIRE

5-YEAR HIGHWAY IMPROVEMENT PROGRAM

Highways Affecting Brentwood

PROJECT LOCATION	LENGTH	IMPROVEMENT TYPE	ESTIMATED COST	FISCAL YEAR
RURAL FEDERAL AID:				
Brentwood - Haigh Rd. over Exeter River	---	Bridge Reconstruction	$ 120,000	1979
Brentwood-Exeter - N.H. 101	3.0	New Location	$3,000,000	1981
Epping-Brentwood - N.H. 101	2.8	Restoration, Rehabilitation, Repair	$ 600,00	1978

Route 125:

5100-5400	24-hour count
212-224	per hour
3.5 - 3.7	per minute

Route 1:

4800-10,918

Route 101 By-Pass:

4800-10,590

1976 = 1975 + 6.2%

This percentage doubles traffic in twelve years--thus Route 125 will at a minimum equal in twelve years todays' maximum on Route 101.

By further examining the Map at Exhibit III. it can be seen that Route 125 is by far the heaviest trafficked. North-South Road between Route 93 and Route 16 with a geographic location that supports its natural evolution into a prime North-South passage probably eventually equalling Route 93 in importance.

1970 CENSUS

Brentwood Town

Table Count of Occupied and Vacant Year-round Housing Units by Number of Units

UNITS AT ADDRESS	TOTAL OCCUPIED AND VACANT	TOTAL OCCUPIED**	OWNER OCCUPIED	RENTER OCCUPIED
1	302	281*		
2	16	16		
3	0	0		
4	5	5		
5 - 9	0	0		
10 or more	0	0		
Mobile Homes	52	52		
	375	354		

*Note that this figure is used as the Base line in developing Tables E through H and Exhibit I

**Note that the Sum (354) of figures in this column representing total occupied dwelling structures is the Base line used to develop Tables E-E through H-H and Exhibit I-I

MASTER PLAN FOR THE DEVELOPMENT OF THE TOWN OF BRENTWOOD

SCHEDULE

STEP ONE	STEP TWO
Shut Down Rt. 125	Establish Condominium, Commercial Park Standards
Rewrite Zoning Changes	Town Vote Adoption
Water Standards Developed	Town Vote Adoption
Wood Stove Safety Standards Developed	Town Vote Adoption
Economic Analysis of Master Plan Begun - Completed	Corrective Action to Master Plan Where Required, Data to Committees →
Committees Appointed Auxiliary Funding Board	Money Sources Identified
Farm Preservation	Broad Outline of Plan Completed. Emergency Measures Identified. Minimum Current Usage Tax Implemented
Land Reservation	Broad Outline of Plan Completed. Some Parcels Generally Identified. Exeter River, Dudley Creek Control Study Complete
Industrial Park	Methodology Identified. Plan of Action Complete. Park Standards Complete. Industrial Types Identified
Plans For Library Accreditation Complete. Some Funding Identified	Execution Begun. Additional Funding Identified
Contact With Adjacent Towns Initiated on Waste to Energy Recycle Plan	Contact Expanded. Plans Begin Formulation
Initial Meeting of Community Council	Implement Minimum Tax for Elderly. Broad Program Developed. Call Service, Ride Service Implemented
School Committee Begin Exploring New Facility Requirements Beyond 1986-87	Identify Total Life of Plant Expansion. School Population It Must Accommodate in 1990, 1995, 2000

The Master Plan is adopted by the Planning Board. Subsequent reports are to be routed from the committees to the Planning Board for review. The Planning Board will return the reports to the committees with their recommendations. Master Plan Annual Review

Schedule Continued

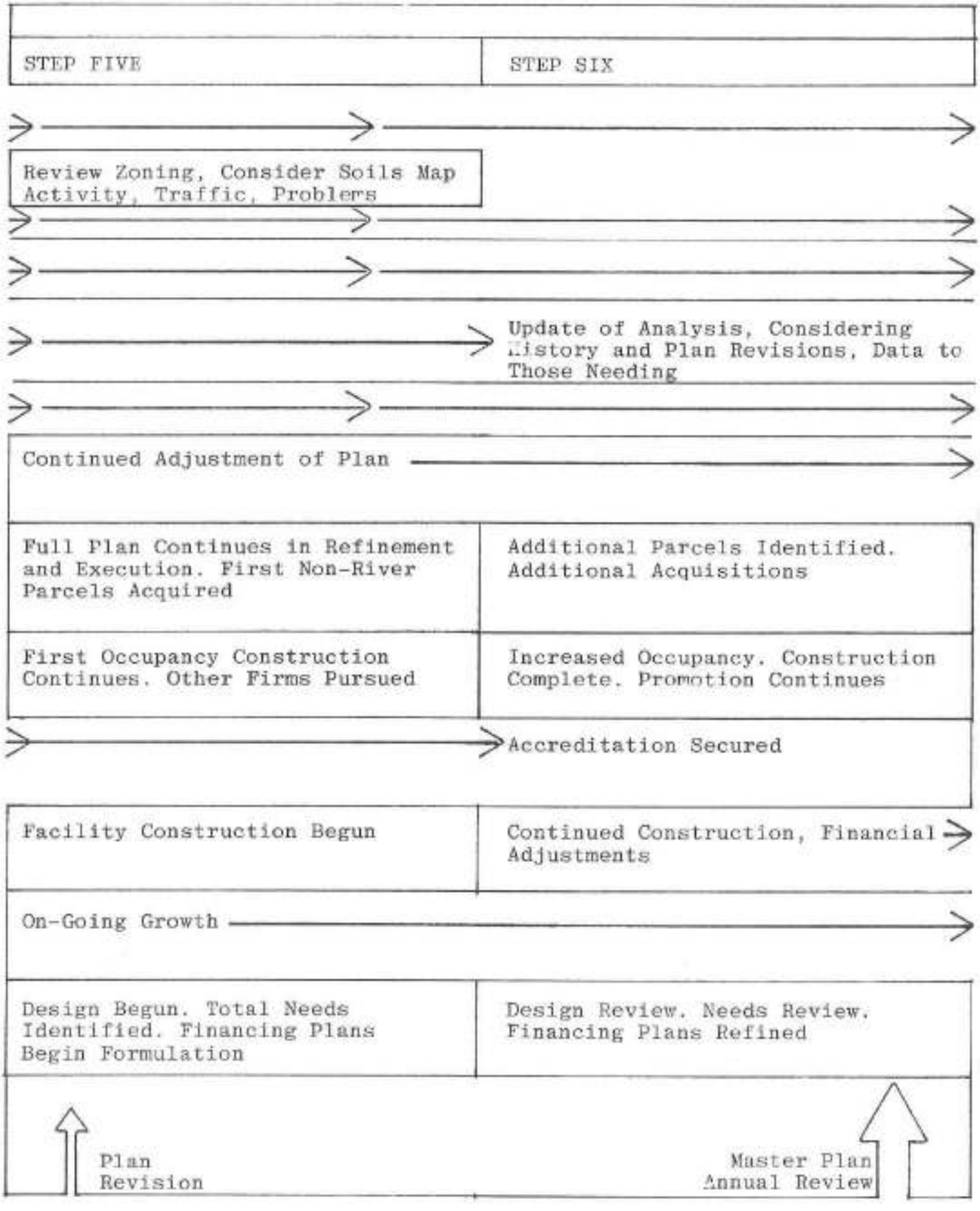
STEP THREE	STEP FOUR
Reopen Development of Rt.125, Actively Pursue Condominiums & Commercial Parks →	
Implement	
Inspection →	
Installation Permits, Inspections →	
→	→
Prerequisite Absorbed Data, Assistance to Committees	Continued Data Gathering - Assistance to Committees →
Emergency Measures Finalized and Implemented. Refine Long Range Plan	Implementation of Long Range Plan. Active Dissemination of Farming Incentives
Detail Level of Plan Complete. Some Fundings Identified. Control of Selected Parcels on Exeter River, Dudley Creek Secured	Continued Expansion of River/Creek Control. Other Parcels in System in Process of Acquisition
Planning Board Review, Adopt Standards, Establish Regulations Committee in Contact with Entrepreneurs	Entrepreneur & Package Solidified; Design Completed. Construction Started
Continued Refinement →	
Continued Execution	Continued Funding Adjustment
Continued Plan Refinement. Initial Studies of Sites	Refinement of Plans, Economic Decisions
Additional Community Needs Identified	New Programs Implemented, Old Programs Refined
Project Town Budget, Ability To Accommodate Cost of Expansion. Phased or One-Time Expansion Best	Firm Plans Formulated. Equipment, Faculty Expansion Needs Generally Identified

Guidance and recommendations will also be provided by the Selectmen, Conservation Commission and Budget Committee as appropriate.

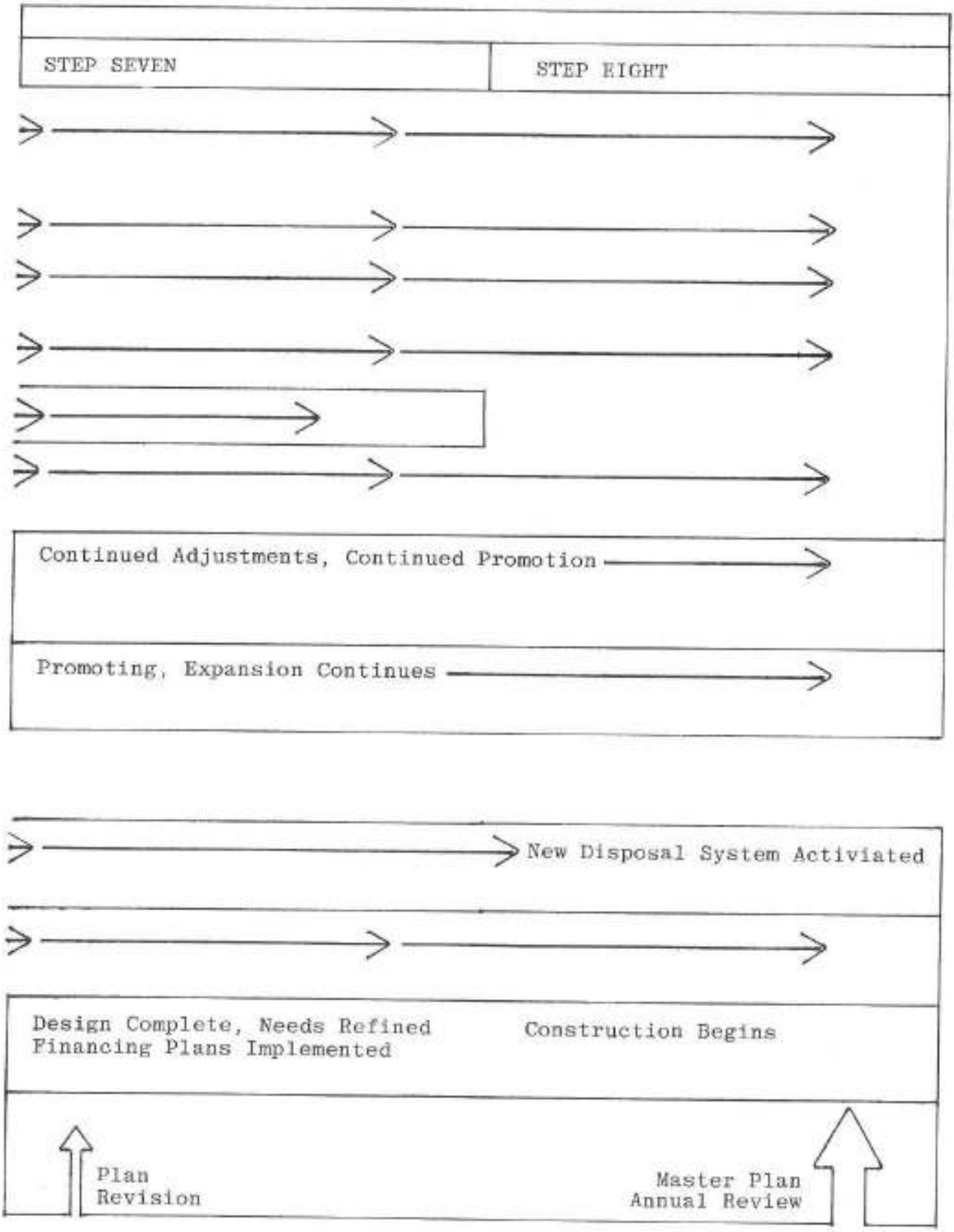
↑ Plan Revision

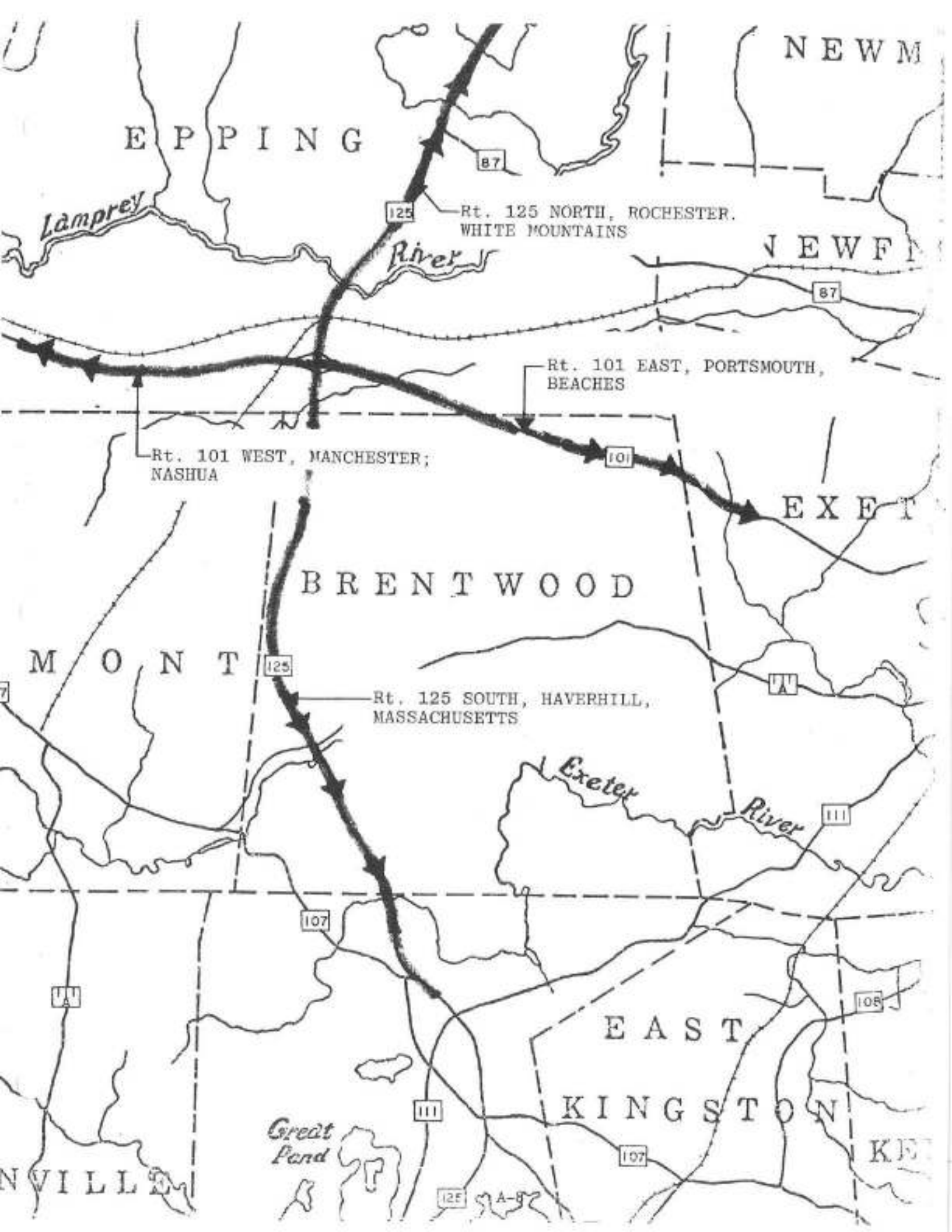
Master Plan Annual Review ↑

Schedule Continued



Schedule Continued




NEWM
EPPING
87
Lamprey
125
Rt. 125 NORTH, ROCHESTER.
WHITE MOUNTAINS
River
NEWF
87
Rt. 101 EAST, PORTSMOUTH,
BEACHES
Rt. 101 WEST, MANCHESTER;
NASHUA
101
EXET
BRENTWOOD
MONT
125
Rt. 125 SOUTH, HAVERHILL,
MASSACHUSETTS
Exeter
River
111
107
EAST
105
KINGSTON
111
Great
Pond
107
125
A-8

BRENTWOOD



RESIDENTIAL/AGRICULTURAL

COMMERCIAL/INDUSTRIAL

COMMERCIAL

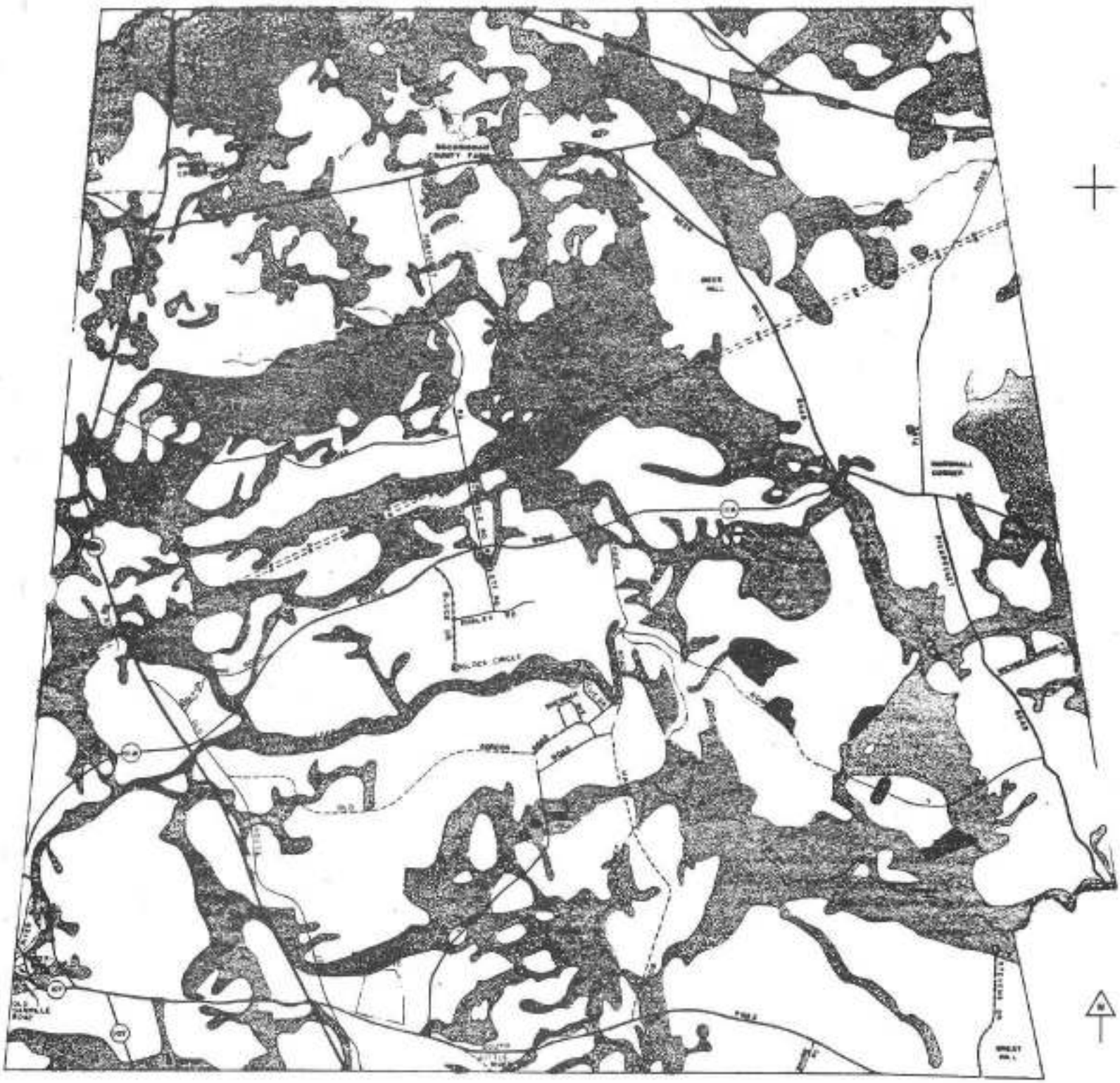
INDUSTRIAL PARK

TOWN CENTER/OFFICE/SCHOOL/FIRE

PARKS/TRAILS

CAMPING/CONNECTIVE TRAIL/TENNIS/GOLF

BRENTWOOD



SCALE: 1 inch = 1000 feet

WETLANDS

WETLANDS

Additional areas identified by residents

[illegible]
[illegible] Rockingham County Planning Commission
3 Water Street
Exeter, New Hampshire 03833
April, 1976

"The preparation of this map was financially aided through a federal grant from the Department of Housing and Urban Development, under the Comprehensive Planning Assistance Program authorized by Section 701 of the Housing Act of 1954 as amended."

LEGEND

STATE & TOWN ROADS

[illegible]

MASTER PLAN
Update
1988



Brentwood
New Hampshire

BRENTWOOD MASTER PLAN

1988 REVISION

Prepared by the Brentwood Planning Board with the assistance of the Rockingham Planning Commission.

Adopted by a unanimous vote of the Brentwood Planning Board, in accordance with Revised Statute Annotated 675:6, following a public hearing on December 1, 1988.

Robert A. Battles

Bruce J Stevens

Roger W Crosby

Reginald Rose

Jane L. Byrne

Karen Veinotte

Brentwood Planning Board

Robert Battles, Co-Chairman
Bruce Stevens, Co-Chairman
Karen Veinotte, Secretary
David Roberts
James Shuchman
Roger Crosby
Jane Byrne, Selectmen's Representative
Reginald Rose
Joyce Gove

Phyllis Whitehouse
Town Clerk

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CHAPTER I — INTRODUCTION

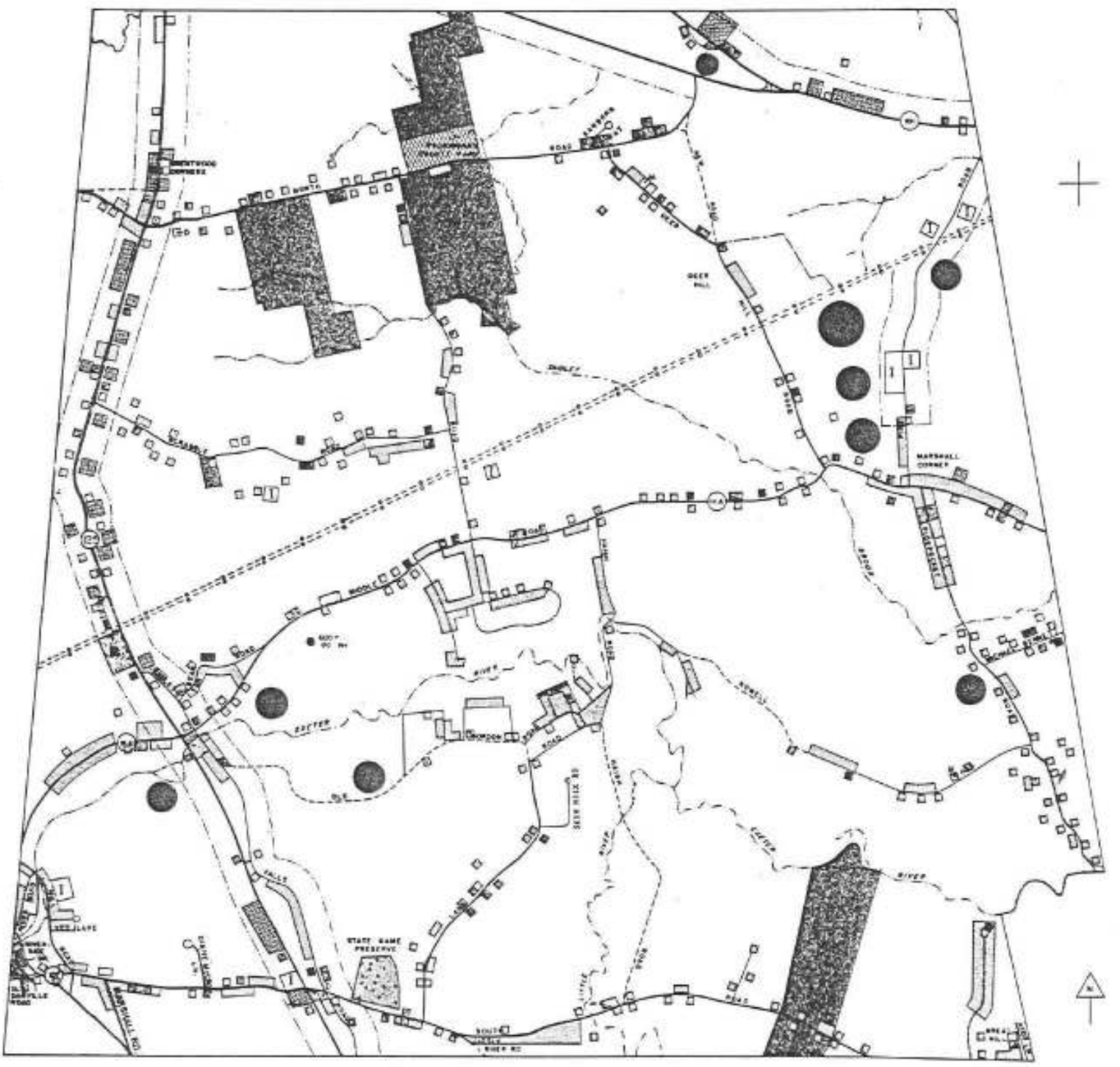
A. PURPOSE

"It shall be the duty of every planning board...to prepare and amend from time to time a master plan to guide the development of the municipality." So begins New Hampshire Revised Statutes Annotated 674:1 describing the "Duties of the Planning Board." It is easy to forget, in the face of all the development proposals that the Planning Board must deal with, that the Board's first and foremost function is to prepare a plan for Brentwood's development. In fact, without a plan, the Planning Board has no power and the Town loses its ability to enforce land use controls like zoning.

Later on, the Statutes go into some detail on just what a master plan should contain, namely a "...set of statements and land use and development proposals ...designed to show...the planning board's recommendations for the desirable development of the territory...within its planning jurisdiction." And still later — "the master plan shall be made with the general purpose of guiding and accomplishing coordinated and harmonious development which will, in accordance with existing and probable future needs, promote health, safety, order, convenience, prosperity or the general welfare as well as efficiency and economy in the process of development."

With the State Statutes as a guide, the Brentwood Planning Board has prepared the following updated master plan for the Town. The Plan seeks to attain conditions in the community that support the efforts of each of its citizens to improve the quality of his or her life. The Plan further seeks to avoid chaotic development with its potential for damaging the welfare of the many in exchange for the welfare of the few. It seeks to provide for orderly and natural growth commensurate with the Town's ability to support that growth in terms of services and facilities. It seeks to judiciously protect the general welfare of both the many and the few and do so with a minimum of restraints.

BRENTWOOD



SCALE: 1 inch = 1000 feet

Prepared by:
Southeastern New Hampshire Regional Planning Commission
2 Wall Street
Exeter, New Hampshire 03833
April 1976

"The preparation of this map was financially aided through a Federal grant from the Department of Housing and Urban Development, under the Comprehensive Planning Assistance Program authorized by Section 701 of the Housing Act of 1954 as amended."

LEGEND

- STATE & TOWN ROADS
- ROADS CLOSED SUBJECT TO GATES & BARS
- UNACCEPTED ROADS
- POWER LINE Right Of Way

EXISTING LAND USE

- RESIDENTIAL Single Family
- R RESIDENTIAL Duplex
- R RESIDENTIAL Multi Family
- RESIDENTIAL Mobile Home
- HOME OCCUPATION
- I INDUSTRIAL
- COMMERCIAL
- INSTITUTIONAL
- PUBLIC
- PUBLIC Recreational
- OPEN SPACE
- AGRICULTURAL
- PIT

MAP #1

B. ORGANIZATION

The organization of the revised master plan is similar to that of the 1980 Plan. Each chapter builds upon the substance of the prior chapter.

Chapter II presents a town history which allows the reader to develop an understanding and empathy for the community of Brentwood as it has evolved through the years.

Chapter III, "Goals & Objectives," describes the 1986 Citizen Survey and provides a list of 11 goal statements that provide the groundwater for the Master Plan.

Chapter IV follows with a look at facts and figures about the Town. This Chapter, titled, "Current Status," includes a look at Brentwood as it exists today, including basic socio-economic facts and figures, the Town's natural features like soils and topography, and the use of the land in Brentwood.

Chapter V titled, "The Present and the Future," begins the move from the present into the future, with a look at present conditions and needs for the future. The Chapter contains details and recommendations on:

- Housing
- Transportation
- Utilities
- Community Facilities
- Recreation
- Conservation and Preservation
- Water Resources Protection

Chapter VI, titled "Future Land Use," reflects recommendations contained in Chapter IV and describes the Planning Board's consensus on how it sees Brentwood developing in future years. The Chapter is designed to fulfill the declared purpose of this document and seeks to promote that fulfillment in the form and manner expressed as the lawful and legal will of its citizens.

CHAPTER II — HISTORY OF BRENTWOOD

Brentwood is located near the center of Rockingham County. It is bound on the north by Epping, on the east by Exeter, on the south by Kingston and on the west by Fremont. It is watered by the Exeter River, by the Little River and by Dudley Brook, formerly referred to as Deer River.

Originally, Brentwood was a part of Exeter, incorporated as a separate Parish until June 26, 1742.

The church was an important factor in the lives of Brentwood people, although other factors had an equal influence on the shaping of its history.

Settlement was determined by many conditions, among them the quality of the land. Very early in its history, farming was a main occupation.

The Exeter River played an important part in the lives of the people, for it offered the power needed to operate the many mills that were present throughout the 1800's and on into this century. These mills have all disappeared, leaving the river as a wild area much used by the people for fishing and recreation.

From the far western part of town at Copy Hold to the falls just near the Exeter line, mills offered employment and invited new residents. In the center of this activity, at Crawley's Falls, at the intersection of Old Route 125 and Middle Road (Route 111A), three mills existed. Two are pictured in the HISTORY OF BRENTWOOD, prepared by the town's Historical Society in 1967. At least one employed 29 more people at one time.

The Rockingham County Map of 1857 shows commercial activity also thriving in town. The map shows there were "general stores" serving as mini town centers in each section of town. Other records indicate that as early as 1775, with 1,100 people in town, the many sections of town were serviced not only by "general stores," but by many specialized business enterprises such as blacksmith shops, tanneries and at least two coopers, one near Kingston South Road and one on North Road.

As the town grew as a generous mix of commercial, industrial, farm and residential activity developed, cultural needs were not neglected. In 1831 at Crawley's Falls, Captain Josiah Dudley and Jonathan Morrill built a two-story building to serve as a store. In 1836 a small room in the upper story was furnished for a "singing school" and other social activities.

In many ways, Brentwood' history is the story of a slow coming together of scattered communities. Wetlands are interposed throughout the town separating the various areas of productive farm lands. The slowness and difficulty of transportation promoted mini community centers. However, as transportation has improved, a gradual completion of the movement to synthesis has become paramount. Even though at one time served by five separate post offices and split into five separate school districts, the people themselves in their own way have moved towards unifying their self-support efforts.

Much can be said about the changes in recent years. No longer is Brentwood principally a town of farmers and general stores and tanneries and blacksmiths and mills. Like much of today's rural America, most inhabitants work outside of the town. Most residents commute to jobs and businesses elsewhere. Yet, some do find their full livelihood in Brentwood with many supplementing their income with a small business activity out of their homes. Few full-time farms remain. Yet, the rural flavor remains. The town "looks" like a farming community. And on the many occasions when the people have been asked through surveys at large and questionnaires at special official and unofficial meetings, the people have said loud and clear, "That's the way we want to keep it."



A. Citizen Survey

In September of 1986, a citizens survey was distributed to 605 households in Brentwood. The survey, which had a 39% response rate, asked residents of Brentwood their opinions on a variety of topics ranging from why they chose to live in town, to what they considered were serious local problems, to what residents wanted in the way of capital expenditures. The survey results provide an insight into how people living in Brentwood feel about their community. These insights form the basis for the majority of the goals which are, in turn, the basis for the Master Plan.

A brief analysis of the results of the survey gives a quick picture of how people live in Brentwood and how they feel about their town:

... Ninety-one percent of the respondents own their homes.

... A majority of respondents chose to live in Brentwood because of the Town's rural character.

... The average length of time respondents have lived in Brentwood is 13+ years.

... People who work away from home commute an average of 21 miles each way.

... Most residents do their shopping in Exeter and Stratham.

... Respondents think that Brentwood most needs "more open space" and "preservation of wetlands" and least needs "more stores and restaurants" and "apartments."

... Eighty-five percent of the respondents want Brentwood to continue to control the rate of residential growth.

... Respondents would like to see single-family residential units built in town, but not apartments and mobile homes.

... Serious local problems include "heavy truck traffic," "traffic speed," and "water supply & potential contamination."

... Less than half the respondents (46%) want greater Town services.

... While no Town capital expenditure was considered "very important," some importance was placed on "upgrading Town roads," "Town recreational facilities," "enlargement of the library," "public works equipment," "acquiring more open Town land," "enlarging the school," and "increasing Fire Department capacity."

B. Goals & Objectives

Goals for Brentwood are an important, fundamental part of the process of planning for Brentwood's future. The goals and objectives listed below provide a broad framework within which the Master Plan will be prepared.

Brentwood seeks to:

1. **Preserve its rural character by controlling future land uses.**

   The September 1986 citizens survey shows that the single-most common reason people choose to live in Brentwood is the Town's rural character. Rural character will be preserved only by controlling the type and location of future land uses.

2. **Develop land use controls, and solicit state support, toward resolving problems of traffic speed and heavy truck traffic.**

   The single-most often referenced local problem noted on the citizen survey was "traffic speed," followed by "heavy truck traffic." Addressing this goal will require cooperation and coordination between the Town and the State.

3. **Control the location, design and operation of commercial and industrial land uses in appropriately zoned areas.**

   Brentwood residents, through the survey, show a real interest in controlling commercial and industrial uses in the Town to insure the continued utility of such uses. In addition, keeping industrial and commercial uses in their respective zones will help prevent deterioration of residential neighborhoods due to the proximity of these non-residential uses. A comprehensive review of the Town's zoning ordinance, following completion of the Master Plan, will be a first step in achieving this goal.

4. **Protect areas of environmental importance, including wetlands.**

   In response to the question of, "What do you think Brentwood needs most?," the top response was, "Preservation of wetlands." Protection of these and other areas of environmental importance will benefit the citizens of the Town and the region. Permitting development to take place without regard for the suitability of underlying soils, slopes and groundwater can result in environmental damage, damage to the structures placed thereon, inconvenience to landowners, pollution of groundwater and, ultimately, the necessity for large private and/or public expenditures to correct mistakes. Wetlands zoning, lot size by soil type, shoreline protection zoning, and aquifer protection zoning are four common approaches to addressing these issues. All should be investigated as opportunities for Brentwood to insure that fragile areas are protected.

5. **Control both the rate and pattern of growth for the benefit of present and future citizens of the Town.**

The survey indicates that 85% of the residents of Brentwood support controlling the rate of growth and that the majority wishes residential development in planned subdivisions and along present roads. Growth rates which are too rapid can result in overcrowded schools, traffic congestion, over stressed municipal services, and higher taxes. Controlling the rate of growth will require an analysis of the Town's services, decisions as to their capacity, and a determination of the specifics of a growth control measure. Growth control, by statute, must be based upon some serious deficiency in local infrastructure and temporary in nature. In addition, the Town must show it is taking steps to resolve the problem that has required the growth control measure.

6. **Plan for and provide open space and recreational facilities for its residents.**

In response to the question, "What do you think Brentwood needs most?," the second-most common response was "More open space." Preserving and protecting open space will require the Town to consider a variety of approaches ranging from purchase of land to accepting donations of development rights.

7. **Encourage the provision of an adequate supply of housing to meet the needs of all of Brentwood's residents, particularly low income and elderly persons, while providing for a fair share of the regional housing demand.**

Issues of housing and growth generate controversy in virtually all towns. Local regulations inevitably influence the cost of housing. With people facing difficulties in finding adequate housing, the Planning Board is obliged to examine strategies for encouraging the provision of fair and equitable housing opportunities within the confines of the Town's land use controls.

8. **Preserve its past and protect its historic resources.**

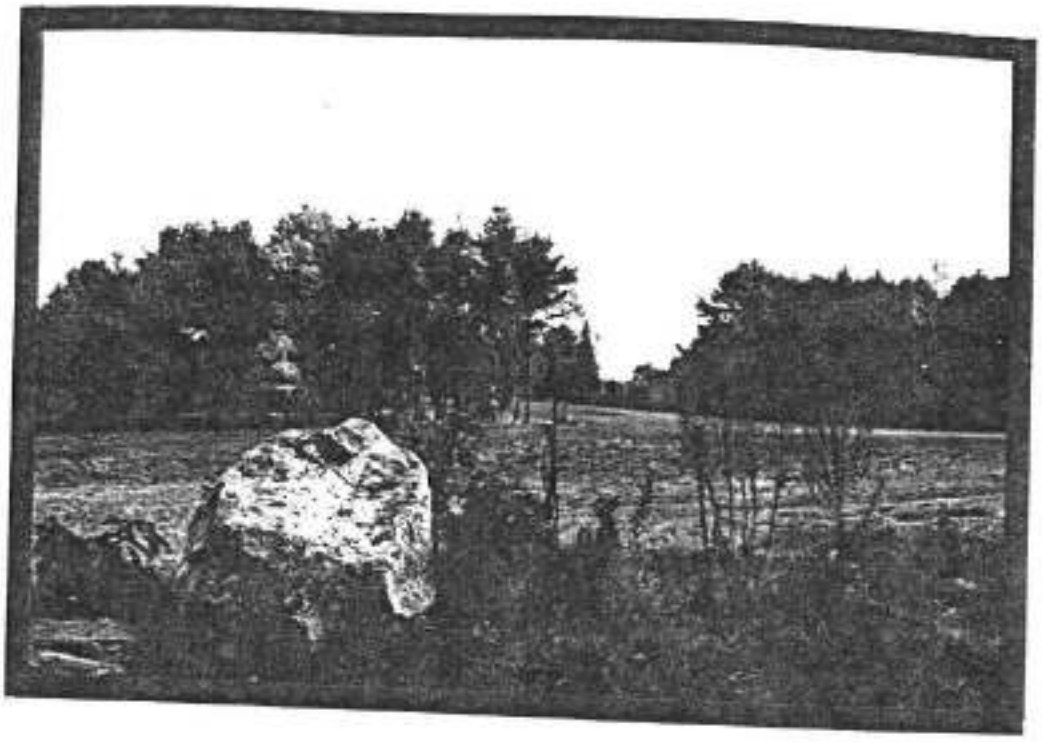
Throughout the citizens survey, residents of Brentwood made reference to Brentwood's character and their interest in maintaining this character. Identification and preservation of historic resources is one way that this character can be maintained for future Town residents.

9. **Plan for and provide improved public facilities and services.**

In addition to residents' concern over traffic speed and heavy trucks, the survey indicates local concern for "water supply or potential contamination." The survey goes on to show support for increased expenditures for "upgrading Town roads" and "increased Fire Department capacity." Given this interest, it is appropriate that, at a minimum, the Town develop a Capital Improvements Program directed at, among other topics, the upgrading of local roads and Fire Department capacity.

11. **Review the Master Plan every two years.**

With growth and change occurring at a rapid rate and, with increasing legislative and court concern for insuring that land use regulations are fair to all concerned, it is more important than ever to make sure that the Master Plan be kept up-to-date. An out-of-date plan can result in unsupported land use controls, and unsupported land use controls can be, and are, looked upon with disfavor by the courts.



CHAPTER IV — CURRENT STATUS

A. Existing Land Use:

The existing pattern of land use in a community has a direct effect on decisions about its future development. Map 1 shows existing land use in Brentwood. The location and extent of farms, residences and businesses -- and their relationship to each other -- are important community features; the road network determines ease or difficulty of access; the location of fire stations, community centers and schools all affect the ease with which public services can be provided to different areas of the community.

An existing land use study begins with the identification, location and mapping of land uses in a community.

In many communities, the land use maps show a pattern that is characterized by a town center surrounded by a sparsely population rural area. Brentwood has been characterized by the lack of a town center. The school and the new Town Office building may provide the nucleus of a town center.

Low-density residential development is the major land use in town. Higher density residential uses can be found mainly in the southwest corner of Brentwood, along North Road, and on Rowell and Haigh Roads.

Most areas of industrial use are located along Pine Road. There is another industrial area on Scrabble Road and four small industrial areas in the southwest corner of Brentwood.

The area lining Route 125 has the most commercial land uses. Route 101 also has some commercial uses, as do most of the other major roads in town.

The remainder of the land is undeveloped. There are several gravel pits throughout the Town, with the highest concentration being along Pine Road.

B. Land Use Analysis:

An evaluation of existing land use should go beyond an observation of the present pattern to address the question of how future growth can best be accommodated. The most important factors in this analysis are: roads, municipal services, regional growth patterns, and compatibility of land uses.

In many communities, road maintenance expenses are a major budget item; the location of future development can have a significant impact on highway construction and maintenance expenses. When development occurs in a sprawled pattern, the community is faced with upgrading and maintaining the many miles of rural road, but when development is concentrated, these expenses are minimized. The existing road network may suggest that certain areas of the community are preferred for growth because they are already served by a good road. On the other hand, a community can sometimes direct growth into an area by upgrading the road access.

Location of extension of public services can be used to reinforce the existing land use pattern or to change the pattern. A common method of encouraging a desired pattern of growth is to allow a greater density of development in areas most easily served by municipal services like police, fire and school buses.

Regional land uses affects the pattern of community land use -- development in one town often has a direct effect on neighboring towns. For example, if growth in a town is moving toward a common boundary, it may encourage growth in the neighboring community as well.

C. **Development Suitability:**

Map 2 provides a view of existing land use, along with steep slopes, wetlands, soils, flood hazard areas and areas with a high potential for groundwater.

(For purposes of discussion throughout the Master Plan, the term "development" is defined as any activity that involves the erection of a habitable structure, and/or alters the surface configuration of the land.)

While there is a goodly amount of vacant land without particular development constraints, there is pressure to build on sites that do have such development constraints. This suggests that the Town should carefully review its land use control regulations to ensure that new development does not present environmental problems for either the Town or future homeowners.

D. **Topography:**

Topography is the shape of the land -- its ups and downs, hills, valleys, ridges and plains. In a community planning context, these features impose a natural order on the land that, in turn, influences the pattern of land use. An awareness of topography in a community may show why the existing pattern of land use developed as it did, and may also suggest ways in which future patterns could evolve.

Topography influences land use in very elemental ways -- often, hills are like walls, and valleys are like corridors. These simple conditions affect travel, commerce, vision and even social relationships.

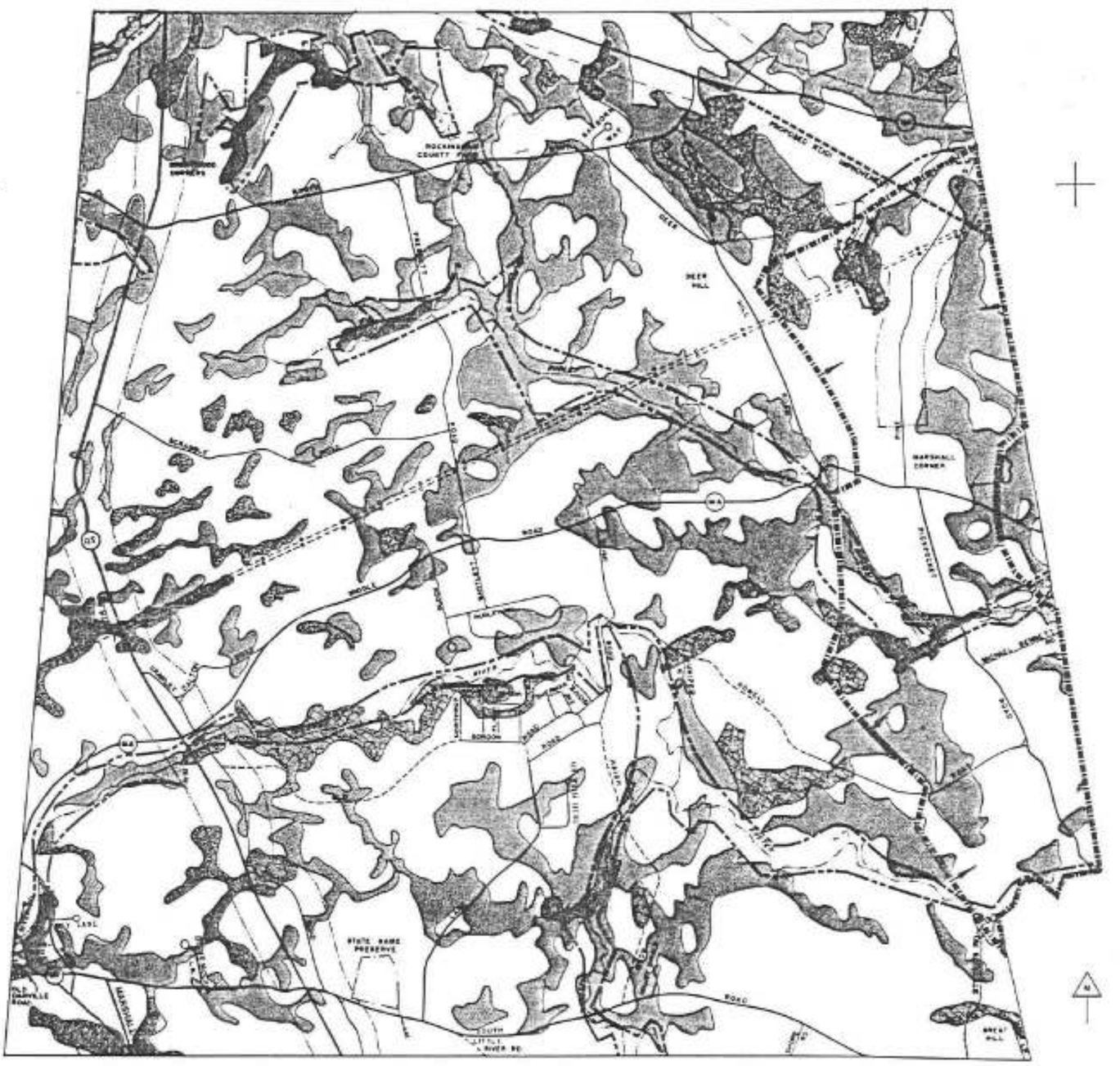
In this part of New Hampshire, the hills are low and their sides generally not steep. The valleys are flat and often wetland. Consequently, development first took place along the crests of the hills where land was dry and could be tilled. The roads connected the farm houses and subsequent houses were built along these roads. A look at Brentwood's topography shows clearly how it has shaped road patterns. Wetlands are crossed at their narrowest points, reducing the amount of fill that had to be placed.

As is typical of any of the area towns, Brentwood's roads were developed along the path of least resistance. The main roads in town are along relatively flat areas. New subdivisions are beginning to appear in some areas of moderate slope. Generally, the topography in Brentwood has not created any specific barriers to development.

E. **Slope:**

The influence of slope on land use depends on its steepness and on its relationship to soil, water and vegetation. Map 2 shows areas of town with slopes greater than 15%. Variations in steepness affect such things as the amount of cutting and filling necessary to build roads or to prepare building sites, road maintenance and snow removal, and utility construction and service.

BRENTWOOD



SCALE: 1 inch = 1000 feet

Prepared by
Southeastern New Hampshire Regional Planning Commission
2 Wall Street
Exeter, New Hampshire 03833
April 1972

"The preparation of this map was financially aided through a Federal grant from the Department of Housing and Urban Development, under the Comprehensive Planning Assistance Program authorized by Section 701 of the Housing Act of 1954 as amended."

LEGEND

STATE & Town Roads
POWER LINES SUBJECT TO WATER & SEWER
UNACCEPTED ROADS
POWER LINE RIGHT OF WAY

DEVELOPMENT SUITABILITY

Very Poorly Drained Soils
Poorly Drained Soils
Slopes 15% +
Groundwater - High Potential
Flood Hazard

MAP #2

Whereas moderate slope conditions present few inherent limitations to most uses, the cost and difficulty of many development activities are likely to increase in steeper areas. Opportunities that steeper areas present for unique recreational or residential use, however, may override basic cost considerations.

Soil drainage characteristics are important under any slope condition. In steep areas, however, soils usually are shallower, and the absorption capacity of soil is often very limited. Though erosion potential tends to increase with steepness, soil type also has a direct influence on the erodability of sloped areas and can lessen or magnify erosion potential.

Because of complicating factors on steep slopes, active land uses should be planned and undertaken with caution in such areas. In areas of greater than 25% slope, the erosion potential is severe, and adequate and safe septic effluent disposal is extremely difficult and costly; active use of these areas often poses problems to the developer, to the purchaser, to landowners down the slope and, ultimately, to the community; the same problems are likely to be encountered in areas of 15-25% slope.

Slope may become a factor at the other extreme as well -- in flat areas where there are poorly drained soils, water may pool at or near the surface. Special engineering and construction techniques may be needed to prevent structural or septic tank problems in these areas. Well-drained, flat-to-gently-sloping areas are suitable for almost any land use.

Brentwood is characterized by its basically flat areas with a 0-8% slope, and gently rolling hills with an 8-25% slope. There are relatively few areas of steep slope over 25%.

Slopes do not present any major problems or barriers to development in the Town of Brentwood.

F. **Soils:**

Soil is the ingredient of the land itself -- the ground on which land use happens. Because it is the foundation for all uses, the condition of the soil is an important factor in all land use decisions.

The soil has different meanings to different people: the potential homeowner often thinks of soil merely as a place to build a house and grow a lawn; engineers commonly consider soil as all the unconsolidated material overlying bedrock; soil scientists consider soil as a natural body that has both depth and surface area. For planning purposes, the soil scientist's definition is used, because the greatest source of soil information available to communities is scientists working for the Soil Conservation Service (SCS) of the U.S. Department of Agriculture.

A soil scientist is concerned primarily with the condition of the soil within four feet of the surface. According to SCS soil scientists, "soil is a dynamic three-dimensional body. Its upper surface is the surface of the land; its lower boundary is parent material or bedrock; and it is bounded on its sides by other soils. The properties of a soil represent the integrated effect of climate and living matter on the parent material, as conditioned by relief and time." "Soil survey" is a general term for the systematic examination of soils in the field and in laboratories -- the description, classification and mapping of soil types, and the interpretation of their adaptability for different uses.

Brentwood's soil survey is based on the Rockingham County Soil Conservation Map, dated 1982. The survey reflects a range of soil types, from soil excellent for farming, to very poorly drained, very wet soils. Map 2, Development Suitability, reflects two pieces of information from the soil survey: 1) very poorly drained soils; and 2) poorly drained soils.

Very poorly and poorly drained soils are generally referred to as wetlands. The areas are wet, since water moves through the soil so slowly that the water table remains at or near the surface of the ground for the greater part of the year. The reference to "very poorly" and "poorly" refers in part, but not exclusively to, the amount of time water remains at or near the surface.

Very poorly drained soils generally occupy level or depressed sites, are frequently ponded, and commonly have soils with a thick dark colored surface layer and gray subsoil.

Poorly drained soils occupy nearly-level to sloping sites, are ponded for short periods, have a dark colored surface layer with grayish, mottled subsoil. (A detailed explanation of both types of soils is available from the U.S. Soil Conservation Service.)

Twenty-seven percent of Brentwood's soils are poorly drained or very poorly drained. These wet soils and steep slopes are a definite deterrent to development of any type. These areas should be protected from development and left in their natural state to serve as wildlife habitat, open space, natural barriers, and collection and storage areas for water.

As with any survey presented at a scale of 1" = 1,000', on-site inspection is necessary for an accurate classification of soils in a specific area.

G. Flood Hazard Areas:

Floods are a natural and normal phenomenon; they become a problem to man only when he competes with streams and rivers for the use of floodplains. During normal stream flow, water is carried in the channel but, in times of high runoff, water rises over the banks and flows onto the floodplains, frequently damaging structures located there.

There are two broad solutions to the flood problem: the protective solution which utilizes structural features such as dams, levees, and other construction techniques to minimize flood damage; and the preventative solution, which relies on regulation of land uses to keep flood-damageable property out of flood hazard areas. For many years, the protective solution has been relied on to avert flood damage; this alone has not done the job, and the emphasis is now on the preventative approach. The new strategy is being implemented through the National Flood Insurance Program, in which the Federal government requires that a community regulate construction in flood hazard areas in order to qualify for the sale of flood insurance. The National Flood Insurance Program has made land management in flood hazard areas a virtual necessity for many New Hampshire communities.

Map 2, Development Suitability, shows the areas designated as Flood Hazard Areas by the U.S. Department of Housing and Urban Development, Federal Insurance Administration. They occur mainly along the major rivers and adjoining areas.

H. Water Resources:

Map 2 shows areas of Town that have a high potential as sites for the extraction of significant amounts of groundwater. Wells located within these areas should yield significant quantities of water to meet or augment municipal and industrial requirements.

While Brentwood has no municipal water system at this time, and none is foreseen in the immediate future, protecting these areas from contamination is important to ensure that the option of providing municipal water supply is left open. Pollution of these sites is generally irreversible, and could preclude the sites from use even for individual private wells.

While these groundwater sites, unlike wetland soils and steep slopes, are developable, land uses, and the percent of any parcel made impervious by development, should be carefully monitored to ensure that the groundwater is not polluted.

I. Vegetation:

Vegetation in Brentwood consists of ten categories:

1) Wooded: mixed coniferous and deciduous. These are well-stocked forested areas. Most of Brentwood is in this category. The largest are located between Middle and South Roads.

2) Wet Wooded: includes low land hardwoods and other forested areas. There is a large area of wet wooded land north of the power line extending from Prescott Road and to the west of Route 125 adjoining Fremont. It also continues south beyond the Exeter River. Another strip occurs east of Deer Hill Road north of the power line. Several areas are scattered along South Road.

3) Wet Scrubby: areas consisting primarily of shrubs, grasses and ferns. There is a long strip of "wet scrubby" land along Dudley Brook, also to the west of Route 125 at Smith Road, and a few areas along Middle Road and South Road. There is a short stretch along Little River to the west of Haigh Road.

4) Abandoned Land: this includes such areas as recently cut-over forested land, abandoned old fields, and urban land with early successional vegetation. It also includes the unused, nonforested land under power lines.

   There are patches of abandoned land along most of the roads in Brentwood. The largest concentration is along Pickpocket Road, and north of the power line between Prescott and Deer Hill Roads.

5) Vegetated Urban: commercial, industrial or residential areas of more than an acre. The residential areas have a density of more than one dwelling unit per acre. There is some vegetation in this areas.

   North Road, Route 101, South Road west of Route 125, and around the junction of Route 111A and Route 125 are the major vegetated urban areas. Marshall's Corner also is in this category.

6) Field and Pasture: open areas usually used for grazing animals. Some are large yards. Deer Hill Road, North Road, and Middle Road have the largest areas in this category. There are also scattered areas along South Road, Lake Road and Pickpocket Road.

7) Cropland: areas planted or plowed for crop cultivation. The County Farm has the largest area of cropland in Brentwood. Pickpocket Road and South Road have several patches. There are just a few other areas scattered around town.

8) Orchard: fruit trees of sufficient number, reasonable order, and apparent healthy condition. There are very few orchards -- one on Rowell Road, two off South Road, and another in the Smith Road area.

9) Gravel Pits: those in use and abandoned. There is a large area on Pine Road.

10) Open Water: lakes, ponds and rivers.

J. Socioeconomic Profile

Brentwood has been growing at a steady rate since 1960. That rate is just under 3% per year, which is greater than New Hampshire's rate for the same time period. Considering New Hampshire's rate of growth is greater than any of the other northeastern states, gives one a sense for the magnitude of population growth relative to other areas in the country.

Table 1 indicates the annual percentage growth rate and population totals in neighboring towns for various time periods.

In 1985, the Office of State Planning estimated that there were 2,183 individuals living in town, or an increase of 721 people since 1970. One can see that the town has been growing at a very steady rate since 1960.

The Office of State Planning has projected Brentwood's population. These projections indicate that the Town will continue at its steady rate of growth if present trends continue. By the year 2010, they estimate there will be 4,190 people living in Brentwood. This is indicated in Table 2.

Where have all these people been coming from? Table 3 indicates that 62% of the Town's 1980 residents, or 1,203 people, were born outside of New Hampshire. This trend is similar to that experienced by other southern New Hampshire towns.

How long have the residents of the Town lived at their present residence? Table 4 indicates that, in 1980, 922 (or 51%) of the Town's residents have lived at their present address five years or less. Even though some of these individuals are residents of the county facilities, young children or individuals who have moved from another address within town, one cannot escape the fact that many of these 922 people have moved to Brentwood from outside of Brentwood.

TABLE 1

Population Growth; Selected Communities

Town	1960	1970	1980	1985	1986	% Annual Growth '60-'85	% Annual Growth 1970-'85
Brentwood	1,072	1,468	2,004	2,183	2,382	3.12	3.07
Exeter	7,243	8,892	11,024	12,040	11,846	1.91	1.81
E.Kingston	574	838	1,135	1,269	1,326	3.27	2.91
Kingston	1,672	2,882	4,111	4,890	5,065	4.35	3.59
Fremont	783	993	1,333	1,675	1,802	3.26	3.79
Epping	2,006	2,356	3,460	4,107	4,147	2.83	3.60
State	606,787	737,578	920,475	998,000	1,027,008	2.04	2.09

Source: Office of State Planning; U.S. Bureau of the Census

TABLE 2

Population Projections, Brentwood, NH

1990	2000	2010
2,857	4,082	5,454

Source: Office of State Planning

TABLE 3

Nativity and Place of Birth

	1970	%	1980	%
Born in State of Residence	711	55	736	37
Born in different State	543	42	1,202	62
Born Abroad	40	3	7	1
	1,294	100%	1,945	100%

Source: U.S. Bureau of the Census

TABLE 4

Response in 1980 to Question of Resident in 1975 — Brentwood

Category	Estimated Number	Percent of Total
Same house	899	49.4
Other residence in County	500	27.5
Other residence different County	79	4.3
Outside N.H.	343	18.8
	1,821	100.0%

Source: U.S. Bureau of the Census

TABLE 5

Place of Employment, Brentwood Residents (1980)

Category	Number	Percent of Total
BRENTWOOD	123	18.9
Kingston	13	2.0
Exeter	165	25.3
Portsmouth/Dover/Rochester	67	10.3
Elsewhere in NH	41	6.3
Massachusetts	153	23.5
Elsewhere	89	13.7
Total	651	100.0%

Source: U.S. Bureau of the Census

Where do Brentwood residents work? Table 5 indicates most of those who work do so in Exeter. The second-most frequent site for Brentwood residents is in neighboring Massachusetts or in Brentwood. The number of Brentwood residents commuting to Massachusetts again reflects a trend followed by southern New Hampshire communities. The rest of Brentwood workers are scattered around other New Hampshire locations.

What are the types of housing that is currently located in Brentwood? Table 6 indicates that most of the housing in Town is single-family. There were 534 single-family homes in Brentwood in 1984, 31 duplex or multi-family units, and 99 mobile homes.

What are the family incomes for Brentwood residents? Table 7 indicates the distribution of family incomes. There are a wide range of family incomes, from no income, to those with incomes of $75,000 or greater. The median income for the Town was $19,119 in 1980. Using this as a measure of the Town's relative wealth, Brentwood can be considered as an "average" southern New Hampshire town. The median income for Brentwood is greater than that of Exeter and Epping, but less than Stratham, Kensington and Plaistow.

How old are Brentwood's residents? Table 8 gives some indication, although it does include individuals residing at the county nursing home, and distorts the results for other Brentwood residents. The table indicates 112 individuals in the 0-4 years category in 1980. These children can be expected to have entered Brentwood's schools. In addition, there will be others moving to town during this time. Therefore, the actual number depends upon net gain in population growth during this time.

TABLE 6

Housing Types, Brentwood, NH (1985)

Category	Number	Percent of Total
Single Family	554	80.4
Multi-Family & Duplex	32	4.6
Mobile Homes	103	15.0
Total	689	

Source: NH Office of State Planning

TABLE 7

Household Income, Brentwood Residents (1979)

Income Level	Number of Households	Percent Of Total
Less than $2,500	25	4.6
2,500 - 4,999	31	5.7
5,000 - 7,499	33	6.0
7,500 - 9,999	31	5.7
10,000 - 12,499	44	8.0
12,500 - 14,999	36	6.6
15,000 - 17,499	45	8.2
17,500 - 19,999	44	8.0
20,000 - 22,499	48	8.8
22,500 - 24,999	17	3.1
25,000 - 27,499	28	5.1
27,500 - 29,999	29	5.3
30,000 - 34,999	51	9.3
35,000 - 39,999	31	5.7
40,000 - 49,999	30	5.5
50,000 - 74,999	20	3.7
$75,000 or more	4	.7
Total	547	100.0

Source: U.S. Bureau of the Census

TABLE 8

Age of Brentwood's Residents (1980)

Category	Number	Percent of Total
0 - 4	112	5.6
5 - 9	153	7.6
10-14	164	8.2
15-19	168	8.4
20-24	95	4.7
25-29	121	6.0
30-34	176	8.8
35-44	280	14.0
45-54	189	9.4
55-59	75	3.7
60-64	72	3.6
65-74	143	7.1
75-84	149	7.4
85 and over	107	5.3
	2,004	

Source: U.S. Bureau of the Census

CHAPTER V — THE PRESENT AND THE FUTURE

The following text describes and analyzes the basic land use related components of Brentwood. These components include:

.. Housing
.. Transportation
.. Utilities
.. Community Facilities
.. Recreation
.. Conservation & Preservation
.. Water Resource Protection

Certainly it is true that there are other components of the Town that are valid and perhaps supportive of an in-depth analysis; however, regardless of the organization of the analysis, these 7 areas must be incorporated. As each of these sections is analyzed, the interaction among the 7 begins to cloud any discussion. Any change in one of the 7 affects the direction of all the others.

A. Housing

1. Background: The Master Plan is in part an effort to describe an environment in which each individual can maximize the quality of his or her life as that individual interprets the word "quality." In surveys conducted in 1975, 1977 and 1986, the majority of Brentwood's citizens have indicated that this environment can best be supported by maintaining a rural atmosphere.

   What does this mean in terms of housing? It is reasonable to assume that the majority of people of Brentwood equate "rural atmosphere" with a typical New England town. Such a town has not only woodlands, fields, and farmland, but also a balanced population according to age and income; the young, middle-aged, and elderly; the wealthy and those of moderate or low income. Likewise the "typical rural New England town" is made up of a variety of different types and ages of housing.

   Table H-1 shows some of the changes that have occurred in housing type and cost from 1970 to 1980, (the last year complete housing statistics are available) as well as other housing details. The table reflects the growing prosperity of this part of New England, and growth associated with this prosperity.

   Brentwood grew at a significant rate over the 1970-to-1980 decade, adding nearly 201 year-round housing units to its 1970 total of 381, principally in the form of single-family dwellings (155) and mobile homes (65). The cost of housing also increased over the decade, with median home values increasing by 134% in constant dollars, and 363% when no adjustment for inflation is made. This brought the median price of a single-family house from $12,408 in 1970 to $57,400 in 1980.

TABLE H-1

GENERAL HOUSING CHARACTERISTICS

Town of Brentwood

1970-1980

	1970	1980	Percent Change
Total Housing Units	401	590	47.1
Year Round Units	381	582	52.8
Seasonal Units	20	8	-70.0
Owner Occupied	329	494	50.2
Renter Occupied	39	49	25.6
Vacant	13	39	200.0
Single Family #	323	478	48.0
Multi-Family #	34	31	-8.8
Mobile Home #	24	89	270.8
Median Persons per unit	3.34	3.05	-8.7
Median Home Value	$12408	$57400	362.6
Median Home Value $1970 *	$12408	$28990	133.6
Median Rent	$64	$206	221.9
Median Rent $1970 *	$64	$104	62.5

Age of Housing Stock (Year structure built)	Number	Percent of Total
1980-1985	91	13.2
1970-1979	230	33.4
1960-1969	100	14.5
1950-1959	42	6.1
1940-1949	15	2.2
1939-earlier	211	30.6

Sewage Disposal	Number	Percent of Total
Public Sewer	4	0.7
Septic Tank or Cesspool	582	97.3
Other	12	2

Source of Water		
Public System or private company	2	0.3
Individual drilled well	285	47.7
Individual dug well	300	50.2
Other	11	1.8

Sources: 1980 Census STF1 and STF3 & 1970 Census.
 # Current Estimates and Trends in New Hampshires Housing Supply, Office of State Planning, 1979 & 1985.
*** 1980 figures adjusted to 1970 dollars using Consumer Price Index (U.S. City Average).**

With this growth came a lowering of the age of Brentwood's housing stock. While continuing to maintain the "feel" of a typical rural New England town, Brentwood's housing was in reality quite new. By 1985, 61% of all residential units in town had been built since 1960, with only 31% built in 1939 or earlier.

In 1980, Brentwood's housing situation generally mirrored that of its neighbors (see Table H-2). Owner-occupied dwellings were very close to the area average (85% vs. 81%), with a lower renter-occupied figure (8% vs. 15%), slightly more persons per-unit (3% vs. 2.7%), a slightly higher median value of owner-occupied units ($57,400 vs. $50,778), yet slightly lower median rents ($206 vs. $227). Inexplicably, in 1980 Brentwood had a vacancy rate of all units of 6.7%, while the area averaged 3.8%.

In 1980, Brentwood shared many of the growth statistics of neighboring rural New Hampshire towns, and more rapid growth and change was on the way.

The upward trend in area housing costs continued, with the average unit in Brentwood selling for $179,972 in 1986, with newly-constructed homes going for an average of $195,760. Table H-3 shows similar growth figures for Brentwood's neighbors, the County and the State.

Between 1980 and 1985, Rockingham County was the most rapidly growing county in the State. Brentwood, like all municipalities in the County, experienced its share of this growth. Along with Brentwood's population growth (2.7% from 1970-1985, as compared to a State figure of 2%) came an increase in residential building activity. Housing growth averaged 4% annually from 1970 to 1985 (see Table H-4). This is a rate higher than area communities (3.6%) and the State (3.4%), and only slightly below the County figure of 4.3%.

2. Housing Type: The result of these changes, brought on by a booming local economy, has been continued explosive growth and a limited, expensive, housing market.

The courts have increasingly come to look to municipalities to help insure an adequate local housing supply. The existing housing situation in a municipality is also seen as an indicator of how a town responds to the needs of residents of various economic groups. Recent litigation against towns has involved allegations of discrimination against low and moderate income groups through local housing policies. State statutes and court rulings stress the need for towns to provide opportunities for a wide range of housing types. Brentwood, unfortunately, scores well below average in this regard.

TABLE H-2

AREA HOUSING CHARACTERISTICS 1980

TOWN/AREA	Total Housing Units	Count of Year-Roun Units	Count of Seasonal Units	Owner Occupied	Renter Occupied	Vacant	Median Persons Per Unit	Median Value Owner Occupied	Median Rent Per Month
BRENTWOOD	590	582	8	84.9%	8.4%	6.7%	3.05	57400	206
Danville	445	438	7	84.9%	12.3%	2.7%	2.9	48000	219
East Kingston	390	370	20	90.5%	7.6%	1.9%	2.87	54900	263
Epping	1343	1217	126	77.3%	17.1%	5.6%	2.66	45600	205
Exeter	4406	4401	5	66.0%	29.0%	5.0%	2.27	53300	224
Fremont	464	463	1	82.7%	14.3%	3.0%	2.62	43200	203
Kensington	456	450	6	87.6%	8.9%	3.6%	2.85	59900	265
Kingston	1683	1483	200	80.6%	14.8%	4.6%	2.66	48600	236
Newfields	281	280	1	77.1%	20.7%	2.1%	2.84	46100	222
TOTAL	10058	9684	374	81.3%	14.8%	3.9%	2.75	50778	227
ROCKINGHAM CN	76115	69410	6705	67.4%	27.6%	5.0%	2.50	56600	240
NEW HAMPSHIRE	386381	349215	37166	62.7%	30.0%	7.4%	2.40	48000	206

SOURCES: 1980 U.S. Census STF1. Tables:- 4,5,26,34,39,44.

TABLE H-3

Area Housing Costs, 1986

Town/Area	New		Existing		Both	
	Sample	Average	Sample	Average	Sample	Average
BRENTWOOD	5	$195,760	20	$176,025	25	$179,972
Danville	4	143,458	22	118,636	26	122,455
East Kingston	Not Available		Not Available		Not Available	
Epping	9	99,207	15	106,835	24	103,975
Exeter	16	175,135	35	115,680	51	134,332
Fremont	14	105,525	25	96,796	39	99,929
Kensington	3	194,500	12	139,783	15	150,726
Kingston	8	146,158	21	128,595	29,	133,440
Newfields	1	159,000	7	128,842	8	132,180
TOTAL	60	$152,343	157	$126,399	217	$132,180
Rockingham County		$151,971		$128,150		$134,614
New Hampshire		$130,780		$104,516		$110,181

Source: New Hampshire Housing Finance Authority, Purchase Price Averages, 1986

TABLE H-4

HOUSING DISTRIBUTION BY TYPE

TOWN/AREA	1985 Total	1985 Single Family number	1985 Single Family %	1985 Multi-Family number	1985 Multi-Family %	1985 Mobile-Homes number	1985 Mobile-Homes %	1970 - 1985 Units added	1970 - 1985 Percent Growth: Total	1970 - 1985 Percent Growth: Avg.Annual
BRENTWOOD	689	554	80.4%	32	4.6%	103	14.9%	308	81%	4.03%
Danville	700	487	69.6%	41	5.9%	172	24.6%	423	153%	6.38%
East Kingston	480	352	73.3%	8	1.7%	120	25.0%	230	92%	4.44%
Epping	1517	1011	66.6%	317	20.9%	189	12.5%	779	106%	4.92%
Exeter	5047	2675	53.0%	1557	30.9%	815	16.1%	1966	64%	3.34%
Fremont	652	573	87.9%	57	8.7%	22	3.4%	325	99%	4.71%
Kensington	538	480	89.2%	26	4.8%	32	5.9%	204	61%	3.23%
Kingston	1832	1457	79.5%	218	11.9%	157	8.6%	712	64%	3.33%
Newfields	339	272	80.2%	63	18.6%	4	1.2%	108	47%	2.59%
TOTAL/AVERAGE	11794	7861	65.8%	2319	27.0%	1614	7.2%	5055	69%	3.58%
ROCKINGHAM CNTY	84304	54826	65.0%	23208	27.5%	6270	7.4%	39742	89%	4.34%
NEW HAMPSHIRE	406795	252427	62.1%	129214	31.8%	25154	6.2%	160006	65%	3.39%

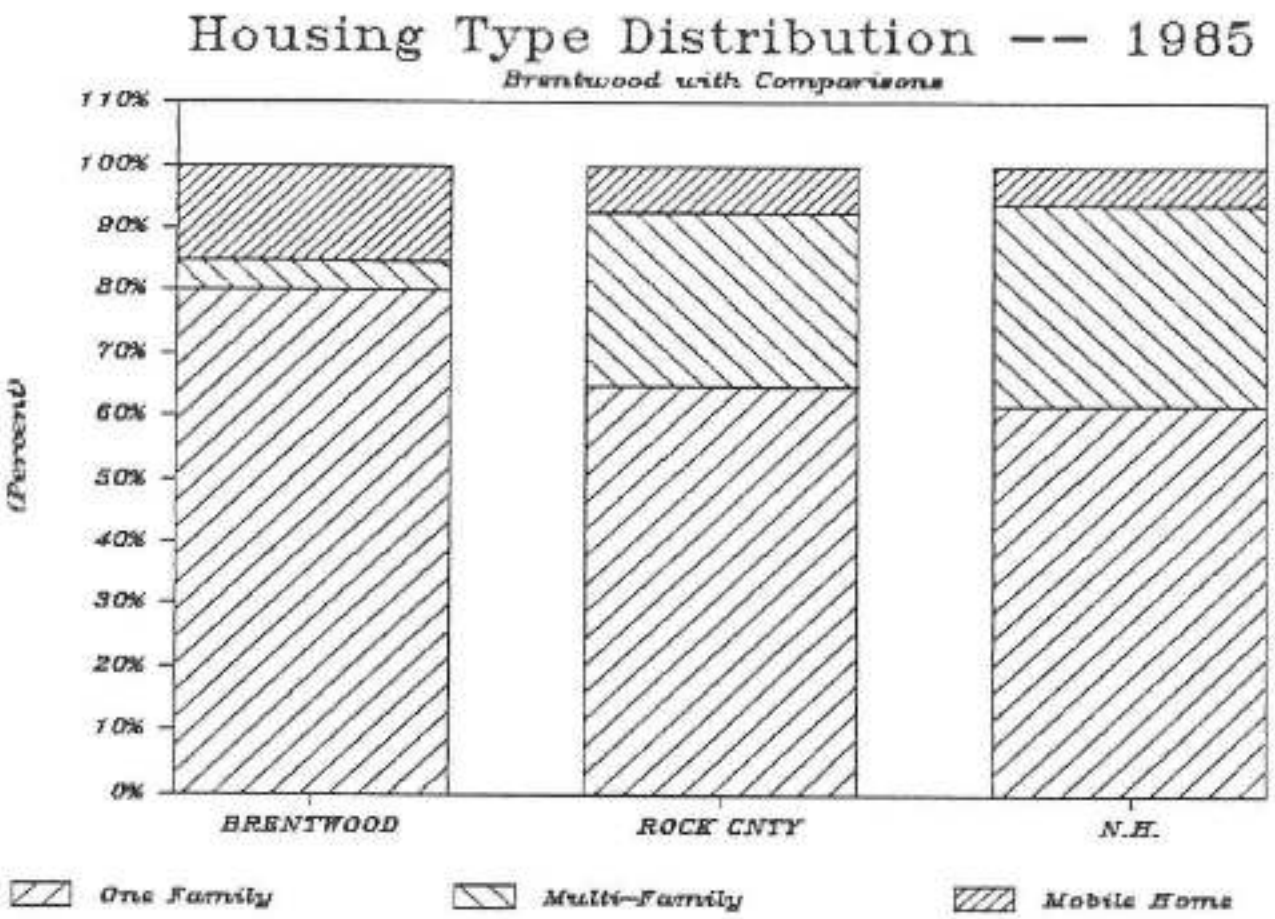
SOURCES: (1)"Current Estimates & Trends in New Hampshire's Housing Supply, Update: 1985,"
N.H. Office of State Planning.

Table H-4 compares Brentwood and neighboring communities in terms of housing distribution in 1985 (the last year such figures are available). This analysis shows that Brentwood provides considerably less than the regional average of multi-family housing (5% vs. 27%) but provides considerably more than the regional average with respect to mobile homes (15% vs. 7%). Local land use controls allow for mobile homes, single-family residences and duplexes in the Residential-Agricultural Zone. Single family residents represent 80% of all dwelling units in town; this compares to 65% for the area, and 62% for the State.

Figure H-1 shows graphically Brentwood's housing situation by type. As noted above, while the percentage of housing in the form of mobile homes is well above the County or State, the number of multi-family units is very low. Even when combined with mobile homes, non-single family housing is well below average. To accommodate the needs of people who live and work in Brentwood, housing stock needs to reflect the demand and diversity of Brentwood's residents. If land use regulations are not amended to accommodate multi-family housing, single-family residential development will likely come to comprise more and more of Brentwood's housing stock. (The number of multi-family units actually decreased between 1970 and 1980.) To insure that the broad range of housing demand is met, land use regulations must be evaluated and modified to ensure the availability of a diverse housing stock.

3. Income: Another test of the effectiveness of Brentwood's housing policy is to examine the income distribution of its residents. From Table H-5 it is clear that Brentwood houses a slightly above-average proportion of the region's higher income households, and a slightly lower proportion of the region's low income households. Overall, however, Brentwood emerges as a community with an income distribution fairly comparable to that of the region and county. This pattern is exemplified by noting that the 1980 median family income in Brentwood, at $19,119, is only slightly higher that that of area municipalities ($18,732). This point is further supported by Table H-6, which shows Brentwood supporting very close to its percentage of the families for each income group; i.e., with 8% of the area population, 7% of area families with incomes below $5,000 per year reside in Brentwood.

FIGURE H-1



Source: "Current Estimates and Trends in New Hampshires Housing Supply", N.H. Office of State Planning.

TABLE H- 5

PERCENT OF AREA'S FAMILIES BY INCOME *
Income Range (in Dollars)

TOWN	Percent of Area's Population	0 to 5000	5000 to 9999	10000 to 14999	15000 to 24999	25000 to 49999	>50000
BRENTWOOD	8%	7%	5%	7%	6%	8%	7%
Danville	5%	1%	3%	4%	6%	6%	5%
East Kingston	4%	4%	4%	4%	4%	5%	5%
Epping	13%	20%	18%	19%	13%	8%	4%
Exeter	42%	46%	41%	41%	44%	39%	45%
Fremont	5%	5%	5%	4%	6%	6%	2%
Kensington	5%	5%	3%	5%	6%	5%	12%
Kingston	15%	10%	18%	13%	12%	20%	17%
Newfields	3%	2%	2%	3%	3%	4%	3%

Source: 1980 U.S. Census, STF1 Table 4, STF3 Table 73.

*Each Numerically numbered column shows the percent of all families in the area in a particular income range. For example, 7% of all the families in the area with an income between $0 and $5000 live in Brentwood.

TABLE H- 6

1980 Median Household Income By Town*

Town	1980 Median Income ($)	Rank (1 = highest)
BRENTWOOD	$ 19,119	5
Danville	19,767	4
East Kingston	20,230	2
Epping	14,644	9
Exeter	16,726	6
Fremont	18,355	8
Kensington	20,263	3
Kingston	20,791	1
Newfields	18,690	7
Average	$ 18,732	

Source: 1980 U.S. Census STF3 Table 74

*To gain some perspective on changes since 1980, the average annual increase in yearly wages in Rockingham County for all industries was 7.5%, rising from $12,119 in 1980 to $17,359 in 1985.

The most direct way Brentwood can continue to positively affect housing costs is through local land use controls. While carefully crafted land use controls can help to reduce the cost of housing, such controls should not be written at the expense of undermining the intent of the regulations to protect the public health and welfare.

Brentwood residents, in their responses to the 1986 survey, have expressed a desire to manage town growth so as to preclude the need for rapid expansion of school and municipal services.

One way to address part of this desire is to protect water quality. Toward this end, the capacity of soils to handle septic systems should be an important consideration in determining lot size requirements. Brentwood's present 80,000 square foot minimum lot size does not necessarily guarantee maintenance of water quality. Establishing lot size, by soil type, would better address this issue while permitting denser development (1 unit per acre) on soil suited to development, thus saving valuable open space.

A further consideration in determining lot size requirements is the cost of land. In many residential areas, land costs may effectively exclude low-income households. In many instances, the two-acre lot requirement necessitates development of large areas and construction of lengthy road networks to service the subdivision. The result is generally very expensive housing, constructed on equally expensive lots.

Some traditional subdivision controls add costs to development through requirements such as street specifications. Alternatively, new concepts in development such as cluster development can significantly reduce costs of both roads and structures. Furthermore, these types of development have the added benefit of preserving open space, while continuing to provide a wide variety of housing options.

4. Housing Recommendations

The following recommendations are designed to insure that Brentwood continues to provide diverse housing opportunities, promoting community goals, improving local housing controls, and ensuring compliance with relevant state and federal legislation.

a) Multi-Family Housing: New opportunities should be provided for new multi- family development as well as conversion of some large older houses to duplex and multi-family structures. Such uses would best fit with town character if developed adjacent to existing development in the town center (the Rte. 111A-125 area).

b) Cluster Development: As development pressures increase, preservation of the rural character of Brentwood will require implementation of innovative zoning techniques. One such technique is cluster zoning or open space development. It is recommended that the Planning Board develop and adopt a cluster ordinance. This would allow the Town to more efficiently use its prime developable land by encouraging developers to cluster housing units, preserving land as open space. This will serve the dual purpose, particularly for mobile home subdivisions, of decreasing development costs while preserving the Town's valuable natural resources.

c) Lot Size by Soil Type: Current zoning requires there be 80,000 square feet of land for each single-family house. This requirement, while simple to administer, sets an arbitrary lot size that, in reality, can be either too large in the case of excellent soils, or too small in the case of wetter soils. The result can be wasteful of open land in those instances when one acre is adequate to handle the septic system, and destructive of water quality in those instances when two acres is not large enough to handle the septic system.

d) Town Policy: In order to encourage the elderly to remain in town, programs for the elderly should be conscientiously promoted, such as: using the Visiting Nurse, Meals on Wheels, rural transportation, use of available Federal subsidies, food stamps, fuel payments, rental subsidies, elderly tax exemption according to the law, daily telephoning, etc.

B. Transportation

1. Introduction: Historically, one of the problems associated with Brentwood development was the difficulty people had travelling in and around the town. The presence of wetlands, dispersed throughout Brentwood, resulted in the isolation of productive farm lands, and the establishment of mini-community centers such as Brentwood Corners and Marshall's Corner. However, as roads improved and mobility increased, the town has increasingly consolidated, resulting in the growth of commerce and services along Route 125 and in the vicinity of the intersection of Route 125 and Route 111A.

Route 125 is a heavily travelled North-South connector for traffic originating in and around the New Hampshire/Massachusetts border region, into the lakes and mountain regions of New Hampshire.

Likewise, commuter traffic utilizes Route 125 extensively. A 1985 New Hampshire Department of Transportation traffic count revealed on Route 125, South of County Farm Road, a 24-hour Average Daily Traffic Count of 7500. This represents a 44% increase from 5200 in 1975. A traffic count undertaken in 1987 as part of a study of traffic impact showed Route 125 traffic up to 12,014 for a 24-hour period.

N.H. Route 111A is the major east-west route running through the middle of Brentwood. Route 111A is a two lane, windy road with center and side line striping.

In the southern part of the town, South Road carries the east-west traffic connecting with N.H. Route 125 in the southwest part of the Town. South Road is a two-lane, rural, windy road without pavement markings.

Northern Brentwood is served by North Road and N.H. Route 101 which serve east-west traffic. The State plans to widen N.H. Route 101 to four lanes from the present four lane terminus to its intersection with Main Street in Exeter. The new four lane road will be relocated just to the South of its present location in Brentwood.

Five projects are involved with the widening of N.H. Route 101 to four lanes.

1. Epping-Brentwood FY: 1989 (goes to bid)
   Project #10074
   Federal #FGFFO 18-2C57
   Estimated Cost: $21,500,000
   Description: Addition of barrel on N.H. 101 from Raymond running east onto Brentwood about 4.8 miles.

2. Brentwood-Exeter FY: 1988
   Project #P-3885-E
   Federal #F-018-2 (18)
   Estimated Cost: $3,159,074
   Description: Beginning about 1.2 miles west of Brentwood/Exeter town line, running east 3 miles. (This includes PE & ROW for 10399, 10400, 10642.

3. Brentwood FY: 1988
   Project #10399
   Federal #F-108-2 (62)
   Estimated Cost: $2,200,000
   Description: Bridge and approach Pine Road over N.H. 101.

4. Brentwood-Exeter FY: 1988
   Project #10642
   Federal #F-018-2 (65)
   Estimated Cost: $6,100,000
   Description: Epping/Brentwood town line easterly 2.2 miles to a point 700 feet east of the Brentwood/Exeter town line including a North Bound Interchange.

5. Brentwood FY: 1987
   Project #10400
   Federal #F-018-2 (63)
   Estimated Cost: $1,800,000
   Description: Bridge-North Road over 101.

The balance of Brentwood's roads are minor streets and include: Lake Road, Haigh Road, Prescott Road, Pickpocket Road, Pine Road, Deer Hill Road, and Scrabble Road.

2. Classification of Roads: New Hampshire has a seven-category road classification system to indicate function and maintenance responsibility. In order to understand the different types of aid available to town, it is useful to review the several classifications of the highway system.

Class I, Trunk Line Highways, consist of all existing or proposed highways on the primary state highway system, excepting all portions of such highways within the compact sections of towns and cities of 7,500 inhabitants and over. The state assumes full control and pays cost of construction, reconstruction and maintenance of its sections; the portions in compact areas controlled by the towns and cities under Class IV highways.

Class II, State Aid Highways, consist of all existing or proposed highways on the secondary state highway system, excepting portions of such highways within the compact sections of towns and cities of 7,500 inhabitants and over, which are classified as Class IV highways.

All sections improved to the satisfaction of the commissioner are maintained and reconstructed by the State. All unimproved sections, where no state and local funds have been expended, must be maintained by the town or city in which they are located until improved to the satisfaction of the highway commissioner.

All bridges improved to state standards with state aid bridge funds are maintained by the State. All other bridges shall be maintained by the city or town until such improvement is made.

Class III, Recreational Roads, consist of all such roads leading to, and within, State Reservations designated by the Legislature. The State Highway Department assumes full control of reconstruction and maintenance of such roads.

Class IV, Town and City Streets, consist of all highways within the compact sections of towns and cities of 7,500 inhabitants and over. Extensions of Class I and Class II highways through these areas are included in this classification. At present there are 13 cities and 9 towns in this category.

Class V, Rural Highways, consist of all other traveled highways which the town or city has the duty to maintain regularly.

Class VI, Unmaintained Highways, consist of all other existing public ways, including highways discontinued as open highways, highways closed subject to gates and bars, and highways not maintained in suitable condition for travel for five years or more.

Other, consists of U.S. Forest Service roads and state secondary roads maintained by the U.S. Forest Service, also other toll highways not on the state turnpike system, (i.e. private toll road, Mt. Washington toll road, Monadnock toll road).

The State of New Hampshire reports that as of August 1, 1987, the Town of Brentwood had 42.65 miles of roads in all classes. The following is a breakdown of the towns classified road mileage:

Table T-1

Class I	3.15
Class II	12.28
Class III	-----
Class IV	-----
Class V	22.69
Class VI	4.53
TOTAL:	42.65

3. Financing Road Improvements: Brentwood's road network is eligible for four forms of financing:

   a. State Aid Construction Funds are provided for improvement of uncompleted sections of state secondary, Class II, highways. The ratio of state to town matching funds is based on the assessed valuation of the municipality and varies from a 2 to 1 ratio in small towns to a 1 to 1 ratio in the large municipalities. Application must be made to the Administrator, Bureau of Municipal Highways by May 1 of each year, but preliminary discussions about such projects should begin well in advance of this date. (Chapter 235 RSA).

   b. State Aid Reconstruction Funds are available for improvement of completed sections of state secondary, Class II, highways when the town or city wishes to advance the priority of construction for special types of work such as improved drainage, riding surface or elimination of sharp curves. The matching ratio is the same as for State Aid Construction Funds and application is made in the same manner. (Chapter 235 RSA).

   c. Highway Block Grant Aid Funds are apportioned to all cities and towns on a yearly basis for the construction, reconstruction, and maintenance of Class IV and V highways on the following basis:

      Apportionment A. These funds are allocated from an annual apportionment of not less than 12% of the total highway revenues collected the preceeding fiscal year. The amount distributed is based on one-half mileage and one-half population as the city/town factors bear to the state total.

      Apportionment B. These funds are allocated from an annual apportionment of $400,000; the amount available to towns is based on a formula using equalized valuation and Class V mileage designed to give the greatest benefit to the low valuation towns with high road mileage.

      Block Grant Aid payments are made as follows: 30 percent in July; 30 percent in October; 20 percent in January; and 20 percent in April. Unused balances may be carried over to the following municipal fiscal year. (Chapter 235 RSA)

d. Federal Aid Bridge Replacement Funds are available for replacement or rehabilitation of town bridges over 20 feet in length. Bridge Aid funds may be used for matching these funds. Application is made to the Administrator, Bureau of Municipal Highways in the same manner as aid under the Bridge Aid Program.

4. Scenic Roads: Many towns in New Hampshire have designated certain roads as scenic. This designation is beneficial in two ways. First, it establishes a procedure for protecting the rural landscape within a public right-of-way.

Second, it can be a demonstrated public intent to maintain a road's rural qualities. Provisions for establishing a scenic road as described in the RSA's are listed below:

> RSA 231:157 **Scenic Roads; Designation.** Any road in a town, other than a Class I or Class II highway, may be designated as a scenic road in the following manner. Upon petition of 10 persons who are either voters of the town or who own land which abuts a road mentioned in the petition (even though not voters of the town), the voters of such town at any annual or special meeting may designate such road as a scenic road. Such petitioners shall be responsible for providing the town clerk with a list of known property owners whose land abuts any of the roads mentioned in the petition. The Town Clerk shall notify by regular mail within 10 days of the filing all abutters along the road that lies within the town that a scenic road petition has been filed for and that an article to designate such road as a scenic road will appear in the warrant at the next town meeting. The voters at a regular town meeting may rescind in like manner their designation of a scenic road upon petition as provided above. Notice to the abutting landowners shall also be given as provided above.

RSA 231:15 **Effect of Designation as Scenic Road.**

> I. As used in this subdivision "tree" means any woody plant which has a circumference of 15 inches or more at a point 4 feet from the ground.
>
> II. Upon a road being desingated as a scenic road as provided in RSA 231:157, any repair, maintenance, reconstruction, or paving work done with respect thereto shall not involve or include the cutting or removal of trees, or the tearing down or destruction of stone walls, or portions thereof, except with the prior written consent of the planning board, or any other official municipal body designated by the meeting to implement the provisions of this subdivision, after a public hearing duly advertised as to time, date, place and purpose, 2 times in a newspaper of general circulation in the area, the last publication to occur at least 7 days prior to such hearing, provided however, that a road agent may remove portions of trees, shrubs, vegetation and other natural or man-made obstructions from within 3 feet of the main traveled portion of such road which interfere with the safe travel upon such road without such consent, and provided further that a road agent may, in emergency situations, cut and remove trees with the written consent of the Selectmen without such hearing.

III. Designation of a road as scenic shall not affect the eligibility of the town to receive construction, maintenance or reconstruction and pursuant to the provisions of RSA 235 for such road.

IV. Designation of a road as a scenic road shall not affect the rights of any landowner with respect to work on his own property.

Currently, there are no designated scenic roads in Brentwood.

5. 1984 Brentwood Highway Committee Report: In 1984, a Committee on Highway Maintenance and Planning, appointed by the Selectmen, completed a report which covered such issues as roadway conditions, suggested roadway improvements, winter maintenance costs, as well as general recommendstions for improved roadway management. Primarily, the study was undertaken because of the town's concern as to whether or not they should acquire their own equipment. However, from this concern came other pertinent issues. The following are highlights of the report.

   a. After viewing Town Roads, it was the opinion of the Committee that the roads are, for the most part, in good condition.

   b. Certain sections of roads (Scrabble, Deer Hill, and Rowell) need reconstruction. (Based upon discussions held with the Town Road Agent, these roads have received suggested reconstruction and repairs.)

   c. Stone mix was recommended as a standard way of sealing town roads. (This technique is presently being utilized by the Road Agent.)

   d. According to the Road Agent, routine culvert maintenance, shoulder work, ditching where needed, and cutting of shrubbery is standard practice as recommended by the Committee. To date, all except three roads in town have received chip sealing.

      The majority of Brentwood's roads are farmers mix which is a gravel/ oil mix put down with a grader. Therefore, the chip sealing, also known as stone mix, enhances the surface condition of the roads.

   e. The Committee, in its report, recommended appointing a Road Agent for a two year term. (Presently, there is a road agent who contracts with the Town and is appointed to a two year term. He provides the equipment necessary for maintaining town roads.)

   f. Winter maintenance costs were recommended to be on a comparable scale with surrounding towns. (Winter maintenance costs are within a surrounding town average. Winter maintenance costs, according to the road agent, have been reduced since 1983.)

   Table T-2 is a complete listing of the roads in town, with a breakdown of various attributes. The table shows what category each road was ranked as far as overall condition, as well as a detailed breakdown of various attributes.

Table T-2

1984 Roadway Survey Routes
Completed by the Brentwood Highway Committee*

LOCATION	MILES	FEET	WIDTH	YARDS	GENERAL CONDITION OF ROAD--1984 (A WITH UPDATES FROM SUMMER, 1987)
Bar ett Drive	----	1,385	28'	4,308	This is one of the newer, better roads in Town. The pavement is a hot mix with a good sub-base. The road has approximately a two foot wide shoulder with little to no cracking or rutting. (Very good cat.)
Blc : Drive	----	2,244	24'	5,984	This is a new road with a hot mix pavement and a good sub-base. There is a good ditch gutter line with two foot shoulders. There is no rutting, but some pavement cracking at culverts. (Very good category)
*Cr vley Falls Rd.	2.35	12,408	20'	4,136	This is a fairly good road with no pavement markings. There is a good sub-base, but drainage is only satisfactory. There is an alignment problem where the road turns east then west just by the State Game Preserve.
Dalton Road	----	2,540	19'	5,362	This road is paved with a good sub-base. There is a poor ditch gutter line with no real shoulders, yet no real cracking along the road. Built satisfactorily, the road is considered good. (Good category)
Deer Hill Rd.	1	3,570	19'	18,683	This road has rebuilt sections with a good surface and sub-base. The road has Industrial/Commercial uses along it, resulting in heavy trucking activity. In 1984, a 2,550 foot section was reconstructed.
Dudley Drive	----	2,900	26'	8,377	This is a new road with hot mix pavement and a good sub-base. There is a shallow ditch gutter line with a two foot shoulder. The road is good, with little to no cracking or rutting. (Very good category)
*Flanders Drive	.3	1584	25'	528	This is a new subdivision road with a hot mix pavement and a good sub-base. As of August, 1987, this is a town accepted road. There are no pavement markings and it is a 'looped' road.
Go_ Road	----	1,225	24'	3,266	This is a new road, paved, with a good sub-base. There is an adequate ditch-gutter line with a 24' shoulder width. There is minimal pavement cracking. (Very good category)
Ha h Rd.	----	2,196	20.5	5,002	This road has been rebuilt with TRA funds. The sub-base is good, with no ditch gutter line and no shoulders. The surface is mix & place and has minimal cracking. The road is overall good.
Ka e Rd. Old Danville Rd. Riverside Dr.	----	1,536	18'	3,072	These three short stretches of road were grouped together. The sub-base is fair, with no ditching, and only shoulders on Old Danville Road. Considered in fair to good condition, the roads do have some cracking.
Lake Rd. (" bridge)	2	485	21'	25,771	Lake Road has a good sub-base with minimal ditching and minimal shoulder width. There is some cracking and isolated rutting. This road is in overall good condition.
Little River Rd.	----	----	----	----	Class VI Road (Subject to Gates and Bars). There is a gate across this road.
Michael Bennett Rd.	----	1,330	20'	2,955	This road has a thin coat of hot top mix with a good sub-base. There is no ditch-gutter line, with 1 to 2 foot shoulders. Built with TRA funds, there is little pavement cracking, despite light trucking. (Good)
Middle Rd. (" H. Route 111A)	5.1	26,928	21'	8,976	This is a state maintained road with pavement markings, yellow lines down the middle, and white lines along the edges. The sub-base is fair, although drainage is fair to poor, resulting in some cracking.
Mill Rd.	----	2,791	19'	5,892	This road has a good sub-base with partial ditch gutter line and no shoulders. There is minimal cracking in pavement and some shoulder work needed. This road is considered to be in good condition.

*Information supplemented with data gathered in the summer of 1987 by staff of the RPC.

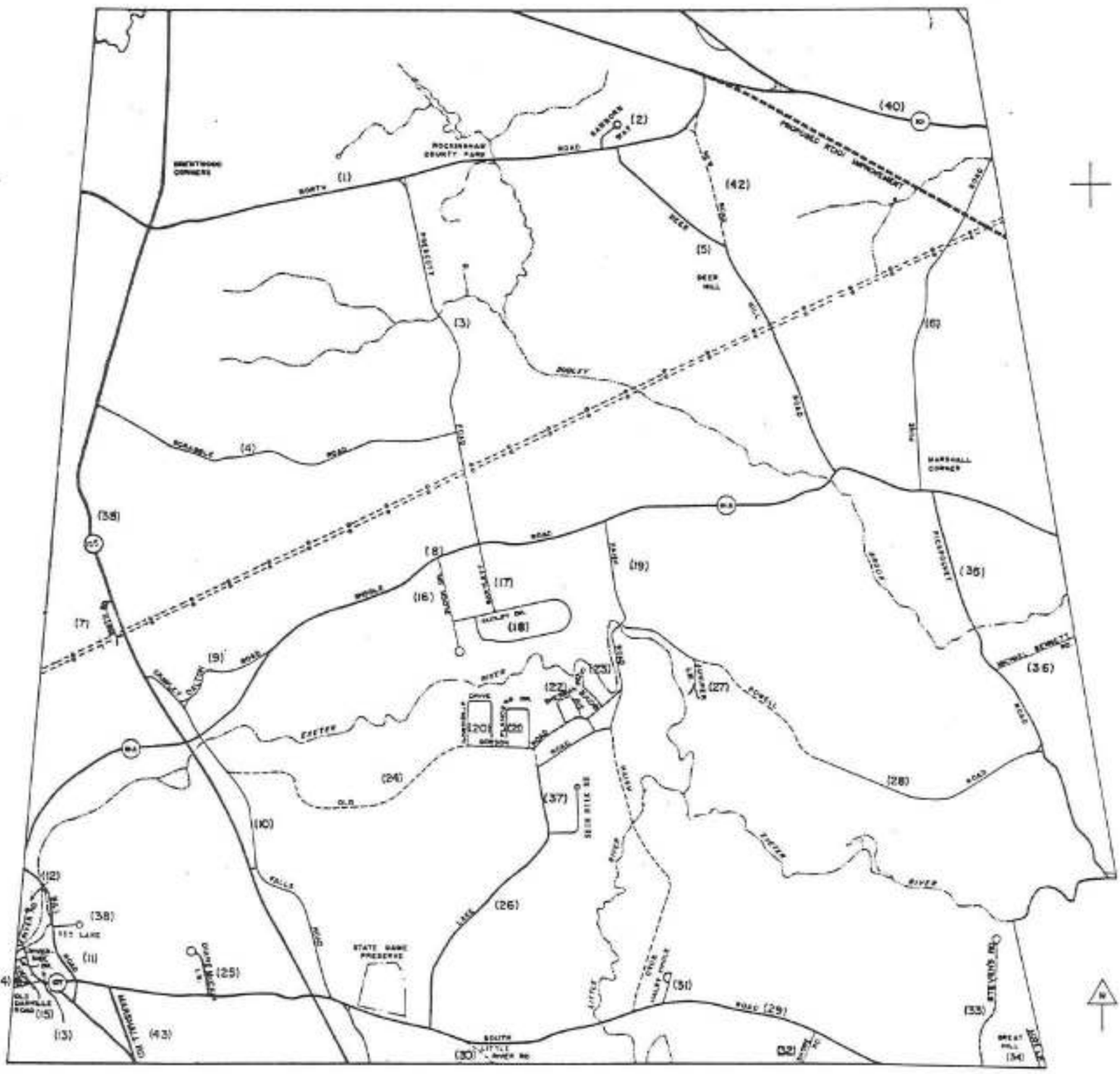
Table T-2 continued

LOCATION	MILES	FEET	WIDTH	YARDS	GENERAL CONDITION OF ROAD--1984 (* WITH UPDATES FROM SUMMER, 1987)
*Mill Side	.1	528	25'	176	This is a new subdivision road with a good sub-base and smooth surface. There are no pavement markings and the road is a cul-de-sac.
*New Road	----	----	----	----	Class VI Road (subject to gates and bars).
North Road (From Rt. 125 to Rds Fremont T/L)	----	1,584	21'	3,696	This road has some surface cracking and breakage of the pavement at the edges of the road. The road is classified in the fair to good category.
*Northrup Drive	.6	3168	25	1,056	This is a new subdivision road with a hot mix pavement and a good sub-base. As of August, 1987, this is a town accepted road. There are no pavement markings and it is a 'looped' road.
Old Gordon Rd.	----	2,123	26'	6,133	This is a paved road with a good sub-base. There is no ditch gutter line and minimal shoulder width. The road has little pavement cracking, or rutting. The road is classified in the good category.
Pickpocket Rd.	1	3,900	22'	22,440	This road was classified in the fair to poor category. There is little ditching, poor shoulder width, poor sub-base, and severe cracking. There is heavy residential traffic on this road.
Pine Rd.	1	2,325	20'	16,900	This road is paved with a good sub-base. There is no ditch gutter line and minimal shoulders. The typical section is good, with some pavement cracking, yet no rutting. There is some heavy truck traffic present.
Prescott Rd.	1	3,260	19'	18,028	This road has a good surface with a good sub-base. There is no ditch gutter line and little shoulder width. There is minimal pavement cracking, and no rutting. The road is classified as good.
Rowell Rd. (Neigh End)	----	1,700	22'	4,155	This is a gravel road with a good sub-base and no shoulder width. The road was built for access to summer dwellings. There is some occassional flooding during rainy times. The road is classified as poor.
Rowell Rd. (Pickpocket End)	----	3,000	18'	6,000	This section of Rowell Road has a poor sub-base and is only half paved. There is no ditch gutter line, and no shoulder width. There is severe cracking and is classified as the worst section of road in town.
Scrabble Road	1	2,911	19'	17,292	This road is in poor condition where it intersects Prescott Road to approximately 3/10 of a mile. There is severe cracking, a poor sub-base, no drainage, and no shoulders. The rest of Scrabble Road is rated good.
Sherman Ave.	----	1,872	26'	5,408	This is a new paved road with a good sub-base. There is no ditch gutter line and little shoulder width. There is no pavement cracking and little rutting. This raod is classified as good.
Shore Rd.	----	860	20'	1,911	This is a short section of paved road, with a poor sub-base. There is no ditch-gutter line, and no shouler width. There is severe pavement cracking and rutting. This road is classified as fair to poor.
Smith Rd.	2	2,826	21'	31,234	This is a paved road with a poor sub-base, little ditching and poor shoulder width. There is severe pavement cracking and rutting. There is poor drainage along sections of the road. This road is fair to poor.
South Rd. (Rt. 125 to Stevens Drive)	----	4,587	21'	10,703	This road has a good sub-base, little ditching, and very poor shoulder width. There is some rutting on the shoulders, and minimal pavement cracking.
South Rd. (Rt. 125 to Rt.107)	----	3,750	24'	10,000	This is a fairly new road with hot mix pavement and a good sub-base. There is a good ditch-gutter line and good shoulder width. (Very good)
*Stevens Drive	.6	3,168	24	1056	This is a fairly new subdivision road with a smooth surface and no pavement markings. This is a cul-de-sac road, built to town standards.

Some of Brentwood's roads were not included in the 1984 report; therefore, the Rockingham Planning Commission, as part of its survey of the safety issues related to roads, updated the report. This update included adding the names of new roads in Town, as well as their attributes, for any existing roads not included in the 1984 report. In Table T-2, roads not included in the 1984 report are denoted with an asterisk.

The more information Brentwood has on the condition of its roads, the easier it will be to determine future needs and the impacts of proposed new developments.

BRENTWOOD



Prepared by: JR

Rockingham Area Association Regional Planning Commission
2 Water Street
Exeter, New Hampshire 03833
April 1978

"This preparation of this map was financially aided through a Federal grant from the Department of Housing and Urban Development, under the Comprehensive Planning Assistance Program authorized by Section 701 of the Housing Act of 1954 as amended."

LEGEND

- STATE & TOWN ROADS
- ROADS CLOSED SUBJECT TO GATES & BARS
- UNACCEPTED ROADS
- POWER LINE RIGHT OF WAY

MAP #3

STREET AND ROAD INDEX

MAP #	STREET NAME	MAP #	STREET NAME
(34)	ASOT LANE	(39)	NEW HAMPSHIRE ROUTE 125
(17)	BARTLETT DRIVE	(42)	NEW ROAD
(14)	BLOCK DRIVE	(3)	NORTH ROAD
(10)	CRAWLEY FALLS ROAD	(20)	NORTHEAST DRIVE
(9)	DARTOUT ROAD	(13)	OLD HAMPTON ROAD
(5)	DEER HILL ROAD	(24)	OLD GORDON ROAD
(25)	DIANE McCAIN LANE	(33)	PICKPOCKET ROAD
(18)	DUDLEY DRIVE	(6)	PINE ROAD
(12)	FLAMOUNT DRIVE	(3)	PORTSMOUTH ROAD
(23)	GATE ROAD	(32)	RIVER ROAD
(19)	HAZEN ROAD	(12)	RIVERSIDE DRIVE
(22)	HAZLET CIRCLE	(28)	ROWELL ROAD
(27)	JENNIFER LANE	(2)	HARBOUR WAY
(16)	KAPEL DRIVE	(4)	ROBERTS ROAD
(26)	LAKE ROAD	(22)	ROSEMARY AVENUE
(30)	LITTLE RIVER ROAD	(31)	ROUSE ROAD
(43)	MARSHALL ROAD	(37)	SEEN HILL ROAD
(36)	MICHAEL BENNETT ROAD	(7)	SMITH ROAD
(8)	MIRTLE ROAD	(29)	SOUTH ROAD
(11)	MILL ROAD	(35)	STEPEN'S ROAD
(40)	NEW HAMPSHIRE ROUTE 101	(38)	YET LAKE
(2)	NEW HAMPSHIRE ROUTE 111A		

6. Intersection Conditions: During July and August, 1987, a survey was undertaken by the Rockingham Planning Commission that included updating the list of roads in Brentwood, and a basic review of safety. The majority of town roads have, on the average, a pavement width of 20 feet. New subdivision roads have a pavement width of 24 feet, with a 50 foot right-of-way.

The safety review included identifying obstructions in intersections, alignment problems, and inadequate signage. Two signage problems are prevalent throughout Brentwood. The first is the lack of street names. This could be potentially dangerous for firefighters or police responding to calls, as well as a source of confusion for the general public. Norton Road, Stevens Road, Cove Road, Michael Bennett Road, a part of Haigh Road, and South Road are examples of unsigned roads.

Second, there is a lack, or mislocation of traffic control signs at intersections (e.g. stop signs and yield signs). Examples are the intersection of Prescott Road and Route 111, the intersection of Rowell Road and Pickpocket Road and the intersection of Lake Road and South Road.

7. Commuting Patterns

According to the 1980 U.S. Census, 41.6% of employed Brentwood residents work in Exeter, and 31.0% work within the Town of Brentwood (see Table T-3). These two categories represent a significant percent of the total work force, demonstrating that a large portion of Brentwood's work force are employed a short distance from home. Other New Hampshire and Massachusetts towns and cities account for the remaining 30% of the work force. Figure T-1 shows this information graphically. These figures suggest that the local road network, particularly Route 111A, are heavily impacted by commuters travelling within Brentwood and to and from adjacent towns.

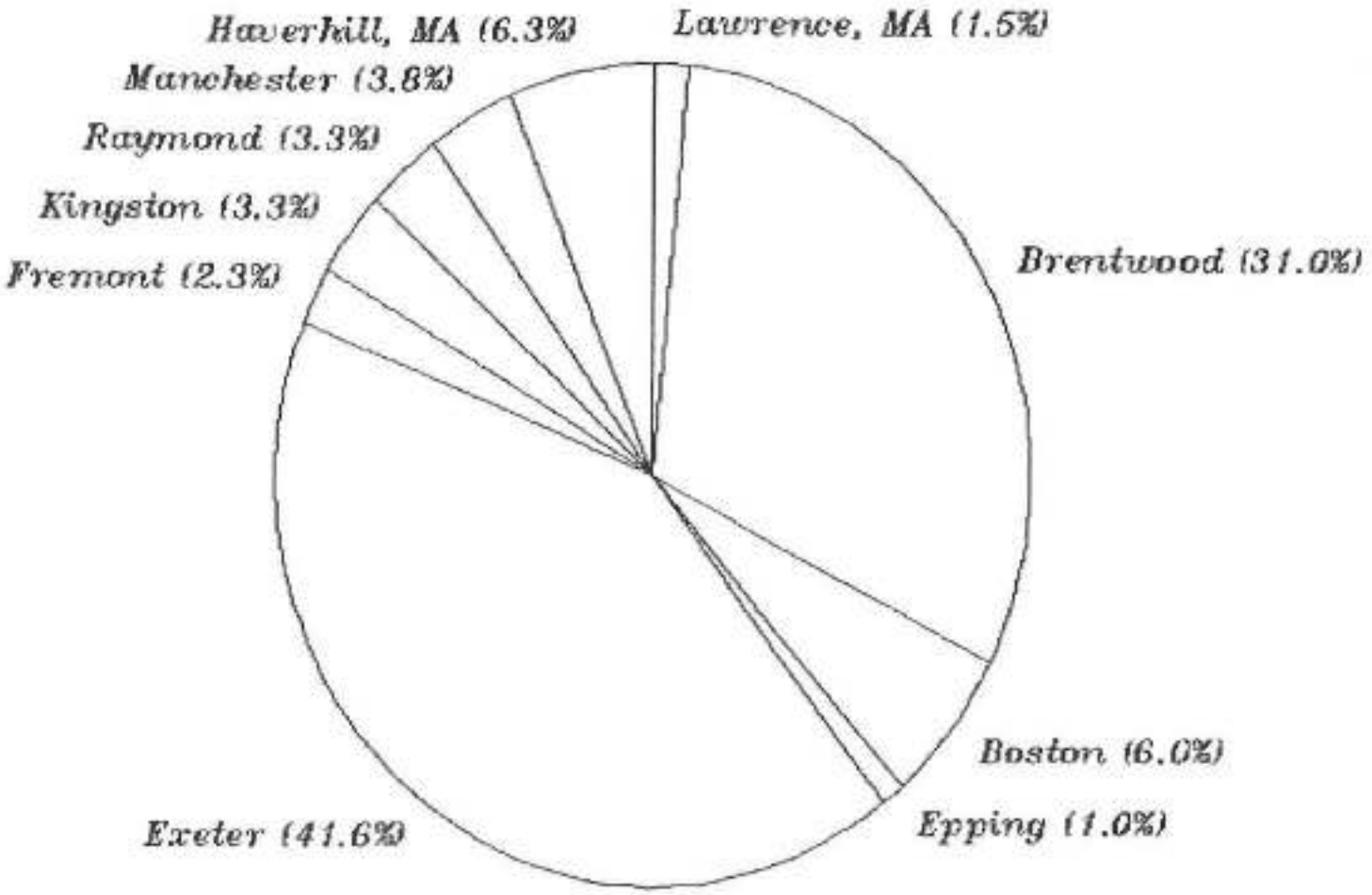
Table T-3

BRENTWOOD	BRENTWOOD 1980 WORK TRIP DESTINATIONS	PERCENT OF TOTAL WORKING
Brentwood	123	31.0%
Boston	24	6.0%
Epping	4	1.0%
Exeter	165	41.6%
Fremont	9	2.3%
Kingston	13	3.3%
Raymond	13	3.3%
Manchester	15	3.8%
Haverhill, MA	25	6.3%
Lawrence, MA	6	1.5%
Total Working:	397	100.0%
Total Living In:	748	

COMMUTING PATTERNS

FROM THE TOWN OF BRENTWOOD

Figure I-1



8. Recommendations

The following recommendations will assist the Town of Brentwood in continuing to provide a safe and efficient transportation network for the current and projected population.

a. The Town of Brentwood should encourage developers to minimize their impacts on existing town roads. This can be accomplished through the use of cluster subdivisions, interior roads and traffic impacts study requirements for development proposals.

b. The Town of Brentwood, when appropriate, should require developers to minimize off-site impacts either through monetary contributions or by undertaking necessary off-site road improvements.

(Appendix A contains guidelines for the contents of a traffic impact analysis.)

c. The Town of Brentwood should, as part of its subdivision and site plan review regulations, require development to follow proper drainage and erosion control practices.

d. The Board of Selectmen should actively enforce RSA 47:17 "Bylaws and Ordinances" under Section VIII "Traffic Devices and Signals" which empowers communities:

> "To make special regulations as to the use of vehicles upon particular highways, except as to speed, and to exclude such vehicles altogether from certain ways; to establish stop intersections, erect and provide for the control of traffic by, stop signs or other traffic devices or signals which shall conform to standards set by the highway commissioner and shall be approved by him as to type, size, installation and method of operation."

This RSA allows Brentwood to adopt an ordinance restricting vehicles above certain weights (to be determined by the town engineer or road agent) from designated town roads during seasonally wet periods.

e. The Town of Brentwood should continue to update its inventory of roads, thus allowing the town to guide future roadway improvement planning. An additional step should be to prepare a roadway management plan. The plan would enable Brentwood to achieve the best value possible for the available public funds in providing and operating smooth, safe, and economical road surfaces. Typical activities include inventory, condition assessment, selection of maintenance and rehabilitation strategies, predicting needs, requirements, and budgeting necessary funds.

f. The New Hampshire Department of Transportation requires that municipalities follow guidelines established by the "Manual on Uniform Traffic Control Devices" (U.S. Dept. of Transportation) for locating and placing roadway signs. The Brentwood Planning Board and Road Agent should enforce these standards.

g. The Planning Board should require that the maximum driveway grade, within 50 feet of an existing or proposed roadway, not exceed 3%. This standard should not be waived. However, the Planning Board should also amend its subdivision regulations to permit a maximum driveway grade of 6%, at any point greater than 50 feet from an existing or proposed roadway. This standard may be waived up to a maximum of 8% only in extenuating circumstances.

h. The Planning Board should strictly enforce its subdivision regulation, Section 4-G which addresses the Maximum Grade of Streets. Plans should no longer be reviewed that show roadway grades of greater than 6%.

i. The Planning Board should require that the maximum roadway grade within 100' of an intersection, measured along the centerline, not exceed 3%. This standard should not be waived.

j. The roadway width guideline provided in Table 4 will help Brentwood determine if their roads are being over-used according to design standards. The recommended road widths are based on expected traffic volumes. Brentwood now requires that no street or highway rightof-way shall be less than fifty (50) feet in width and may be required to be more if a greater street width is warranted in the opinion of the board.

k. The Planning Board should strictly enforce its Subdivision Regulation, Section 4-C, which addresses the maximum road length. Dead end or cul-de-sac roads should provide for adequate maneuverability for service vehicles such as school buses, snow plows, ambulances, and fire trucks.

l. Brentwood should adopt a street numbering system in order to avoid such problems as difficulties or delays for emergency vehicles such as fire trucks and ambulances and any inconveniences to visitors due to confusing or missing numbers.

m. The portion of Rowell Road from its intersection with Haigh Road to where it becomes Class VI, and the portion of Haigh Road between Rowell and Gordon Roads should be designated Scenic under RSA 231:157. In addition, all Town roads should be reviewed for potential designation as a way to protect the rural landscape within public rights-of-way, thus demonstrating Brentwood's intent to maintain its rural character.

Table T-4

Recommended Minimum Rural Road Widths

The American Association of State Highway and Transportation Officials, established in 1937, formulates and recommends highway engineering policies. This Association recommends that, to provide for the safe and efficient movement of vehicles in rural areas, rural two-lane, two-way roadways require 12-foot paved travel lanes and 4-foot paved shoulders. Realizing many rural areas would not agree to these pavement conditions, the Association set up guidelines for minimum pavement widths based on expected traffic volumes. These widths are:

Expected Volume/Day	Lane Width
50 - 250	9 feet
250 - 400	10 feet
400 - 550	11 feet
Over 550	12 feet

Appendix A

Guidelines for Content of a Traffic Impact Analysis

Proposal

1) Size and Type of Development:

   a. Gross square feet in commercial or industrial developments.
   b. Number of units in residential developments.

2) Location Map, with Proposed Driveways.

Traffic Data

1) Manual counts for peak hour data. This data must be gathered at or near time of analysis.

2) Twenty-four hour machine counts (an average weekday). Machine counts on record may be used if taken less than two years prior to the analysis.

Traffic Analysis

1) Assumptions used (i.e. growth rates, committed improvements, other proposed developments).

2) Trip generation volumes determined using the Institute of Transportation Engineers (ITE) "Trip Generation Manual". Refer to ITE code numbers. Trip generation volumes not obtainable using the manual must be documented.

3) Required Level of Analysis:

   a. All analyses must be completed for existing conditions, existing conditions plus 10 years (no build), opening year, and opending year plus 10 years (build).

   b. Analysis for each proposed driveway at its intersection with an existing street must conform with "Transportation Research Circular 212" Intersection Capacity Analysis.

   c. Assignment of generated traffic to surrounding road network. Analysis of adjacent road network and intersections for roadway and intersection capacity. [Note: For roadway capacity analysis, techniques developed in the Highway Capacity Manual are recommended. For intersection capacity analysis, techniques developed in "Transportation Research Circular 212" are recommended].

Conclusions

1) Summary of improvements by location, including but not limited to:

   a. Additional pavement widths and markings for right and left turn lanes;
   b. additional traffic lanes; and
   c. traffic control light.

C. UTILITIES

Water Supply

Currently, Brentwood is not served by a municipal water supply. The majority of households and businesses obtain their water from private, individual wells.

The areas of town where the need for public water supply will likely arise first are those where development density and septic system failures are greatest. Presently, the area in town that appears to be the most susceptible to contamination is the Town Center and along Route 111A, on both sides of Route 125.

As Brentwood grows, its increasing population will likely force the Town to consider installing a public water supply. As development pressures increase, alternatives to private wells should be considered. One such alternative, although short-range, would be to encourage community wells. Given Brentwood's reliance on private wells, it is in the Town's best interest to protect the existing water supply. Groundwater protection can maintain individual wells and will delay the need of a municipal water supply. Groundwater protection methods are detailed in the "Water Resources" part of the "Conservation/Preservation" section.

Recommendations

1. To maintain water quality, undertake a program to educate residents about septic system function and the importance of proper maintenance. Educational materials are available through the Rockingham Planning Commission.

2. Adopt groundwater protection methods as described in "Water Resources" and other sections of this plan.

3. Evaluate the feasibility of developing a well field in the northeast corner of Town associated with a documented aquifer, and transmission lines for the community.

Wastewater Disposal

Brentwood does not have a municipal sewage treatment facility. The Town relies upon individual on-site sewage disposal systems for wastewater treatment. To date, Brentwood has not undertaken any studies to determine the location and feasibility of a municipal sewerage system.

The Town will generate 139,5000 and 225,800 gallons of septage in 1986 and 2006, respectively (source: Kimball-Chase Co., Inc., August, 1986). However, Brentwood has no formal agreement with an approved septage disposal site. This arrangement is not in compliance with NH RSA 149-M:13. Haulers with no site of their own have relied on the wastewater treatment facilities of nearby towns for disposal. Due to capacity limitations, these plants are generally unwilling to make formal agreements with towns outside their sewer districts.

Recommendations

1. Brentwood should sign an agreement with a septage disposal facility as soon as possible so as to be in compliance with RSA 149-M:13.

2. Brentwood's past rate and density of development has not made a public sewer system necessary or feasible. Projected growth rates indicate, however, that the Town may not be able to avoid public utilities in some areas. Brentwood should begin investigating alternative ways to aggregate and treat sewage. Densely populated areas and other areas of concerns should be identified to receive priority consideration with respect to such municipal facilities.

Electrical Service

Electricity is supplied to Brentwood by 3 companies -- the New Hampshire Electric Cooperative (NH Coop), the Public Service Company of New Hampshire (PSNH); and the Exeter and Hampton Electric Company (E&H). The NH Coop serves part of Lake Road and South Road, while E&H provides service near the Exeter line in the South Road area. The remainder of the town is served by PSNH. The town is bisected by a 115 KV transmission line owned by PSNH, which carries power from Portsmouth's Schiller Station to the west through Derry and Londonderry. There are no transformer stations in Brentwood.

Exeter & Hampton is active in town in expanding service to new housing, and PSNH plans to replace a section of 8.32 KV transmission line with a 34.5 KV line along Route 107 to Route 111A.

Natural Gas

At present, no natural gas service is available in Brentwood. Town residents use individual propane tanks for heating and cooking. No forecasts have been made as to if and when Brentwood will be served by natural gas lines.

D. Community Facilities

Municipal Government

The Brentwood Town Offices are located on Dalton Road just off Route 111A, not far from its intersection with Route 125. The building was built in 1978, using mostly volunteer labor, and much of the material was donated. The Town Office Building complies with Federal Handicapped Access Regulations. Prior to one centralized location, Town records were kept various homes across town, i.e., the Town Clerk's house, Tax Collector's house, etc. (Oldtimers remember Town records being kept in Leroy "Mud" Lake's car trunk. Mr. Lake was a Selectman for many years.) The building is on a 30-acre parcel of Town-owned land. Some expansion is possible on-site, but a good portion of the land is wet.

Offices of the Selectmen, Town Clerk, Tax Collector, Building Inspector, Police Department, are located in the Town Office Building. Records of Town boards are maintained in the building and most Town boards meet in the meeting room.

Municipal workers include the Selectmen, Administrative Assistant, Town Clerk, Tax Collector, Building Inspector, Secretaries to various boards, Treasurer, Auditor, Police, Highway, Librarian and Assistant, Welfare Administrator, Assessors, and Election workers. Volunteer workers include members of the Planning Board, Zoning Board of Adjustment, Budget Committee, Conservation Commission, Fire & Rescue, Solid Waste delegates, and Library Trustees.

The growth in Brentwood's population suggests that the Town Offices will need to be expanded to afford more meeting space, and the installation of a fireproof vault for Town records.

In the long run, Brentwood will need full-time police, fire, and rescue protection, a full-time highway department, and a part-time building custodian for all town-owned buildings, i.e., Town Offices and Library.

Recommendations

1. The Selectmen should appoint a Study Committee to establish details as to the expansion of the Town Office Building.

2. The Selectmen should initiate a planning effort aimed at determining the need for additional Town employees required by Brentwood's growing population.

3. The Capital Improvement Program should address current needs including expansion of the existing communication and computer systems.

Fire Department

The Brentwood Fire station is a seven bay facility which includes a dispatch office and a meeting hall. The station is owned and operated by the Brentwood Volunteer Firemen's Association. Building upkeep and maintenance is performed and paid for by the Association.

Equipment

The first equipment purchase undertaken by the Fire Department was a 1932 Dodge with a 275 gallon oil tank and a garden hose. In 1953, a Chevrolet 500 gpm pumper was purchased. In 1970, a Ford Maxim 1000 gpm pumper was added to the Fire Department's Inventory. In 1987, two Class A pumpers were purchased to replace the 1953 and 1970 units. The equipment owned by the Fire Department consists of the following:

Engine 1 - 1987 I.H. = KME 1250/1000 pumper
Engine 2 - 1968 Ford-Ward LaFrance 750/750 pumper
Engine 4 - 1987 Hahn-KME 1500/1000 pumper
Tanker 1 - 1975 Mack/Shop-built 3000 gallon tanker
Forestry 1 - 1954 Military 4x4 shop-built forestry truck

Operations

Brentwood is a member of a 56-town mutual aid pact. It gives and receives mutual aid to those towns, if the need arises, at no cost. The number of calls to which the fire department has responded has increased, for the most part, in the 80's. Hazardous materials emergencies are on the rise and have become a major problem for fire departments not only in Brentwood but across the country. Fire departments now have enforcement duties pertaining to hazardous materials as well as handling spills, leaks,

and fire involving such materials. The formation of a heavy rescue company and the purchase of a vehicle to carry the equipment necessary to handle hazardous materials emergencies is vital if industrial development is to take place in Brentwood.

The present fire department staff for Brentwood includes a chief, eight officers, and 42 firefighters. The department is run on an on-call basis.

Recommendations

1) Full-time firefighters to cover daytime hours, 8:00 a.m. - 4:00 p.m., will be necessary in the near future.

2) Within 5 years, Engine 2 will need to be replaced. The purchase of a 1250 gpm capacity Class A pumper is recommended.

3) The location of industrial development on Pine Road in eastern Brentwood has created the need for a substation in this area. This should be considered within the next five years to provide adequate fire protection. The land for this substation could either be purchased outright or reserved within a subdivision.

4) The town should form a heavy rescue company and purchase a rescue truck.

5) As maintenance costs increase and volunteer fund raising efforts decrease, the town may need to assume future ownership of the $400,000 fire station.

6) The fire department will be facing increased costs for the training of personnel as State and Federal requirements are met. This is especially true in regard to handling hazardous materials emergencies.

7) The Planning Board and Fire Department must continue to work closely on fire codes and standards.

Police Department

The Brentwood Police Department is located in the basement of the town office building. The facility includes an evidence room, conference room, and administrative office (Chief's office). All of these rooms are in good condition and are adequate for the current level of operations.

Equipment

The Police Department presently has two cruisers. The oldest is a 1980 Plymouth with over 100,000 miles of use. The second is a 1986 Plymouth that has logged 46,000 miles. The 1980 vehicle is in poor condition and the 1986 is in good condition. Following is a list of other equipment and the quantities of each, owned by the Brentwood Police Department:

Phoenix SX Mobile 11 Channel radio (5)
Motorola Motrac 4 Channel Mobile Radio (3)
Motorola Convert-Com 4 Channel Radio (2)
12 Channel General Electric Portable Radio (4)
Motorola Minitor Pocket Pagers (3)
Smar Pocket Pagers (2)
General Electric 12 Volt Power Supply (1)
Whelen WS-295 Control Boxes (2)
Kustom Signal Radar Unit (1)
Whelen Edge 9000 Bar Light

Whelen Strobe Head Lights (1 set, 4 ea)
Mossberg Pump Action 12 Guage Shot gun (2)
Power Amplifier (1)
Vega Vehicle Pager (1)

Operations

The Police Department staff includes a chief, deputy chief, Sergeant, Juvenile officer/matron, animal control officer, and eight patrolmen. All of the positions are part time. The majority of calls consist of accidents, prowlers, domestic disputes, speeding, and attempted burglary. The cost to the town for a response by the police department varies according to the type of call. Response to a minor accident would cost $50.00 but if some type of hospitalization is involved, that cost could triple. The trends in kinds and expense of responses have remained stable in recent years.

Recommendations

Following are recommendations on future needs for staffing and equipment for the Brentwood Police Department.

1) Town officials should consider giving the entire basement area of the Town Office building over to the Police Department. If the town appropriated funds for materials volunteers within the department could do all necessary renovations. This would meet all office space requirements for a period of 10 years.

2) It is suggested that current growth if carried out over the next ten years may result in the need for new office facilities.

3) The town should purchase a third cruiser equipped with a cage, light bar, 15 channel Motorola radio, and a Kustom Signal Radar unit. For future vehicle purchase it is recommended that $6,000 be placed in the Capital Reserve Fund each year to enable the Department to purchase a new cruiser every three years. This program should stay in effect for 10 years.

4) The town should consider an increase in the present clothing allowance.

5) The town should consider immediately hiring a part time or full time position. If the town hires a part time police officer it should plan on making this a full time position later. It is further recommended that the town be prepared to fund 2 full time officers by 1998.

Ambulance Service

The Town of Brentwood has provided it's residents with ambulance services for twenty-four years. The ambulance is housed at the fire station and operates with a staff of eighteen persons trained in emergency medical procedures. Service is provided to neighboring towns by way of a mutual aid pact. One ambulance, a 1979 Ford modular, is used to provide emergency service.

Recommendations:

1) Ambulance 1 will need to be completely rebuilt or replaced within five years.
2) Training budgets for personnel, especially as such training relates to hazardous materials emergencies must be increased.

PUBLIC WORKS

While Brentwood has a Director of Public Works, there are no full-time Town employees charged with public works-related activities. The position of Road Agent is filled on an bi-annual basis by vote of the Selectmen. The Road Agent is responsible for road maintenance on an on-call basis. As the need arises, the Road Agent hires part-time helpers and, as a consequence, there are no Town employees per se associated with road maintenance.

The Town owns only the following equipment:

Drag Boom	8 years old
2 Sanders	6-14 years old
2 Plows with wings	6-8 years old
Brush Saw	3 years old
Chain Saw	3 years old



All other equipment is hired from John Ruest, the Road Agent. Plows and wings are stored at the Town salt shed on Route 111, while other equipment used in road clearing and maintenance is kept at the Road Agent's place of work.

The salt storage shed is well located to serve the Town, but is not of adequate size to hold the salt needed for an entire winter. In addition, the absence of any indoor Town public works facility means that plows and wings must be attached outside, generally in the snow -- a real problem in terms of driver morale and comfort.

The Road Agent and the Committee on Highway Maintenance and Planning completed an inventory of the 22+ miles of Town roads in 1984. This inventory is used to determine priorities for roadway resurfacing and other improvements. All new roads are constructed at the developer's expense and are built to Town standards.

Recommendations

1) The site of the existing salt shed should be surveyed and evaluated for suitability for construction of a 40' x 60' Town Shed. (It may be necessary to buy land from abutters before expansion is feasible.) Such a shed would provide storage for a winter's salt needs, as well as an enclosed space for plow attachment, general maintenance, and equipment storage.

2) A new sander and wing for winter road maintenance should be purchased.

3) A 1-ton, 4-wheel drive dump truck should be purchased for Town use.

4) The part-time, appointed position of Road Agent should be converted to a full-time position.

CEMETERIES

Brentwood does not have a Town-owned cemetery. There are, however, 10 private cemeteries in town. Cemeteries #1 and #2 are by far the largest, with the remaining being small family plots. These 10 are located as follows:

1. North of Route 111A and west of Bartlett Road
2. South of Route 111A and west of Scrabble Road
3. South of Route 111A, east of the Swasey School
4. The "Thyng" cemetery on the Class VI portion of Rowell Road
5. On North Road near Deer Hill Road
6. Just north of the County Home on North Road
7. The "Tuck Family Cemetery," on Route 125 (adjacent to the Lutes' residence)
8. On Route 107, at the Old Danville Road
9. The Swasey Family Cemetery on Pickpocket Road
10. On South Road at Lake Road, the Pinkham Cemetery

Recommendations

1) In the absence of a public cemetery, the Selectmen should consider investigation of possible sites for a Town cemetery.

SCHOOL SYSTEM

Brentwood is part of Supervisory Union 16, along with East Kingston, Newfields, Stratham, Exeter, and Kensington. Brentwood students, grades 1-6, attend the Swasey Elementary School located on Route 111A just east of the Town Center. Grades 7 and 8 attend the Exeter Area Junior High School in Exeter, while students in grades 9 - 12 attend Exeter Area High School, also located in Exeter.

The Swasey School was built in 1950, with the middle addition added in 1967, with the newest addition completed in 1975. The school sits on an 9-acre site. Two lifts are available for the handicapped, but there is no handicap access to the cafeteria from the lobby or the office. The November 1987 enrollment was 190. This, compared to the school's capacity of 194, suggests student distribution problems in grades 4, 5, & 6, and a school at nearly 98% of capacity.

While a 20 to 1 student/teacher ratio is being maintained, the facility is being used to capacity. Chapter 1, Occupational Therapy, Speech, and the psychologist have no space in which to work, and assemblies in the resources room are very crowded due to the growth in enrollment. There is no nurse's office or room for sick children, nor a conference room to provide needed privacy. Both the principal and secretary are in need of office space, and the school is in desperate need of adequate storage space. The outside shed is not large enough to store required maintenance equipment.

The Swasey School supports a full-time staff which includes a principal, 11 1/2 classroom teachers, a Special Education teacher, a lunchroom manager, and a cook. Part-time staff includes a secretary, physical education teacher, psychologist, speech teacher, occupational therapist, positive reinforcement specialist, instructional aide, Chapter 1 tutor, lunchroom/recess aide, and a custodian.

There is no music or art program, though the School Board has adopted a plan to implement both. Figure S-1 shows current enrollment by grade, while Figure S-2 shows projected enrollments.

While the Junior High School in Exeter operates at below capacity, the High School is overcrowded. This overcrowding has lead to class shortened periods and a time schedule which does not conform to State standards. The High School has no drama facility, and the high school library is well below State standards.

The SAU continues to study potential options for expanding High School programs and physical plant. In late 1986, the SAU received a consultant's report describing options available to meet the space needs of the system. This report, along with supplemental information, is now being reviewed, with action anticipated sometime in 1988 or 1989.

Figure S-1
School Enrollment-1987

READINESS	10	
FIRST GRADE	30	
SECOND GRADE	31	
THIRD GRADE	36	
FOURTH GRADE	31	
FIFTH GRADE	26	
SIXTH GRADE	26	
	190	TOTAL ENROLLMENT

Recommendations

1. The Brentwood School Board and Building Facilities Committee have employed the architectural firm of Dennis Mires to assist in developing a 5 year capital improvement plan for the upgrading and expansion of the Swasey School.

   The 5 year plan includes:

   -- The improvements needed to implement new curriculum offering in art, music, and physical education.

   __ Facility improvements needed to meet the new elementary school state standards.

   __ Expansion of the building (four additional classrooms)

2. Planning efforts should be supported toward the end of improving Exeter High School.

Library

Brentwood's Mary E. Bartlett Library was opened in the old Crawley Falls schoolhouse in 1952. The building had served as a school for over one hundred years, having been built in the mid-1800's.

The building is centrally located and sits on approximately one-half acre of land. It is a quiet spot in a primarily residential section, with no

TABLE S-1

BRENTWOOD PUBLIC SCHOOLS

Enrollment on January 1, 1988.

	Readiness	1	2	3	4	5	6	7	8	9	10	11	12	Total
Swasey	10	30	31	36	31	26	26							190
Area JH														
Area HS										40	29	36	27	132
1987 Comparison	10	31	36	32	24	22	29	263	272	332	328	328	283	
1990-91 Projection		32	30	45	48	43	39	33	32	29	32	22	42	
1994-95 Projection		40	36	32	33	37	37	61	59	48	43	35	29	

problems associated with adjacent land use. The structure itself is about 30'x 40', and of that, only about 25' by 30' serve the main purpose of the library. (The narrow entrance hallway and hallway to the rear of the building are too restricted to be of any other use.)

The Crawley Falls schoolhouse is the only one of the original four schoolhouses in Brentwood still being used as a public building, and the Trustees feel it is very important to maintain, as far as possible, the historic integrity of the building.

The library has a collection of 8,760 books, many magazines, videos, and audio tapes. The staff consists of one part-time and one full-time librarian. As the library is only open 18 hours a week, it means that one person works 15 hours a week, and the other, 3 hours.

Space for seating, book storage, and any assorted programs is well below that required. The library is used on a fairly regular basis by 537 of the townspeople -- almost one-quarter of the people in town. With the growth of the Town, and expanded services in the library, more people will need to be served in the future.

The Trustees of the Library hope to double the size of the existing building. This would entail removing the back of the building, and constructing a 30' x 30' addition. Also needed is a septic system, as there is now a holding tank for waste. Water is piped to the library from an abutter's well (the Byrne's property).

Since all accredited public libraries must have access for the handicapped, building expansion would incorporate this feature. As the Town continues to grow, there will be a demand for expanded library services.

Recommendation

1) The Library Trustees should redouble their efforts to expand the Mary E. Bartlett Library and associated facilities and services.

E. RECREATION

Brentwood supports a variety of recreational facilities, most run by the Brentwood Recreation Commission (BRC), a non-profit local organization. Figure R-1 describes existing recreational areas and facilities in Brentwood, along with their location, size, activities, and features.

The BRC, in coordination with other organizations such as Brentwood Youth Baseball, is keenly interested in future development of public and private land in town. The playing fields, developed on BRC land and adjoining Town land in 1986-87, were a significant improvement in Town athletic facilities. These improvements are still in progress with completion of a second ballfield and family picnic area planned for 1988.

TABLE R-1

DESCRIPTION	LOCATION	SIZE	ACTIVITIES	FEATURES	REMARKS
RECREATION CENTER	ROUTE 125, 1/4 MILE NORTH OF THE INTERSECTION WITH ROUTE 111A, ON THE WEST OF THE HIGHWAY	7 AND 1/5 ACRES	BASEBALL, SOFTBALL, PICNICS, BOY SCOUTS, GIRL SCOUTS CROSS COUNTRY SKIING MEETINGS	LITTLE LEAGUE FIELD SINGLE STORY BUILDING (40'X 70) PARKING AREA	HAS ACCESS TO ADJOINING TOWN LAND (8.5 ACRES OF PLAYING FIELDS AND WOODED AREA)
TOWN LAND		8 AND 1/2 ACRES	BASEBALL SOFTBALL SOCCER FOOTBALL CROSS COUNTRY SKIING	POWY LEAGUE/SOFTBALL FIELD MULTI-PURPOSE FIELD	HAS ACCESS TO ADJOINING TOWN LAND (60 ACRES OF WOODLAND)
TOWN LAND		60 ACRES	HIKING HORSEBACK RIDING CROSS COUNTRY SKIING HUNTING SNOWMOBILES OFF-ROAD VEHICLES	WOODED AND WET WOODED AREA	POWER LINES CROSS TOWN LAND PROVIDING SOME OPEN TERRAIN
BRENTWOOD ELEMENTARY SCHOOL	ROUTE 111A, 1/2 MILE EAST OF ROUTE 125 INTERSECTION ON NORTH SIDE OF ROAD	5+ ACRES	BASKETBALL FIELD SPORTS	PLAYGROUND OPEN FIELD BASKETBALL COURT TENNIS COURT (UNUSABLE)	THE SCHOOL PLAYING FIELDS ARE NOT SUITABLE FOR ORGANIZED SPORTS. THE TENNIS COURT IS IN DISREPAIR AND IS NOT USED. ADJOINS OTHER TOWN LAND.
TOWN LAND		40+ ACRES	HIKING CROSS COUNTRY SKIING SNOWMOBILES OFF-ROAD VEHICLES HORSEBACK RIDING	WOODED AREA NATURE TRAIL	THIS SECTION OF LAND PROVIDES A CONNECTION BETWEEN WOODED AREAS NORTH AND SOUTH OF ROUTE 111A WHICH AFFORDS ACCESS TO THE POWER LINES AND THE TRAIL CROSSING AT THE EXETER RIVER FOOTBRIDGE

TABLE R-1 (continued)

DESCRIPTION	LOCATION	SIZE	ACTIVITIES	FEATURES	REMARKS
LINDEM'S FIELD	BETWEEN DALTON ROAD AND ROUTE 111A BEHIND THE TOWN LIBRARY	TWO ACRES	BASEBALL SOFTBALL	LITTLE LEAGUE FIELD	PRIVATELY OWNED LAND
TOWN LAND	NORTH OF SCRABBLE ROAD, APPROXIMATELY 1/2 MILE EAST OF ROUTE 125 INTERSECTION	UNDETERMINED ACREAGE	HUNTING	WOODLAND	
EXETER RIVER	FLOWS FROM WEST TO EAST THROUGH THE SOUTHERN PORTION OF TOWN	6-7 MILES IN LENGTH	CANOEING RAFTING FISHING ICE SKATING	ABUNDANT WILDLIFE ROWELL COVE FOOTBRIDGE, 1/3 MILE SOUTH OF SWASEY ELEMENTARY SCHOOL	LIMITED ACCESS IS AVAILABLE TO THE RIVER AT THE FOLLOWING LOCATIONS: -- ROUTE 111A BELOW MILL ROAD DAM -- JUST WEST OF ROUTE 111A/ROUTE 125 INTERSECTION --NEAR LINDY'S COUNTRY STORE --ROWELL ROAD, NEAR HAIGH ROAD BRIDGE --PICKPOCKET DAM AT EXETER TOWN LINE
LITTLE RIVER	FLOWS NORTHERLY FROM THE MIDDLE OF THE SOUTHERN TOWN LINE TO COMBINE WITH THE EXETER RIVER BETWEEN ROWELL ROAD AND SOUTH ROAD	3 AND 1/2 MILES IN LENGTH	FISHING CANOEING (NEAR CONFLUENCE WITH EXETER RIVER ONLY	AVRIL ROCK	LIMITED ACCESS THROUGH PRIVATE LAND AND BY WAY OF EXETER RIVER

The BRC supports land conservation efforts described in the Conservation/Preservation section of the Master Plan, and have formulated long and shortterm goals that will complement these conservation efforts. The importance of the Exeter River to Brentwood cannot be understated and, as shown below, the River's development figures highly in plans for the community.

Recommendations

BRC Short Term Goals

1. Completion of third ballfield at BRC/Town athletic area.
2. Addition of picnic areas in pine groves adjacent to ballfields at BRC.
3. Repair of Exeter River footbridge damaged during 1987 Spring flood.
4. Improvements to BRC building's existing single-story facility to allow use for pre-school activities.
5. Creation of field space for Tee-ball practice at BRC/Town athletic area.

BRC Long Term Goals

1. Completion of BRC building above existing structure.
2. Addition of outdoor basketball courts at the BRC.
3. New BRC maintenance/storage buildings.
4. Addition of tennis courts at the BRC.
5. New well for sprinkling ballfields at the BRC.
6. Creation of a skating pond on Town land adjacent to southern edge of BRC /Town athletic area.
7. New well and septic system for BRC building.
8. Development of jogging and bicycle paths.
9. Development of a BMX course.
10. Construction of a picnic pavillion at the BRC.

Recommendations

1) Refurbish elementary school facilities such as basketball court and tennis courts.
2) Pave access road to BRC/Town land.
3) Acquire private land adjoining eastern Town property line at the elementary school for facility and playing field expansion.
4) Acquire public "rights-of-way" to the Exeter River at locations such as the following:
   - -- Rowell Road to Rowell Cove
   - -- Mill Road
   - -- Stevens Drive
   - -- Gove Road
   - -- Path to footbridge from Route 111A and Old Gordon Road.
5) Acquire Town land at Avril Rock on the Little River near its confluence with the Exeter River for a picnic and/or camping area.
6) Acquire Town land along Exeter River to preserve it as a scenic wilderness area.

BRC Staffing Requirements

..	Present Staff:	-- Part-time groundskeeper -- Part-time summer program coordinator
..	Near Term Staffing Needs:	-- Full-time groundskeeper for BRC property and athletic fields on Town land (possibly sharing costs with Town).
..	Long Term Staffing Needs:	-- Full-time grounds/maintenance crew -- Full-time Recreation Director

F. Conservation and Preservation

Open lands are wild lands, timber lands, farm lands, and sizeable open fields not currently being used for farming. At present, Brentwood has extensive land in this state, much of which should remain so because of geological characteristics. Much of this land is held by a few individuals so that their decisions have great impact on the development of the town. If the Town is to be assured of maintaining open land for conservation purposes, for farming and timbering, and eventually for park areas, policies must be set to manage the way in which such land is converted to industrial, commercial and residential uses and to assure that a desirable portion of land now open remains so.

With increasing development the Town is experiencing a steady loss of forested land. According to the UNH Department of Forest Resources, Brentwood had 7760 acres in 1953, 1150 in 1974, and 5065 acres in 1982. The Town should seek to have forest lands of manageable size (greater than ten acres) preserved and utilized for their aesthetic, environmental, and economic benefits.

The most significant open land belonging to the Town is the Town forest now managed by the Conservation Commission. This land is composed of two parcels. The first of these parcels is located next to the Swasey Central School. Between 22 and 31 acres in size, this land has been used by school children and boy scouts in a variety of ways, including the marking of nature trails and the planting of vegetation for wildlife. The second tract of Town forest land encompasses 66.7 acres. 8.8 acres of this parcel is devoted to the Brentwood Recreation Center and it's attendendant facilities. The remaining 57.9 acres at the northwest corner consists of small areas of wetland and large wooded areas that would be excellent for horseback riding and walking trails.

In addition to these two large parcels there are several smaller plots of land within Brentwood that would be easily adapted to horse riding or nature trails. These include parcels of 7, 2.3, and 4.7 acres located off Old Danville Road, Route 111A, and Scrabble Road, respectively.

As documented by the Rockingham Planning Commission questionnaire, the most agreed-upon objective in the Town of Brentwood, besides keeping taxes reasonable, is preserving the rural atmosphere of the Town. For most of us, this means preserving our backyards and the views from the roads, beginning with the stone walls and going back into the fields and woods. The rural atmosphere of Route 125 is rapidly being lost to development. Much still remains in the rest of the Town. For the smaller, but still important number of hikers, hunters, and snowmobilers, woods and wetlands still abound. Since it is going to cost something to retain this rural atmosphere, a development policy is needed that will offset costs, minimize the burdens and assure that what remains, is shared equitably.

The Conservation Commission, as well as the Selectmen, play a critical role in the conservation and preservation of open space in Brentwood. Conservation Commissions typically provide information and instruction to other town officials regarding the best ways to protect and utilize the natural resources of the town.

In order to be able to identify important open space areas on which to focus its preservation efforts, the Conservation Commission should undertake a natural resources inventory. Such an inventory would establish if there are areas of critical concern that the Commission should direct its energies toward. This would be the first step in formulating a plan to conserve land and preserve open space.

With a natural resource inventory in place, priorities for land protection can then be set based on environmental benefits, imminent threat, accessibility, scenic beauty, recreatiuonal potential, fragility, and scarcity. The next sterp would be to piece together a protective strategy using any of the following approaches:

1) Land Purchase (fee-simple interest): Purchase of land will give the Town ultimate control over its use, but may also be the most expensive means of land acquisition. However, federal and state matching grants can greatly reduce purchase costs.

2) Option or Right of First Refusal: If landowners are not interested in any permanent protection method, they may be willing to grant an option or right of first refusal to the Town. An option establishes a price at which the Town could purchase the land any time during a specified period of years. A right of first refusal guarantees the Town the opportunity to purchase the land for a price equal to a bona fide offer from another party. It provides a legal means for the Town to become aware of a potential sale and an opportunity to respond.

3) Purchase and Resale: An increasingly necessary option the Town should consider is the purchase of the property and its subsequent resale, of all or part, with restrictions or limited development opportunities. In this way, the Town may be able to recoup more than its purchase cost through some creative planning and tasteful development on that part of the land not critical to open space benefits.

4) Bargain Purchase: Buying the land for less than its fair market value reduces the purchase price for the Town and offers tax deductions to the seller. The difference between the fair market value and the bargain sale price may be used as a charitable donation by the landowner. Used in concert with the Land and Water Conservation Funds or Pitman-Robertson funds administered through the Department of Resource and Economic Development, a bargain sale of 50% could eliminate any expense for the Town.

5) Easements (less-than-fee interests):

   -- Conservation easement: Landowners who do not want to develop their land can sell or, more commonly, give a conservation easement to the Town, and yet retain some property rights themselves. A conservation easement places perpetual restrictions on land use and provides for long term enforcement by the Town.

   -- Purchase of development rights: Landowners sell the development rights to the Town, or state, thereby permanently protecting their land from development.

   Both of these methods provide tax benefits to the landowner.

Regulation and Zoning:

Through land use regulation, Brentwood can conserve open space areas in the interest of environmental quality and public health and welfare. One such method is to allow cluster development in certain areas, so that a portion of the property can be designated and restricted by deed to remain undeveloped.

Tax Incentives:

1) Donation: Landowners who donate their land, or easement restrictions, can receive tax benefits in the form of federal income tax deductions, potential estate tax benefits, and relief from property taxes.

2) Current Use Assessment Program: Authorized by NH RSA 79-A, this property tax abatement program generally provides for reduced property assessments on parcels of field, farm, forest and wetland of 10 acres or more or on "natural preserves" of any size, recreational land of any size, or farmland generating more than $2,500 annually.

Public Programs:

-- Designation of Prime Wetlands: This program would permit the Town to designate some wetlands within its borders as "prime wetlands" because of their size, unspoiled character, fragility or uniqueness. Once prime wetlands are designated, the NH Wetlands Board is required to give special consideration to these areas. The Wetlands Board will not issue a dredge and fill permit: 1) without a public hearing; and 2) if the proposed project impairs the value of the wetland.

-- Aquisition of Agricultural Land Development Rights: This program is administered by the Agricultural Land Preservation Committee (ALPC) and is designed to save important farmland throughout New Hampshire.

If the ALPC designates a farmland parcel as an "agricultural preservation restriction area," the state will purchase the land's development rights in order to limit the land's use to agricultural production. Criteria used to make this designation include:

1) soils potential and suitability;
2) threat of development;
3) cost of development rights;
4) present status of land.

-- Trust for New Hampshire Lands: This is a nonprofit corporation formed recently (Fall 1986) by representatives from the business, conservation, and government sectors. There are two primary goals set for the Trust: 1) protect up to 100,000 acres of prime natural land throughout the state for conservation and recreation purposes; and 2) to enable towns to identify and retain important natural landscapes that enhance the community's character. The Trust wants to accomplish its land preservation goals through voluntary negotiation with landowners, and will rely on land protection methods such as land acquisition, conservation easements, and purchase of development rights. The Trust will seek $50 million in bonds from the state over a 5 year period. A portion of this money will be available as a match to towns.

-- Federal Grants: There are two federal grant programs for the purchase of conservation land 1) The Land and Water Conservation Fund offers grants of 50% of the fair market value of lands acquired by governmental units for public recreation. Conservation lands could qualify. 2) The N.H. Department of Fish & Game receives Pitman-Robertson Funds which cover 75% of the fair market value of lands acquired by the Department for wildlife protection.

-- Exeter River Watershed Association: This is also a newly-formed (Fall 1986) nonprofit citizen organization. Its present goal is to "work towards regional cooperation to protect and improve the health of the Exeter River and its watershed." Since so much of the Exeter River flows through Brentwood, the Town should participate in this program.

The conservation of valuable and unique natural resources and the preservation of open space is important for Brentwood. It is one way to maintain the communities character in spite of its continued growth. All the Town boards, especially the Conservation Commission, play a vital role in this endeavor.

Recommendations

1) Undertake a natural resource inventory in order to identify prime forestland, farmland, wetland, scenic areas, and historic landscapes.
2) Employ regulatory approaches for open space protection such as innovative zoning districts.
3) Encourage land and conservation easement donations by promoting tax incentives.
4) Participate in the federal, state, and regional open space protection programs.



WATER RESOURCE MANAGEMENT AND PROTECTION

INTRODUCTION

This component of the Town of Brentwood Master Plan addresses the requirements, established by the New Hampshire Office of State Planning under the authority of RSA 4-C:20,I, for the preparation of local water resource management and protection plans.

The purposes of this chapter are to identify and describe surface and groundwater resources; to identify existing and potential threats to these resources; to evaluate the adequacy of water resources to meet the current and future needs of the Town; to evaluate existing local programs which have the potential to impact water resources; and to identify regulatory and nonregulatory programs that could further enhance water resource management and protection efforts.

The protection and wise use of water resources are of critical concern to the Town of Brentwood. With a large majority of homeowners dependent on private wells for domestic, public and business use, the quantity and quality of available groundwater must be protected from contamination and depletion. Other Town water resources, such as swamps, ponds, streams and wetlands, are important not only because they are often hydrologically related to groundwater, but because they provide ecological, scenic and recreational value to the Town as a whole.

In general, there is a direct relationship between land use and water quality. The right use in the wrong area, or the right use carried out in the wrong way can degrade and contaminate both surface and groundwater, increase flood hazards, destroy water-based wildlife and interfere with scenic and recreational values. It is the responsibility of the Town to take reasonable precautions to protect all water resources from incompatible uses and, in so doing, protect the health and general welfare of the community.

I. DESCRIPTION OF THE SURFACE WATER RESOURCE

Watersheds

The Town of Brentwood contains two regional watersheds - The Exeter/Squamscott and the Piscassic. The Exeter/Squamscott River watershed is identified on the "New Hampshire Hydrologic Unit Map" (source: U.S. Department of Agriculture, Soil Conservation Service, May 1982), and the Piscassic River watershed is identified on the Legislative Classification of Surface Waters" map (source: New Hampshire Water Supply and Pollution Control Commission, 1986).

The following paragraphs provide a general description of each watershed.

a) Exeter/Squamscott River Watershed: The Exeter and Squamscott rivers have a total length of about 14 and 6.5 miles, respectively. The watershed area covers portions of 17 towns - Candia, Chester, Derry, Raymond, Sandown, Hampstead, Danville, Fremont, Brentwood, Kingston, East Kingston, Kensington, Hampton Falls, Stratham, Newfields, Newmarket, and Exeter. The total area is approximately 77,000 acres (120 square miles). The area of the Exeter/Squamscott River watershed contained within Brentwood is about 9,900 acres (15.5 sq. mi.).

b) Piscassic River Watershed: The Piscassic River has a total length of about 12 miles. The watershed area covers portions of Fremont, Epping, Brentwood, Exeter, Newfields, and Newmarket. The total area is approximately 13,500 acres (21 sq. mi.). The area of the Piscassic River watershed contained within Brentwood is about 750 acres (1.2 sq. mi.).

Watersheds Within the Municipal Boundaries

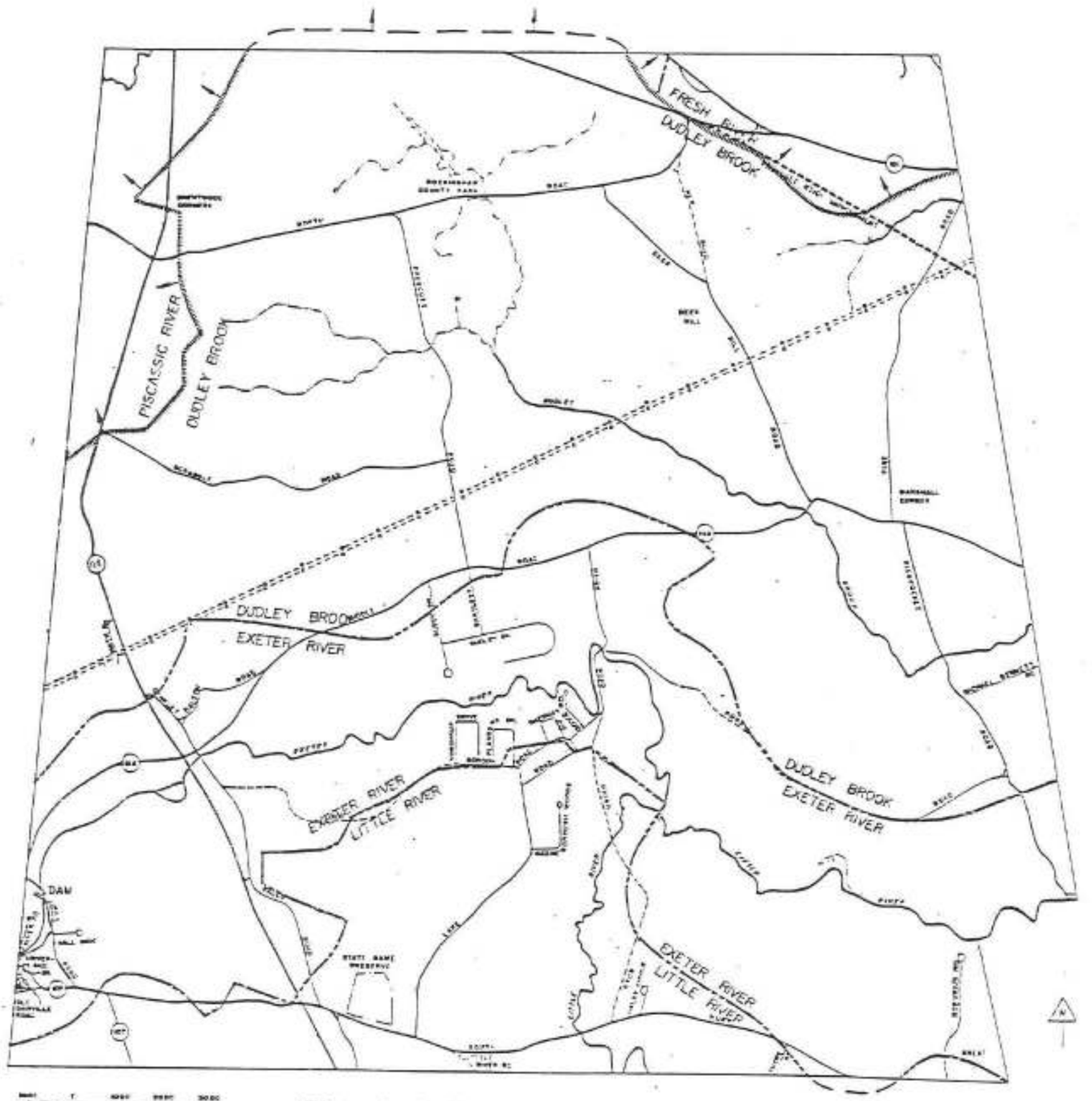
The Exeter/Squamscott River and Piscassic River watersheds were divided into five sub-watersheds within the Town. The Exeter/Squamscott River watershed was divided into three areas which are drained by the Exeter River, Dudley Brook, and the Little River. The Piscassic River watershed was divided into two areas - one drained by the Piscassic River and the other drained by the Fresh River. These watersheds are depicted on Map A - "Watersheds, Rivers, and Perennial Streams".

Table 1 presents a breakdown of the acreage of floodplain areas, and poorly drained and very poorly drained soils within Brentwood's five sub-watersheds. The areas for muck and ponded soils, both of which are classified as very poorly drained soils, are also inventoried.

The characteristics of each sub-watershed, including acreage within Brentwood and the legislative classification of the rivers, are described in the following paragraphs.

a) Exeter River: The Exeter River flows for 6.7 miles, from west to east, through the Town of Brentwood. From one end of Town to the other, the River drops from an elevation of 110 feet to 70 feet above mean sea level. As shown on Map A, a small hydroelectric dam exists adjacent to Mill Road in the southwestern corner of Brentwood. The legislative classification of the Exeter River is "B".

BRENTWOOD



SCALE: 1 inch = 2000 feet

Prepared by [illegible]

[illegible]

"The preparation of this map was cooperatively funded through a matching grant from the Department of Economic and Community Development, under the Intergovernmental Planning Assistance Program administered by Region One of the Housing Act of 1954, as amended."

LEGEND

- STATE & TOWN ROADS
- ROADS CLOSED SUBJECT TO GATES & BARS
- UNACCEPTED ROADS
- POWER LINE RIGHT OF WAY

Watersheds, Rivers and Perennial Streams

Map A

- Sub-Watersheds
- Regional Watershed (Exeter/Squamscott Rivers-Piscassic River)
- Coast A Watershed
- Rivers and Perennial Streams

Prepared by the Rockingham Planning Commission
July 1986

Sources: Kingston and Hampstead, N.H., 7.5 Minute Topographic Maps; U.S. Geological Survey, 1982.

TABLE 1. Acreage of Wetlands and Floodplain Areas

	Sub-Watersheds				
Area	Exeter	Dudley	Little	Piscassic	Fresh
Poorly Drained Soils	524	1398	478	176	114
Very Poorly Drained Soils	64	412	52	21	37
Muck	29	112	31	0	0
Ponded	26	8	0	0	0
Floodplain	387	345	92	50	10

b) Dudley Brook: Dudley Brook flows for 2.9 miles, from west to east, through the Town. The Brook drops from an elevation of 100 feet to 80 feet at the Brentwood border. The legislative classification of Dudley Brook is "B".

c) Little River: The Little River flows north and is approximately 1.7 miles long within Brentwood. The River drops from an elevation of 80 feet at the Kingston border to 70 feet at the Exeter River confluence. The legislative classification of the Little River is "B".

d) Piscassic River: The Piscassic River crosses a small 2000-foot portion of Town in its northwestern corner. The River's elevation is 130 feet above sea level, and its legislative classification is "A".

e) Fresh River: The Fresh River flows in northeastern Brentwood for about 2600 feet. The River's elevation is 110 feet, and its legislative classification is "A".

Map B, "Wetlands", depicts the location of wetland areas throughout Brentwood. This information was taken from an SCS County Soil Survey Map (April 1982). Wetlands are defined as poorly and very poorly drained soils. Much of these wetlands are contained in Brentwood's 100-year flood zones, which are depicted on Map C - "Flood Hazards and Bedrock Geology". Flood hazard boundaries are those shown on the Town of Brentwood "Flood Insurance Rate Map", published by the Federal Emergency Management Agency (FEMA) in April 1981. In general, the 100-year flood zone surrounds the major water courses throughout Town. The largest contiguous flood area surrounds the Exeter River.

Development should be located away from wetlands and floodplains. The filling of and use of wetlands for building construction not only destroys wetlands and their benefits, but may also lead to groundwater contamination. Moreover, building within a flood zone will potentially reduce the floodplain's capacity to absorb and retain water during periods of excessive precipitation and runoff. Contamination may also result from flooding damage to septic systems. Without specific flood proofing design and construction, development within floodplains poses threats to public health, safety, and welfare.

BRENTWOOD



SCALE: 1 inch = 1000 feet

LEGEND

Wetlands

Map B

- Poorly Drained
- Very Poorly Drained

Prepared by the Rockingham Planning Commission
July 1986

Source: Town of Brentwood, Rockingham County, N.H. (Soils Map); U.S. Department of Agriculture - Soil Conservation Service, June 1986.

BRENTWOOD



SCALE: 1 inch = 1000 feet

Flood Hazards and Bedrock Geology

Map C

Flood Hazards

Bedrock Boundaries

Prepared by the Rockingham Planning Commission
July 1980

Sources: "Flood Insurance Rate Map, Town of Brentwood, New Hampshire, Rockingham County," Federal Emergency Management Agency, April 1981.

Geological Map of New Hampshire: U.S. Geological Survey/State Geologist, 1961.

Potential Surface Water Supplies

As a surface water source, the Exeter River has the most potential to be used as a municipal drinking water supply for Brentwood. Because the Exeter River's Legislative Classification for water quality is "B", this river would require adequate treatment before being suitable for public consumption.

The neighboring Town of Exeter presently uses the Exeter River as a source for its water supply. The Exeter River was sampled at the Pickpocket Dam in Exeter on January 11, 1988. Upon laboratory analysis, the river water was found to exceed the Maximum Contaminant Level (MCL) for Iron (at 0.427 mg/l) and Total Coliform (at 200 counts of bacteria colonies). The Safe Drinking Water Act has set Iron and Total Coliform MCL's for potable water at 0.300 mg/l and one colony count per 100 ml, respectively. According to Gidley Laboratories, Inc. (Fairhaven, MA), which reviews water test results for Exeter, levels of 0.427 mg/l of iron and 200 coliform counts are acceptable for water that undergoes treatment.

Exeter employs a three-step process for treatment: 1) alum is added to the water as a coagulant to remove colloidal particles; 2) the water is run through a rapid-sand-filter to remove residual floc; and 3) the water is chlorinated for disinfection. This type of extensive water treatment would require a substantial capital investment for the Town of Brentwood.

All of the towns which contain the Exeter River have a stake in preventing inappropriate uses which may degrade the River's quality. This holds especially true for the Town of Exeter, which is the furthest downstream community and the only town that uses the River for municipal water supply purposes.

Even though the Piscassic has a Legislative Classification of "A" (requiring only disinfection for public consumption), its remote location and relatively small flow make this river unsuitable as a public drinking water supply.

At this time, the most economical and practical source for a municipal water supply in Brentwood would be from groundwater, which typically requires much less treatment.

II. DESCRIPTION OF GROUNDWATER RESOURCES

Stratified Drift Aquifers

The U.S. Geological Survey has characterized Brentwood as having two types of stratified drift aquifers, labelled as: "Stratified-Drift Aquifer" and "Stratified-Drift Aquifer Over Glacio-Estuarine Silts & Clays". The boundaries of the primary recharge areas of these aquifers are depicted on Map D, "Aquifers and Wells". The source of this information was from a U.S. Geological Survey Investigations Report (not yet published) entitled: "Geohydrology And Water Quality of Stratified-Drift Aquifers In The Exeter, Lamprey And Oyster River Basins, Southeastern New Hampshire."

At this time, information is not available regarding water table elevation, saturated thickness, transmissivity, direction of flow and water quality of these aquifers.

BRENTWOOD



SCALE: 1 inch = 1000 feet

LEGEND

STATE & TOWN ROADS

GRADE CLOSED SUMMER TO GATES & GARE

UNACCEPTED ROAD

POWER LINE RIGHT OF WAY

Aquifers and Wells
Map D

- Stratified Drift Aquifer
- Stratified Drift Aquifer over Glacio Estuarine Silts and Clays
- Public Wells
- Bedrock Well
- Stratified Drift Well
- U.S.G.S. Test Well

Prepared by the Rockingham Planning Commission
July 1986

SOURCES: "Geohydrology and Water Quality of Stratified-Drift Aquifers in the Lamprey, Exeter and Oyster River Basins, Southeastern N.H.": U.S. Geological Survey, 1986.

Water Well board, N.H. Department of Environmental Services, March 1986.

The average daily withdrawal and discharge information that is required to be filed with the Water Resources Division of the New Hampshire Department of Environmental Services pursuant to the N.H. Code of Administrative Rules Wr 700 has not yet been compiled for Brentwood.

According to the Water Resources Division of the N.H. Department of Environmental Services (DES), 112 wells were reported as being completed between January, 1984 and October, 1987. The well log data is presented in the "Summary of Well Completion Report Data for the Town of Brentwood," dated March 23, 1988, and is contained herein as Appendix I.

Map D depicts the locations of 43 wells which are mapped by the Water Well Board of the N.H. DES (denoted by circles). Of these, 29 are located within a stratified drift aquifer as identified by the U.S. Geological Survey; including a total of 15 test wells which were drilled into gravel for the Towns of Brentwood and Exeter. These well sites are located among the gravel pits between Pine Road and Route 101 in the northeastern part of Brentwood. The well depths ranged from 28 to 99 feet, with discharges ranging from 30 to 90 gallons per minute.

The remaining 14 wells, located within an aquifer area, were drilled into bedrock. These well depths ranged from 70 to 630 feet, with discharges ranging from 3 to 50 gallons per minute. Overall, the gravel wells had higher water yields at shallower depths than the bedrock wells. This is consistent with the fact that, on the average, stratified drift aquifers yield larger volumes of groundwater than do bedrock aquifers.

Map D also shows nine other well locations, all of which are classified as public water systems by the Water Supply and Engineering Bureau of the DES Water Supply and Pollution Control Division (denoted by squares). These wells are discussed further herein (see section V).

The last four wells shown on Map D are 1985 USGS test wells (denoted by "X's"), from which water quality data was collected. This information was gathered as part of the USGS Water Investigations Report entitled: "Geohydrology and Water Quality of Stratified Drift Aquifers in the Exeter, Lamprey, and Oyster River Basins, Southeastern New Hampshire" (to be published in the Fall of 1988). Upon analysis, wells II and III were both found to have high concentrations of naturally-occurring Manganese (0.660 and 0.170 mg/l respectively). In addition, well IV was found to contain trace amounts of organic chemicals. The contaminating substance was speculated to be a solvent, however, no apparent source was found. (See Appendix II for water quality data.)

Bedrock and Till Aquifers

The location and extent of till aquifers could not be determined due to the absence of surficial geology information from the N.H. Department of Resources and Economic Development and the U.S. Geological Survey.

However, the bedrock geology of Brentwood was determined using the "Interim Geologic Map of New Hampshire," U.S. Geological Survey/State Geologist (1986), prepared at a scale of one inch equals approximately four miles. The fault lines of different formations are shown on Map C, "Flood Hazards and Bedrock Geology".

Brentwood has three types of bedrock geology:

1) Kittery Formation (OZk) - phyllite and calcareous siltstone; (metamorphic)
2) Eliot Formation (OZc) - phyllite, quartzite, quartz mica schist, and calc silicate (metamorphic);
3) Exeter Pluton (Oe9) - proxene and pyroxene - hornblende diorite and gabbro, with minor grandiorite and granite (igneous).

Since the average daily withdrawal and discharge information is not yet available for Brentwood (as previously discussed), the water users reporting under this program who are located outside of the stratified drift areas cannot be identified.

Radon

Radon contamination in water from bedrock wells has recently become a concern throughout the U.S. Radon is a colorless, odorless, cancer-causing gas produced as uranium (typically occurring in trace amounts) decays. This gas escapes from water once it is brought up from the ground. For example, when a shower is used in a home with radon-containing water, radioactive gas diffuses into the air.

Two systems are being developed by the University of New Hampshire to remove the radon from small community water supplies, using: 1) granular activated carbon; and 2) packed tower aeration.

Due to the predominence of stratified metamorphic bedrock in Brentwood, the Radiological Health Program (RHP) of the N.H. Division of Public Health Services has rated the Town as "Variable" for the occurrence of radon. More radon sampling is planned for Brentwood by the RHP.

Potential Groundwater Supplies

Groundwater is a very valuable resource for the Town of Brentwood. It has the potential to provide the Town with drinking water for many generations to come. However, the resource is vulnerable to contamination or depletion if not properly managed and protected.

Groundwater quality can be impaired by a variety of materials. Sources of groundwater contaminants include landfills, commercial and industrial wastes, agricultural fertilizers, human sewage, road salting, etc. Groundwater quantity is reduced by contamination of available groundwater supplies, over-pumping in the aquifer zone, and increasing impervious surfaces such as roof tops and parking lots, thereby preventing recharge of the aquifer. These threats to groundwater are discussed further herein (see section III).

The term "aquifer" is defined as earth material containing sufficient quantities of groundwater for pumping. As previously discussed, the U.S. Geological Survey (USGS) has identified two aquifer formations within Brentwood. One is located on the town's eastern border with Exeter and is subsequently referred to as the "eastern aquifer". The second is located in the southwestern portion of town and is subsequently referred to as the "southwestern aquifer". These areas were mapped in 1987, and are shown on Map D.

Brentwood's eastern aquifer contains wells for two public water systems: 1) Bell & Flynn, Inc.; and 2) Brentwood Manufacturing. The southwestern aquifer contains a public water system for the Swazey School. Otherwise, the groundwater within these aquifer areas is primarily used for private homes.

The most prominent groundwater threat for the southwestern aquifer is the Magnusson site, located in Kingston, which contains a closed septage disposal facility and dump, and the operating Kingston landfill. A full description of this site is presented within section III, entitled "Identification of Potential threats to Water Resources", contained herein. Brentwood's eastern aquifer contains no significant threat as identified by the "Inventory of Groundwater and Surface Water Potential Nonpoint Pollution Sources" report, published by the N.H. Water Supply and Pollution Control Commission in 1982.

Map F, "Generalized Zoning", shows that two areas within Brentwood's aquifers are zoned as Commercial/Industrial. Map G, "Generalized Future Land Uses", depicts the northern part of the eastern aquifer as an Industrial district; and the western part of the southwestern aquifer as being used for commercial. Given the extent of vacant land within these aquifer areas, there is high potential for further development, with additional private wells to serve future residential, commercial, and industrial uses.

Currently, Brentwood's Zoning Ordinance has no provision for the maximum site coverage of commercial or industrial uses. It is therefore likely that most of these areas will be developed with a minimum percentage of open space. However, adequate open space areas should be provided in order to ensure that the groundwater below is being replenished during rainfall and snowmelt events.

If the Town of Brentwood were to develop a public drinking water supply within the next 10 to 20 years, it seems most likely that well fields would be located within the eastern aquifer. This conclusion is based on two assumptions:

1) Two other groundwater surveys have identified only the eastern part of Brentwood as having a high potential to yield groundwater. The U.S. Army Corps of Engineers (USACE) classified eastern Brentwood as having an aquifer, which was defined as "an unconsolidated geologic formation containing a minimum of 20 feet of saturated permeable material, which will yield significant quantities of water to wells for public usage. Generally, this range is in the order of 150 gpm per well" (Source: Groundwater Assessment Study for 50 Communities in Southeastern New Hampshire, USACE; September, 1980).

   Three years previous to the USACE report, the U.S. Geological Survey (USGS) also identified the eastern part of Brentwood as having high potential to yield water. Wells located "within these areas should yield sufficient quantities of water to meet or augment supplies for municipal and/or industrial purposes" (Source: Availability of Groundwater in the Lower Merrimack River Basin, Southern New Hampshire, J.E. Cotton, USGS; 1977).

2) Brentwood's eastern aquifer has fewer potential threats to its water quality than does the southwestern aquifer (which contains the Kingston Landfill/Magnusson disposal site).

It is expected that by the Fall of 1988, the USGS will publish information regarding Brentwood's aquifers, which will quantify important pumping factors,

i.e. water table elevation, saturated thickness, transmissivity, direction of groundwater flow and water quality. This data will assist in determining if one aquifer (or both) is best suited for a municipal water supply. In addition, data should be collected in order to determine the extent, rate of movement, and severity of any groundwater contamination emanating from the Kingston Landfill site.

Brentwood's most practical source for a municipal water supply is from its aquifers, because of their relative purity and accessibility. It is therefore necessary for the Town to protect its aquifers by enforcing measures which will promote groundwater recharge and reduce the risk of contamination. This course of action will safeguard an excellent source of drinking water for the future residents of Brentwood.

III. IDENTIFICATION OF POTENTIAL THREATS TO WATER RESOURCES

Potential Nonpoint Pollutant Sources

A. Within Brentwood

1. Existing Potential Pollutant Sources:

Nonpoint sources of pollution involve the diffuse discharge of wastes from sources which are widely spread, difficult to identify, and hard to control. Nonpoint pollution is typically produced from land runoff during times of rain and snowmelt.

The following is a general list which briefly describes potential nonpoint pollution sources (and their associated mitigation techniques) within the Town of Brentwood:

Table 2
Nonpoint Pollutant Sources and Remedies

Source	Remedy
subsurface sewage disposal systems agricultural runoff	replacement and/or relocation; Best Management Practices e.g., concrete manure pits, no winter manure-spreading, etc.;
road salt storage and application	salt sheds, decrease salt to sand ratio, emphasize mechanical snow removal using plows, graders, etc., reduce frequency of application; increase use of calcium chloride and other de-icing chemicals;
storm runoff from construction sites	erosion control measures e.g., haybales, silt fences, straw mulch, etc.;
storm runoff from parking lots	catch basins which trap grit, oil and/or grease;

Table 2...continued

Source	Remedy
sediments from silted-in catch basins and detention ponds	maintenance program;
runoff/leachate from junkyards and abandoned landfills	drainage collection/treatment systems, and proper disposal of hazardous materials, e.g. battery acid, gasoline, etc. with a certified hauler.

Examples of specific existing land uses that represent potential nonpoint pollutant sources are depicted on Map E, "Existing Potential Pollutant Sources". These include:

1) Several commercial and manufacturing operations located within Brentwood's aquifer areas and directly next to the Exeter River (along Pond Road, Route 125, and Mill Road). These sites experience surface runoff from parking lots and work areas which may contribute pollutants to groundwater and the River; and
2) An operating farm in the southeastern part of Town, abutting the Exeter River. Surface runoff from the barn yard and corn fields, containing sediment, manure, pesticides, etc., may be a source of nonpoint pollution to the River.

Also of concern is that Brentwood contains a total of eight gravel pits within its two aquifers. Substantial excavation poses a potential threat to an aquifer's water quality and quantity. By removing the aquifer's cover soils the site's capacity to filter pollutants is reduced. This problem may become acute if development is located in this area, and groundwater quality is threatened by poorly-treated septic system effluent. In addition, if the earth is dug to a level at or near the water table, water evaporation may increase thereby depleting the aquifer resource. This may be counteracted, however, by the increase of water percolation (groundwater recharge) resulting from the removal of vegetative cover.

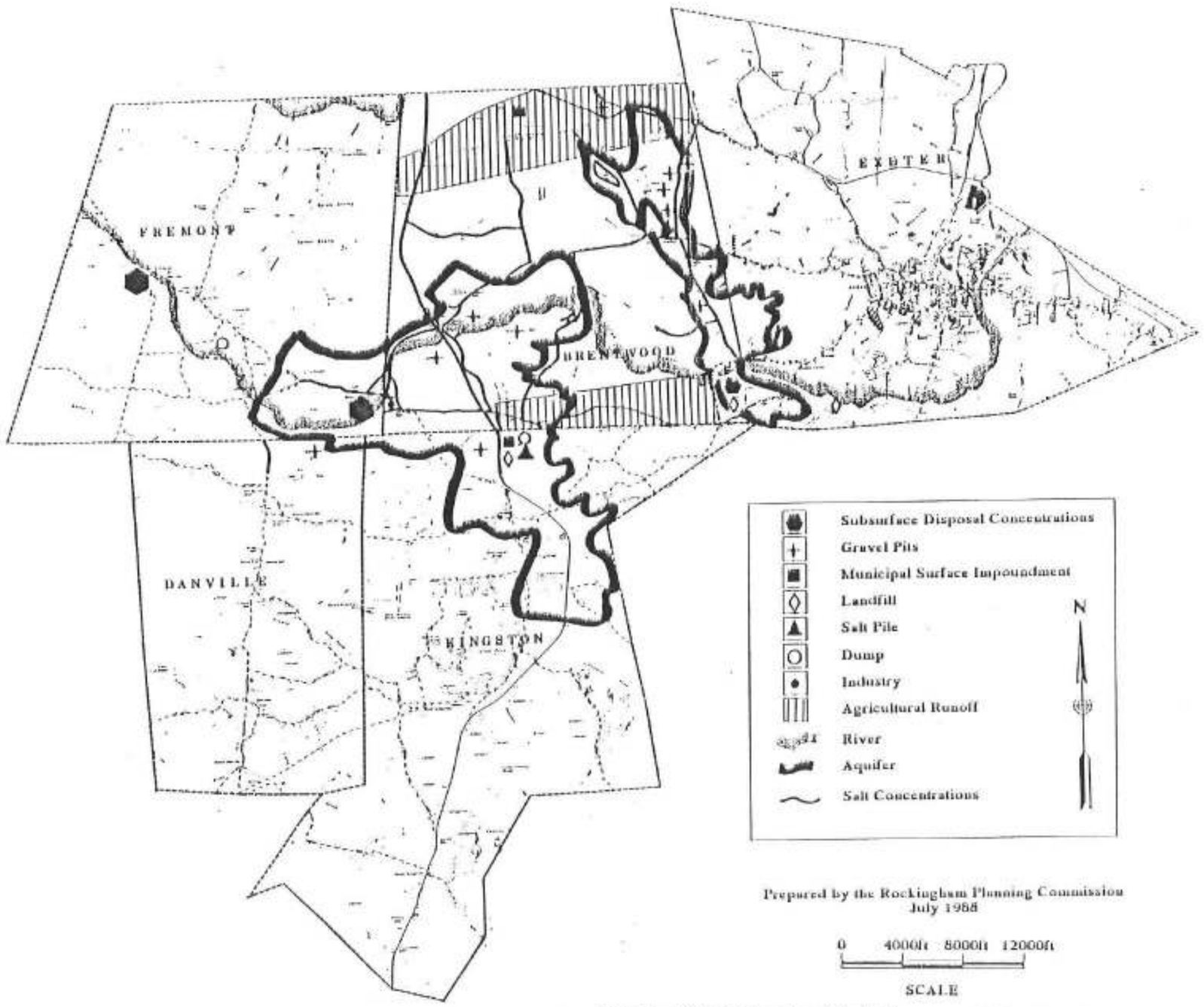
The following potential nonpoint source pollutant sites were identified in the "Inventory of Groundwater and Surface Water Potential Nonpoint Pollution Sources," Water Supply and Pollution Control Division, New Hampshire Department of Environmental Services, February 1982; and the "Waste Site Inventory" maintained by the Waste Management Division of the New Hampshire Department of Environmental Services dated September 1987 (the most recent inventory available). These sites are depicted on Map E.

1) Sanitary Waste Disposal Systems:

   Virtually all of Brentwood is serviced by individual subsurface systems. The Town presently has approximately 670 septic systems (extrapolated from 1980 census data and 1985 OSP housing estimates). Septage is removed from these systems by periodic pumping and maintenance of septic tanks.

Existing Potential Pollutant Sources

Map E



Prepared by the Rockingham Planning Commission
July 1988

0 4000ft 8000ft 12000ft

SCALE

Sources: Waste Site Inventory; Waste Management Division, N.H. Department of Environmental Services, Sept. 1987; Existing Land Use Map, Brentwood, N.H.; Brentwood Master Plan (draft), 1988

According to Southeast Regional Solid Waste District estimates (5/88), Brentwood generated 156,100 gallons of septage in 1986 (projected to be 231,000 gallons in 2006).

Individuals throughout the Town rely on individual septage haulers to find a disposal site. This arrangement is not in compliance with RSA 149-M:13, which states that each town shall provide, or assure access to, an approved septage and solid waste facility for its residents.

2) The only "significant" sanitary waste system is that which serves the Rockingham County Home. This system is described further in the following section, Point Pollutant Sources.

3) No hazardous waste sites were identified.

4) The Town has no landfill, and delivers its solid waste to the Kingston Landfill.

5) A covered salt storage shed is located at the Public Works garage. Approximately 20,000 lbs. of salt are stored here every year.

6) The roads subjected to substantial winter salting are highlighted on Map E.

7) No snow dumping sites, subsurface disposal system concentrations, or significant erosion sites have been identified in Town.

8) No storm water surface impoundments, urban runoff, or pesticide application areas were identified.

9) Areas experiencing agricultural runoff were identified in the northern and southern portions of Town (see Map E).

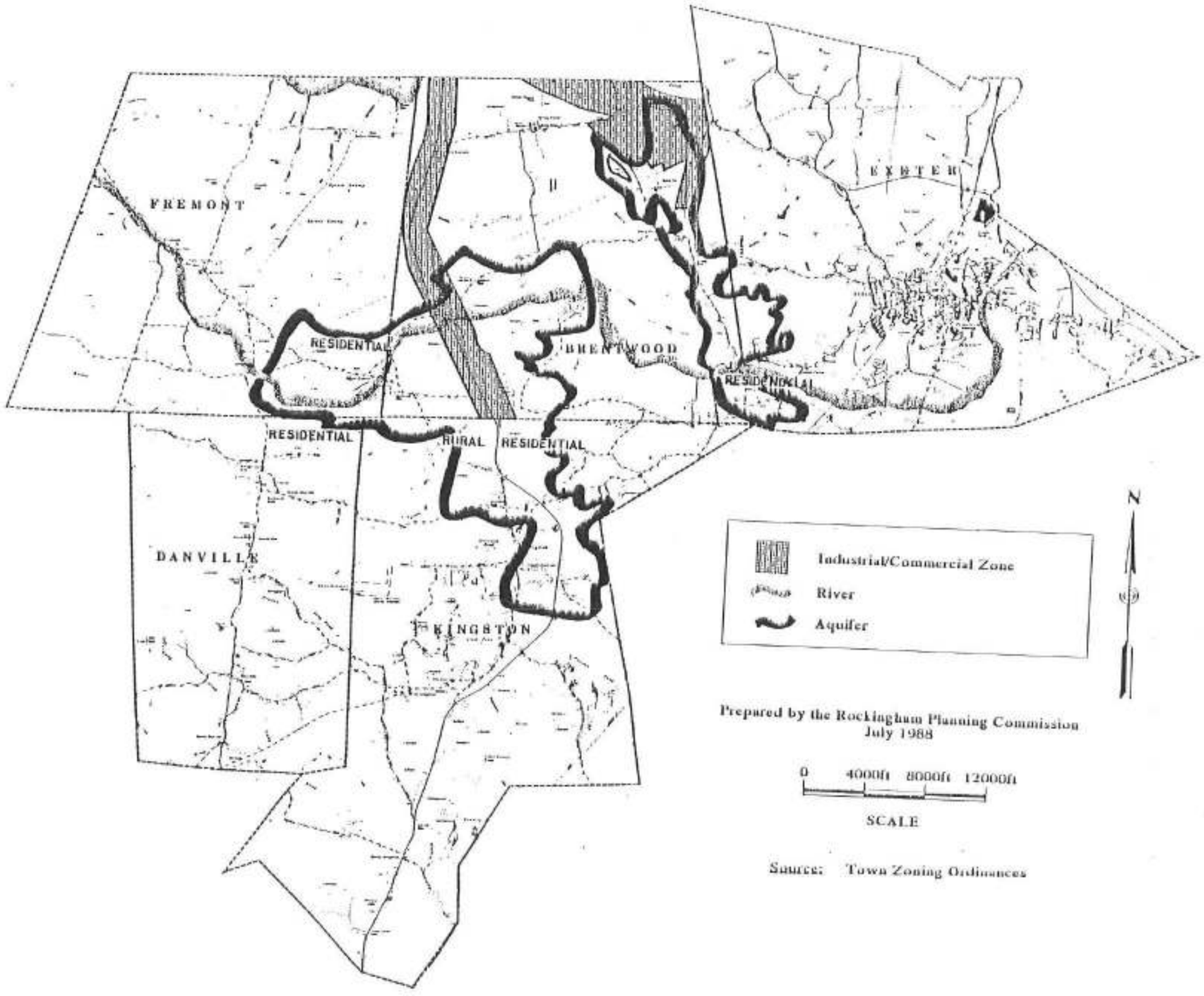
2. Future Potential Pollutant Sources.

a. Near Term - The Brentwood Planning Board recently approved a plan for a 36,000 square foot commercial development near the Route 101/Route 27 intersection. The total area of disturbance for this project, including parking, will be three acres. Given the magnitude of this project, erosion and sedimentation control measures should be carefully installed and maintained in order to prevent unnecessary contamination to the nearby wetlands which drain into Fresh River.

b. Long Term - Map F, "Generalized Zoning" shows that a section of the land surrounding the Exeter River, and two areas within Brentwood's aquifers, are zoned as Commercial/Industrial. When reviewing future developments within this district, the Town should consider runoff from commercial and industrial sites as potential sources of nonpoint pollution to groundwater and surface waters.

Generalized Zoning

Map F



Prepared by the Rockingham Planning Commission
July 1988

Source: Town Zoning Ordinances

Generalized future land uses for Brentwood are shown on Map G, "Generalized Future Land Uses". The northern part of the eastern aquifer is planned as an Industrial district; and the western part of the southwestern aquifer is planned for commercial use. Without strict adherence to performance and use standards, commercial and industrial uses within a groundwater recharge area can pose potential threats to the aquifer.

Fortunately, in 1985, Brentwood adopted an Aquifer Protection Ordinance which regulates uses that could jeopardize the aquifer's water quality. However, the aquifer zone is based on the aquifer mapping of John Cotton (USGS,1977) and does not include Brentwood's southwestern aquifer as recently mapped by the USGS (1988). Other changes to this ordinance are recommended in Section VIII herein entitled: "Recommendations for New or Revised Policies and Programs."

B. Contributing Areas Outside of Brentwood

In determining the areas outside of Brentwood which exhibit potential threats to the Town's water resources, it was appropriate to categorize Brentwood's water resources into surface water and groundwater.

1. Surface Water - Exeter River and Piscassic River Watersheds

a. Existing Potential Pollutant Sources

The Town of Fremont has the greatest impact on the Exeter River and the Piscassic River before they flow into Brentwood. Fremont consists mostly of undeveloped woodlands, fields, and wetlands. Fremont also has low-density residential areas (1 to 3 acres per dwelling), especially along the main roads (Route 107, South Road, and Sandown Road). There is neither public water nor public sewer service in Fremont.

Map E shows two areas along the Exeter River in Fremont which have a high concentration of subsurface sewage disposal systems. Fremont's former landfill is also depicted. These areas exhibit a potential threat to the Exeter River.

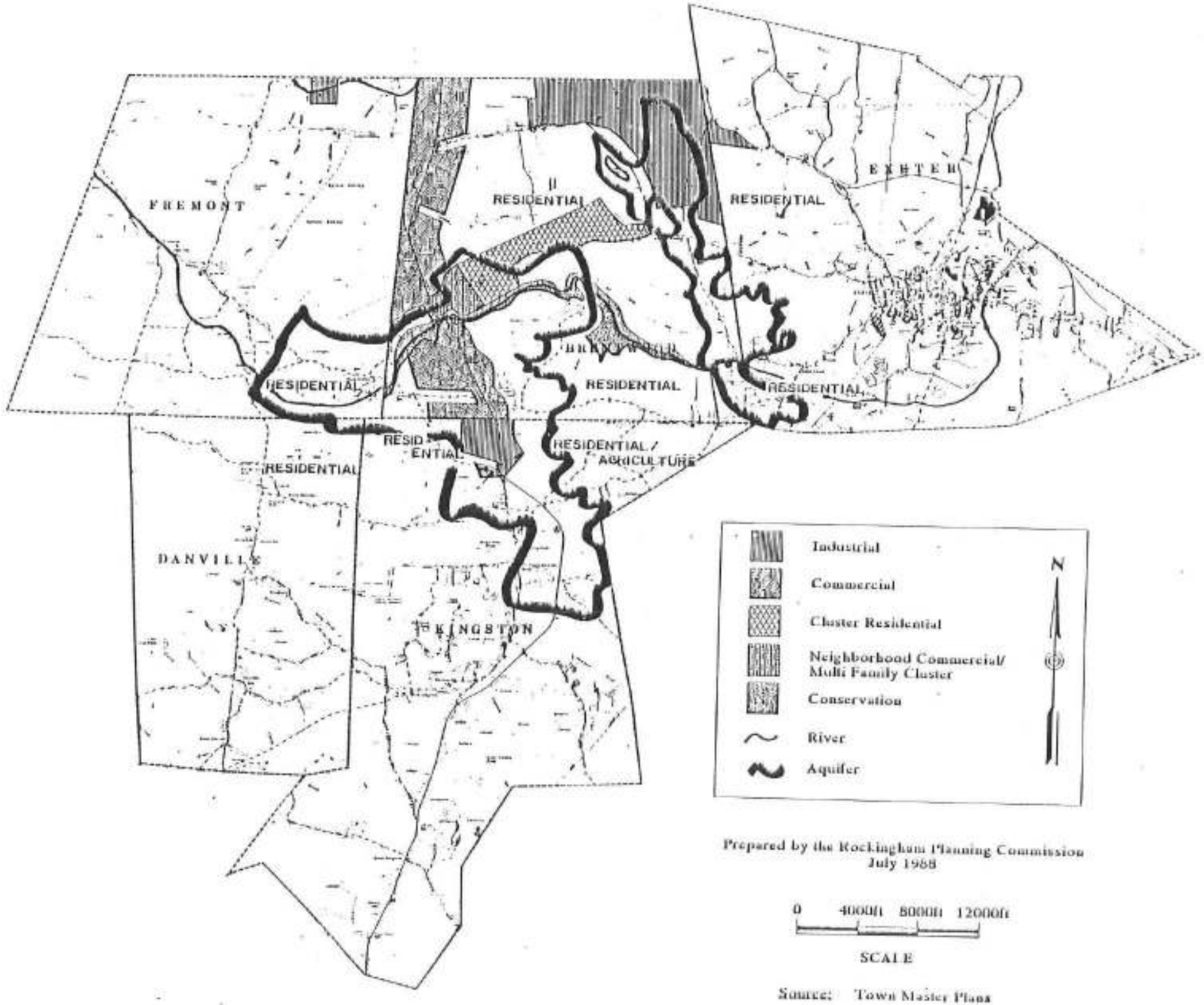
A short segment (about 2000 feet) of the Piscassic River flows through Brentwood in the northwestern-most corner of Town. There are no identified potential threats to the Piscassic River in Fremont.

b. Future Potential Pollutant Sources

Fremont's Master Plan promotes the protection of the Exeter River and the Piscassic River. The Master Plan's Future Land Use map describes the corridor surrounding the Exeter River and the Piscassic River as "Land Unsuitable For Development", because of poor soils and flooding. However, a portion of the Piscassic River runs through an area planned as a light industrial district. Without careful siting and control of a light industry (e.g., food packing, printing, electronics assembly), surface

Generalized Future Land Uses

Map G



Source: Town Master Plans

runoff and process wastes can present a potential threat to the water quality of an abutting river.

Nonetheless, Fremont is well prepared for protecting its surface waters by having a Wetland and Watershed Protection ordinance which prohibits building within 150 feet of the Exeter and Piscassic rivers.

Aside from this ordinance, it is difficult to identify threats from future development based on Fremont's zoning because land use districts (i.e. residential, commercial, or industrial) are not established.

2. Groundwater

a. Existing Potential Pollutant Sources

Brentwood's aquifers extend into Kingston, Danville, Fremont, and Exeter. The aquifer areas contained within these four towns consist primarily of undeveloped woodlands and low-density residential development. None of these towns have public water nor public sewer service, except for Exeter which has a public water line that runs close to the eastern aquifer boundary (almost to the Cross Road/Powder Hill Road intersection in Exeter).

The Town of Kingston has the greatest impact on Brentwood's aquifer located in the southwestern part of Town. According to the Waste Site Inventory (previously cited), Kingston has three potential threats located off of Route 125 and within 0.5 miles from the Brentwood Town line:

1) The Kingston Landfill, which is commercially operated and provides disposal service for eleven towns. The landfill is unlined and hydrogeologic studies have been initiated to determine the extent, flow direction, and severity of groundwater contamination;
2) An abandoned dump - which operated for more than 50 years; and
3) The Magnusson septage disposal facility, which closed in 1986. This facility began operation in 1966 and consisted of dual lagoons at the present landfill site. The lagoons had a combined septage disposal capacity of 3,000 gpd and served 7 communities.

The Town of Exeter had two potential threats identified in the Waste Site Inventory, both located off of Route 111 in the southwestern part of Town:

1) A concentration of subsurface sewage disposal systems for a seasonal camping area; and
2) The Exeter Landfill - one-third of which is unlined - and no longer used. The remaining two-thirds of the landfill area is clay-lined and leachate-controlled. This site is leased, and is used for Exeter-generated wastes only. The Exeter Landfill has been estimated to have 5-8 years of remaining life.

These potential threats exist within Brentwood's eastern aquifer, but are located in Exeter across from the Exeter River. At present, any landfill leachate or sewage flowing toward Brentwood is intercepted by the Exeter River. However, if Brentwood placed wells in this area, the resulting flow gradients from pumping could cause groundwater to flow past the River into Brentwood.

The only potential threats not cited in the Waste Site Inventory are the two gravel pits located in the northern portions of Danville and Kingston.

b. Future Potential Pollutant Sources

Future land use information for aquifer areas extending beyond Brentwood's boundaries is based on the master plans and zoning ordinances of Danville, Exeter, Fremont, and Kingston. The areas of these towns which contain the "Brentwood" aquifers are zoned as residential, and are recommended to continue as such by their master plans. A portion of the aquifer area in Kingston is presently zoned as Industrial, which is cited in Kingston's Future Land Use map.

Point Pollutant Sources

In May 1988, the Rockingham Planning Commission reviewed public files, maintained by the New Hampshire Department of Environmental Services, in order to locate potential point pollutant sources in Brentwood. The findings are as follows:

A. The Rockingham County Complex is the only use in Brentwood that has been issued a permit under the National Pollutant Discharge Elimination (NPDES) for surface water discharges. The County Complex, located on North Road, consists of a farm, a correctional facility, a nursing home, and various County offices. The location of the Complex, denoted by a square symbol, is shown on Map E. This site's wastewater treatment plant is composed of screening, separation of floatables and settleable solids, a clarification digester, a trickling filter, an aeration lagoon, and a chlorination chamber. In 1980, this facility discharged 15,147,500 gallons of treated municipal wastes into Ice Pond Brook, which has a Class B water quality rating. No discharge is allowed during the summer months because of the Brook's low flow. (See the "Public Waste Water Treatment" section herein for further discussion.)

B. No permits have been issued in Brentwood for a groundwater discharge in accordance with the NH Code or Administrative Rules, Part Ws 410.

Underground Storage Tanks

As of November, 1987, the NH Department of Environmental Services has identified twenty-two (22) active underground fuel storage tanks, at nine locations throughout Brentwood. Five of the storage tanks have capacities less than 1,100 gallons.

Detailed data relative to tank location (by street address), owner's name, tank number, capacity, type of product stored, and the tank's age is presented in

Appendix III, "Inventory of Underground Storage Tanks". The underground storage tanks within Brentwood are single-walled and have no leak detection systems; and all but one are constructed of asphalt-coated steel. The Town's newest tank, owned by Bayside Distributing, Inc., is constructed of steel that has been cathodically-protected, and coated with an epoxy resin.

Early in 1987 the Planning Board approved a site plan for a service station located on Route 101, approximately 1500 feet west of the Brentwood/Exeter boundary. No construction has commenced since approval, however.

No other underground storage tanks have been proposed, based on Planning Board files for nonresidential development, as of June 1988.

IV. ASSESSMENT OF GROWTH IN DEMAND FOR WATER

Projected Growth in Demand for Water

In June 1987, the Water Management Bureau, of the N.H. Department of Environmental Services' Water Resource Division, initiated the Water User Registration and Reporting Program. The objective of the program is to gather accurate data on the major uses of the State's water and the demands placed upon aquifers, streams, and rivers. To accomplish this objective, all facilities which use an average of 20,000 gallons (or more) of water per day must register with the Division.

In March 1988, the Bureau stated that the water users reporting information relative to the Town of Brentwood would not be available until August 1988. This information is an important component in estimating Brentwood's existing and future water demand (especially for distinguishing the demand among the residential, industrial, commercial, agricultural, and institutional sectors). This data should be incorporated into this section as it becomes available.

The lack of detailed data on water usage makes it extremely difficult to quantify water consumption and to identify changing trends in water use. An attempt was made to calculate the gross daily consumption from residences using household and population data published by the N.H. Office of State Planning. In 1986, Brentwood's estimated population was 2,382 persons with approximately 3.01 persons per household; which translates into 791 households. Assuming that the average household contains three bedrooms, and using the standard of 150 gpd per bedroom (source: "Subdivision And Individual Sewage Disposal System Design Rules", N.H. DES, Water Supply and Pollution Control Division, April 1987), Brentwood residences used 355,950 gallons of water per day in 1986. The same calculation was used to project residential water demand for the year 2000. With a projected population of 4,082, an average household size of 2.70 persons, and 1,512 households, Brentwood residences will use 680,400 gpd during the year 2000.

The water demand for the non-residential sectors will be entirely dependent upon what types of commercial or industrial uses locate within Brentwood, and whether or not they are water-intensive uses. At this point, however, it is assumed that the residential water demand will account for the majority of Brentwood's water usage during the next 10 to 20 years. During this time, the bulk of Brentwood's water demand will be met through the use of private wells.

The Rockingham County Complex community water system presently serves the largest area in Brentwood, as depicted on Map D. This main well now provides 86,000

gpd to its users, and has an estimated yield of 288,000 gpd. Thus, the County Complex has the water supply capacity to increase its service area.

In towns without municipal water lines, residential cluster developments are typically served by on-site community water systems. Map G shows an area along Route 111A in Brentwood that is planned to allow for residential cluster development. Therefore, this part of Brentwood will likely be served by various community water systems in the future.

In summary, it is emphasized that during the next 10 to 20 years more information should be gathered regarding the type of land uses occurring in Town, and their respective demands on water. This information may warrant new assumptions as to Brentwood's future water demands.

V. DESCRIPTION OF THE INFRASTRUCTURE

A. Septic System Usage

Using 1986 OSP population estimates, approximately 1,982 residents are served by septic systems. This number does not include the estimated 400 residents served by the Rockingham County Complex treatment plant. (Brentwood's Health Officer knew of no cases of septic system failures and/or cases of well contamination in Town.)

Brentwood has a high potential for growth in its number of septic systems. Given the expense of wastewater treatment facilities, the reduction of federal matching funds for facility construction and the diffuse development pattern in Brentwood, it is probable that all future development (during the next 10-20 years) will be served by septic systems.

Brentwood's zoning prohibits septic system construction in areas where at least one of the following conditions apply: 1) within 75 feet of a wetland soil; 2) where the seasonal high water table is within 12 inches of the ground surface; and 3) on a slope of 15% or greater.

Brentwood's future land use map shows the area surrounding the Exeter River being planned as "Conservation". This area would most likely exclude septic systems as well.

Soil Potential Ratings

In April 1982, the USDA Soil Conservation Service (SCS) and the Rockingham County Conservation District (RCCD) developed a manual entitled: "Soils Information For Resource Planning - Brentwood, New Hampshire" (April 1982). This manual provided guidelines for land use based on soil types.

In using national standards, however, 38 out of Brentwood's 39 soil types received a "severe" rating for septic system development. (The Charlton soil series (symbols 62 and 63) with slopes 1-15%, received "slight" and "moderate" ratings.) In fact, there were only a few soils throughout Rockingham County that were not classified as having "severe" limitations for septic system development. This situation prompted the RCCD and the SCS to develop a more meaningful set of land use guidelines based on soil types.

In May 1987, the "Soil Potentials for Development - Rockingham County" manual was published. Five soil potential classes were provided: very

high, high, medium, low, and very low. Low potential is assigned to those soils having severe soil limitations, with costs of design measures extremely high or prohibitive.

Map H, "Soils Potential for Septic Systems", depicts the general areas of Brentwood which have soil potentials that are low and very low for septic system development. Soils with low potential were mapped because they had limitations due to steep slopes or high water tables (as well as high shrink-swell properties, short depths to bedrock, and stoniness). As previously mentioned, Brentwood's zoning ordinance prohibits septic systems in soils with steep slopes (15% or greater) or with high water tables (12 inches or less).

B. Solid Waste Disposal

The Town of Brentwood currently has no solid waste disposal facility. Brentwood residents rely on the Kingston Landfill for trash disposal. Even though there is some private curb-side pick-up, most trash is individually delivered to the landfill.

The Kingston Landfill, located off of Route 125 near the Brentwood/Kingston town line (see Map E), is approximately 50 years old. As described earlier, the landfill is unlined, and hydrogeologic studies have been initiated to determine the directional flow and concentration of leachate. The landfill consists of separate disposal areas for refuse and bulky wastes. The site is not constrained by the lack of capacity for the near future, however, the owner/operator has indicated an intention to close the facility by 1990.

C. Public Water Supply

Map D shows the location for 9 public water systems, all of which draw from groundwater. Of these systems, only the Rockingham County Complex is considered to have a community water system as defined by the N.H. Water Supply Engineering Bureau. Only community systems undergo regular testing for water quality data.

The Complex's water system is comprised of two gravel-packed wells with pumping capacities of greater than 200 gpm. One well was developed in 1975 and the other well was developed in 1985. Before coming on line, the latter well was pumped at 450 gpm (648,000 gpd) for 7 days with minimal drawdown (Source: John Harnden, Rockingham County Complex, water system operator; June 1988).

These wells are tested monthly for Total Coliform and have consistently contained a colony count of zero. Thus, the water does not require treatment (chlorination) to be potable. The most recent comprehensive water quality data for the main well of the Complex were derived from samples taken in August 1985. All contaminant concentrations were below the Maximum Contaminant Levels (MCLs), established by the Safe Drinking Water Act, except for Manganese which was found to be 0.15 mg/l (MCL = 0.05 mg/l).

BRENTWOOD



SCALE: 1 inch = 1000 feet

LEGEND

STATE & TOWN ROADS

POWER CLOSES PUBLIC TO GATES & RAMP

UNACCEPTED ROADS

POWER LINE RIGHT OF WAY

Soils Potential for Septic Systems

Map H

Low Potential

Very Low Potential

Prepared by the Rockingham Planning Commission
July 1988

Sources: Town of Brentwood, Rockingham County, N.H., Soils Map; U.S. Department of Agriculture - Soil Conservation Service, April 1982.

Soils Potentials for Development - Rockingham County; U.S. Department of Agriculture and Rockingham County Conservation District, May 1987.

The service area for the wells of the Complex is shown on Map D. The system serves 290 hospital clients, 500 employees, and 100 inmates. The entire supply system is metered for monitoring purposes only.

In 1987, the minimum, average, and maximum usage of water from this system was 62,000, 80,000, and 95,000 gpd, respectively. (Source: The N.H. Water Supply and Pollution Control Division's manual entitled: "Public Water Supplies - Facilities and Policy Summary, 1983"; updated as of 11/87.) Since each of these wells can yield more than 288,000 gpd, it is safe to assume that this system will meet estimated future demands during the next ten years.

Other pertinent facts are as follows:

1) The water system's distribution piping is constructed of ductile iron and PVC.

2) The complex presently employs a leak detection program.

3) One 500,000 gallon elevated, steel tank provides storage and pressure for this water system. It is estimated that at peak use, this tank will provide 5 days of storage.

4) The main system provides fire protection (via sprinklers/hydrants) to the jail facility only. A nearby pond (un-named), which feeds into Ice Pond Brook, supplies the other buildings with water for fire protection.

There is presently a proposal for building an addition to the jail facility to house an additional 100 inmates. This construction is projected to take place at some point during 1990-91.

D. Public Waste Water Treatment

In January 1982, Wright-Pierce drafted a report entitled: "Wastewater Treatment Facilities Plan - Rockingham County Home Complex, Brentwood, New Hampshire." This plan was submitted to and approved by the N.H. Water Supply and Pollution Control Division. The following description of the Complex's treatment plant is based upon the Wright-Pierce report.

The wastewater treatment facility at the County Complex was constructed in 1957 and modified in 1974. The modifications involved the construction of a 5.5 million gallon storage lagoon in order to allow for treated sewage to be stored when Ice Pond Brook was at low flow (less than 0.28 cfs). The lagoon is able to store an average flow of 60,000 gpd for 90 days, or 37,000 gpd for 150 days.

The treatment plant presently has two potential problems which warrant further investigation:

Despite being called for in the specifications for lagoon construction, a synthetic membrane liner was not installed. This has presented concerns during recent years over possible lagoon leakage. The other potential problem concerns the sludge that is periodically removed from the clarigester and placed on a sludge drying bed. The bed is underdrained, and sludge leachate is suspected to discharge directly into Ice Pond Brook.

The entire treatment plant is limited by secondary clarification (51,000 gpd) in terms of process loading and by the storage lagoon capacity (37,000 gpd) hydraulically.

In 1980, an annual average of 41,500 gpd of treated waste water was discharged into Ice Pond Brook. Because of low flows, there was no discharge for a total of 130 days. Thus, the actual average daily discharge was 64,600 gpd. In 1979, the annual and actual average discharges were 51,100 gpd and 76,400 gpd, respectively. Recent monitoring results indicate that the mass of Biochemical Oxygen Demand (BOD, measured in pounds) has often been above the limits set by the 1986 NPDES permit. These events typically occur when the storage capacity of the aerated lagoon is exceeded.

In order to address this problem, the N.H. Water Supply and Pollution Control Division is studying the feasibility of constructing a tertiary treatment system. Tertiary treatment would further reduce phosphorus, suspended solids, and BOD from the effluent being dischared to Ice Pond Brook. By having cleaner effluent, there will be less impact to the Brook during low flow periods. Consequently, the minimum stream flow limit can be reduced, which will increase the number of discharge days to the Brook, and ultimately reduce the storage burden of the aerated lagoon. Construction of this system may begin as soon as the spring of 1989.

VI. DESCRIPTION OF EXISTING PROGRAMS AND POLICIES

Each ordinance and regulation in Brentwood was reviewed for the purpose of identifying the elements of each which have the potential to impact on any of the following eight water resource parameters (WRP):

1) Erosion and sedimentation;
2) Surface water flows;
3) Groundwater recharge;
4) Management of existing and potential contaminant sources;
5) Flood storage;
6) Encroachment on wetlands;
7) Nutrients levels; and
8) Wildlife and fisheries habitat.

Zoning Ordinance

Sanitary Protection (Article III, Section 6): These provisions regulate the placement of septic systems by requiring setbacks from wells and neighboring dwellings. This pertains to WRP #4 by managing potential contaminant sources (namely septic systems). Potential nutrient levels (WRP #7) in ground and surface waters may also be reduced through this provision.

Miscellaneous (Article III, Section 7): No water can be conveyed outside of the Town without a permit. This rule regulates potential surface water flows and/or groundwater recharge (WRP #2 and 3). In addition, storage, burial, or dumping of waste material is not permitted. This regulates potential contaminant sources (WRP #4).

Performance Standards (Article V, Section 2): "No discharge to...water...of any toxic or noxious matter in such quantity as to be detrimental to or endanger

the public health...shall be permitted." This regulates potential contaminant sources (WRP #4).

Floodplain Regulations (Article VII-A): This section requires that there shall be no encroachment, from fill or new construction, that results in any increase of the 100 year flood levels. This rule protects Brentwood's flood storage areas (WRP #5).

Wetlands Ordinance (Article VII-B): This section restricts the use of and encroachment on local wetlands which have been identified as poorly or very poorly drained using the standards of High Intensity Soils mapping for New Hampshire. This ordinance is based upon a model ordinance developed by the Soil Conservation Service. Selected objectives contained in this ordinance and relating specifically to water resources are as follows:

a) Prevent the development of structures and land uses on wetlands which will contribute pollution to surface and groundwater by sewage, toxic substances, or sedimentation (WRP #1,4,6, and 7);
b) Prevent significant changes to wetlands which provide flood protection, provide filtration of water flowing into ponds and streams, augment stream flow during dry periods, and are connected to the ground or surface water supply (WRP #1,2,3,5, and 6);
c) Protect wildlife habitats, maintain ecological balances, and enhance ecological values (WRP #6 and 8); and
d) Protect potential water supplies and existing aquifers and recharge areas (WRP #3 and 4).

The Brentwood Wetlands Ordinance has the potential to impact each of the eight water resource parameters.

Aquifer Protection Ordinance (Article VII-C): This ordinance prohibits certain land uses, which are potential contaminant sources, within the primary and secondary recharge areas of designated aquifers (WRP #3 and 4).

Building Ordinance

Restrictions (Article I, Section 2.G,H): Any sewage disposal facilities shall meet all State and local requirements; such as a 75-foot setback from wells, public waters, and dwelling units (WRP #4 and 7).

Floodplain Regulations (Article I, Section 2.N): To receive a building permit within Brentwood's flood hazard areas, the Building Inspector must determine that a building site is safe from flooding. Any new construction shall be designed to prevent flotation, collapse, or lateral movement. Septic systems shall be designed to minimize or eliminate the mixing of sewage and flood waters (WRP #4,5, and 7).

Septic System Ordinance

This ordinance regulates potential contaminant sources by providing performance standards for the siting and construction of septic systems. Nutrient levels of associated water resources are maintained as well (WRP #4 and 7).

Subdivision Regulations

Authority and Purpose (Section 1.A): This section specifies that established engineering standards be used for the installation of sewer, storm drainage, and water facilities (WRP #1,2,4, and 7).

Formal Application Process (Section 3.B): This section requires a bond or other surety for drainage improvements, public water, and sewer lines (WRP #1,2,4, and 7).

General Requirements (Section 4): Provide adequate proof that each lot can accommodate a septic system, and that the lots have been approved by the N.H. Water Supply and Pollution Control Division (WRP #4 and 7).

Format of the Plat (Section 5): All water courses, ponds, standing water, water mains, sewers, culverts, and drains must be shown on the plan (WRP #2,4, and 7).

Minimum Requirements for Septic Systems (Section 7): This regulation controls potential contaminant sources by providing performance standards for the siting and construction of septic systems. Nutrient levels in associated water are maintained (WRP #4 and 7).

Site Plan Review Regulations

Specifications for Site Review (Section B,D): Grading, paving, and storm drainage must be designed so as to pevent erosion/sedimentation of streams, or damage to abutting properties and roads (WRP #1 and 2).

The design of water supply and sewage disposal facilities must meet State and local regulations (WRP #4 and 7).

All water courses, water bodies, and drainage facilities must be shown on the plan (WRP #2).

All existing and proposed water supply and sewage facilities must be shown on the plan (WRP #4 and 7).

Specifications of Roads and Streets

Drainage (Section 4): This section provides guidance and requirements for drainage studies, and design criteria for drainage facilities (WRP #2).

Driveway Regulations

Contents of Application and Permit (Section 3): Describe any drainage structures (WRP #2).

Excavation Regulations

Submission Documents (Section III): Provide groundwater table elevations, and the location of any USGS-identified aquifers (WRP #3) as well as lakes and streams (WRP #2).

Project Site Requirements (Section IV): No excavation project shall substantially damage any aquifer. Excavation within six feet of seasonal high water is prohibited (WRP #3 and 4).

Health Ordinance

The Town of Brentwood does not have a health ordinance per se. However, there are many ordinances and regulations which pertain to public health, i.e. standards for water supply and septic system design, placement and construction. In addition, the Town has an appointed Health Officer who assists in the administration of these local health-related laws, as well as State regulations in accordance with RSA 147.

VII. ANALYSIS

Analysis Regarding Water Supplies

As discussed in the section IV, entitled "Assessment of Growth in Demand for Water", virtually all of Brentwood's water supply is derived from individual private wells. It is assumed that this type of supply will meet the Town's demand for at least the next ten years.

The public water system for the Rockingham County Complex is the only one of nine considered to be a "community" system. As previously stated, this system will meet future demands during the next ten years and, barring any unforseen contamination, no system upgrade or expansion will be required. (See Section V.C for further discussion.)

Analysis Regarding Other Water Resource Purposes

a) **Discharges:**

1) As previously discussed in Section V.D, the N.H. Water Supply and Pollution Control Division is using the waste assimilation capacity of Ice Pond Brook to determine the feasibility of constructing a tertiary wastewater treatment plant for the Rockingham County Complex.

   Section V.D also described two potential problems with the Complex's treatment plant. Further study should be conducted to determine the extent of: 1) wastewater leakage from the plant's lagoon; and 2) discharge from the sludge drying bed to Ice Pond Brook.

2) The hydrogeologic study for the Kingston Landfill site (as described in Section IIIB.2.a) warrants close scrutiny. This site contains three waste facilities - a closed dump and septage lagoons, and an operating landfill. All three are unlined and have the potential for producing large volumes of underground leachate. It is important for the townspeople to know if any leachate travels into Brentwood, thereby putting private wells at risk of contamination.

b) **Recreation:** In 1977, the N.H. Office of State Planning published a study entitled: "Wild, Scenic, and Recreational Rivers for New Hampshire." Out of 67 other rivers being classified throughout the State, the study classified the Exeter River as a "Recreational River". The study defined recreational rivers as those: which provide outstanding recreational

opportunities in natural surroundings. These rivers should be protected for their natural qualities which can provide for a wide range of active and passive outdoor recreation activities. Recreational rivers should: be readily accessible; have high water quality; have enough water to provide for fishing and canoeing; and be at least five miles long.

Fishing, canoeing, and swimming are the most common recreational uses of the Exeter River in Brentwood.

c) **Wetlands:** There are several different types of Wetlands, which include: marshes, meadows, shrub and wooded swamps, and bogs. Wetlands are important, valuable, natural resources and worthy of protection from inappropriate use. They have been found, in general, to provide critical ecological and socially valuable functions, including:

1) provide habitat and reproduction areas for plants, fish and wildlife;
2) help maintain ground and surface water levels;
3) act as flood water storage areas;
4) absorption and filtration of pollutants and sediments (caused by upstream erosion);
5) provide opportunities for recreation and education;
6) visual aesthetics.

The filling of and use of wetlands for building construction not only destroys wetlands and their benefits, but may lead to groundwater contamination as well. Leaching fields constructed in filled areas are likely to be placed too near the seasonal high water table below and to have an inadequate receiving layer for proper treatment of the septic system's effluent.

There is an ongoing need to protect wetlands in Brentwood. Statewide, wetlands are under increasing development pressure due to the depletion of the most developable land. Although the State of New Hampshire has laws and regulations in place (RSA 483-A, administered by the Wetlands Board and RSA 149 8:a, administered by the N.H. Water Supply and Pollution Control Commission), they do not always provide the degree of protection needed. For these reasons, local control over the use of wetlands should remain in effect indefinitely. The Town of Brentwood has recognized the importance of preserving wetlands, and has acted accordingly by establishing a Wetlands Ordinance.

d) **Fisheries:** The Exeter River is the most commonly fished river in Brentwood. Dudley Brook and the Little River also support recreational fishing. Each spring, the N.H. Fish and Game Department stocks the Exeter River with shad, and all three rivers with trout. In addition, the Department occasionally nets fish in Brentwood for inventory purposes. Commonly-occurring fish species include: Yellow Perch, Eastern Chain Pickerel, Common Sucker, American Shad, Largemouth Bass, and Common Sunfish.

Brentwood must safeguard its surface water quality in order to provide the opportunity of sports fishing for present and future townspeople.

e) **Wildlife Habitat:** River, stream, and wetland corridors provide the richest habitat for the greatest number of fish, wildlife, and flora. Fish and wildlife populations cannot succeed within limited habitat confines. Native wildlife must have travel lanes within their range, and waterfowl and other

birds need ground-level nesting habitat. Protection of these linear corridors is essential to the stability of wildlife populations.

Riparian corridors (i.e., shorelands) also contribute much in terms of recreational benefits, i.e. canoeing, hiking, fishing, birding, horse trails, cross country skiing, picnicking, etc. Shorelands are also sensitive due to flooding, erodibility, and proximity to open water. Moreover, soil type and percent slope typically limits the development potential of a shoreland area.

f) **Hydropower:** Brentwood contains one hydroelectric power station, located in the southwestern corner of Town, along the Exeter River (see Map A). The amount of electricity produced at this station is enough to power 25 homes. The electricity is sold to Public Service of New Hampshire. This plant ceases operation during months of low flow (e.g. August, September).

At this time, there are no plans for future hydropower facilities within Brentwood. The hydropower market is not as strong as it was ten years ago (during the height of the nation's energy shortage) because of uncertain markets for electricity, environmental restrictions, and alternative power sources which are more economical.

Harnessing hydropower is not always benign to the fish, animals, and people which use the impacted river. Hydro development can result in the loss of productive habitat, degrade water quality, and cause direct mortality of fish (especially juvenile fish traveling downstream) and other aquatic organisms.

If any hydropower facilities are proposed in the future, no decision should be made by Town officials until a thorough site review and evaluation is performed. The cumulative impacts of hydropower dams along the rivers should also be considered.

g) **Fire Protection:** Brentwood's Subdivision Regulations provide the Planning Board with the option of requiring a developer to conduct a fire safety investigation. The investigation shall determine if a water supply exists on the property which would deliver not less than 800 gpm for at least one hour. The Fire Chief shall consider any engineering data submitted by the developer.

Furthermore, the Planning Board shall consider hydrant locations (not to exceed 1,500 feet to any lot) and fencing for fire ponds.

h) **Conflicting Uses:** The only known potential conflict that exists between competing uses involves the waste discharges of the County Complex and the fisheries habitat associated with Ice Pond Brook. This conflict could be mitigated by upgrading the treatment plant, as discussed in the following section.

Management of Potential Threats

Section III, "Identification of Potential Threats to Water Resources", presents a full discussion of existing and permitted future land uses which pose threats to water resources within Brentwood. The County Complex poses the most significant threat to water resources (Ice Pond Brook) within Brentwood. Three measures are recommended (if practicable) in order to protect the water quality of Ice Pond Brook:

1) Construct a tertiary wastewater treatment facility;
2) Re-circulate and treat the discharge from the sludge drying bed; and
3) Line the storage lagoon to prevent subsurface leakage.

Beyond Brentwood's borders, the Kingston Landfill poses the most significant threat to the Town's water resources (southwestern aquifer). A leachate collection system should be installed if the site's groundwater sampling and analysis program indicates that waste leachate is contaminating or posing an imminent threat to surrounding groundwater leakage.

Management and protection techniques for water resources are described in the following section herein.

VIII. RECOMMENDATIONS FOR NEW OR REVISED POLICIES AND PROGRAMS

Nonregulatory Programs

It is recommended that the Town of Brentwood employ the following nonregulatory programs in order to manage and protect its water resources:

1. Educational and informational programs should be developed in order to provide the general public with an understanding of the operation, proper use, and maintenance of septic systems and leach fields (i.e., regularly pumping out septic tanks, avoiding disposal of hazardous or harmful wastes, etc.) This would likely prevent unnecessary system contamination and failures, thereby protecting surface and groundwater resources.

2. Develop a septic system inspection program, especially for aquifer recharge zones, in order to ensure that these systems are adequately maintained.

3. Continue to promote and participate in the annual Home Hazardous Waste Collection, sponsored by the Rockingham Planning Commission.

4. Establish and begin to appropriate money for a land acquisition fund to be used for the protection of land and water resource conservation areas. There are generally five different methods for protecting these natural areas:

    a) Land Purchase;
    b) Option or Right of First Refusal;
    c) Purchase and Resale;
    d) Bargain Purchase;
    e) Easements - Conservation Restrictions and/or Purchase of Development Rights.

    Conservation funds would enable the Town to act on short notice when a valuable parcel of land is threatened. This land may be of critical importance for protecting significant wetlands, shoreland, wildlife habitat, or recreational areas.

5. The Conservation Commission should also seek land acquisition funding through State and Federal grants (e.g., Trust for New Hampshire Lands, The Land and Water Conservation Fund, and the Pitman-Robertson Fund through the N.H. Fish and Game Department).

6. The Brentwood Conservation Commission should work with people who own land having conservation potential by promoting the tax incentives associated

with the donation of land or easement restrictions. The Current Use Assessment program also provides tax abatements on parcels of 10 acres or more or on "natural preserves" of any size.

7. The Brentwood Planning Board should work with their counterparts in surrounding towns to promote land use planning practices which are mutually beneficial to protect common watersheds, wetlands, and aquifers. Brentwood may choose to develop intermunicipal agreements (pursuant to RSA 53-A) to protect these shared resources.

   The Exeter River Watershed Association (EWRA) is working to achieve this type of intermunicipal collaboration. The EWRA is a nonprofit organization (formed in 1986) whose goal is to "work towards regional cooperation to protect and improve the health of the Exeter River and its Watershed." Since so much of the Exeter River flows through Brentwood, the Town should continue to participate in this organization and their efforts.

8. Develop a program to reduce the amount of road salt used, especially in aquifer recharge areas. The following methods should be employed:

   a) Emphasize mechanical snow removal;
   b) Mix sodium chloride with calcium chloride and/or sand to reduce the total amount of sodium chloride applied;
   c) Periodically re-calibrate salt spreaders so that they apply the correct amount of salt/sand mix; and
   d) Post areas where reduced salting is practiced, which will encourage drivers to reduce speeds and drive more cautiously.

9. Develop a program to inspect and maintain drainage control facilites, (e.g. catch basins and detention ponds, and culverts) throughout Town. If these devices become filled with sediment, they can no longer perform their function.

10. Develop a program emphasizing water conservation. Even though Brentwood has no municipal sewer, using less water may increase the efficiency and useful life of individual sewage disposal systems.

11. Encourage farms to employ Best Management Practices (BMP's) as prescribed by the Soil Conservation Service. BMP's include storage of manure in concrete pits, and more efficient and better timed application of fertilizer and pesticides.

12. Develop a water quality data base for monitoring contamination events in both surface and ground waters throughout Town.

13. The Planning Board should be kept informed by the Rockingham Planning Commission regarding the availability and appropriateness of regional or State water resource data.

The costs of instituting these nonregulatory programs are expected to be variable, but relatively low. For example, any assistance provided by the Rockingham Planning Commission is either at reduced cost or no cost, as part of Brentwood's annual membership in the Commission.

Costs associated with land conservation efforts involving donations of land and easements would involve survey, legal, and recording fees. The outright purchase of these lands or the purchase of development rights would obviously entail substantially greater costs.

These nonregulatory programs could probably be carried out by existing voluntary and paid manpower. It should not be necessary to hire additional personnel to conduct or supervise any of these activities with the possible exception of #2, establishing a septic system inspection program.

Regulatory Programs

The Town of Brentwood enforces a zoning ordinance, a building ordinance, a septic system ordinance, subdivision regulations, site plan review regulations, specifications of roads and streets, driveway regulations, and excavation regulations. All have been reviewed and found to contain provisions specifically pertaining to water resource protection.

The following new or revised regulatory programs are recommended in order to improve and/or enhance existing local water resource management and protection mechanisms:

1. The Aquifer Protection ordinance should be amended to redefine the district boundaries using the area depicted on Map D, "Aquifers and Wells", as the "Stratified Drift Aquifer". Further information (i.e., saturated thickness, transmissivity, etc.) is required in order to determine if Brentwood's southwestern aquifer is viable as a future municipal water supply source; thereby warranting protection under the Town's Aquifer Protection ordinance.

   The Aquifer Protection ordinance should also be amended to include the following provisions or requirements:

   a. Maximum Site Coverage - Impervious areas (e.g., buildings, roads, and parking lots) prevents recharge to the groundwater below. Ten percent is the recommended maximum for residential site coverage; and 10-50% for commercial. If greater than 10%, it should be proven that surface runoff will be controlled, collected, and retained on-site with no degradation to water quality. Use of dry wells to recapture runoff may also be required;

   b. Minimum 3-acre Lot Size - The intent of large-lot zoning is to reduce nitrate loading to groundwater. The majority of urea-nitrates in human wastes are not removed after passing through the soil beneath a septic system's leach field. This is especially true in the more permeable sand and gravel soils which typically overlay aquifer recharge areas;

   c. Strengthen State Septic System Design - Because of the rapid percolation of on-site sewage through sands and gravels, and the potential for nitrate contamination, certain design requirements for septic system construction should be made more stringent. These criteria include: Two feet to seasonal high water table (instead of 6 inches); four feet of natural soil (instead of 3 feet) above bedrock; and strict standards for fill material.

   d. Hydrogeologic Study - For all nonresidential developments and subdivisions greater than three lots, a hydrogeologic study should be performed in order to evaluate the impacts to groundwater within the development parcel and the surrounding land. The groundwater quality beyond the property lines of said site should not be degraded by contaminants such as nitrates, phosphates, bacteria, etc.

Subdivisions of three lots or less may require a study if the site is sensitive due to soils, well locations, etc.

e. Prohibit Uses - Although some uses are currently prohibited, there are other uses which have the potential to contaminate the aquifer as well. These include: industrial uses which discharge contact-type process waters on-site; commercial or industrial use, storage, handling, etc. of hazardous or toxic materials and wastes; underground storage of petroleum products; auto service and repair facilities; junkyards and salvage operations; commercial animal feedlots; and dry cleaning or laundry facilities;

f. Runoff Control - The use of detention basins and dry wells will capture runoff and facilitate groundwater recharge. Grease and oil traps can be used in paved parking areas to prevent subsurface water contamination.

g. Boundary Appeals Process - If there is a dispute over the bounds of the Aquifer Protection District, the Planning Board shall engage, at the landowner's expense, a qualified hydrogeologist to determine the District's proper location on a site specific basis.

h. Conditional Uses - Certain land uses otherwise prohibited within an aquifer area may be permitted as long as certain requirements are met, and the landowner can prove that no contamination will result from operation.

2. Brentwood should adopt a Shoreland Protection Ordinance to insure the proper protection of shorelands and associated water bodies. This ordinance would establish a minimum setback for specific uses from the mean water mark of the Town's primary rivers and streams. The establishment of a minimum standard will promote the following objectives:

1) Provide a safety zone to avoid flood damage;
2) Protect public waters from pollution;
3) Prevent erosion;
4) Conserve and protect aquatic and terrestial habitat associated with riparian areas; and
5) Preserve and enhance those aesthetic values associated with natural shoreland areas.

This type of protection is especially important for the Exeter River, which is used as a public water supply by the Town of Exeter.

3. A Cluster Development ordinance allows a development to concentrate a high density of dwelling units in exchange for committing an adjacent area to common open space in perpetuity. The Town should adopt such an ordinance so that development can be directed away from areas of high aquifer recharge, shorelands, flood zones, and wetlands.

4. Erosion and sedimentation control regulations should be adopted by the Planning Board. These regulations provide standards and guidelines for development planning, for the purpose of controlling erosion and preventing sediment transport to wetlands and streams.

5. Brentwood should develop its own Underground Storage Tank (UST) regulations. Requirements to be considered are as follows:

   a) Require the removal of all abandoned tanks;
   b) Ban all new underground heating oil tanks with a capacity of less than 1,100 gallons. These tanks need not be registered with the N.H. Water Supply and Pollution Control Division, thereby making them difficult to monitor and regulate;
   c) Amend the Site Plan Review regulations to require development plans to identify the location, type, content, and capacity of each proposed inground petroleum and chemical storage tanks in order to maintain a current inventory.

   The N.H. Water Resources Action Project has developed other such guidelines which Brentwood could use to develop and administer a local UST regulatory program (source: "Guidelines for Controlling Underground Storage Tanks", Tools for Community Water Supply Protection, N.H. Water Resources Action Project, 1985, prepared by Sharon P. Francis, N.H. Natural Resources Forum, Sky Farm, Box 341, Charlestown, NH 03603).

6. A State septic system inspector will issue a permit for a system that has been evaluated (before covering) and found to operate properly. Brentwood should grant a certificate of occupancy only after this State permit has been received.

7. Amend the Zoning Ordinance to include a maximum coverage percentage for commercial and industrial lots. This would provide for surface runoff water to infiltrate into the ground and recharge local groundwater supplies.

8. The types of land uses reviewed under the Site Plan Review regulations may require large volumes of water. These uses have the potential to deplete other wells in the area relying on the same groundwater resource for their supplies. Therefore, if a proposed land use requires large water supply volumes, the following information should be required:

   a) The on-site location of the proposed well, its expected yield, pumping duration and quantity (maximum) of water withdrawn;
   b) Subsurface groundwater conditions (e.g., saturated thickness, direction of groundwater flow, etc.);
   c) Location of abutting water supply wells, amount of water being pumped, and maximum capacity needed;
   d) Effect of proposed use on abutting water supplies.

9. Amend the Subdivision and Site Plan Review regulations as follows:

   a) Require that the Aquifer Protection District Boundary be depicted on the development plan;
   b) Promote the use of catch basins designed to trap oil and sediments;
   c) Encourage road designs which require less use of de-icing chemicals (e.g. roads with minimal slope and/or turning radius, etc.);
   d) Require that runoff be retained on-site and that no degradation of water quality shall occur. This will provide for groundwater recharge through the infiltration of retained water. This provision will also safeguard abutting properties from increased flows which can cause flooding and erosion damage.

10. The Brentwood Conservation Commission should consider mapping and documenting prime wetlands as authorized under RSA 483-A:7, and subsequently recommend their adoption as part of the Zoning Ordinance in accordance with RSA 675:3. The State of New Hamshire Wetlands Board is required to give special consideration to prime wetlands during the review of dredge and fill permit applications.

Generally, the cost of preparing proposed amendments to regulations and ordinances is minimal. Technical assistance can be provided at low or no cost by the Rockingham Planning Commission. There would be some expense involved with complying with the statutory requirements for the publication of hearing notices.

Unless the members of the Conservation Commission possess certain technical qualifications relative to the mapping and identification of wetland areas or can obtain voluntary assistance from qualified residents, some funding may have to be budgeted for training or the provision of limited technical assistance.

The Town should not need to hire any personnel for the preparation of the recommended amendments to regulations and ordinances. Limited professional assistance may have to be provided to map and document wetlands for the "prime wetlands" program.

SUMMARY OF WELL COMPLETION REPORT DATA FOR THE TOWN OF BRENTWOOD

	MAP	WELL	NAME	ROAD	LOT	PARCEL	ELEV	RCORP	USE	WSH	TYPE	TOTD	BLKD	CASING	YTH	YTD	YTD	SWL	OVERBURDEN	QC	NOTE
								84/08/11	1	1	1	505.0	30.00		3	0.25	0.25		1-4	2	
	029.0015	3c7-39	D. Dunbar	Bartlett Rd				84/09/12	1	1	1	650.0	28.60	46.00	3	0.50	100.00		1-4	2	
	029.0012	3c7-49	D. Dunbar	Bartlett Rd			130.0	84/09/27	1	1	1	100.0	46.00	55.00	3	1.00	30.00	8.00	1-4	2	
27 #	029.0019	156-19	D. Tash	Bartlett Rd.			130.0	84/05/22		1	1	200.0	6.00	95.00	3		20.00		3	2	
4	029.0003	377-39	King	Brentwood Forest				85/09/05	1	1	1	178.0	80.00		3	0.25	35.00		1-4	2	
	029.0046	315-108	G. Fink	crn of Haig Rd				87/08/24	1	1	1	180.0	40.00	71.00	3	0.17	30.00		2	2	
	029.0105	3c7-45	J. D'Alessio	Deerhill Rd	5-2	12.2	140.0	84/08/23	1	1	1	150.0		40.00			4.00			3	
1 #	029.0015	406-81	P. O'Connor	Deerhill Rd				87/09/10	1	1	1	180.0	14.00	21.00	3		75.00		1	2	
	029.0102	377-498	R. Scarcini	Doetown Rd				85/07/22	8	6	2	60.0	55.00						1-14-4-3	1	CM:TYPE(2)=auger
	029.0075	7c7-B4A-1	USGS	Dudley Dr				86/07/20	1	1	1	302.0	40.00	67.00	3	1.50	2.50		2	2	
	029.0066	406-476	B. Raymond	Dudley Rd			150.0	84/05/11	1	1	1	300.0	45.00	53.00	3	1.00	12.00		1-4	2	
17 #	029.0018	156-4	D. Rosen	Dudley Rd				86/07/29	1	1	1	220.0	60.00	75.00	3		5.00		1-4	2	
	029.0087	377-496	J. Sisemore	Dudley Rd			120.0	84/11/19	1	1	1	223.0	85.00	105.00	3	1.00	30.00		1-4	1	YL
31 #	029.0008	457-84-17	Allison	Flanders Dr				85/09/06	1	1	1	205.0	42.00		3	0.50	15.00		1-4	2	
	029.0047	315-109	G. Fink	crn Haig Rd				85/12/20	1	1	1	384.0	45.00	91.00	3	0.50	4.50		1-4	2	YL
	029.0044	315-165	G. Finke	Haig Rd				85/03/15	1	1	1	305.0	52.00	96.00	3		25.00		1	2	
1	029.0027	315-12	G. Finche	Haig Rd			110.0	85/03/15	1	1	1	255.0	76.00	111.00	3		20.00		1	2	YL
30	029.0026	315-25	G. Finche	Haig Rd			100.0	85/07/23	8	6	2	45.0	39.50						1-4	1	CM:TYPE(2)=auger
	029.0076	7c7-B4A-2	USGS	Haigh Rd			140.0	85/06/13	1	1	1	120.0	20.00	31.00	3		12.00		14	1	
17 #	029.0024	377-204	I. Cross	Kadra Rd				87/01/09	1	1	1	650.0	58.00	71.00	3	1.00	4.00	20.00	2	2	YL
	029.0085	457-87-3	W. Michaud	Lake Rd	1	19.5		85/10/10	1	1	1	330.0	110.60		3	1.50	10.00		1	2	
	029.0048	406-316	Currie Ent	Lake Rd				85/10/16	1	1	1	420.0	103.00	110.00	3	0.75	10.00		2-4	2	
	029.0063	406-318	Currie Ent	Lake Rd				85/10/09	1	1	1	120.0	90.00		3	1.00	40.00		2	2	
	029.0069	406-315	Brentwood Farms Inc	Lake Rd			130.0	85/06/19	1	1	1	300.0	16.50	32.00	3	1.00	3.00		2	2	
34 #	029.0023	457-85-34	J. Greaves	Mill Rd			130.0	85/06/20	1	1	1	300.0	22.00	33.00	3	1.00	4.00		2	2	YL
38 #	029.0022	457-85-35	J. Greaves	Mill Rd			130.0	84/10/31	2	2	1	550.0	15.00	30.00	2	32.00	8.00	14.00	4	1	YL
1	029.0011	367-65	3 Ponds Campground	North Rd				86/05/16	1	2	1	400.0	5.00	21.00	3	0.50	2.00	15.00	3	2	YL
	029.0068	205-320	Epping Pump Co Inc	North Rd										10.00				5.55	12-14-3	1	
	029.0081	7c7-B4A-27	USGS	North Rd			132.0	85/09/12	8	5	2	12.0		10.00				4.29	4-12-124	1	SM
3	029.0010	313-406-306	Rockingham County Farm	North Rd			110.0	84/09/17		1	2	43.0		43.00	2	144.00	200.00	12.00	4	3	YL
2	029.0014	367-64	3 Pond Campground	North Rd			150.0	84/11/08	2	2	1	220.0	14.00	30.00	3	32.00	10.00	11.00	14	1	
	029.0108	156-101	R. Nowalski	crn North Rd Rte 125				87/09/08	1	2	1	160.0	14.00	20.00	3	1.00	7.00		3	2	
	029.0088	406-503	D. Henderson	Northrope Rd		13		86/08/17	1	1	1	202.0	57.00	63.00	3	0.75	75.00		3	2	
	029.0046	144-4	J. Savelo	Northrup Dr		16		84/05/12	1	1	1	355.0	57.00	76.00	3	3.00	12.00	53.00	1-4	2	
	029.0095	457-86-193	W. Howell	Northrup Dr	1.2	917		84/10/27	1	1	1	270.0	44.00	72.00	3	1.00	50.00		1	2	YL
	029.0098	457-87-43	L. Roy	Northrup Dr		20		87/06/16	1	1	1	250.0	49.00	62.00	3	1.00	15.00		124	2	
	029.0096	406-778	Attitash Assoc	Northrup Dr		18		87/03/17	1	1	1	202.0	58.00	80.00	3	1.50	10.00		12	2	
	029.0010	457-143-87	Airking Ind	Northrup Dr	1-2	35		87/09/18	1	1	1	400.0	57.00	72.00	3	1.00	15.00		124	1	YL
	029.0051	177-330	I. Cross	Old Danville Rd				85/10/04	1	1	1	160.0	48.00		3		10.00		2	2	
36 #	029.0009	177-97	Persson	Old Gordon Rd			120.0	84/09/21	1	1	1	200.0	40.00	85.00	3		8.00		1-4	2	
	029.0097	406-772	R. Swasey	Old Gordon Rd				87/03/13	1	1	1	202.0	76.00	90.00	3	1.00	15.00		12	2	
32 #	029.0028	457-85-44	L. Roy	Old Gordon Rd			130.0	85/07/11	1	1	1	525.0	80.00	94.00	3	1.00	4.00		1	1	YL
	029.0052	406-331	F. Marreau	Old Gordon Rd				85/11/04	1	1	1	202.0	74.00		3	1.00	50.00		2	2	
35 #	029.0002	177-18	Roy	Old Gordon Rd			120.0	84/04/23			1	280.0	10.00	110.00	3		4.00		2	3	
	029.0079	7c7-B4A-3	USGS	old Gordon Rd			125.0	85/07/25	8	6	2	63.0	61.00						1-4	1	CM:TYPE(2)=auger
41 #	029.0036	457-5	Brown	Old Rte 125			150.0	84/10/09	1	1	1	275.0	5.00	20.50	3	0.50	8.50		1	1	YL
42 #	029.0025	20-35	M. Barry	Pickpocket Rd			150.0	85/03/28	1	1	1	450.0	151.00	161.00	3		50.00		12	2	
	029.0100	457-87-51	J. Turner	Pickpocket Rd	54201	2		87/05/05	1	1	1	250.0	45.00	61.00	3	1.00	30.00		2-1-4	1	YL
	029.0082	7c7-B4A-28	USGS	Pine Rd			141.0	85/09/16	8	5	2	36.8	26.00	30.00				19.98	12-124-1-14-3	1	
	029.0107	367-63	R. Fuller	Pine Rd	5.2	5		87/09/27	1	1	1	440.0	80.00	101.00	3	0.25	100.00		12	2	
	029.0084	7c7-B4A-30	USGS	Pine Rd			131.0	85/06/24	8	5	2	40.0		32.50				5.52	12-1	1	
	029.0083	7c7-B4A-29	USGS	Pine Rd			131.0	85/09/17	8	5	2	29.8		29.60				6.46	12-1-14-3	1	
20	029.0017	156-11	M. Floyed	Prescott Rd			150.0	84/02/26	1	2	1	70.0	36.00	42.00	3	1.00	30.00	10.00	1-4	2	
21	029.0007	457-84-4	Noland	Prescott Rd			150.0	84/11/16	1	2	1	147.0	44.00	61.00	3	1.00	20.00		1	1	YL
	029.0055	156-51	L. Tibbetts Jr	Prescott Rd				85/09/04	1	2	1	125.0	22.00		3	1.00	5.00	15.00	3	2	

MAP ID	WBAN	WELL #	NAME	ROAD	MAP	PARCEL
	029.0089	436 86-136	F. Pinette	Powell Rd		2
	029.0069	406-408	JM Britton Co	Powell Rd		
	029.0045	313-1	Town of Exeter	off Rte 101		
1	029.0038	313-M1	Town of Exeter	Rte 101		
6	029.0030	313-103A	Town of Exeter	Rte 101		
16	029.0041	313-101	Town of Exeter	Rte 101		
	029.0034	313-107TW	Town of Exeter	Rte 101		
	029.0029	313-105	Town of Exeter	Rte 101		
11	029.0040	313-M3	Town of Exeter	Rte 101		
15	029.0035	313-104TW	Town of Exeter	Rte 101		
1	029.0042	313-101A	Town of Exeter	Rte 101		
	029.0059	1001-M-103	Brentwood Prop Investors	Rte 101		
14	029.0032	313-105	Town of Brentwood	Rte 101		
5	029.0037	313-110	Town of Brentwood	Rte 101		
	029.0058	1001-M-104	Brentwood Prop Investors	Rte 101		
4	029.0039	313-M2	Town of Exeter	Rte 101		
	029.0056	1001-M-101	Brentwood Prop Investors	Rte 101		
	029.0057	1001-M-105	Brentwood Prop Investors	Rte 101		
	029.0060	1001-M-102	Brentwood Prop Investors	Rte 101		
13	029.0043	313-TW102	Town of Exeter	Rte 101		
12	029.0036	313-109	Town of Brentwood	Rte 101		
	029.0101	177-443	L. Lafave	Rte 101		
14	029.0055	313-108	Town of Brentwood	Rte 101		
5	029.0031	301-106TW	Town of Exeter	Rte 101		
	029.0074	767-BAA-26	USGS	Rte 107		
	029.0095	406-757	Jenco	Rte 107		
	029.0094	406-753	BCG Corp	Rte 107		
	029.0054	65-85-22	P. Flewelling	Rte 111A		
	029.0109	156-96	J. MacDonald	Rte 111A		
25	029.0020	156-18	W. Sipe	Rte 111A		
	029.0060	767-BAA-4	USGS	Rte 111A		
	029.0112	457-142-87	T. Wiscarve	Rte 111A	2	
	029.0091	156-80	R. Fason	Rte 111A		
	029.0067	567-74	E. Levesque	Rte 111A		
	029.0090	156-70	C. Galleger	Jct Rte 111A & Rte 125		
21	029.0005	423-349-R4	Gigante	Rte 125		
22	029.0001	3-9	Noul	Rte 125		
	029.0106	367-42	T. Bouchard Jr	Rte 125		
	029.0072	457-86-23	Shelter Ent Inc	Rte 125	3	BL1-49.5
	029.0065	315-166	G. Finke	Rte 30		
24	029.0021	457-85-4	J. Lemantier	Scrabble Rd		
	029.0053	646-5885	S. Kolacz	Scrabble Rd		
	029.0099	406-921	J. Burnett	Scrabble Rd		
23	029.0026	457-84-6	Sunburn	Scrabble Rd		
	029.0064	406-214	Architectural Innovation	Scrabble Rd		
	029.0104	177-727	G. Nelson	343 South Rd		
	029.0062	157-132	M. Brown	South Rd		
	029.0061	157-134	M. Brown	South Rd		
	029.0070	364-173	Tilton Const	South Rd		
	029.0092	156-84	K. Davis	South Rd		
	029.0050	177-303	R. Hatch	South Rd		
	029.0073	145-164	R. Currier	South Rd	1.3	BL3-40.2
	029.0111	457-194-87	J. & S. Rogers	South Rd	1224	
4/0	029.0016	145-93	G. Mayhew	South Rd		
	029.0078	767-BAA-22	USGS	South Rd		
	029.0071	364-174	Tilton Const	South Rd		
	029.0077	767-BAA-21	USGS	cor South Rd & Lake Rd		

ELEV	DCOMP	USE	RSN	TYPE	TOTD	BKED	CASING	YIN	YID	YTO	SWL	OVERBURDEN	QC	NOTE
	86/09/02	1	1	1	155.0	15.00	25.00	5	1.00	20.00		2	2	YL
	86/06/07	1	1	1	182.0	55.00	63.00	5	0.75	30.00		2	2	
	85/06/25	8	5	2	90.0			2	166.00	726.00	4.83	2-12-2-1-2	2	SW GP
130.0	85/01/08	8	5	2	28.0	29.00	26.00					1-12	1	SW
120.0	85/01/04	8	5	2	29.0	61.00	70.20				7.40	2-12-1-12-6	1	SW CM:OB(6)=14-12-1
120.0	84/12/17	8	5	2	90.0		80.00	2	1.00	60.00	6.00	2-12-2-12	1	SW
120.0	85/01/03	8	5	2	95.0	95.00	62.25	2	1.00	60.00	9.55	124-4	2	SW
120.0	84/12/20	8	5	2	81.0	81.00	70.20		5.00	70.00	7.54	2-12-1-12-6-12	1	SW CM:OB(6)=14-12-1
130.0	85/01/09	8	5	2	55.0	55.00	50.50					1-4-24	2	SW
120.0	85/03/07	9	5	2	55.0	55.00						4-12-1-124	1	
120.0	85/01/14	8	5	2	90.0		61.50	2	5.00	90.00	2.50	6-12	1	SW CM:OB(6)=0-70' and down
	85/09/19	8	5	2	26.5							1	1	SW GP
120.0	84/01/26	9	5	2	30.0	30.00						4-12-4	1	
120.0	85/01/10	8	5	2	98.0	98.00	47.00	2	1.60	75.00	5.50	12-1-12-14	1	SW
	85/09/19	8	5	2	26.5							1-4	1	SW GP
150.0	85/01/08	9	5	2	39.0							1-4-124	1	
	85/09/24	8	5	2	64.0	57.40						1-12	1	SW GP
	85/09/20	8	5	2	26.5							1	1	SW GP
	85/09/18	8	5	2	25.7							1	1	SW GP
120.0	84/12/19	8	5	2	99.0		100.95	2	0.50	30.00		1-4-12	1	SW
120.0	85/01/07	8	5	2	92.5	97.50	82.00	2	1.00	50.00	3.50	1-4-12-1	1	SW
	87/07/06	1	1	1	560.0	28.60	40.00	3		20.00		14	2	
120.0	85/01/02	8	5	2	72.0	72.00	64.00	2	1.00	75.00	3.00	1-4-1-12	2	SW
120.0	85/12/26	8	5	2	96.0	96.00	73.20				6.45	1-24-12-2-4	1	SW
142.0	85/09/10	8	5	2	55.0	67.00	54.00				9.71	1-14-4-12	1	
	87/02/22	1	1	1	242.0	60.00	67.00	3	1.00	4.00		1	2	
	87/02/21	1	1	1	142.0	50.00	57.00	3	0.75	4.00		1	2	
	85/12/02	1	1	1	175.0	27.00		1	1.00	5.00	14.00	4-3	1	
	87/08/14	1	2	1	100.0	28.00	36.00	3	1.00	25.00	8.00	12	1	
110.0	86/09/22	1	1	1	240.0	5.00	20.00	3	1.00	4.00	5.00	2	2	
120.0	85/09/18	8	6	2	50.0	50.00						12-4-3	1	CM:TYPE(2)=auger
	87/06/29	1	1	1	150.0	17.00	40.00	3	1.00	7.00		2	1	YL
	86/08/02	1	2	1	345.0	13.00	20.00	1	1.00	12.00	0.10	2	2	
	85/09/26	1	1	1	310.0	15.00	25.00	5	0.25	2.00		2	2	
	86/06/11	1	2	1	145.0	24.00	30.00	3	1.00	7.50	7.00	4	2	
170.0	84/08/30	4	1	1	260.0	22.00	33.00	3	1.00	2.50	10.00	1-3	1	YL
220.0	84/04/12	1	2	1	305.0	25.00	92.00	3	1.00	5.00		3	2	
	87/08/14	1	1	1	140.0	15.00	61.00	5	0.25	50.00		13	2	
	86/05/18	0	1	1	300.0	50.00	60.00	5	1.00	5.00		2-4	2	YL
	85/12/24	1	1	1	20.0	75.00	101.00	3	0.50	60.00		1-4	2	
150.0	85/03/21	1	1	1	750.0	18.00	41.00	3	2.00	1.50		2	2	
	85/05/06	1	1	1	160.0	12.00		3	1.00	8.00		5	2	YL
	87/07/19	1	2	1	162.0	16.00	25.00	5	0.75	50.00		6	3	CM:OB(6)=sand known
160.0	84/10/22	1	1	1	175.0	19.00	41.00	5	1.00	5.00	20.00	1	2	YL
	85/04/10	1	1	1	242.0	15.00		3	1.25	5.00		2	2	
	87/10/06	1	1	1	160.0	12.00	20.00	3		30.00		4	2	
	85/10/09	1	1	1	170.0	40.00	40.00	3	4.00	9.00	15.00	2	3	
	85/10/18	1	1	1	300.0	20.00	20.00	3	5.00	12.00	15.00	2	3	
	85/09/15	1	1	1	130.0	5.00	20.00	3	0.50	10.00	15.00	1	2	
	86/10/05	1	1	1	300.0	12.00	20.00	1	1.00	7.00	28.00	4	2	
	85/09/04	1	1	1	120.0	18.00		5		20.00		3	2	
	86/01/09	1	1	1	260.0	10.00	23.00	2	6.00	5.00	22.00	3	2	
	87/10/22	1	1	1	350.0	30.00	41.00	3	1.00	1.50		254	1	YL
140.0	85/03/18	1	1	1	140.0	9.00	21.00	2	4.00	5.00	20.00	3	2	
142.0	85/07/24	8	5	2	50.0	49.00	46.00				29.34	1-12-14-3	1	
	85/09/15	1	1	1	255.0	6.00	20.00	3	0.50	4.00	24.00	1	2	
134.0	85/07/24	8	5	2	22.0		20.00				9.07	1-4-1-4-3	1	

WARD	WELL#	NAME	ROAD	MAP	PARCEL	ELEV	SCORE	USE	SCR	TYPE	DATE	YIELD	CASING	YRA	YTD	YTD	SIA	OVERBURDEN	QC	NOTE
029.0303	177-754	A. Saith	9 Stevens Dr				87/11/05	1	1	1	100.0	65.00	70.00	5		20.00		12	2	

* - Wells located within aquifer areas.

APPENDIX I

Summary of Well Completion Report Data for the Town of Brentwood

Attribute	Explanation	Data Type, Codes and Definitions	Data Entry Conventions	Item Number on Well Completion Report
WELL#	Well driller's number	Text 15	[driller's license no.]-[sequence no.]	
WRB#	Water resources board I. D. number	Text 8	[3-digit numeric town code]-[4-digit sequence no.] town code must include leading zeros	
OPT#	Optional number for cross referencing	(Reserved)		
ELEV	Elevation	Real Number	in feet above sea level	
LAT	Latitude	Integer	6 digit number for degrees, minutes, and seconds with leading zeros included	
LONG	Longitude	Integer	6 digit number for degrees, minutes, and seconds with leading zeros included	
NAME	Well Owner, etc.	Text 36	first initial and last name for individuals; complete name for contractors or companies (consult "dictionary" for accepted abbreviations)	1
ROAD	Address of well location	Text 26	street name or reference point (consult "dictionary" for accepted abbreviations)	2
TOWN	Town in which well is located	Text 22	complete name of town (no abbreviations allowed)	2
MAP	Map page number as recorded on the town's tax map	Text 10	varies according to the coding system in use by a particular town; prefix BLK- indicates block number	2
PARCEL	Parcel identifier as recorded the town's tax map	Text 12	varies according to the coding system in use by a particular town	2
DCOMP	Date well was completed	Date	6-digit no. for year/month/day with leading zeros included	3
USE	Proposed use of well	Text 1 0=other 1=domestic 2=small community water supply 3=municipal 4=commercial 5=industrial 6=agricultural 7=institutional 8=test/exploration 9=abandoned		4
REM	Reason for constructing well	Text 1 0=other 1=new 2=replace existing 3=deepen existing 4=provide additional supply 5=monitoring (water level) measurement or water quality sampling) 6=stratigraphic observation only		5
TYPE	Type of well	Text 1 0=other 1=drilled in bedrock 2=drilled in gravel 3=dug 4=auger hole (any uncased hole) 5=driven point		6
TOTD	Total depth of well	Real number	in feet below land surface datum	7
BDKD	Depth to bedrock	Real number	in feet below land surface datum	8
CASING	Total length of casing installed in well	Real number	in feet	9

Attribute	Explanation	Data Type, Codes and Definitions	Data Entry Conventions	Item Number on Well Completion Report
YTH	Yield test method	Text 1 1=bailed 2=pumped 3=compressed air		31
YTD	Yield test duration	Real number	in hours	31
YTQ	Discharge	Real number	in gallons per minute	31
SWL	Static water level	Real number (0.=overflowing .)=at ground level)	in feet below land surface datum	32
DMSAS	Date static water level was measured	Date	6-digit no. for year/month/day with leading zeros included	32
WQ	Water quality information	Text 1 Y="Yes" Laboratory analysis performed Null value (=D=)="no" or not reported		13
GM	Type of overburden material	Text 16 0=exposed bedrock 1=sand 2=gravel 3=till 4=clay 5=mixed 6=other		15

Codes are entered layer by layer in the sequence reported in the WELL LOG; successive layers are separated by a hyphen (for example, 12-4 indicates a sand and gravel layer overlying a clay layer; mixed is used if 3 through 6 are recorded on the same line; if "6" is used, an explanation is included as a comment under the attribute NOTE)

PI	Pump information	(Reserved)	
QC	Subjective assessment of quality of reported information	Text 1 1=good 2=fair 3=poor	
NOTE	Special notes	Text 36 YI=yield log SN=screen information GP=gravel pack DD=drawdown measurements CM=comments	

"CM:" is used to explain any attribute coded as "other" (ie., CM:USE(1)=fire protection)

THE FOLLOWING ADDITIONAL CONVENTIONS APPLY AS NOTED:

1) NO periods are permitted to follow abbreviations within text fields, EXCEPT in the case of NAME where a period is required after the first initial
2) any attribute coded as "other" must be explained by means of a comment under NOTE; however, the code for any attribute can be qualified using a comment expressed in the standard format CM:attribute(code)=explanation as illustrated above
3) the 2-character NOTE codes must always be given in the order listed above and separated by a single space whenever multiple codes are needed (ie. SN GT and NOT GT SN)

APPENDIX II

Water Quality Data From USGS Test Wells

	LOCAL IDENTIFIER	DATE	TEMPERATURE (DEG C) (00010)	TEMPERATURE, AIR (DEG C) (00020)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	COLOR (PLATINUM-COBALT UNITS) (00080)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	PH, LAB (STANDARD UNITS) (00403)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)
Bwn 22		12-05-85	5.0	1.0	1028	00020	3	325	6.4	6.6	0.01
Bwn 25		12-06-85	6.0	0.0	1028	00020	3	146	6.4	6.5	0.01
Bwn 28		12-02-85	5.0	7.0	1028	00020	7	63	6.6	6.9	(0.01
Bwn 30		12-02-85	6.5	-3.5	1028	00020	5	65	6.4	7.0	(0.01

	LOCAL IDENTIFIER	DATE	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)
Bwn 22		12-05-85	0.8	16	4.1	30	5.7	64	11	(0.1	15
Bwn 25		12-06-85	1.7	13	2.7	6.6	2.9	18	12	(0.1	21
Bwn 28		12-02-85	1.4	4.5	1.1	3.2	3.6	3.6	7.3	(0.1	14
Bwn 30		12-03-85	2.3	6.1	1.2	3.8	1.3	3.4	4.7	(0.1	19

	LOCAL IDENTIFIER	DATE	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01042)	IRON, DISSOLVED (UG/L AS FE) (01046)
Bwn 22		12-05-85	(1	20	(0.5	10	(1	(10	1	(1	3
Bwn 25		12-06-85	(1	15	(0.5	20	(1	(10	2	(1	(3
Bwn 28		12-02-85	(1	8	(0.5	(10	(1	(10	3	(1	(3
Bwn 30		12-03-85	(1	8	(0.5		(1	(10	(1	(1	7

	LOCAL IDENTIFIER	DATE	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	ANTIMONY, DISSOLVED (UG/L AS SB) (01095)	ALUMINUM, DISSOLVED (UG/L AS AL) (01105)
Bwn 22		12-05-85	(1	33	(1	6	(1	110	50	(1	410
* Bwn 25		12-06-85	(1	* 660	(1	6	(1	71	15	(1	(10
* Bwn 28		12-02-85	(1	* 170	(1	6	(1	63	20	(1	40
Bwn 30		12-03-85	(1	23	(1	5	(1		130	(1	50

	LOCAL IDENTIFIER	DATE	LITHIUM DISSOLVED (UG/L AS LI) (01130)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	DICHLOROBROMOMETHANE TOTAL (UG/L) (32101)	CARBON TETRACHLORIDE TOTAL (UG/L) (32102)	1,2-DICHLOROETHANE TOTAL (UG/L) (32103)	BROMOFORM TOTAL (UG/L) (32104)	DIBROMOCHLOROMETHANE TOTAL (UG/L) (32105)	CHLOROFORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)
BWW	22	12-05-85	15	1	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
BWW	26	12-06-85	7	1	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
BWW	28	12-02-85	5	1	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
BWW	30	12-03-85	14	1	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

	LOCAL IDENTIFIER	DATE	BENZENE TOTAL (UG/L) (34030)	CHLOROBENZENE TOTAL (UG/L) (34301)	CHLOROETHANE TOTAL (UG/L) (34311)	ETHYLBENZENE TOTAL (UG/L) (34371)	METHYLENE CHLORIDE TOTAL (UG/L) (34423)	TETRACHLOROETHYLENE TOTAL (UG/L) (34475)	TRICHLOROFLUOROMETHANE TOTAL (UG/L) (34488)
BWW	22	12-05-85	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
BWW	26	12-06-85	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
BWW	28	12-02-85	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
BWW	30	12-03-85	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

	LOCAL IDENTIFIER	DATE	1,1-DICHLOROETHANE TOTAL (UG/L) (34496)	1,1-DICHLOROETHYLENE TOTAL (UG/L) (34501)	1,1,1-TRICHLOROETHANE TOTAL (UG/L) (34506)	1,1,2-TRICHLOROETHANE TOTAL (UG/L) (34511)	1,1,2,2-TETRACHLOROETHANE TOTAL (UG/L) (34516)	1,2-DICHLOROPROPANE TOTAL (UG/L) (34541)	CHLOROETHYLENE TOTAL (UG/L) (34546)	1,3-DICHLOROPROPANE TOTAL (UG/L) (34561)
BWW	22	12-05-85	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
BWW	26	12-06-85	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
BWW	28	12-01-85	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
* BWW	30	12-01-85	* 11	* 3.5	* 6.2	<3.0	<3.0	<3.0	<3.0	<3.0

	LOCAL IDENTIFIER	DATE	2-CHLOROETHYLVINYLETHER TOTAL (UG/L) (34576)	DICHLORODIFLUOROMETHANE TOTAL (UG/L) (34668)	VINYL CHLORIDE TOTAL (UG/L) (39175)	TRICHLOROETHYLENE TOTAL (UG/L) (39180)	MERCURY DISSOLVED (UG/L AS HG) (71890)	SPECIFIC CONDUCTANCE LAB (UMHOS/CM) (90095)	ALKALINITY LAB (MG/L AS CACO3) (90410)	LABORATORY NUMBER
BWW	22	12-05-85	<3.0	<3.0	<3.0	<3.0	0.1	327	21	BS47411
BWW	26	12-06-85	<3.0	<3.0	<3.0	<3.0	0.1	140	66	BS47251
BWW	28	12-01-85	<3.0	<3.0	<3.0	<3.0	0.1	83	34	BS47169
BWW	30	12-03-85	<3.0	<3.0	<3.0	<3.0	0.1	88	18	BS47253

	LOCAL IDENTIFIER	DATE	ALDRIN, TOTAL (UG/L) (39330)	CHLORDANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DIELDRIN, TOTAL (UG/L) (39570)	ENDRIN, TOTAL (UG/L) (39380)
BWW 22		12-05-85	(0.01	(0.1	(0.01	(0.01	(0.01	(0.01	(0.01

	LOCAL IDENTIFIER	DATE	ENDOSULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	PCB, TOTAL (UG/L) (39516)	METHOXYCHLOR, POLYCHLOR. TOTAL (UG/L) (39250)	HEPTACHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTACHLOR, TOTAL (UG/L) (39410)	LINDANE TOTAL (UG/L) (39340)
BWW 22		12-05-85	(0.01	(0.01	(0.01	(0.1	(0.1	(0.01	(0.01	(1.00

* - High concentrations

Table		Map D Symbol
BWW 22	=	I
BWW 26	=	II
BWW 28	=	III
BWW 30	=	IV

APPENDIX III

Inventory of Underground Storage Tanks

[illegible]	Facility Location Name	Facility Location Street	Tank Age	Tank Capacity	Product Description
011[illegible]	[illegible] DISTRIBUTING, INC.	ROUTE 125	01	10,000	Petroleum - Diesel
011291*001	[illegible]	PINE ROAD	10	5,000	#2 FUEL OIL
011291*002[a]	[illegible]	PINE ROAD	10	5,000	#2 FUEL OIL
011[illegible]	[illegible] SCHOOL DISTRICT	ROUTE 111A	26	5,000	#2 FUEL OIL
02[illegible]	JOHN R. OLSON	ROUTE 111A	15	1,000	Petroleum - Diesel
02[illegible]	JOHN R. OLSON	ROUTE 111A	10	1,000	Empty
011[illegible]	[illegible] SMITH TRACTOR INC.	RTE 129	5	5,000	#2 FUEL OIL
011[illegible]	[illegible] SMITH TRACTOR INC.	RTE 129	2	275	Petroleum - Used Oil
011[illegible]	LIBBY'S COUNTRY STORE	ROUTE 111-A	08	2,000	Petroleum - Gasoline
011[illegible]	LIBBY'S COUNTRY STORE	ROUTE 111-A	8	2,000	Petroleum - Gasoline
02[illegible]	[illegible] MARKEY & SONS INC	ROUTE 125	03	500	Petroleum - Used Oil
011[illegible]	[illegible]	PINE ROAD	26	2,000	Petroleum - Gasoline
011[illegible]	[illegible]	PINE ROAD	26	2,000	Petroleum - Gasoline
011[illegible]	[illegible]	PINE ROAD	26	8,000	#2 FUEL OIL
011[illegible]	[illegible]	PINE ROAD	20	2,000	Petroleum - Diesel
011[illegible]	[illegible] COUNTY COMPLEX	NORTH ROAD	14	15,000	#6 OIL
011[illegible]	[illegible] COUNTY COMPLEX	NORTH ROAD	14	10,000	#2 OIL
011[illegible]	[illegible] COUNTY COMPLEX	NORTH ROAD	14	1,000	Petroleum - Diesel
011[illegible]	[illegible] COUNTY COMPLEX	NORTH ROAD	17	12,000	Petroleum - Gasoline
011[illegible]	[illegible] COUNTY COMPLEX	NORTH ROAD	5	15,000	#6 OIL
011[illegible]	[illegible] COUNTY COMPLEX	NORTH ROAD	5	12,000	#2 OIL
011[illegible]	[illegible] COUNTY COMPLEX	NORTH ROAD	5	12,000	Petroleum - Gasoline

a - Empty and temporarily out of service.

BRENTWOOD



SCALE: 1 inch = 1000 feet

Prepared by

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LEGEND

STATE & TOWN ROADS

ROADS CLOSED DURING/OUT TO DATES & DAYS

UNACCEPTED ROADS

POWER LINE RIGHT OF WAY

FUTURE LAND USE

CONSERVATION

NEIGHBORHOOD COMMERCIAL/ MULTI FAMILY CLUSTER

COMMERCIAL

RESIDENTIAL CLUSTER

PROMINENT GEOLOGICAL FEATURE

INDUSTRIAL

MAP #4

A. Introduction

The previous 5 chapters have all been leading to the development of a plan for future land use in Brentwood. The goal of the master planning process is to guide the future growth of Brentwood. This Chapter then represents a drawing-together of all work associated with the plan and identifies what Brentwood wants to see in terms of a long-range development pattern of the town.

Several steps were involved in formulating this section of the Plan. Developable land was identified and mapped (see Map 2). By mapping all areas unsuited for developed, e.g., steep slopes, poorly drained and very poorly drained soils, it is possible to then identify those parts of town most suited to development from an environmental and practical point of view.

Next, results of the citizen survey, input from other Town boards, space needed to accommodate population and employment were considered. Likewise, residential, commercial, institutional, and industrial development trends were identified. Finally, taking into account the assembled information, areas best suited to various types of development were identified.

The future land use map (Map 4) is a representation of the desired direction of future development in town. And, while the map is a useful tool for visualizing the recommended development pattern, it is not a zoning map. The boundaries are general guidelines. Future zoning amendments, based on the plan and associated recommendations, will be required if elements of the plan are to be a reality.

B. Development Constraints

Preferred locations for development are those areas with fewest natural development constraints. Each physical characteristic of the land poses varying limitations on development. Identifying these limiting characteristics, and determining their effect on development, is an important step in developing a future land use plan.

Development should be directed away from areas which have natural development constraints or pose health and safety risks to residents. The following indicates where development should be closely regulated:

1. Severe Soil Limitations for Septic Systems: Brentwood has no immediate plans for constructing a municipal water or sewer system. In the absence of such a system, the Town must carefully plan to minimize the potential for pollution of its limited groundwater resources.

   The ability to site a septic system on a lot is, therefore, the most important consideration in determining development suitability.

   Roughly one-third of Brentwood's land area is poorly or very-poorly suited to installation of septic systems. Development should, whenever possible, be directed away from such land. Development on very-poorly drained soils, in particularly, only invites public health hazards.

2. Wetlands: The importance of preserving and protecting wetlands is well established. Brentwood's wetland areas are discussed in detail in Chapters IV and V.

   Aside from the importance of preserving wetlands, it is equally important to prevent building in such areas because of the potential impact on water quality and public health. Wetlands exist where water is at, or near, the surface of the ground for seven months or more of the year. Septic system failures occurring in, or near, wetlands can readily cause groundwater contamination. All septic systems must be located at a safe minimum distance from wetlands, surface waters and groundwater. Even if municipal sewer does become, at some time in the future, available, a reasonable buffer zone should be maintained.

3. Aquifer Recharge Zones: Aquifer recharge zones are poorly suited for many types of development due to the potential for contamination of large water supplies (see Chapter IV, Water Resources, and Chapter V, "Water Resource Protection"). Vulnerability to contamination is particularly high in land overlying sand and gravel aquifers due to the high permeability of the associated soil types. Contaminants can spread rapidly into the aquifer and destroy it as a water supply.

   To ensure a future potable water supply, protection of these aquifers is of great importance to the Town.

4. Stormwater Drainage: Since Brentwood has several low-lying areas with a high water table, drainage problems can also be an inhibiting factor for development. As more land is built upon and paved over, there is less area available for stormwater run-off. Inadequate drainage plans for subdivisions can lead to flooded basements and lawns. Each lot should be able to handle its own stormwater runoff on-site. Good engineering and careful planning should result in adequate drainage for almost any buildable lot.

5. Floodplains: Brentwood's floodplains, as identified by the Federal Emergency Management Administration and shown on Map 2, include land associated with Dudley Brook, from Prescott Road to the Exeter Town Line, the Exeter River from Fremont to Exeter, and the Little River from the Kingston Line to its confluence with the Exeter. Development in floodplains is now controlled by Town zoning. Current zoning precludes development in those areas that can lead to a loss of life and property and/or an increase in flood heights.

6. Additional Factors: Other factors not related to physical capability, such as highway access, compatibility with surrounding uses, the adequacy of municipal services, and existing zoning regulations, should also be considered in determining the suitability of specific parcels for a proposed use.

C. Residential Land Use

Chapter III describes a community survey process and the establishment of goals & objectives relating to Brentwood's development as a community. These goals and objectives set the framework for decisions relating to residential and other land uses. In particular, the goals that call for preserving the Town's rural character, controlling the rate and pattern

of growth, and providing an adequate supply of housing are all germaine to the issue of future residential land use.

With these goals and the development constraints described above in mind, the following pattern of residential development is described.

Currently, residential uses are permitted on buildable 2-acre lots anywhere in Town. It is recommended that this approach be changed.

While single-family homes would continue to be permitted anywhere in Town, lot sizes would be controlled according to soil-type. The better the soil for purposes of treatment of septic tank effluent, the smaller the lot, with a minimum set at 1 acre. This change would insure the wise use of Brentwood's limited land resources and reduce the loss of open space to development, while insuring that, regardless of lot size, water quality is maintained.

Determining lot size by soil type will also allow more opportunities for cluster development, another recommendation contained in Chapter V. If minimum lot size is maintained at the current 2-acre minimum, it is unlikely that cluster development would take place, there being no particular advantage to developers to pursue this option. With soil type lot sizing in place, more opportunities exist for innovative and more economical use of the land. Cluster development, allowing dwelling units to be closer together than is the case in traditional developments, allow for shorter streets, less utility extensions and the maintenance of land as open space, an important step in maintaining Brentwood's rural character.

It is recommended that single-family detached dwellings, in clusters, be allowed anywhere in Town, with up to 4 attached units permitted in or near the town center (see Map 4) in a to-be-created Cluster Residential Zone.

Lot size, as determined by soil type, in the Cluster Residential Zone, would be the same as that required for single dwelling units elsewhere in Brentwood. The only difference would be that units could be attached. Concurrently, attached units could, like single-family units, be for rent or sale, thus reflecting the recommendations relating to multi-family housing in Chapter V, and the goal of providing an adequate supply of housing to meet the needs of all of Brentwood's residents. In line with this recommendation would be development of zoning regulations permitting the conversion of existing dwelling units to two-family units predicated on strict performance criteria, including water supply, septic systems, parking and lot size.

D. Commercial Land Use

Once again, as future commercial land use is discussed, it is important to take a look at goals as described in Chapter III. Preservation of rural character and control as to location of commercial land uses are both described as goals for future development. With these goals in mind, there are some ground rules that apply to commercial, as well as industrial, development that are applied in describing a pattern for future land use in Brentwood, namely:

1. Development Suitability directs development. Commercial and industrial uses will be discouraged on land that cannot support such uses.

2. Future development will take place adjacent to existing development. In an effort to keep as much open space open as possible, it is generally assumed that future development will take place alongside existing development.

3. Future development densities will be similar to existing densities.

Commercial development is primarily located along Route 125 and, to a minor extent, Middle Road eastward from Route 125. The future land use map shows this pattern continuing with some significant refinements. While commercial development continues to be encouraged along Route 125, a 500' buffer is shown associated with all residential uses not fronting on Route 125. Concurrently, the depth of the zone is recommended to be increased from that reflected in current zoning to 2,000' back from Route 125.

This increase in depth, and the proposed increase in depth to 3,000' to the west of Route 125, south of its intersection of Route 111A, supports a policy that calls for greater setback and more use of back land, as a means of reducing the appearance of strip development along the roadway. Concurrently, it is recommended that zoning for these areas be amended to encourage cluster commercial development, including office parks, to insure the best use of available land while addressing the need for safe and aesthetically pleasing commercial design.

The proposed new Neighborhood Commercial area is shown on the future land use map as running 2,000' back from both sides of Middle Road, for a distance of 3,000' east of Route 125. While most types of commercial development are encouraged along Route 125 in the Commercial area, the new Neighborhood Commercial Area would limit uses to small-scale shops and stores, catering to the needs of Brentwood residents, and not necessarily the general public using Route 125. Uses such as "mom & pop" grocery stores, drug stores, laundromats, doctors, dentists and law offices, and barber/beauty shops would be encouraged, as would cluster and multi-family (up to 4 attached units) residential uses.

Much of the Route 125 Commercial area, particularly that to the north of Scrabble Road, is very wet. Only consistent and rigorous enforcement of Town Wetland Regulations will insure that these areas are not lost as a valuable Town resource.

E. Industrial Land Use

The goals described in Chapter III call for preserving Brentwood's rural character and controlling the location of industrial land uses. Chapter IV briefly describes the state of current industrial land uses as shown on the Existing Land Use Map. Section D., above, describes the fundamentals of how decisions are made as to the best areas for future industrial land uses.

Based on these ground rules, the Future Land Use Map shows areas best suited for the siting of new industry and/or an industrial park. The area generally covers the northeastern section of Town along both sides of the route of the existing and to-be-relocated Route 101, and south along Pine Road to the southern boundary of the existing gravel operation.

This area is particularly well-suited in light of its excellent road access and the presence of existing industry in the area. Its drawbacks include the presence of considerable wetlands in the area, and, at the southern end, the presence of a large aquifer. Both of these drawbacks can be addressed with the careful implementation of both a wetlands and groundwater protection regulation.

F. Land Not Suited For Development

As has been noted, the master plan anticipates that no municipal sewer or water system will be developed in Brentwood in the next ten years. To pursue a sewer avoidance strategy, the Town must continue to base development decisions on the capacity of the land to safely absorb, renovate and disperse sewage on-site. The natural capability of land should, therefore, continue to be the dominant factor in determining development suitability. Land which is not considered suitable for development is a composite of land classifications including areas which have very low potential for the siting of septic systems, including poorly drained and very poorly drained soils, areas within the designated 100-year flood hazard zone, aquifer recharge zones.

No development should be permitted on poorly drained and very poorly drained soils. Development in 100-year flood hazard zones is already limited by Town zoning. Development in aquifer recharge zones should be controlled by the passage of a more comprehensive and current Town aquifer protection ordinance.

G. Growth Management

In 1983 Brentwood enacted a zoning ordinance which limited the number of building permits to 3% of the number of dwelling units in the town at the start of each calendar year. The number of permits was raised to 7% in 1985. For a number of reasons the growth management ordinance was recinded in 1986.

Recent court decisions, as well as changes in State Legislation have come to limit the ability of New Hampshire communitites to legally control their rates of growth. Any local growth control ordinance must now comply with the following general restrictions:

1. The growth management ordinance must be enacted under zoning authorit- and not as a general town ordinance or by-law.

2. The growth controls must be reasonable and non-discriminatory.

3. Local growth controls must be based on, and be specifically supported by, a master plan and capital improvements program which are the result of careful scientific and statistical study. Master plans and Capital Improvement Programs developed after the fact will not do unless they re-access and re-affirm both the need for and method of gropwth control.

4. The growth management ordinance cannot be used to forever limit growth or to displace it to other towns in the region. Rather, it can be used to time the occurance of growth so that community facility improvements that are necessary to support growth can be made without undue strain.

5. Growth management must be accompanied by a good faith effort to provide the community facilities necessary to permit future growth and development. This should be demonstrated by the development and use of a Capital Improvements Program.

6. The growth management ordinance must be temporary by design and have built-in requirements and procedures for "constant" re-examination of their need.

The primary objective of a growth management ordinance is to provide a mechanism to temporarily slow the rate of growth, in order to allow the Town time to correct deficiencies in overloaded municipal facilities and/or services. Such an ordinance insures that the rate of growth of the Town will not unreasonably interfere with the Town's capacity to expand its municipal services in a planned and orderly fashion.

Growth management mechanisms typically involve limiting the number of building permits during a one year period. A system for the equitable distribution of these permits must also be established. A lesser degree of growth control management would involve the phasing of residential developments over a period of time. For example, a proposed project containing 50 dwelling units may be required to be phased at 10 units per year for five years.

Recent growth control ordinances also contain provisions for triggering the permitting or phasing mechanism. These provisions define "growth impact indicators" for the Town and set threshold limits, beyond which the growth management ordinance automatically takes effect. These indicators could include: number of building permits issued; population growth rate; numbers of students; and the amount of long term bonded debt for municipal and/or school purposes. For example, a "threshold" could be when student enrollment exceeds 85 percent of the Town's school capacity.

Recommendations:

1. Adopt soil-type lot-size regulations as a means of protecting groundwater quality and expanding development options.

2. Utilize soils information on a regular basis during Planning Board deliberations.

3. To expand housing opportunities, change existing zoning ordinance to permit conversions of existing units to duplexes, cluster development, multi-family housing, and a new "Cluster Residential" district.

4. Expand opportunities for commercial development along Route 125 by increasing the depth of existing zones, and encouraging the use of more back land.

5. Undertake major changes to existing zoning and site plan review regulations to encourage cluster commercial development, safer access to commercial properties, and better commercial design.

6. Establish a new "Neighborhood Commercial" zone to provide more opportunities for the development of small-scale shops and stores primarily catering to the needs of Brentwood residents.

7. Expand existing industrial zoning along Route 101 to encompass areas on both sides of the to-be-relocated Route 101 and south along Pine Road. Concurrently, review existing industrial zone language to insure that environmental concerns are addressed and that residential land uses in the area are protected.

8. Review and amend existing zoning to insure that lands not suited to development are protected.

9. Amend the aquifer protection ordinance to insure that the Town's major aquifers retain their present water quality.

SUMMARY OF RECOMMENDATIONS

The following provides a summary of all recommendations completed thus far. The recommendations are based on a number of factors: the existing situations and uses, the community values and policies as developed by the Planning Board drawing on its experience and citizen input, and technical planning issues.



HOUSING RECOMMENDATIONS

The following recommendations are designed to insure that Brentwood continues to provide diverse housing opportunities, promoting community goals, improving local housing controls, and ensuring compliance with relevant state and federal legislation.

1. Multi-Family Housing: New opportunities should be provided for new multi- family development as well as conversion of some large older houses to duplex and multi-family structures. Such uses would best fit with town character if developed adjacent to existing development in the town center (the Rte. 111A-125 area).

2. Cluster Development: As development pressures increase, preservation of the rural character of Brentwood will require implementation of innovative zoning techniques. One such technique is cluster zoning or open space development. It is recommended that the Planning Board develop and adopt a cluster ordinance. This would allow the Town to more efficiently use its prime developable land by encouraging developers to cluster housing units, preserving land as open space. This will serve the dual purpose, particularly for mobile home subdivisions, of decreasing development costs while preserving the Town's valuable natural resources.

3. Lot Size by Soil Type: Current zoning requires there be 80,000 square feet of land for each single-family house. This requirement, while simple to administer, sets an arbitrary lot size that, in reality, can be either too large in the case of excellent soils, or too small in the case of wetter soils. The result can be wasteful of open land in those instances when one acre is adequate to handle the septic system, and destructive of water quality in those instances when two acres is not large enough to handle the septic system.

4. Town Policy: In order to encourage the elderly to remain in town, programs for the elderly should be conscientiously promoted, such as: using the Visiting Nurse, Meals on Wheels, rural transportation, use of available Federal subsidies, food stamps, fuel payments, rental subsidies, elderly tax exemption according to the law, daily telephoning, etc.

TRANSPORTATION RECOMMENDATIONS

The following recommendations will assist the Town of Brentwood in continuing to provide a safe and efficient transportation network for the current and projected population.

1. The Town of Brentwood should encourage developers to minimize their impacts on existing town roads. This can be accomplished through the use of cluster subdivisions,

interior roads and traffic impacts study requirements for development proposals.

2. The Town of Brentwood, when appropriate, should require developers to minimize off-site impacts either through monetary contributions or by undertaking necessary off-site road improvements.

   (Appendix A contains guidelines for the contents of a traffic impact analysis.)

3. The Town of Brentwood should, as part of its subdivision and site plan review regulations, require development to follow proper drainage and erosion control practices.

4. The Board of Selectmen should actively enforce RSA 47:17 "Bylaws and Ordinances" under Section VIII "Traffic Devices and Signals" which empowers communities:

   > "To make special regulations as to the use of vehicles upon particular highways, except as to speed, and to exclude such vehicles altogether from certain ways; to establish stop intersections, erect and provide for the control of traffic by, stop signs or other traffic devices or signals which shall conform to standards set by the highway commissioner and shall be approved by him as to type, size, installation and method of operation."

   This RSA allows Brentwood to adopt an ordinance restricting vehicles above certain weights (to be determined by the town engineer or road agent) from designated town roads during seasonally wet periods.

5. The Town of Brentwood should continue to update its inventory of roads, thus allowing the town to guide future roadway improvement planning. An additional step should be to prepare a roadway management plan. The plan would enable Brentwood to achieve the best value possible for the available public funds in providing and operating smooth, safe, and economical road surfaces. Typical activities include inventory, condition assessment, selection of maintenance and rehabilitation strategies, predicting needs, requirements, and budgeting necessary funds.

6. The New Hampshire Department of Transportation requires that municipalities follow guidelines established by the "Manual on Uniform Traffic Control Devices" (U.S. Dept. of Transportation) for locating and placing roadway signs. The Brentwood Planning Board and Road Agent should enforce these standards.

7. The Planning Board should require that the maximum driveway grade, within 50 feet of an existing or proposed roadway, not exceed 3%. This standard should not be waived. However, the Planning Board should also amend its subdivision

regulations to permit a maximum driveway grade of 6%, at any point greater than 50 feet from an existing or proposed roadway. This standard may be waived up to a maximum of 8% only in extenuating circumstances.

8. The Planning Board should strictly enforce its subdivision regulation, Section 4-G which addresses the Maximum Grade of Streets. Plans should no longer be reviewed that show roadway grades of greater than 6%.

9. The Planning Board should require that the maximum roadway grade within 100' of an intersection, measured along the centerline, not exceed 3%. This standard should not be waived.

10. The roadway width guideline provided in Table 4 will help Brentwood determine if their roads are being over-used according to design standards. The recommended road widths are based on expected traffic volumes. Brentwood now requires that no street or highway rightof-way shall be less than fifty (50) feet in width and may be required to be more if a greater street width is warranted in the opinion of the board.

11. The Planning Board should strictly enforce its Subdivision Regulation, Section 4-C, which addresses the maximum road length. Dead end or cul-de-sac roads should provide for adequate maneuverability for service vehicles such as school buses, snow plows, ambulances, and fire trucks.

12. Brentwood should adopt a street numbering system in order to avoid such problems as difficulties or delays for emergency vehicles such as fire trucks and ambulances and any inconveniences to visitors due to confusing or missing numbers.

13. The portion of Rowell Road from its intersection with Haigh Road to where it becomes Class VI, and the portion of Haigh Road between Rowell and Gordon Roads should be designated Scenic under RSA 231:157. In addition, all Town roads should be reviewed for potential designation as a way to protect the rural landscape within public rights-of-way, thus demonstrating Brentwood's intent to maintain its rural character.

WATER SUPPLY RECOMMENTAIONS

1. To maintain water quality, undertake a program to educate residents about septic system function and the importance of proper maintenance. Educational materials are available through the Rockingham Planning Commission.

2. Adopt groundwater protection methods as described in "Water Resources" and other sections of this plan.

3. Evaluate the feasibility of developing a well field in the northeast corner of Town associated with a documented aquifer, and transmission lines for the community.

WASTEWATER DISPOSAL RECOMMENDATIONS

1. Brentwood should sign an agreement with a septage disposal facility as soon as possible so as to be in compliance with RSA 149-M:13.

2. Brentwood's past rate and density of development has not made a public sewer system necessary or feasible. Projected growth rates indicate, however, that the Town may not be able to avoid public utilities in some areas. Brentwood should begin investigating alternative ways to aggregate and treat sewage. Densely populated areas and other areas of concerns should be identified to receive priority consideration with respect to such municipal facilities.

MUNICIPAL GOVERNMENT RECOMMENDATIONS

1. The Selectmen should appoint a Study Committee to establish details as to the expansion of the Town Office Building.

2. The Selectmen should initiate a planning effort aimed at determining the need for additional Town employees required by Brentwood's growing population.

3. The Capital Improvement Program should address current needs including expansion of the existing communication and computer systems.such municipal facilities.the community.

PUBLIC WORKS RECOMMENTATIONS

1. The site of the existing salt shed should be surveyed and evaluated for suitability for construction of a 40' x 60' Town Shed. (It may be necessary to buy land from abutters before expansion is feasible.) Such a shed would provide storage for a winter's salt needs, as well as an enclosed space for plow attachment, general maintenance, and equipment storage.

2. A new sander and wing for winter road maintenance should be purchased.

3. A 1-ton, 4-wheel drive dump truck should be purchased for Town use.

4. The part-time, appointed position of Road Agent should be converted to a full-time position.

SCHOOL RECOMMENDATIONS

1. The Brentwood School Board and Building Facilities Committee have employed the architectural firm of Dennis Mires to assist in developing a 5 year capital improvement plan for the upgrading and expansion of the Swasey School.

   The 5 year plan includes:
   - -- The improvements needed to implement new curriculum offering in art, music, and physical education.
   - __ Facility improvements needed to meet the new elementary school state standards.
   - __ Expansion of the building (four additional classrooms)

2. Planning efforts should be supported toward the end of improving Exeter High School.

LIBRARY RECOMMENDATION

The Library Trustees should redouble their efforts to expand the Mary E. Bartlett Library and associated facilities and services.

CEMETARY RECOMMENDATION

In the absence of a public cemetery, the Selectmen should consider investigation of possible sites for a Town cemetery.

RECREATION RECOMMENDATIONS

1. Refurbish elementary school facilities such as basketball court and tennis courts.

2. Pave access road to BRC/Town land.

3. Acquire private land adjoining eastern Town property line at the elementary school for facility and playing field expansion.

4. Acquire public "rights-of-way" to the Exeter River at locations such as the following:

   - -- Rowell Road to Rowell Cove
   - -- Mill Road
   - -- Stevens Drive
   - -- Gove Road
   - -- Path to footbridge from Route 111A and Old Gordon Road.

5. Acquire Town land at Avril Rock on the Little River near its confluence with the Exeter River for a picnic and/or camping area.

6. Acquire Town land along Exeter River to preserve it as a scenic wilderness area.

CONSERVATION AND PRESERVATION RECOMMENDATIONS

1. Undertake a natural resource inventory in order to identify prime forestland, farmland, wetland, scenic areas, and historic landscapes.

2. Employ regulatory approaches for open space protection such as innovative zoning districts.

3. Encourage land and conservation easement donations by promoting tax incentives.

4. Participate in the federal, state, and regional open space protection programs.

FUTURE LAND USE RECOMMENDATIONS

1. Adopt soil-type lot-size regulations as a means of protecting groundwater quality and expanding development options.

2. Utilize soils information on a regular basis during Planning Board deliberations.

3. To expand housing opportunities, change existing zoning ordinance to permit conversions of existing units to duplexes, cluster development, multi-family housing, and a new "Cluster Residential" district.

4. Expand opportunities for commercial development along Route 125 by increasing the depth of existing zones, and encouraging the use of more back land.

5. Undertake major changes to existing zoning and site plan review regulations to encourage cluster commercial development, safer access to commercial properties, and better commercial design.

6. Establish a new "Neighborhood Commercial" zone to provide more opportunities for the development of small-scale shops and stores primarily catering to the needs of Brentwood residents.

7. Expand existing industrial zoning along Route 101 to encompass areas on both sides of the to-be-relocated Route 101 and south along Pine Road. Concurrently, review existing industrial zone language to insure that environmental concerns are addressed and that residential land uses in the area are protected.

8. Review and amend existing zoning to insure that lands not suited to development are protected.

9. Amend the aquifer protection ordinance to insure that the Town's major aquifers retain their present water quality.

1995 Update to the Brentwood Master Plan

Prepared with the

Brentwood Planning Board

by the

Rockingham Planning Commission

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Section 1 - Introduction

The Brentwood Master Plan is the primary policy document regarding land use issues for the Town. The policies enumerated in this document serve as the foundation for the adoption of a wide range of regulatory measures directed toward insuring that development in Brentwood occurs in a manner that protects and promotes the health, safety and welfare of the residents of the Town. The Master Plan is prepared and adopted by the planning board of a municipality in accordance with state RSA's 674:2-4. In 1986 a survey was prepared which asked questions about different land use issues and was sent to all Town residents as a way for the Planning Board to gather community input. The Planning Board used this input as a foundation for the preparation of a new Plan which was adopted on December 1, 1988. This document offered a variety of recommendations regarding land use that in many ways significantly differed from Town land use policy of the past. Adoption of this document provided the Town with a variety of land use options. Over the past six years the Board has proposed a number of regulatory measures to the Town for their approval. Among the land use concepts advocated in the 1988 Master Plan and subsequently accepted by the voters are soil-based lot sizing, a more stringent aquifer protection district, a shoreland protection district, a cluster development ordinance and bylaws regulating home occupations, child day care facilities, and conversions of existing structures to the condominium form of ownership.

In updating the 1988 document the Planning Board has taken a two pronged approach. First, a review of the policy recommendations offered in the 1988 document was undertaken to determine which had been accomplished and which of those not accomplished were still considered to be viable recommended actions. This enterprise was accomplished through discussions by the Board and the results are discussed in further detail below. The second approach utilized by the Board in updating the 1988 document involved the preparation and distribution of another citizen survey mailed to each of the residents in town. The results of this survey are provided below.

1994 Citizen Survey

In the winter of 1994, a citizens survey was distributed to 852 households in Brentwood. the survey, which had a 29% response rate, asked residents of Brentwood their opinions on a variety of topics ranging from why they chose to live in town and what they considered were serious local problems, to what residents wanted in the way of capital expenditures. The survey results provide an insight into how people living in Brentwood feel about their community. These insights will be used by the Planning Board in forming the basis for the majority of the goals which are, in turn, the driving force for the Master Plan.

A brief analysis of the results of the survey gives a quick picture of how people live in Brentwood and how they feel about their town:

- Ninety-five percent of the respondents own their homes.
- By a margin of 3 to 1 respondents stated that the reason they chose to reside in Brentwood was because of its rural atmosphere. Other reasons cited included the high quality of the area school district and the towns proximity to employment.
- Nearly half of those responding have lived in Brentwood for ten years or less.
- Respondents overwhelmingly would like to see single-family residential units built in town,

and to a lesser degree, elderly housing units and duplexes. Respondents were much less favorable toward greater numbers of apartments and manufactured housing being constructed as housing options.

- The overwhelming development pattern endorsed by respondents was for planned subdivisions along existing roads. The second choice listed when queried about housing opportunity was for increased elderly facilities. Interestingly, the third choice of respondents concerning residential development was in support of cluster style development.

- Serious local problems include "the Town's tax rate"(the most frequently chosen problem) "traffic speed", "maintenance of Town roads" and "visible junk and automobile junkyards".

- Eighty three percent (83%) of those responding to questions about levels of Town service felt that Town services are adequate. In light of this majority several trends are apparent from responses. Substantial responses indicate that increase in police presence and fire and rescue service are warranted. There was also support for upgrading Town roads and acquiring easements for protection of rivers.

- The most favored type of commercial activity cited by respondents was agriculture and farming, chosen as number one by roughly half of the respondents. The second choice most often picked in ranking important types of commercial development was stores. This response represents a departure from the response indicated in previous surveys when increased retail operations were at the bottom of the list.

- When asked to select the most important environmental resources in Town the first priority was in protection of drinking water resources. In second place in importance was the protection of open spaces.

- Sixty percent (60%) of those responding felt that private airstrips should not be allowed within the Town of Brentwood. Of those responding in the affirmative forty-seven percent (47%) felt that private airstrips should be allowed in any zone in town.

Tabulation of the responses to the education based questions in the survey revealed the following:

- Sixty-one percent (61%) of the survey respondents have school age children.

- A slight majority (56%) of the respondents favored a longer school day as a strategy for increasing quality of the public education experience, while the respondents were evenly split (50.3% for and 49.7% against) with regard to lengthening the school year to enhance the quality of the public education experience.

- Eighty-eight percent (88%) of those respondents answering felt that transportation should be provided for students in grades 9-12 even if the NH Legislature does not presently require this. In addition sixty-four percent (64%) felt that the Town should charge a user fee for bus service to offset the cost of this transportation service.

- Provision of kindergarten was supported by roughly two-thirds (67%) of the survey respondents.

- Seventy-one (71%) of those responding supported the concept of choice in public schools.

- The survey asked if residents favor the institution of an inclusive pre-school program at the Swasey School which would service special education preschool students instead of paying to have these students educated out of district. Respondents were in favor of such a program by a margin of 4 to 1 (84% in support vs. 16% against).

  Furthermore, seventy-six percent (76%) felt that there should be a user fee to help offset the cost of such a program for those students involved that were not special education clients.

- Eighteen percent (18%) of those responding stated that they had a need for before or after school day care. Further, twenty-one percent (21%) stated that they would utilize a day care service for schoolage children if one were offered at the Swasey School.

- The final question in the survey polled the residents as to whether they felt that the Brentwood School Board addressed the needs of the community. Eighty-three percent (83%) felt that the School Board was addressing the communities needs.

Section 2 - Review of Recommendations of the 1988 Master Plan

The 1988 Master Plan provided fifty-three policy recommendations to the Town regarding land use issues and municipal government. Of the fifty-three, Brentwood has accomplished nineteen outright. Of the remaining recommendations the Planning Board has determined which remained relevant and they are included below.

HOUSING RECOMMENDATIONS

The following recommendations are designed to insure that Brentwood continues to provide diverse housing opportunities, promoting community goals, improving local development standards regulating housing construction, and ensuring compliance with relevant state and federal legislation.

1. In order to encourage the elderly to remain in town, programs for the elderly should be conscientiously promoted, such as: using the Visiting Nurse, Meals on Wheels, rural transportation, use of available Federal subsidies, food stamps, fuel payments, rental subsidies, elderly tax exemption as allowed by NH state law, daily telephoning, etc.

2. Research or provide the opportunity for the construction of elderly housing units in Town.

TRANSPORTATION RECOMMENDATIONS

The following recommendations will assist the Town of Brentwood in continuing to provide a safe and efficient transportation network for the current and projected population.

3. The Town of Brentwood should encourage developers to minimize their impacts on existing town roads. This can be accomplished through the use of cluster subdivisions, interior roads and traffic impacts study requirements for development proposals.

4. The Town of Brentwood, when appropriate, should require developers to minimize off-site impacts either through monetary contributions or by undertaking necessary off-site road improvements.

5. The Board of Selectmen should actively enforce RSA 47:17 "Bylaws and Ordinances" under Section VIII "Traffic Devices and Signals" which empowers communities:

> "To make special regulations as to the use of vehicles upon particular highways, except as to speed, and to exclude such vehicles altogether from certain ways; to establish stop intersections, erect and provide for the control of traffic by, stop signs or other traffic devices or signals which shall conform to standards set by the highway commissioner and shall be approved by him as to type, size, installation and method of operation."

This RSA allows Brentwood to adopt an ordinance restricting vehicles above certain weights (to be determined by the town engineer or road agent) from designated town roads during seasonally wet periods.

6. The Town of Brentwood should continue to update its inventory of roads, thus allowing the town to guide future roadway improvement planning. An additional step should be to prepare a roadway management plan. The plan would enable Brentwood to achieve the best value possible for the available public funds in providing and operating smooth, safe, and economical road surfaces. Typical activities include inventory, condition assessment, selection of maintenance and rehabilitation strategies, predicting needs, requirements, and budgeting necessary funds.

7. The New Hampshire Department of Transportation requires that municipalities follow guidelines established by the "Manual on Uniform Traffic Control Devices" (U.S. Dept. of Transportation) for locating and placing roadway signs. The Brentwood Planning Board and Road Agent should enforce these standards.

8. The Planning Board should require that the maximum driveway grade, within 50 feet of an existing or proposed roadway, not exceed 3%. This standard should not be waived. However, the Planning Board should also amend its subdivision regulations to permit a maximum driveway grade of 6%, at any point greater than 50 feet from an existing or proposed roadway. This standard may be waived up to a maximum of 8% only in extenuating circumstances.

9. The Planning Board should require that the maximum roadway grade within 100' of an intersection, measured along the centerline, not exceed 3%. This standard should not be waived.

10. The portion of Rowell Road from its intersection with Haigh Road to where it becomes Class VI, and the portion of Haigh Road between Rowell and Gordon Roads should be designated Scenic under RSA 231:157. In addition, all Town roads should be reviewed for potential designation as a scenic way to protect the rural landscape within public rights-of-way, thus demonstrating Brentwood's intent to maintain its rural character.

11. The Selectmen should consider enacting the provisions of RSA231:59-a, relating to Class VI roads being declared to be emergency lanes and the expending of public funds to keep such lanes passable.

WATER SUPPLY RECOMMENDATIONS

12. Evaluate the feasibility of developing a well field in the northeast corner of Town associated with a documented aquifer, and transmission lines for the community.

13. To maintain water quality, undertake a program to educate residents about septic system function and the importance of proper maintenance. Educational materials are available through the Rockingham Planning Commission.

WASTEWATER DISPOSAL RECOMMENDATIONS

14. Brentwood's past rate and density of development has not made a public sewer system necessary or feasible. Projected growth rates indicate, however, that the Town may not be able to avoid public utilities in some areas. Brentwood should begin investigating alternative ways to aggregate and treat sewage. Densely populated areas and other areas of concerns should be identified to receive priority consideration with respect to such municipal facilities.

MUNICIPAL GOVERNMENT RECOMMENDATIONS

15. Appoint a Study Committee to explore the expansion or relocation of the Town Office Building.

16. Initiate a planning effort aimed at determining the need for additional Town employees required by Brentwood's growing population.

17. Revise and utilize the Brentwood Capital Improvement Program.

PUBLIC WORKS RECOMMENDATIONS

18. Purchase a new sander and wing for winter road maintenance.

19. The part-time, appointed position of Road Agent should be converted to a full-time position.

20. A 30 x 60 metal building should be constructed at the location of the present Town maintenance shed on NH Route 111-A.

SCHOOL RECOMMENDATIONS

21. Continue planning efforts aimed at improving the facilities at Exeter Area Junior and Senior High Schools.

LIBRARY RECOMMENDATION

22. The Library Trustees should continue their efforts at expanding the Mary E. Bartlett Library and associated facilities and services.

RECREATION RECOMMENDATIONS

23. Refurbish the tennis court located on property owned by Swasey Central School.

24. Pave access road to BRC/Town land.

CONSERVATION AND PRESERVATION RECOMMENDATIONS

25. Acquire public "rights-of-way" to the Exeter River at locations such as the following:

- Rowell Road to Rowell Cove
- Mill Road
- Stevens Drive
- Gove Road

26. Acquire Town land at Avril Rock on the Little River near its confluence with the Exeter River for a picnic and/or camping area.

27. Undertake a natural resource inventory in order to identify prime forest land, farmland, wetland, scenic areas, and historic landscapes.

28. Employ regulatory approaches for open space protection such as innovative zoning districts.

29. Encourage land and conservation easement donations by promoting tax incentives.

30. Participate in the federal, state, and regional open space protection programs.

FUTURE LAND USE RECOMMENDATIONS

31. Review the existing zoning ordinance to determine if available scientific information exists to support a relaxation of design standards which presently make commercial and industrial development impractical.

32. Review carefully the results of the NH Route 101 relocation and develop land use policies that will maximize any benefits to the Town that can be realized from the highway's relocation.

33. Establish a new "Neighborhood Commercial" zone to provide more opportunities for the development of small-scale shops.

Section 3 - Brentwood Community Profile

The Town of Brentwood is moderate in size, approximately 12 square miles in size with a population of approximately 2, 600 located in nearly the geographic center of Rockingham County. This section of the Master Plan update offers information taken in large part from the most recent decennial census with more recent data offered where available.

Tables 1 and 2 and Figure 1 offer an historical perspective of the community as reported by the U.S. Census Bureau. On Figure 1 the population fluctuations are detailed from 1775 - 1992. As shown on this Figure the population of Brentwood has changed drastically from a low point in 1920 of 685 to its highest point this century of 2,592 as of 1992. Interestingly the community saw its lowest population experience in the 1920's and 1930's. This occurrence, seen in other communities in the area as well, can be explained in part by World War I and the fact that the Great Depression sent many rural residents to the larger cities as the country's economy experienced turmoil. Table 1 further reveals population density information for the community for the same period of time displayed in Figure 1. Information that comes as no surprise to anyone is the increased density that was experienced as a result of the growth spurts in the 1970's and 1980's.

Table 2 offers the population history of the Town in comparison to other area communities for the period of 1900-1992 . This table is based upon information compiled by the NH Office of State Planning as well as the US Census Bureau. Nearly all the communities experienced substantial population decreases between 1910 and 1930.

Figure 2 displays the historical growth rates for Brentwood, Rockingham County and surrounding communities for the years 1910 - 1990. As displayed, Brentwood's annual growth rate in recent years has exceeded that of surrounding communities but been slightly lower or equal to the county wide growth rate.

Table 3 offers a series of population projections for the Town and its neighboring communities for the years 2000 - 2015. These projections are estimates developed by the NH Office of State Planning. They indicate a slightly increasing population trend for the Town that was based on market indicator from the very early 1990's. Interestingly the Town appears to be headed for moderate growth that will be slightly higher than statewide projections and slightly lower than the Rockingham County as a whole.

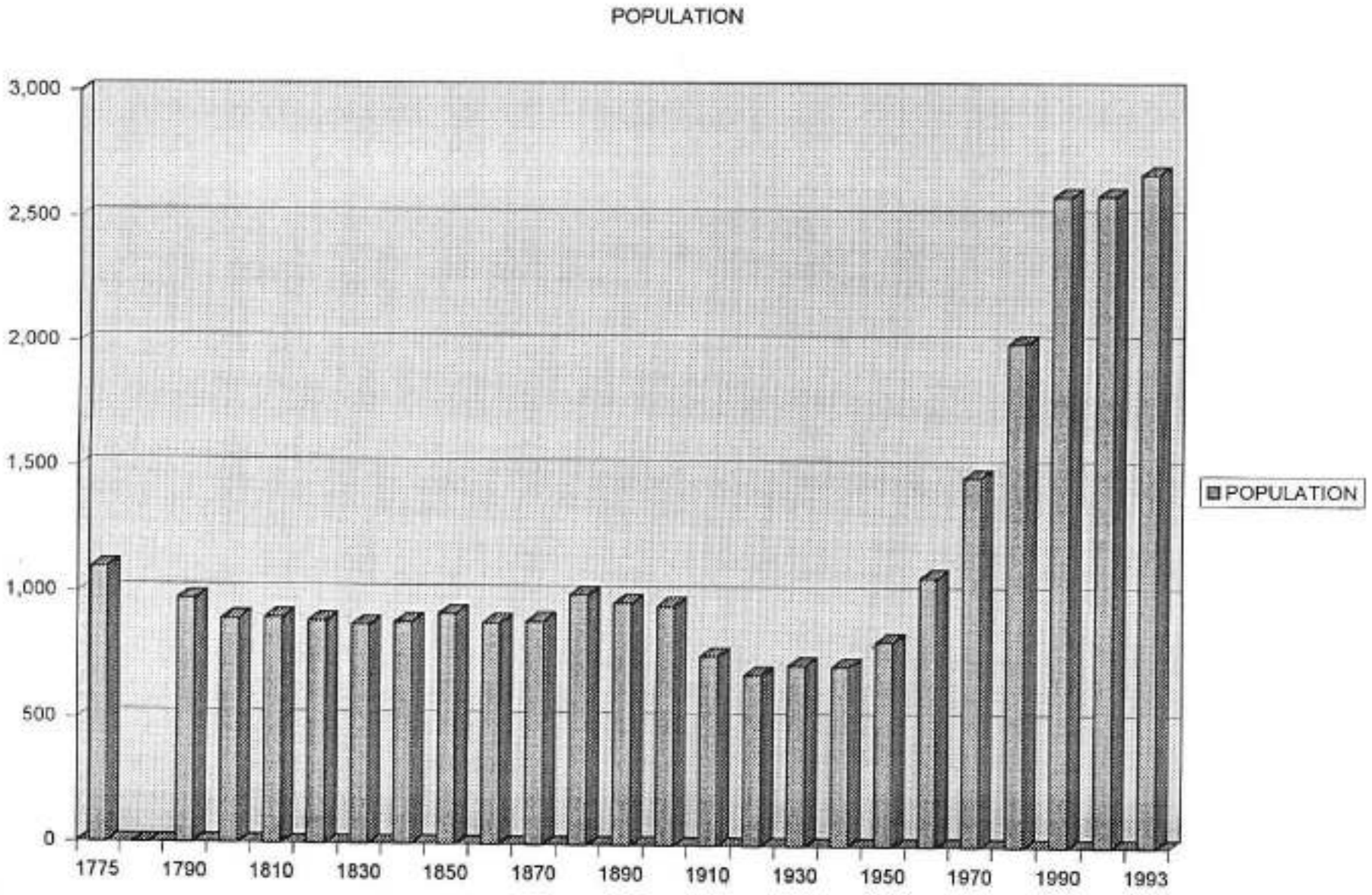
Tables 4 and 5 detail employment and income information about residents of the Town of Brentwood and surrounding communities. Table 4 displays information regarding employment sectors. According to NH Department of Employment Security, both manufacturing and non-manufacturing opportunities increased in Brentwood between 1930 and 1990. In the same time frame the number of business establishments in town in both the manufacturing and non-manufacturing sectors increased. Remarkably, in comparison, Brentwood consistently outperformed all surrounding communities, the County and the State in all categories on Table 4.

BRENTWOOD POPULATION HISTORY

YEAR	POPULATION	PERSONS PER SQUARE MILE*	YEAR	POPULATION	PERSONS PER SQUARE MILE*
1775	1,100	64.7	1890	967	56.9
1786	--------	--------	1900	957	56.3
1790	976	57.4	1910	759	44.6
1800	899	52.9	1920	685	40.3
1810	905	53.2	1930	725	42.6
1820	892	52.5	1940	720	42.4
1830	878	51.6	1950	819	48.2
1840	888	52.2	1960	1,072	63.1
1850	923	54.3	1970	1,468	86.4
1860	887	52.2	1980	2,004	117.9
1870	895	52.6	1990	2,590	152.4
1880	999	58.8	1992	2,592	152.5

Area of Town: 12.2 square miles

*Sources: 1767-1940, Unpublished report, N.H. Office of State Planning.
1940-1990, U.S. Bureau of the Census.
1992, N.H. Office of State Planning.


POPULATION
3,000
2,500
2,000
1,500
1,000
500
0
1775
1790
1810
1830
1850
1870
1890
1910
1930
1950
1970
1990
1993
POPULATION

POPULATION HISTORY
Town of Brentwood and Area Communities
1900-1992

TOWN	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	1992	1993
BRENTWOOD	**957**	**759**	**685**	**725**	**720**	**819**	**1,072**	**1,468**	**2,004**	**2,590**	**2,592**	**2,677**
East Kingston	496	413	384	347	424	448	574	838	1,135	1,358	1,393	1,458
Epping	607	575	623	577	696	719	1,196	1,784	2,129	2,768	2,781	5,342
Exeter	4,922	4,897	4,604	4,872	5,398	5,664	7,243	8,892	11,042	12,481	12,294	12,500
Fremont	749	622	519	571	634	696	783	993	1,333	2,576	2,648	2,703
Kingston	1,132	1,015	859	1,017	1,002	1,170	1,672	2,882	4,111	5,591	5,618	5,651
TOTAL	7,731	7,266	6,815	7,092	7,872	8,346	10,868	13,975	17,643	21,773	21,708	30,331
Rockingham Co.	51,118	52,188	52,498	53,750	58,142	70,059	99,029	138,951	190,345	245,845	242,436	247,812

Source: U.S. Census Bureau - 1900-1990; N.H. Office of State Planning Population Estimates, 1992.

TOWN	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	1992	1993
Brentwood	957	759	685	725	720	819	1,072	1,468	2,004	2,590	2,592	2,677
		-2.29%	-1.02%	0.57%	-0.07%	1.30%	2.73%	3.19%	3.16%	2.60%		
Region	7,731	7,266	6,815	7,092	7,872	8,346	10,868	13,975	17,643	21,773	21708	30,331
		-0.62%	-0.64%	0.40%	1.05%	0.59%	2.68%	2.55%	2.36%	2.13%		
Rockingham Co.	51,118	52,188	52,498	53,750	58,142	70,059	99,029	138,951	190,345	245,845	242436	247,812
		0.21%	0.06%	0.24%	0.79%	1.88%	3.52%	3.45%	3.20%	2.59%		

	1910	1920	1930	1940	1950	1960	1970	1980	1990	1992	1993
Brentwood	-2.29%	-1.02%	0.57%	-0.07%	1.30%	2.73%	3.19%	3.16%	2.60%	0.0%	0.3%
Region	-0.62%	-0.64%	0.40%	1.05%	0.59%	2.68%	2.55%	2.36%	2.13%	0.0%	3.4%
Rockingham Co.	0.21%	0.06%	0.24%	0.79%	1.88%	3.52%	3.45%	3.20%	2.59%	-0.1%	0.2%

POPULATION PROJECTIONS - 1990-2015
Brentwood and Area Communities

TOWN/AREA	1990 (Census)	2000	2005	2010	2015	Average Annual Percent Change 1990-2000	1990-2005	1990-2010	1990-2015
Brentwood	2,590	2,716	2,858	2,964	3,153	0.48%	0.66%	0.68%	0.75%
East Kingston	1,352	1,438	1,500	1,571	1,654	0.62%	0.69%	0.75%	0.70%
Epping	5,162	6,397	6,988	7,469	7,846	2.17%	2.04%	1.86%	1.03%
Exeter	12,481	11,901	11,943	11,916	12,017	-0.47%	-0.29%	-0.23%	0.05%
Fremont	2,576	2,716	2,858	2,964	3,153	0.53%	0.69%	0.70%	0.75%
Kingston	5,591	6,177	6,594	6,936	7,366	1.00%	1.11%	1.08%	0.88%
Region Total	29,752	31,345	32,741	33,820	35,189	0.52%	0.64%	0.64%	0.58%
Rockingham Co.	245,845	266,218	282,972	296,418	312,103	0.80%	0.94%	0.94%	0.80%
New Hampshire	1,109,252	1,175,262	1,233,157	1,281,541	1,335,817	0.58%	0.71%	0.72%	0.64%

SOURCE: N.H. POPULATION PROJECTIONS- TOTAL POPULATION FOR CITIES AND TOWNS 1990-2015
N.H. OFFICE OF STATE PLANNING, OCTOBER 1993.

Employment by Town, Manufacturing and Non-Manufacturing 1980 and 1990 - BRENTWOOD AND AREA COMMUNITIES

	1980			1990			Avg. Annual % Growth		
TOWN/AREA	Manuf.	Non-Manuf.	Total	Manuf.	Non-Manuf.	Total	Manuf.	Non-Manuf.	Total
BRENTWOOD	24	57	81	38	224	262	4.7%	14.7%	12.5%
Epping	-----	-----	415	65	528	593	-----	-----	3.6%
Exeter	1743	3624	5367	1267	5039	6306	-3.1%	3.4%	1.6%
East Kingston	-----	-----	35	-----	-----	NA	-----	-----	NA
Fremont	120	44	164	124	163	287	0.3%	14.0%	5.8%
Kingston	83	269	352	73	714	787	-1.3%	10.3%	8.4%
TOTAL	1946	3937	6333	1529	6444	7973	-2.4%	5.1%	2.3%
Rock. County	17917	38051	55968	14479	62686	82085	-2.1%	5.1%	3.9%
New Hampshire	116595	206632	323227	105608	323922	429530	-1.0%	4.6%	2.9%

Source: NH Dept of Employment Security

Business Establishments by Town, Manufacturing and Non-Manufacturing 1980 and 1990 -BRENTWOOD AND AREA COMMUNITIES

	1980			1990			Avg. Annual % Growth		
TOWN/AREA	Manuf.	Non-Manuf.	Total	Manuf.	Non-Manuf.	Total	Manuf.	Non-Manuf.	Total
Brentwood	3	14	17	6	39	45	7.2%	10.8%	10.2%
East Kingston	-----	-----	13	-----	-----	NA	-----	-----	NA
Epping	-----	-----	44	8	73	81	NA	NA	6.3%
Exeter	26	306	332	16	411	427	-4.7%	3.0%	2.5%
Fremont	6	14	20	8	32	40	2.9%	8.6%	7.2%
Kingston	8	49	57	9	95	104	1.2%	6.8%	6.2%
TOTAL	40	369	466	41	611	652	0.2%	5.2%	3.4%
Rock. County	304	3348	3652	397	5305	6322	2.7%	4.7%	5.6%
New Hampshire	1918	19144	21062	2284	27946	30230	1.8%	3.9%	3.7%

Source: NH Dept of Employment Security

Table 5 offers a look at the median and per capita income reported in the 1980 and 1990 census. As displayed Brentwood's median family income is slightly higher than both the State and County for 1990 but its per capita level is lower than the County and higher than the State. It is also interesting to note that the Town has a very low percentage of persons living below the poverty level.

Table 6 offers a tabular look at the age distribution for Brentwood and surrounding towns in 1980 and 1990. Understandably, with the Rockingham County Nursing Home located in Town the senior population is nearly four times as large in Brentwood as in other communities the County or the State.

Table 7 offers a summary of the educational backgrounds of Brentwood's residents. The table compares the information from the 1980 and 1990 census with some interesting results. There has been a dramatic drop in respondents who attained less than a ninth grade education from 16.5% of the total respondents in 1980 to less than 10.6% in 1990. There has also been a decrease in the number of high school students not completing their studies through the 12th grade. Remarkably the levels of high school graduates and post high school educational attainment are nearly unchanged between the two study years. Those receiving high school diplomas remained at approximately 35% for both years while those respondents professing to college with no degree increased by a little more than 2% over the decade. Those with a BA degree showed only 3% increase between the two study years. Unfortunately the 1980 census did not specifically ask about associate degrees or graduate and professional degrees so comparisons along these lines will have to wait until the 2000 census.

The final table in the community profile section Table 8 details information about Brentwood residents and their places of work and commuting times and distances. There were 1,165 respondents to the census that indicated they were employed in 1990. Of these the vast majority commuted alone in an automobile (79.2%). Nearly sixty percent (57.4%) indicated that they commuted less than 25 minutes to their jobs. This relatively short commute is understandable in light of the fact that a little more than half (56%) of the working population are employed within Rockingham County. Remarkably, more than 20% work in Brentwood and an additional nearly twenty percent (17%) work in nearby Exeter. As revealed on Table 8 the remaining major work destinations are Portsmouth, Plaistow, Stratham, and Seabrook.

Income in Brentwood and Area Communities
Median and Per Capita - 1979 & 1989

TOWN/AREA	- 1979 - Median Family Income	- 1979 - Per Capita Income	- 1989 - Median Family Income	- 1989 - Per Capita Income	Percent of Persons Below Poverty Level
BRENTWOOD	$20,625	$6,101	$47,222	$16,112	1.9%
East Kingston	$21,964	$7,608	$46,914	$15,713	1.2%
Epping	$15,407	$6,980	$40,122	$14,208	6.4%
Exeter	$19,481	$7,392	$42,556	$18,531	5.2%
Fremont	$20,101	$6,654	$43,199	$14,841	1.9%
Kingston	$22,672	$7,419	$51,332	$18,382	1.6%
Rockingham Co	**$21,181**	**$7,445**	**$46,942**	**$17,694**	**4.4**
New Hampshire	**$19,724**	**$6,966**	**$41,628**	**$15,959**	**6.4**

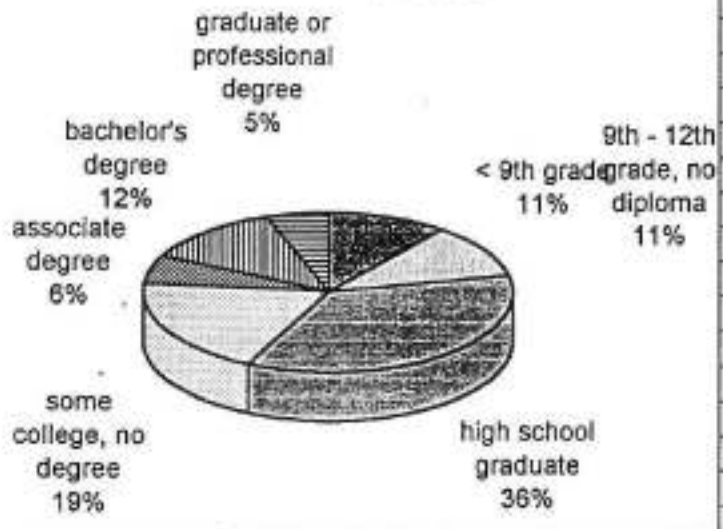
Source: 1980 Census STF3A; 1990 CPH-5-31, Table 9

1980-1990 AGE DISTRIBUTION

	AGES 1980										AGES 1990									
Town	<5	5-13	14-19	20-24	25-34	35-44	45-54	55-64	65-74	75+	<5	5-13	14-19	20-24	25-34	35-44	45-54	55-64	65-74	75+
BRENTWOOD	112	288	197	95	297	283	189	147	143	256	142	295	213	144	323	538	309	188	148	290
	5.6%	14.3%	9.8%	4.7%	14.8%	14.1%	9.4%	7.3%	7.1%	12.8%	5.5%	11.4%	8.2%	5.6%	12.5%	20.8%	11.9%	7.3%	5.7%	11.2%
Epping	278	503	385	262	723	384	309	289	217	110	444	766	279	345	1110	904	459	377	285	193
	8.0%	14.5%	11.1%	7.6%	20.9%	11.1%	8.9%	8.4%	6.3%	3.2%	8.6%	14.8%	5.4%	6.7%	21.5%	17.5%	8.9%	7.3%	5.5%	3.7%
Exeter	618	1407	1217	838	1724	1295	1094	1069	969	793	872	1497	831	727	2315	1999	1301	1000	951	988
	5.6%	12.8%	11.0%	7.6%	15.6%	11.7%	9.9%	9.7%	8.8%	7.2%	7.0%	12.0%	6.7%	5.8%	18.5%	16.0%	10.4%	8.0%	7.6%	7.9%
Fremont	98	205	142	92	246	172	115	124	87	52	273	343	176	130	642	452	231	143	96	86
	7.4%	15.4%	10.7%	6.9%	18.5%	12.9%	8.6%	9.3%	6.5%	3.9%	10.6%	13.3%	6.8%	5.1%	25.0%	17.6%	9.0%	5.6%	3.7%	3.3%
East Kingston	77	191	133	57	176	180	112	84	80	125	158	183	82	64	295	256	137	90	42	51
	6.3%	15.7%	10.9%	4.7%	14.5%	14.8%	9.2%	6.9%	6.6%	10.3%	11.6%	13.5%	6.0%	4.7%	21.7%	18.9%	10.1%	6.6%	3.1%	3.8%
Kingston	305	604	442	298	789	551	391	327	255	149	471	771	446	339	1068	1022	644	356	261	213
	7.4%	14.7%	10.8%	7.2%	19.2%	13.4%	9.5%	8.0%	6.2%	3.6%	8.4%	13.8%	8.0%	6.1%	19.1%	18.3%	11.5%	6.4%	4.7%	3.8%
Region	1183	2595	2074	1344	3167	2314	1819	1713	1496	1336	1889	3085	1581	1410	4686	4150	2437	1798	1522	1608
	6.2%	13.6%	10.9%	7.1%	16.6%	12.2%	9.6%	9.0%	7.9%	7.0%	7.8%	12.8%	6.5%	5.8%	19.4%	17.2%	10.1%	7.4%	6.3%	6.7%
Rock. Co.	13542	28326	20117	16231	35886	24425	18220	15789	10986	6823	19937	31647	18258	16356	49114	44045	26099	17789	13208	9392
	7.1%	14.9%	10.6%	8.5%	18.9%	12.8%	9.6%	8.3%	5.8%	3.6%	8.1%	12.9%	7.4%	6.7%	20.0%	17.9%	10.6%	7.2%	5.4%	3.8%
N. H. State	62512	128767	103769	83624	157396	107028	90121	84426	61788	41179	84565	139157	89673	82962	204823	182632	112215	88196	71471	53558
	6.8%	14.0%	11.3%	9.1%	17.1%	11.6%	9.8%	9.2%	6.7%	4.5%	7.6%	12.5%	8.1%	7.5%	18.5%	16.5%	10.1%	8.0%	6.4%	4.8%

Source: 1980 and 1990 U.S. Census of Population and Housing Table STF1

Educational Attainment - Persons 18 and over				
	1980		1990	
< 9th grade	221		212	10.6%
9th - 12th grade, no diploma	206		221	11.0%
high school graduate	465		712	35.5%
some college, no degree	237		384	19.2%
associate degree	N/A		120	6.0%
bachelor's degree	128		247	12.3%
graduate or professional degree	79		109	5.4%
Totals	1336		2005	100.0%



Source: 1990 Census STF3A, Table P60

Employment Commuting Patterns
Town of Brentwood - 1990

Means of Transportation		
Mode	Number Employed	Percent of Total
Drive alone	923	79.2%
Car pool	115	9.9%
Public transportation	2	0.2%
Walk	42	3.6%
Other	2	0.2%
Work at home	81	7.0%
Total	1,165	100.0%

Work Destinations		
Working:	Number Employed	Percent of Total
In town	241	20.6%
Out of town	929	79.4%
In county	820	89.2%
Out of county	99	10.8%
In state	919	78.5%
Out of state	251	21.5%

Travel Time		
Minutes	Number Employed	Percent of Total
<5	36	3.3%
5 - 9	101	9.3%
10 - 14	160	14.7%
15 - 19	140	12.9%
20 - 24	187	17.2%
25 - 29	59	5.4%
30 - 34	130	11.9%
35 - 39	60	5.5%
40 - 44	31	2.8%
45 - 59	77	7.1%
60 - 89	75	6.9%
90 or more	33	3.0%

Commuting Destinations			
Total employed living in Brentwood:			1165
Work Destination	Number Employed	Work Destination	Number Employed
Brentwood	241	Boston, Ma.	29
Exeter	200	Hampton	27
Portsmouth	70	Kingston	24
Plaistow	53	Epping	24
Stratham	46	Lee	20
Seabrook	39		
Haverhill, Ma.	31		
North Andover, Ma.	29		

Source: 1990 U.S. Census of Population and Housing, STF 3A;
Tables P45, P48, P49, and P50.

HOUSING DISTRIBUTION BY TYPE
Brentwood and the Surrounding Communities

	1980							1990							1980 - 1991		
		Single Family		Multi-Family		Manufactured			Single Family		Multi-Family		Manufactured		Units	Percent Growth:	
TOWN/AREA	Total	number	%	number	%	number	%	Total	number	%	number	%	number	%	added	Total	Avg.Annual
BRENTWOOD	598	478	79.9%	31	5.2%	89	14.9%	778	640	82.3%	46	5.9%	92	11.8%	180	30%	2.67%
Exeter	4406	2355	53.4%	1314	29.8%	737	16.7%	5280	2305	43.7%	1952	37.0%	1023	19.4%	874	20%	1.83%
Epping	1181	826	69.9%	211	17.9%	144	12.2%	2059	1252	60.8%	407	19.8%	400	19.4%	878	74%	5.72%
Danville	439	356	81.1%	33	7.5%	50	11.4%	960	592	61.7%	76	7.9%	292	30.4%	521	119%	8.14%
Fremont	461	386	83.7%	54	11.7%	21	4.6%	920	750	81.5%	102	11.1%	68	7.4%	459	100%	7.15%
Kensington	450	400	88.9%	26	5.8%	24	5.3%	585	511	87.4%	22	3.8%	52	8.9%	135	30%	2.66%
Kingston	1518	1185	78.1%	198	13.0%	135	8.9%	2115	1673	79.1%	267	12.6%	175	8.3%	597	39%	3.37%
Newfields	301	244	81.1%	54	17.9%	3	1.0%	324	260	80.2%	50	15.4%	14	4.3%	23	8%	0.74%
East Kingston	362	296	81.8%	8	2.2%	58	16.0%	494	423	85.6%	12	2.4%	59	11.9%	132	36%	3.16%
REGION TOTAL /AVG.	9716	6526	67.2%	1929	19.9%	1261	13.0%	13515	8406	62.2%	2934	21.7%	2175	16.1%	3799	39%	3.36%
ROCKINGHAM CO.	68132	45559	66.9%	17423	25.6%	5150	7.6%	101773	62681	61.6%	32097	31.5%	7808	7.7%	33641	49%	4.09%
NEW HAMPSHIRE	347758	218351	62.8%	106575	31.2%	20832	6.0%	503541	297474	59.1%	164178	32.6%	41889	8.3%	155783	45%	3.77%

SOURCES: (1) "Current Estimates & Trends in New Hampshire's Housing Supply, Update: 1991."
N.H. Office of State Planning, November 1992.
(2) 1980 and 1990 U.S. Census Bureau

Housing Costs in Exeter and Area Communities
Rental and Owner Occupied Housing Units - 1990

BRENTWOOD	$517	222%	$169,400	263%
Epping	$473	203%	$123,300	191%
Exeter	$539	231%	$154,000	239%
Fremont	$571	245%	$133,600	207%
Region Average	**$233**	**100%**	**$64,478**	**100%**
Rockingham Co.	**$541**	**232%**	**$149,800**	**232%**
New Hampshire	**$479**	**205%**	**$129,400**	**201%**

Source: 1990 Census of Population and Housing, Summary Population and Housing Characteristics, Bureau of the Census.

Occupied Housing Units and Persons per Unit
1980 & 1990 US Census

BRENTWOOD	***543***	***755***	***3.4%***	***3.7***	***3.4***
Epping	1149	1846	4.9%	3.0	2.8
Exeter	4182	4975	1.8%	2.6	2.5
Fremont	449	865	6.8%	3.0	3.0
Kingston	1415	1911	3.1%	2.9	2.9
Area Total	**7738**	**10352**	**3.0%**	**2.8**	**2.7**
Rock. County	**65951**	**89118**	**3.1%**	**2.9**	**2.8**
New Hampshire	**323493**	**411186**	**2.4%**	**2.8**	**2.7**

Source: 1980 and 1990 US Census

Table 12
Housing Costs
Rental and Owner Occupied Housing Units

TOWN/AREA	Median Rent 1990	Percent of Rock. Co. Average	Median Value Owner Occup. Units - 1990	Percent of Rock. Co. Average
Brentwood	***$517***	***96%***	***$169,400***	***113%***
Epping	$473	87%	$123,300	82%
Exeter	$539	100%	$154,000	103%
Fremont	$571	106%	$133,600	89%
Kingston	$524	97%	$148,500	99%
Area Total/Avg.	**$525**	**97%**	**$145,760**	**97%**
Rock. County	**$541**	**100%**	**$149,800**	**100%**
New Hampshire	**$479**	**89%**	**$129,400**	**86%**

Source: 1990 Census of Population and Housing, Summary Population and Housing Characteristics

Table 13
Median Housing Purchase Prices -- 1990 and 1992
Brentwood and Area Communities

Communities	1990 Sample Size*	1990 Median Price	1992 Sample Size*	1992 Median Price	Percent Change 1991-1992
BRENTWOOD	***9***	***$125,048***	***11***	***$105,048***	***-16.0%***
Epping	14	$120,750	24	$88,404	-26.8%
Exeter	21	$136,287	50	$109,189	-19.9%
Fremont					
Kingston	15	$130,071	13	$110,928	-14.7%
Area Total/Avg	59	$45,560	98	$37,597	-19.2%
Rockingham County	1,133	$119,048	1,095	$112,381	-5.6%
New Hampshire	3,956	$107,524	3,470	$99,048	-7.9%

Source: N.H. Housing Finance Authority.
Purchase Price Median, 4 Quarters 1991 and 1992.

*Sample sizes under 50 are not statistically reliable.

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TABLE 14
Percent of Households By Income
1990 Census

TOWN/AREA	Percent of Area Population	Income Ranges					
		$0 to $14,999	$15,000 to $29,999	$30,000 to $49,999	$50,000 to $74,999	$75,000 to $99,999	$100,000 and over
BRENTWOOD	*10%*	*3%*	*1%*	*4%*	*8%*	*12%*	*12%*
Epping	20%	11%	12%	13%	19%	13%	8%
Exeter	48%	32%	29%	26%	44%	49%	56%
Fremont	10%	2%	2%	2%	6%	13%	16%
Kingston	22%	7%	8%	10%	30%	25%	21%
TOTAL	100%	100%	100%	51%	100%	100%	100%

Source: 1990 U.S. Census, STF3A - Tables P80, P107, and P110.

Housing Units in Brentwood and Area Communities 1980 & 1990

TOWN/AREA	Housing Units 1980	Housing Units 1990	Percent Increase 1980-1990	AAGR '80-'90	Persons Per Occupied Housing Unit 1980	Persons Per Occupied Housing Unit 1990
BRENTWOOD	598	778	30%	2.7%	3.14	2.89
Epping	1181	2,059	74%	5.7%	2.96	2.76
Exeter	4,406	5,346	21%	2.0%	2.59	2.45
Fremont	464	920	98%	7.1%	2.93	2.94
Kingston	1,683	2,015	20%	1.8%	2.90	2.93
Region Total/Avg	4,406	5,346	21%	2.0%	0.24	0.22
Rockingham Co.	69,375	101,773	47%	3.9%	2.84	2.72
New Hampshire	349,001	503,541	44%	3.7%	2.75	2.62

Note: "AAGR" = Average Annual Growth Rate

Sources: "Current Estimates & Trends in New Hampshire's Housing Supply, 1980-1990" N.H. Office of State Planning, January, 1992.
1990 Census of Population and Housing, Summary Population and Housing Characteristics - New Hampshire, 1990 CPH-1-31, Table 5.
1980 Census - STF-1, Table 35.

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Section 4 - Community Facilities

A. Municipal Government

The Brentwood Town Offices are located on Dalton Road just of NH Route 111-A, just east of the intersection with NH Route 125. The building was built in 1978, using mostly volunteer labor, and donated material. The Town Office complies with federal regulations regarding handicapped accessibility. The building is located on a 30-acre parcel of Town-owned land. Some on-site expansion is possible but a good portion of the parcel is wet.

Offices of the selectmen, town clerk, tax collector, treasurer, welfare director, building inspector, planning and zoning adjustment boards, and police department are located in the Town Office. Records of other Town Boards are maintained in the building and most Town Boards meet in the meeting room.

Municipal worker's include the selectmen, administrative assistant, town clerk, deputy town clerk, tax collector, building inspector, various board secretaries; treasurer, auditor, police officers, director of public works, road agent, librarian and assistant, welfare administrator, assessors, and election workers. Volunteer workers include members of the planning board, zoning board of adjustment, budget committee, conservation commission, fire and rescue, solid waste delegates, recreation commission, recycling committee, and library trustees.

There have been a number of improvements to the Town Offices in the recent past. These include installation of a uni-sex bathroom meeting federal requirements for handicapped access; installation of a new phone communications network giving separate lines to the major departments; purchase of new computers enabling the Town Clerk, Administrative Assistant and Planning Board to work on independent office equipment; and remodeling of the Planning Board office to create approximately 30% more space.

Recommendations

1. The Town should begin planning efforts to determine the feasibility of expanding the Town Offices or relocating to a larger facility.

2. Purchase or build a fireproof vault for the storage of Town records.

B. BRENTWOOD FIRE DEPARTMENT

The Brentwood Fire Station, located at 148 Crawley Falls Road originally was a two bay structure built in 1947 by all volunteer labor and donated materials. Additions were added in 1976 and 1990, again without public funding, and it is owned and operated by the Brentwood Volunteer Firemens' Association. It is now a seven bay facility which includes a dispatch center, meeting hall, training room, and administrative offices. It also serves the community as an evacuation center with its own auxiliary power supply. Building upkeep and maintenance is performed and paid for by the Association and the Ladies Auxiliary. The building was updated for energy efficiency with the assistance of the State of N.H. Office of Energy.

Equipment

The first equipment purchase undertaken by the Fire Department was a 1932 Dodge with a 275 gallon oil tank and a garden hose. In 1953, a Chevrolet 500 gpm pumper was purchased. In 1970, a Ford Maxim 1000 gpm pumper was added to the Fire Department's inventory. In 1987, two Class A pumpers were purchased to replace the 1953 and 1970 units. The equipment owned by the Fire Department consists of the following:

Engine 1 - 1987, I.H.-KME 1250/1000 pumper
Engine 4 - 1987, Hahn-KME 1500/1000 pumper
Tanker 1 - 1975, Mack/shop-built 3000 gallon tanker
Forestry 1 - 1954, military 4x4 shop-built forestry
Rescue 2 - 1992, Ford F350 1 Ton
Ambulance - 1979, Ford modular ambulance
HAZMAT Trailer - 1994, shop-built
26 Portable Radios
37 Pagers and chargers
10 Mobile radios
1 Base radio
35 sets of personal equipment
15 SurviveAir Packs
12 SurviveAir Bottles
3 500 watt portable lights
3 generators (1000, 1700, and 5000 watt units)
1 Pair mast trousers
2 Portable Oxygen Kits
1 Ambulance stretcher
1 Sherman stretcher
1 Chair Stretcher
2 Short boards
2 Insulated floating water rescue suits
Miscellaneous supplies and equipment for medical emergencies

3 Foam inductors
1 Portable pump
1 Floating pump
2 Chainsaws
K12 Rescue saw
2 2200 gallon Fold-A-Tanks

Hose

3400 feet of 4 inch
2000 feet of 3 inch
600 feet of 2.5 inch
2450 feet of 1.75 inch
850 feet of 1.5 inch
50 feet of 6 inch hard suction

1 Defibulator kit
2 Portable suction kits
1 Stokes stretcher
1 Scoup stretcher
4 Long boards
1 Floating stretcher

Each piece of fire apparatus carries a full compliment of nozzle adaptors, ladders, tools and salvage equipment The rescue and hazmat trailer carry equipment and supplies necessary to assist ambulance and fire apparatus at every type of fire, rescue, recovery or hazmat incident that may occur.

The ambulance is fully stocked with medical supplies and equipment to respond to all medical emergencies.

Operations

The present Fire Department staff for Brentwood includes a chief, seven officers, and 37 fire and rescue personnel. The department is run on an on-call basis.

Brentwood is a member of a 56-town mutual aid pact. The number of calls to which fire and rescue personnel respond continues to increase. Hazardous materials emergencies are on the rise and have become a major problem not only for Brentwood but fire departments across the country. Rescue personnel as well as fire responders face an increased risk of exposure, to blood borne diseases and viral infections.

The Fire Department has enforcement duties pertaining to hazardous materials as well as handling spills, leaks, and fire involving such materials.

Recommendations

1. Initiate a program to recover costs associated with the provision of emergency services to county facilities.

2. Establish a capital reserve fund for the purpose of replacing the tanker currently owned.

3. Full-time firefighters and EMTs covering daytime hours for 8:00 a.m. to 4:00 p.m. will be necessary in the near future.

4. A secretary should be hired for the Department as at least a half-time position..

5. Purchase a computer for administrative work, ambulance billing, state reports, payroll, and budget reports.

6. Purchase additional equipment for response to HAZMAT calls.

7. Continue aggressive training of fire and rescue personnel to minimize liability to the Town and to meet State and Federal regulations.

8. The Planning Board and the Fire Department must continue to work closely together on fire codes and standards.

9 Formulate a plan for the orderly transfer of ownership to the Town of the fire station and hall in the event the volunteer Firemen's Association is unable to continue maintaining the property due to lack of income and increasing maintenance costs.

C. POLICE DEPARTMENT

The Brentwood Police Department is located in the basement of the Town Office Building. The facility includes an evidence room, conference room and Chief's Office. All of these rooms are in good condition and are adequate for the current level of operations.

Equipment

The Police Department currently has two cruisers. The oldest is a 1989 Chevrolet, in good condition, but will need replacement by the year 1995. The second vehicle is a 1990 Chevrolet also in good condition. Following is a list of other equipment and the quantities of each, owned by the Police Department:

5 Phoenix SX Mobile 11 channel Radio
2 Motorola Convert-Com 4 Channel Radio
3 12 Channel General Electric Portable Radio
3 Motorola GP 300
1 General Electric 12 Volt Power Supply

1 Whelen WS-295 Control Boxes
1 Kustom Signal Radar Unit
2 Whelen Edge 9000 Bar Light
2 Mossberg Pump Action 12 Gauge Shot Gun
1 Power Amplifier
1 Vega Vehicle Pager

Operations

The Police Department staff includes a chief, deputy chief, sergeant, juvenile officer/matron, animal control officer; with a total of eleven on the payroll. All positions at this time are part-time positions. The majority of calls consist of accidents, prowlers, domestic disputes, speeding and attempted burglary. A mutual aid agreement has been signed with the Towns of Fremont, Exeter, Kingston and Epping.

Recommendations - The following recommendations are listed in order of importance:

1. Hire a full-time officer by June of 1995.

2. Purchase an up-to-date computer system.

3. Regularly scheduled replacement of fully equipped cruisers.

4. Replace existing mobile radios by 1997. (six radios in all)

5. Fund two full-time officers by the year 1998.

D. MARY E. BARTLETT MEMORIAL LIBRARY

The Brentwood Free Library was dedicated as the Mary E. Bartlett Memorial Library in May 1975. It was established in 1892 with a gift from the legislature. The library moved from home to home, until it was finally located at the present sight on Dalton Road. This location allows the library to be located in close proximity to other Town services such as the Town offices, school and fire hall. It is however somewhat difficult to find the first time. The building is the old school house with an addition constructed by volunteers with donations of labor and materials by many Brentwood citizens.

The library is staffed by two people. It is open 30 hours per week September through June and 23 hours per week during the summer month. The most pressing personnel need at this time is the necessity of having more than one employee at the library at one time. It is difficult to serve the number of patrons that come to the library at one time. It is not unusual to have fifty books circulate within one hour. This does not include books returned, reference questions, and phone calls.

Space is at premium, despite the recent addition. The number of patrons has increased dramatically. Bookshelves are filled and new shelving will be necessary. There is only one table for students to do research. More space will be needed as more shelving is added.

At this time the Mary Bartlett Library has no separate meeting space. All programming is

conducted in the library proper. Programming includes story hours, a summer reading program, book discussion groups, speakers, and an active Friends of the Library group. A separate meeting room would allow programming to take place without disturbing those who are studying, looking for books or browsing. During non-operating hours, the library facility is available for use by community groups. The library has both an entrance and a bathroom which are handicapped accessible. The shelving is not spaced to accommodate a wheel chair.

Maintenance is very important. The structural integrity of the older section of the building was recently evaluated when the floor sagged. A full evaluation is necessary. The library trustees would like to see painting and other maintenance done on a schedule.

LIBRARY SERVICES

The following figures represent an average year of activity at the Mary E Bartlett Memorial Library.

Public Service Hours		1555
Total attendance in the library for the year		4969
In-library use		986
Total reference transactions* completed		986
Material circulation		
a.	Adult	5580
b.	Juvenile	6239
c.	Other (include magazines and A-V)	4300
Total circulation for the year		16,119
Interlibrary loan		
a.	Provided to other libraries	0
b.	Received from other libraries	211
Total number of adult programs		5
Total number of juvenile programs		50
Total attendance at adult programs		90
Total attendance at juvenile programs		624

Library Recommendations

1. Complete a study of the structural integrity of the entire facility and undertake correction of any deficiencies found.

2. Enlarge the staff of the library to allow two individuals per shift.

3. Establish a capital reserve fund to provide for the future expansion of services at the library. This expansion to include both additional space (especially a meeting room) and new equipment (computers, shelving, study tables).

4. Initiate a regularly scheduled maintanance program for the facility.

E. The Swasey Central School

The Swasey Central School was built in 1950 with additions in 1967, 1975 and a major renovation which was completed and dedicated in September of 1989. The school sits on a 9 acre site. It is now all on one floor which makes it entirely handicapped accessible. The school has two wings - a primary wing housing grades one through three and an intermediate wing housing grades four through six. The two wings are joined together by a middle section which includes a library, a gymnasium, the cafeteria and the office. The enrollment as of June, 1994 was 198 with each grade containing approximately 33 children.

We currently have 8 straight grade classrooms and 2 multi-aged classes. Class size runs from a low of 15 to a high of 24 with an average class size of 20. In addition to an administrator, nurse, secretary, and ten classroom teachers, we employ part-time music, art and physical education teachers. We also have tow full-time special education teachers, one of whom has counseling responsibilities. Several part-time teachers include a speech and language therapist, an occupational therapist, a psychologist, a Chapter I tutor, 5 special needs aides, an office aide, 2 cafeteria employees and 2 custodians.

The school has adequate space to support our current instructional program and enough room to support a 25% growth in population. The only area which needs enlarging is our gymnasium which serves as gym, cafeteria and auditorium. A gym which doubles as a cafeteria causes problems with scheduling because gym classes cannot occur from 11:45 - 1:15 each day. Also, while the auditorium can easily accommodate all of our children, it does not accommodate the large number of parents who come to all-school productions. A stage would be a valuable addition so that students can get experience in performance.

The school is used extensively in the late afternoon and evening for Boy Scouts, Girl Scouts, Aerobics, Basketball, after-school sports, Brentwood Recreation, School Board meetings, Variety show, Concerts and a variety of other social events (suppers, etc.)

School Enrollment 1985-1994

(Enrollment as of 9/30 of each year)

GRADES	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
1	35	31	30	31	30	30	29	27	35	35
2	27	38	31	36	29	32	29	32	28	28
3	25	32	36	36	35	29	36	26	32	34
4	22	24	31	33	36	38	31	33	33	34
5	28	22	26	36	34	36	41	30	32	34
6	21	27	26	31	36	32	33	41	30	33
TOTAL	158	174	180	203	200	197	199	189	190	198

"Source: Town of Brentwood Annual Reports, 1985-1994"

Projected School Enrollments 1995-2005*

GRADES	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	26	35	24	26	26	25	25	25	25	25	25
2	33	26	35	24	26	26	25	25	25	25	25
3	33	34	27	36	25	27	27	26	26	26	26
4	35	36	37	29	39	27	29	29	28	28	28
5	36	36	37	38	30	40	28	30	30	29	29
6	31	35	35	36	37	29	39	27	29	28	28
TOTAL	194	202	195	189	183	174	173	162	163	162	161

Enrollment projections taken from SAU #16 (Exeter Area) facilities study prepared by the New England School Development Council and released on February 15, 1995.

Swasey Central School Recommendations

21. Purchase a stage for student performances.

22. Continue to upgrade computer capabilities.

23. Continue to explore the need for a special education preschool at the Swasey Central School.

24. Evaluate the heating and venting systems and indoor air quality at the Swasey Central School and correct any deficiencies.

Section 5 - Construction Materials

One of the newest chapters required for a master plan is the Construction Materials Chapter. The enabling statute that addresses the purpose and description of a master plan was amended by the New Hampshire Legislature in 1989. RSA 674:2, VIII-a requires the following:

> "A construction materials section which summarizes known sources of construction materials which are available for future construction materials needs, including, at a minimum, the location and estimated extent of excavations which have been granted permits under RSA 155-E, as well as reports filed pursuant to RSA 155-E:2, II(d) with respect to non-permitted excavations."

The purpose of this chapter is to identify which construction materials are relevant and to locate these deposits using the soil survey of Rockingham County prepared by the Soil Conservation Service (SCS). Other sources of information are also used as appropriate. The soil survey identifies deposits of roadfill, sand, gravel, and topsoil as construction materials. Each soil type listed on the soil survey has a name and is shown on the map using a number followed, in most cases, by a letter from A to E. The number indicates the composition of the soil and the letter represents the slope. The letter A is a 0-3% slope, B is a 3-8% slope, C is a 8-15% slope, D is a 15-25% slope, and E is greater than 25% slope.

The SCS rated the performance of each soil type based on its physical characteristics and test data conducted during the SCS survey. For each intended use of the soil, the SCS gave the soil a ranking. The ratings of "good", "moderate", "fair", and "poor" are used for roadfill and topsoil. For sand and gravel, the soils are rated as "probable" or "improbable" as to the possibility of sand or gravel being present.

It should be noted that the soil maps are intended for general town wide land use planning. Due to the mapping techniques used, there may be different soil types within a mapped area of another soil type. The smallest soil polygons mapped are usually in the two to three acre range. Because of these limitations, the soil maps should not be used for site specific land use planning. More detailed on-site soil identification is recommended for parcel level work. The construction materials identified in this chapter are based on these SCS maps. The information is not designed or intended to be used for definitive identification of construction materials.

The soil types that are likely to contain any of the four construction materials and are found in Brentwood are listed in Table CM-1. Each soil number and name is provided, as well as the number of acres of that type of soil found in Brentwood. The source for the soil information is the SCS soil map as digitized by Complex Systems of the University of New Hampshire and provided to the Rockingham Planning Commission in digital format. Calculations of the number of acres for each soil type are based on this digital information. Each of the four types of construction materials are listed in Table CM-1. For roadfill, if a soil has a rating of good, it was indicated. For sand and gravel, only the probable rating is listed. In the case of topsoil, there were no soils which had a good rating so the only soil with a moderate rating was listed. Except for this case, if a soil had a rating less than good or probable it was left blank to make the table easier to read. Only the soils that had a good or probable rating in any category were included in the table.

SOIL NUMBER	SOIL NAME	ACRES IN BRENTWOOD	ROADFILL	SAND	GRAVEL	TOPSOIL
12 B,C	Hinckley	105.40	Good	Probable	Probable	Probable
26 A,B,C	Windsor	756.90	Good	Probable	Improbable	Probable
30 A,B	Hartland	251.40	Fair	Improbable	Improbable	Good
32 A,B,C	Boxford	409.50	Probable	Improbable	Improbable	Probable
33 A	Scitico	1,403.00	Probable	Improbable	Improbable	Probable
38 A,B	Elmridge	981.20	Probable	Improbable	Improbable	Fair
42 B,C	Canton	129.90	Good	Improbable	Improbable	Probable
43 B,C	Canton	94.70	Good	Improbable	Improbable	Probable
44 B,C	Montauk	129.60	Fair	Improbable	Improbable	Probable
45 B,C	Montauk	64.10	Fair	Improbable	Improbable	Probable
62 C	Charlton	8.30	Probable	Improbable	Improbable	Probable
63 B,C	Charlton	61.20	Good	Improbable	Improbable	Probable
66 B,C	Paxton	127.20	Good	Improbable	Improbable	Fair
67 B,C	Paxton	107.10	Good	Improbable	Improbable	Probable
67 D	Paxton	12.00	Good	Improbable	Improbable	Probable
129 B	Woodbridge	68.90	Fair	Improbable	Improbable	Probable
134 '	Maybid	249.50	Probable	Improbable	Improbable	Probable
295 '	Greenwood	85.70	Probable	Improbable	Improbable	Probable
298 '	Pits	387.00	Good	Probable	Probable	Probable
299 '	Udorthents	37.40	N/A	N/A	N/A	N/A
305 '	Rippowam	169.50	Probable	Improbable	Improbable	Probable
313 A,B	Deerfield	644.90	Fair	Probable	Improbable	Probable
395 '	Chocorua	60.20	Probable	Probable	Improbable	Probable
495 '	Ossipee	65.10	Probable	Improbable	Improbable	Probable
510 A,B,C	Hoosic	541.90	Good	Probable	Probable	Probable
538 A	Shaker	642.60	Probable	Improbable	Improbable	Probable
547 A,B	Leicester	122.00	Probable	Improbable	Improbable	Probable
	TOWNWIDE	CATAGORY	ACRES			
		GPPP	1034.3			
		GIIF	127.2			
		GPIP	756.9			
		FPIP	644.9			
		FIIG	251.4			
		PIIP	2985.7			
		PIIF	981.2			
		N/A	37.4			

3-

Roadfill

Table CM-1 shows that ten soils in Brentwood are rated as good for use as roadfill. These ten soils total up to 2323 acres. The largest single soil type that is good for roadfill is the 510 A-D, Hoosic, which has 542 acres in Brentwood.

Sand

Sand is a very valuable material used in many kinds of construction. There are six soil types in Brentwood that the SCS have given a probable rating for the presence of sand. The total size of the potential sand producing soils is 2496 acres.

Gravel

Gravel is a most sought after construction material for many types of industries. Due to the geology of Brentwood and much of the coastal region, gravel deposits are not very plentiful. In Brentwood, there are only three soil types where finding gravel is rated as probable. This area covers a total of 1034 acres. The hoosic soil found in Town accounts for over half of the area which is classified as probable for yielding gravel.

Topsoil

Topsoil deposits are the smallest of the four construction materials found in Brentwood. One of the soils, the 30 A, B, Hartland was rated good for topsoil and this covers an area of 251 acres. In addition, two soils, 38 A and B, Elmridge and the 66 B and C, Paxton were rated as fair for topsoil. These types covered 1108 acres of land in Brentwood.

A review of Table CM-1 reveals that no soil found in Brentwood ranked highly in all the construction materials categories. However soils such as the Hincley, Windsor and Hoosic ranked well in more than one of the categories.

Existing Excavations

As the map on the next page shows, there are several active excavation sites in Brentwood. For the most part these are located in the Northeast section of Town along Pine and Deerhill Roads. The largest of these is owned by the State of New Hampshire and is being used for the construction of the expanded NH Route 101. When the project is completed the site will be reclaimed with constructed wetlands as part of the required wetlands mitigation involved with the corridor expansion.

Identification of Stratified Drift Aquifers

The Brentwood Water Resource Management and Protection Plan contains information on the stratified drift aquifers located in Brentwood. In 1990, the U.S.G.S. completed the most through and accurate study of the region's groundwater resources to date. The report is entitled, Geohydrology and Water Quality of Stratified Drift Aquifers in the Exeter, Lamprey, and Oyster River Basin, Southeastern NH.
As expected the aquifers match up fairly closely with the sand and gravel soils from the SCS soils map. When sand and gravel deposits are saturated with water, an aquifer is formed. There are, however, many instances where glaciers deposited sand and gravel on the top of hills or on hillsides; these are referred to as eskers or drumlins. These areas would not contain large amounts of groundwater and would not show up on the U.S.G.S. maps. Aquifers will always contain good sand and gravel, but sand and gravel deposits are not always good aquifers. Copies of this study and its attendant maps can be found in the Town Planning Board office.

Excavation Regulations

In 1984, the Brentwood Planning Board adopted Excavation Regulations that were based on a model developed by the Rockingham Planning Commission. These regulations incorporated all of the required provisions from RSA 155-E. Excavations are permitted in the commercial/industrial zone in Brentwood if the Planning Board issues an excavation permit. This is done by the Planning Board only after obtaining the required excavation and restoration plans and holding a properly noticed public hearing.

Recommendations

1. The Planning Board should institute a program to more consistently bring existing excavation operations into conformance with both the reporting and reclamation requirements outlined in RSA's 155-E:2,(I),d, and 155-E:5.

Section 6 - Non-taxable Facilities In Brentwood NH

Rockingham County Facilities

The Town of Brentwood has, over the course of time, become the *de facto* county seat for Rockingham County. As of 1995, Brentwood is home to five major county facilities: the Rockingham County Jail / House of Corrections (and Sheriffs Department), the Rockingham County Nursing Home, Rockingham County Water Treatment Facility and the Rockingham County Wastewater Treatment Facility. In addition, by 1996 the new Rockingham County Superior Court is scheduled to be operational which effectively locates all major county functions within the town.

With the exception of the new Superior Court all of the county facilities are located on approximately 400 acres situated on both the north and south sides of North Road in the northern section of town. The Superior Courthouse is located on an approximately 22 acre piece of land located on the west side of NH Route 125 immediately north of the Kingston town line.

The county complex on North Road includes approximately thirty buildings. Besides the facilities run by Rockingham County that are listed above there are a number of other activities located at the complex. Part of one building is utilized by UNH Cooperative Extension services; one building houses the County Human Services division and one building is utilized as a motor services garage.

Description of Facilities

Rockingham County Nursing Home

The Rockingham County Nursing Home is a 300 bed facility serving the elderly population of Rockingham County. The facility is approximately 232,000 square feet in size and is located on an 83 acre site on the north side of north road. The facility was originally constructed in 1912, additions were added in 1938, 1958, 1973,1985 and 1992. Plans for improvement of the facility call for the completion of the second floor of the Driscoll building which is currently just a shell. In addition there are planned building renovations to insure that the facility remains in compliance with state and federal requirements such as the Americans with Disabilities Act of 1990.

Rockingham County Jail / House of Corrections (and Sheriff's Department)

The Rockingham County Jail consists of a 101,500 square foot facility located on the same 83 acre parcel as the Rockingham County Nursing Home. The facility was constructed in 1981 and underwent a substantial addition in 1992. The jail has 431 beds and serves as the only criminal detention center in Rockingham County. With the most recent addition the facility is expected to remain in excellent condition for the next several years. No planned improvements exist at this time and such improvements would be based in large part upon future inmate population trends.

Rockingham County Wastewater Treatment Facility

The Rockingham County Wastewater Treatment facility is located on the same parcel as the county jail and nursing home. The facility is 2,280 square feet in size. It was constructed in 1992 in conjunction with the program of expansion mentioned above for both the nursing home and the jail. The facility is designed to treat 165, 000 gallons of wastewater per day.

Rockingham County Water Treatment Facility

Rockingham County Courthouse Facility

The Rockingham County courthouse facility is located on a 22 acre parcel of land on the west side of NH Route 125 on the Brentwood-Kingston town line. The facility is expected to open in 1996 ands will house all significant court facilities for Rockingham County. The building is 100,000 square feet and will include 9 courtrooms. The Rockingham County Superior and Probate courts, seventeen county attorney's offices and the Rockingham County Registry of Deeds. The facility was designed to handle these facilities for a fifty year period so there are no plans for modifications or expansions in the time horizon of this master plan update.

State of New Hampshire

In addition to the substantial Rockingham County land holdings in the Town of Brentwood the State of New Hampshire chose a site in Brentwood to serve as a model for wetlands mitigation for the major improvements and upgrade of NH Route 101 between Raymond and Hampton. This project involved taking by eminent domain an enormous parcel of land from the Town's northeast quadrant that was formerly prime commercial/industrial land. The site is in excess of 400 acres. At one time very nearly approved for a multi-lot industrial subdivision, the State of NH has taken this land and constructed a man-made wetland environment to serve as replacement for those wetland systems destroyed by the road construction project.

Fiscal Impact of Non-taxable Properties Upon the Town Of Brentwood

In an effort to understand the fiscal implications that these non-taxable facilities have on Brentwood the Planning Board ask the Office of the Selectmen to provide the property assessments for both the State of New Hampshire and the County of Rockingham. The figures are startling as revealed below.

Property Owner	Total Value
Rockingham County	$16, 132, 356
State of New Hampshire	$3,761,800

Between these two governmental entities the Town of Brentwood loses approximately $19,900,000 in taxable value annually. Considering that the Town has a net local assessed valuation of $133,559,667 according to the most recent figures available from the NH Department of Revenue Administration, the Town of Brentwood is made to forego nearly 15% of its potential tax-generating land area. It is fairly obvious that no other community the size of Brentwood is being asked to accept such a disproportionate impact upon their tax base in Rockingham County or perhaps the entire State.

Recommendation

1. The Town of Brentwood should continue its efforts at securing compensation from both the State of New Hampshire and the County of Rockingham for the lost economic benefit and continued drain upon municipal services that result from the location of these tax-exempt facilities in Brentwood.

1996 Update to the Brentwood Master Plan



Prepared with the

Brentwood Planning Board

by the

Rockingham Planning Commission

BRENTWOOD MASTER PLAN

1995-96 UPDATE

Prepared by the Brentwood Planning Board with the assistance of the Rockingham Planning Commission.

Adopted by a unanimous vote of the Brentwood Planning Board, in accordance with RSA 675:6, following a public hearing on January 4, 1996.

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Phyllis Thompson, Town Clerk

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Executive Summary of the 1996 Update to the Brentwood Master Plan

The Brentwood Master Plan is the primary policy document regarding land use issues for the Town. The policies enumerated in this document serve as the foundation for the adoption of a wide range of regulatory measures directed toward insuring that development in Brentwood occurs in a manner that protects and promotes the health, safety and welfare of the residents of the Town. The Master Plan is prepared and adopted by the planning board of a municipality in accordance with state RSA's 674:2-4. In 1986 a survey was prepared which asked questions about different land use issues and was sent to all Town residents as a way for the Planning Board to gather community input. The Planning Board used this input as a foundation for the preparation of a new Plan which was adopted on December 1, 1988. This document offered a variety of recommendations regarding land use that in many ways significantly differed from Town land use policy of the past. Adoption of this document provided the Town with a variety of land use options. Over the past six years the Board has proposed a number of regulatory measures to the Town for their approval. Among the land use concepts advocated in the 1988 Master Plan and subsequently accepted by the voters are soil-based lot sizing, a more stringent aquifer protection district, a shoreland protection district, a cluster development ordinance and bylaws regulating home occupations, child day care facilities, and conversions of existing structures to the condominium form of ownership.

In updating the 1988 document the Planning Board has taken a two pronged approach. First, a review of the policy recommendations offered in the 1988 document was undertaken to determine which had been accomplished and which of those not accomplished were still considered to be viable recommended actions. Below are listed the recommendations found in this update:

Community Facilities Recommendations

Municipal Government

1. The Town should begin planning efforts to determine the feasibility of expanding the Town Offices or relocating to a larger facility.

2. Purchase or build a fireproof vault for the storage of Town records.

Fire Department

1. Initiate a program to recover costs associated with the provision of emergency services to county facilities.

2. Establish a capital reserve fund for the purpose of replacing the tanker currently owned.

3. Full-time firefighters and EMTs covering daytime hours for 8:00 a.m. to 4:00 p.m. will be necessary in the near future.

4. A secretary should be hired for the Department as at least a half-time position..

5. Purchase a computer for administrative work, ambulance billing, state reports,

payroll, and budget reports.

6. Purchase additional equipment for response to HAZMAT calls.

7. Continue aggressive training of fire and rescue personnel to minimize liability to the Town and to meet State and Federal regulations.

8. The Planning Board and the Fire Department must continue to work closely together on fire codes and standards.

9 Formulate a plan for the orderly transfer of ownership to the Town of the fire station and hall in the event the volunteer Firemen's Association is unable to continue maintaining the property due to lack of income and increasing maintenance costs.

Police Department

1. Hire a full-time officer by June of 1995.

2. Purchase an up-to-date computer system.

3. Regularly scheduled replacement of fully equipped cruisers.

4. Replace existing mobile radios by 1997. (six radios in all)

5. Fund two full-time officers by the year 1998.

Mary E Bartlett Memorial Library

1. Complete a study of the structural integrity of the entire facility and undertake correction of any deficiencies found.

2. Enlarge the staff of the library to allow two individuals per shift.

3. Establish a capital reserve fund to provide for the future expansion of services at the library. This expansion to include both additional space (especially a meeting room) and new equipment (computers, shelving, study tables).

4. Initiate a regularly scheduled maintanance program for the facility.

Swasey Elementary School

1. Purchase a stage for student performances.

2. Continue to upgrade computer capabilities.

3. Continue to explore the need for a special education preschool at the Swasey Central School.

4. Evaluate the heating and venting systems and indoor air quality at the

Swasey Central School and correct any deficiencies.

Brentwood Recreation

Short-Term

1. Secure & Provide additional playing fields
2. Initiate small working budget through town budget
3. Create outdoor tennis/basketball courts at BRC property
4. Provide safe ice skating area
5. Make BRC building available for 3 season use
6. Upgrade and pave access road to BRC/Town property
7. Research possibility of acquiring "Library" ball field for town property

Long-Term

1. Completion of BRC building for year-round use
2. Provide hiking/nature trails for public use
3. New well for building and irrigation
4. Development of hiking and nature trail system
5. Install irrigation on ball fields
6. Gift/Lease BRC property to town

Brentwood Construction Materials Recommendation

1. The Planning Board should institute a program to more consistently bring existing excavation operations into conformance with both the reporting and reclamation requirements outlined in RSA's 155-E:2,(I),d, and 155-E:5.

Recommendation Regarding Non-Taxable Facilities in Brentwood

1. The Town of Brentwood should continue its efforts at securing compensation from both the State of New Hampshire and the County of Rockingham for the lost economic benefit and continued drain upon municipal services that result from the location of these tax-exempt facilities in Brentwood.

In addition to these policy recommendations the Master Plan update includes a socio-economic profile of the Town of Brentwood using information supplied by the 1990 U.S. Census Bureau. Below are highlighted some of the characteristics revealed by the census for the Town.

- Brentwood's population has grown at a slightly greater rate than thet of Rockingham County in the last 10 years: Brentwoods annual growth rate from 1980-1990 was 2.6% while the counties rate for the same period was 2.59%.
- Brentwood's median family income is slightly higher than both the State and County for 1990

but its per capita level is lower than the County and higher than the State. It is also interesting to note that the Town has a very low percentage of persons living below the poverty level (1.9%).

- Understandably, with the Rockingham County Nursing Home located in Town the senior population is nearly four times as large in Brentwood as in other communities the County or the State.

- There has been a dramatic drop in respondents who attained less than a ninth grade education from 16.5% of the total respondents in 1980 to less than 10.6% in 1990.

- There has been a dramatic drop in respondents who attained less than a ninth grade education from 16.5% of the total respondents in 1980 to less than 10.6% in 1990.

- The Master Plan also details information about Brentwood residents and their places of work and commuting times and distances. There were 1,165 respondents to the census that indicated they were employed in 1990. Of these the vast majority commuted alone in an automobile (79.2%). Nearly sixty percent (57.4%) indicated that they commuted less than 25 minutes to their jobs. This relatively short commute is understandable in light of the fact that a little more than half (56%) of the working population are employed within Rockingham County. Remarkably, more than 20% work in Brentwood and an additional nearly twenty percent (17%) work in nearby Exeter. As revealed in the plan the remaining major work destinations are Portsmouth, Plaistow, Stratham, and Seabrook.

Section 1 - Introduction

The Brentwood Master Plan is the primary policy document regarding land use issues for the Town. The policies enumerated in this document serve as the foundation for the adoption of a wide range of regulatory measures directed toward insuring that development in Brentwood occurs in a manner that protects and promotes the health, safety and welfare of the residents of the Town. The Master Plan is prepared and adopted by the planning board of a municipality in accordance with state RSA's 674:2-4. In 1986 a survey was prepared which asked questions about different land use issues and was sent to all Town residents as a way for the Planning Board to gather community input. The Planning Board used this input as a foundation for the preparation of a new Plan which was adopted on December 1, 1988. This document offered a variety of recommendations regarding land use that in many ways significantly differed from Town land use policy of the past. Adoption of this document provided the Town with a variety of land use options. Over the past six years the Board has proposed a number of regulatory measures to the Town for their approval. Among the land use concepts advocated in the 1988 Master Plan and subsequently accepted by the voters are soil-based lot sizing, a more stringent aquifer protection district, a shoreland protection district, a cluster development ordinance and bylaws regulating home occupations, child day care facilities, and conversions of existing structures to the condominium form of ownership.

In updating the 1988 document the Planning Board has taken a two pronged approach. First, a review of the policy recommendations offered in the 1988 document was undertaken to determine which had been accomplished and which of those not accomplished were still considered to be viable recommended actions. This enterprise was accomplished through discussions by the Board and the results are discussed in further detail below. The second approach utilized by the Board in updating the 1988 document involved the preparation and distribution of another citizen survey mailed to each of the residents in town. The results of this survey are provided below.

1994 Citizen Survey

In the winter of 1994, a citizens survey was distributed to 852 households in Brentwood. the survey, which had a 29% response rate, asked residents of Brentwood their opinions on a variety of topics ranging from why they chose to live in town and what they considered were serious local problems, to what residents wanted in the way of capital expenditures. The survey results provide an insight into how people living in Brentwood feel about their community. These insights will be used by the Planning Board in forming the basis for the majority of the goals which are, in turn, the driving force for the Master Plan.

A brief analysis of the results of the survey gives a quick picture of how people live in Brentwood and how they feel about their town:

- Ninety-five percent of the respondents own their homes.
- By a margin of 3 to 1 respondents stated that the reason they chose to reside in Brentwood was because of its rural atmosphere. Other reasons cited included the high quality of the area school district and the towns proximity to employment.
- Nearly half of those responding have lived in Brentwood for ten years or less.
- Respondents overwhelmingly would like to see single-family residential units built in town,

and to a lesser degree, elderly housing units and duplexes. Respondents were much less favorable toward greater numbers of apartments and manufactured housing being constructed as housing options.

- The overwhelming development pattern endorsed by respondents was for planned subdivisions along existing roads. The second choice listed when queried about housing opportunity was for increased elderly facilities. Interestingly, the third choice of respondents concerning residential development was in support of cluster style development.

- Serious local problems include "the Town's tax rate"(the most frequently chosen problem) "traffic speed", "maintenance of Town roads" and "visible junk and automobile junkyards".

- Eighty three percent (83%) of those responding to questions about levels of Town service felt that Town services are adequate. In light of this majority several trends are apparent from responses. Substantial responses indicate that increase in police presence and fire and rescue service are warranted. There was also support for upgrading Town roads and acquiring easements for protection of rivers.

- The most favored type of commercial activity cited by respondents was agriculture and farming, chosen as number one by roughly half of the respondents. The second choice most often picked in ranking important types of commercial development was stores. This response represents a departure from the response indicated in previous surveys when increased retail operations were at the bottom of the list.

- When asked to select the most important environmental resources in Town the first priority was in protection of drinking water resources. In second place in importance was the protection of open spaces.

- Sixty percent (60%) of those responding felt that private airstrips should not be allowed within the Town of Brentwood. Of those responding in the affirmative forty-seven percent (47%) felt that private airstrips should be allowed in any zone in town.

Tabulation of the responses to the education based questions in the survey revealed the following:

- Sixty-one percent (61%) of the survey respondents have school age children.

- A slight majority (56%) of the respondents favored a longer school day as a strategy for increasing quality of the public education experience, while the respondents were evenly split (50.3% for and 49.7% against) with regard to lengthening the school year to enhance the quality of the public education experience.

- Eighty-eight percent (88%) of those respondents answering felt that transportation should be provided for students in grades 9-12 even if the NH Legislature does not presently require this. In addition sixty-four percent (64%) felt that the Town should charge a user fee for bus service to offset the cost of this transportation service.

- Provision of kindergarten was supported by roughly two-thirds (67%) of the survey respondents.

- Seventy-one (71%) of those responding supported the concept of choice in public schools.

- The survey asked if residents favor the institution of an inclusive pre-school program at the Swasey School which would service special education preschool students instead of paying to have these students educated out of district. Respondents were in favor of such a program by a margin of 4 to 1 (84% in support vs. 16% against).

  Furthermore, seventy-six percent (76%) felt that there should be a user fee to help offset the cost of such a program for those students involved that were not special education clients.

- Eighteen percent (18%) of those responding stated that they had a need for before or after school day care. Further, twenty-one percent (21%) stated that they would utilize a day care service for schoolage children if one were offered at the Swasey School.

- The final question in the survey polled the residents as to whether they felt that the Brentwood School Board addressed the needs of the community. Eighty-three percent (83%) felt that the School Board was addressing the communities needs.

Section 2 - Review of Recommendations of the 1988 Master Plan

The 1988 Master Plan provided fifty-three policy recommendations to the Town regarding land use issues and municipal government. Of the fifty-three, Brentwood has accomplished nineteen outright. Of the remaining recommendations the Planning Board has determined which remained relevant and they are included below.

HOUSING RECOMMENDATIONS

The following recommendations are designed to insure that Brentwood continues to provide diverse housing opportunities, promoting community goals, improving local development standards regulating housing construction, and ensuring compliance with relevant state and federal legislation.

1. In order to encourage the elderly to remain in town, programs for the elderly should be conscientiously promoted, such as: using the Visiting Nurse, Meals on Wheels, rural transportation, use of available Federal subsidies, food stamps, fuel payments, rental subsidies, elderly tax exemption as allowed by NH state law, daily telephoning, etc.

2. Research or provide the opportunity for the construction of elderly housing units in Town.

TRANSPORTATION RECOMMENDATIONS

The following recommendations will assist the Town of Brentwood in continuing to provide a safe and efficient transportation network for the current and projected population.

3. The Town of Brentwood should encourage developers to minimize their impacts on existing town roads. This can be accomplished through the use of cluster subdivisions, interior roads and traffic impacts study requirements for development proposals.

4. The Town of Brentwood, when appropriate, should require developers to minimize off-site impacts either through monetary contributions or by undertaking necessary off-site road improvements.

5. The Board of Selectmen should actively enforce RSA 47:17 "Bylaws and Ordinances" under Section VIII "Traffic Devices and Signals" which empowers communities:

> "To make special regulations as to the use of vehicles upon particular highways, except as to speed, and to exclude such vehicles altogether from certain ways; to establish stop intersections, erect and provide for the control of traffic by, stop signs or other traffic devices or signals which shall conform to standards set by the highway commissioner and shall be approved by him as to type, size, installation and method of operation."

This RSA allows Brentwood to adopt an ordinance restricting vehicles above certain weights (to be determined by the town engineer or road agent) from designated town roads during seasonally wet periods.

6. The Town of Brentwood should continue to update its inventory of roads, thus allowing the town to guide future roadway improvement planning. An additional step should be to prepare a roadway management plan. The plan would enable Brentwood to achieve the best value possible for the available public funds in providing and operating smooth, safe, and economical road surfaces. Typical activities include inventory, condition assessment, selection of maintenance and rehabilitation strategies, predicting needs, requirements, and budgeting necessary funds.

7. The New Hampshire Department of Transportation requires that municipalities follow guidelines established by the "Manual on Uniform Traffic Control Devices" (U.S. Dept. of Transportation) for locating and placing roadway signs. The Brentwood Planning Board and Road Agent should enforce these standards.

8. The Planning Board should require that the maximum driveway grade, within 50 feet of an existing or proposed roadway, not exceed 3%. This standard should not be waived. However, the Planning Board should also amend its subdivision regulations to permit a maximum driveway grade of 6%, at any point greater than 50 feet from an existing or proposed roadway. This standard may be waived up to a maximum of 8% only in extenuating circumstances.

9. The Planning Board should require that the maximum roadway grade within 100' of an intersection, measured along the centerline, not exceed 3%. This standard should not be waived.

10. The portion of Rowell Road from its intersection with Haigh Road to where it becomes Class VI, and the portion of Haigh Road between Rowell and Gordon Roads should be designated Scenic under RSA 231:157. In addition, all Town roads should be reviewed for potential designation as a scenic way to protect the rural landscape within public rights-of-way, thus demonstrating Brentwood's intent to maintain its rural character.

11. The Selectmen should consider enacting the provisions of RSA231:59-a, relating to Class VI roads being declared to be emergency lanes and the expending of public funds to keep such lanes passable.

WATER SUPPLY RECOMMENDATIONS

12. Evaluate the feasibility of developing a well field in the northeast corner of Town associated with a documented aquifer, and transmission lines for the community.

13. To maintain water quality, undertake a program to educate residents about septic system function and the importance of proper maintenance. Educational materials are available through the Rockingham Planning Commission.

WASTEWATER DISPOSAL RECOMMENDATIONS

14. Brentwood's past rate and density of development has not made a public sewer system necessary or feasible. Projected growth rates indicate, however, that the Town may not be able to avoid public utilities in some areas. Brentwood should begin investigating alternative ways to aggregate and treat sewage. Densely populated areas and other areas of concerns should be identified to receive priority consideration with respect to such municipal facilities.

MUNICIPAL GOVERNMENT RECOMMENDATIONS

15. Appoint a Study Committee to explore the expansion or relocation of the Town Office Building.

16. Initiate a planning effort aimed at determining the need for additional Town employees required by Brentwood's growing population.

17. Revise and utilize the Brentwood Capital Improvement Program.

PUBLIC WORKS RECOMMENDATIONS

18. Purchase a new sander and wing for winter road maintenance.

19. The part-time, appointed position of Road Agent should be converted to a full-time position.

20. A 30 x 60 metal building should be constructed at the location of the present Town maintenance shed on NH Route 111-A.

SCHOOL RECOMMENDATIONS

21. Continue planning efforts aimed at improving the facilities at Exeter Area Junior and Senior High Schools.

LIBRARY RECOMMENDATION

22. The Library Trustees should continue their efforts at expanding the Mary E. Bartlett Library and associated facilities and services.

RECREATION RECOMMENDATIONS

23. Refurbish the tennis court located on property owned by Swasey Central School.

24. Pave access road to BRC/Town land.

CONSERVATION AND PRESERVATION RECOMMENDATIONS

25. Acquire public "rights-of-way" to the Exeter River at locations such as the following:

    - Rowell Road to Rowell Cove
    - Mill Road
    - Stevens Drive
    - Gove Road

26. Acquire Town land at Avril Rock on the Little River near its confluence with the Exeter River for a picnic and/or camping area.

27. Undertake a natural resource inventory in order to identify prime forest land, farmland, wetland, scenic areas, and historic landscapes.

28. Employ regulatory approaches for open space protection such as innovative zoning districts.

29. Encourage land and conservation easement donations by promoting tax incentives.

30. Participate in the federal, state, and regional open space protection programs.

FUTURE LAND USE RECOMMENDATIONS

31. Review the existing zoning ordinance to determine if available scientific information exists to support a relaxation of design standards which presently make commercial and industrial development impractical.

32. Review carefully the results of the NH Route 101 relocation and develop land use policies that will maximize any benefits to the Town that can be realized from the highway's relocation.

33. Establish a new "Neighborhood Commercial" zone to provide more opportunities for the development of small-scale shops.

Section 3 - Brentwood Community Profile

The Town of Brentwood is moderate in size, approximately 12 square miles in size with a population of approximately 2, 600 located in nearly the geographic center of Rockingham County. This section of the Master Plan update offers information taken in large part from the most recent decennial census with more recent data offered where available.

Tables 1 and 2 and Figure 1 offer an historical perspective of the community as reported by the U.S. Census Bureau. On Figure 1 the population fluctuations are detailed from 1775 - 1992. As shown on this Figure the population of Brentwood has changed drastically from a low point in 1920 of 685 to its highest point this century of 2,592 as of 1992. Interestingly the community saw its lowest population experience in the 1920's and 1930's. This occurrence, seen in other communities in the area as well, can be explained in part by World War I and the fact that the Great Depression sent many rural residents to the larger cities as the country's economy experienced turmoil. Table 1 further reveals population density information for the community for the same period of time displayed in Figure 1. Information that comes as no surprise to anyone is the increased density that was experienced as a result of the growth spurts in the 1970's and 1980's.

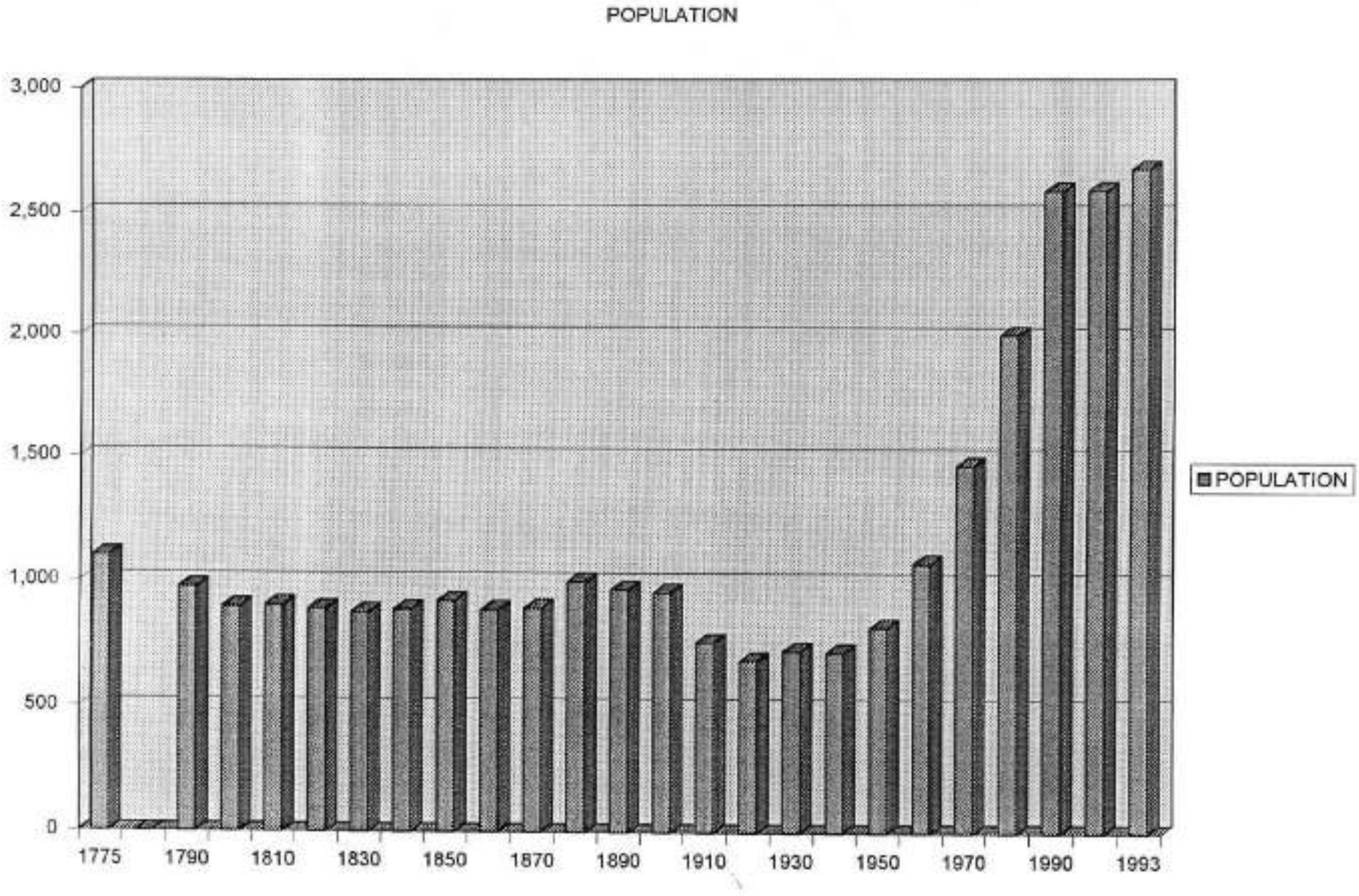
Table 2 offers the population history of the Town in comparison to other area communities for the period of 1900-1992 . This table is based upon information compiled by the NH Office of State Planning as well as the US Census Bureau. Nearly all the communities experienced substantial population decreases between 1910 and 1930.

Figure 2 displays the historical growth rates for Brentwood, Rockingham County and surrounding communities for the years 1910 - 1990. As displayed, Brentwood's annual growth rate in recent years has exceeded that of surrounding communities but been slightly lower or equal to the county wide growth rate.

Table 3 offers a series of population projections for the Town and its neighboring communities for the years 2000 - 2015. These projections are estimates developed by the NH Office of State Planning. They indicate a slightly increasing population trend for the Town that was based on market indicator from the very early 1990's. Interestingly the Town appears to be headed for moderate growth that will be slightly higher than statewide projections and slightly lower than the Rockingham County as a whole.

Tables 4 and 5 detail employment and income information about residents of the Town of Brentwood and surrounding communities. Table 4 displays information regarding employment sectors. According to NH Department of Employment Security, both manufacturing and non-manufacturing opportunities increased in Brentwood between 1980 and 1990. In the same time frame the number of business establishments in town in both the manufacturing and non-manufacturing sectors increased. Remarkably, in comparison, Brentwood consistently outperformed all surrounding communities, the County and the State in all categories on Table 4.

BRENTWOOD POPULATION HISTORY					
YEAR	POPULATION	PERSONS PER SQUARE MILE*	YEAR	POPULATION	PERSONS PER SQUARE MILE*
1775	1,100	64.7	1890	967	56.9
1786	--------	--------	1900	957	56.3
1790	976	57.4	1910	759	44.6
1800	899	52.9	1920	685	40.3
1810	905	53.2	1930	725	42.6
1820	892	52.5	1940	720	42.4
1830	878	51.6	1950	819	48.2
1840	888	52.2	1960	1,072	63.1
1850	923	54.3	1970	1,468	86.4
1860	887	52.2	1980	2,004	117.9
1870	895	52.6	1990	2,590	152.4
1880	999	58.8	1992	2,592	152.5
		Area of Town: 12.2 square miles			
*Sources: 1767-1940, Unpublished report, N.H. Office of State Planning.					
	1940-1990, U.S. Bureau of the Census.				
	1992, N.H. Office of State Planning.				


POPULATION
3,000
2,500
2,000
1,500
1,000
500
0
1775
1790
1810
1830
1850
1870
1890
1910
1930
1950
1970
1990
1993
POPULATION

POPULATION HISTORY
Town of Brentwood and Area Communities
1900-1992

TOWN	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	1992	1993
BRENTWOOD	**957**	**759**	**685**	**725**	**720**	**819**	**1,072**	**1,468**	**2,004**	**2,590**	**2,592**	**2,677**
East Kingston	496	413	384	347	424	448	574	838	1,135	1,358	1,393	1,458
Epping	607	575	623	577	696	719	1,196	1,784	2,129	2,768	2,781	5,342
Exeter	4,922	4,897	4,604	4,872	5,398	5,664	7,243	8,892	11,042	12,481	12,294	12,500
Fremont	749	622	519	571	634	696	783	993	1,333	2,576	2,648	2,703
Kingston	1,132	1,015	859	1,017	1,002	1,170	1,672	2,882	4,111	5,591	5,618	5,651
TOTAL	7,731	7,266	6,815	7,092	7,872	8,346	10,868	13,975	17,643	21,773	21,708	30,331
Rockingham Co.	51,118	52,188	52,498	53,750	58,142	70,059	99,029	138,951	190,345	245,845	242,436	247,812

Source: U.S. Census Bureau - 1900-1990; N.H. Office of State Planning Population Estimates, 1992.

TOWN	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	1992	1993
Brentwood	957	759	685	725	720	819	1,072	1,468	2,004	2,590	2,592	**2,677**
		-2.29%	-1.02%	0.57%	-0.07%	1.30%	2.73%	3.19%	3.16%	2.60%		
Region	7,731	7,266	6,815	7,092	7,872	8,346	10,868	13,975	17,643	21,773	21708	30,331
		-0.62%	-0.64%	0.40%	1.05%	0.59%	2.68%	2.55%	2.36%	2.13%		
Rockingham Co.	51,118	52,188	52,498	53,750	58,142	70,059	99,029	138,951	190,345	245,845	242436	247,812
		0.21%	0.06%	0.24%	0.79%	1.88%	3.52%	3.45%	3.20%	2.59%		

	1910	1920	1930	1940	1950	1960	1970	1980	1990	1992	1993
Brentwood	-2.29%	-1.02%	0.57%	-0.07%	1.30%	2.73%	3.19%	3.16%	2.60%	0.0%	0.3%
Region	-0.62%	-0.64%	0.40%	1.05%	0.59%	2.68%	2.55%	2.36%	2.13%	0.0%	3.4%
Rockingham Co.	0.21%	0.06%	0.24%	0.79%	1.88%	3.52%	3.45%	3.20%	2.59%	-0.1%	0.2%

POPULATION PROJECTIONS - 1990-2015

Brentwood and Area Communities

TOWN/AREA	1990 (Census)	2000	2005	2010	2015	Average Annual Percent Change 1990-2000	1990-2005	1990-2010	1990-2015
Brentwood	2,590	2,716	2,858	2,964	3,153	0.48%	0.66%	0.68%	0.75%
East Kingston	1,352	1,438	1,500	1,571	1,654	0.62%	0.69%	0.75%	0.70%
Epping	5,162	6,397	6,988	7,469	7,846	2.17%	2.04%	1.86%	1.03%
Exeter	12,481	11,901	11,943	11,916	12,017	-0.47%	-0.29%	-0.23%	0.05%
Fremont	2,576	2,716	2,858	2,964	3,153	0.53%	0.69%	0.70%	0.75%
Kingston	5,591	6,177	6,594	6,936	7,366	1.00%	1.11%	1.08%	0.88%
Region Total	29,752	31,345	32,741	33,820	35,189	0.52%	0.64%	0.64%	0.58%
Rockingham Co.	245,845	266,218	282,972	296,418	312,103	0.80%	0.94%	0.94%	0.80%
New Hampshire	1,109,252	1,175,262	1,233,157	1,281,541	1,335,817	0.58%	0.71%	0.72%	0.64%

SOURCE: N.H. POPULATION PROJECTIONS- TOTAL POPULATION FOR CITIES AND TOWNS 1990-2015
N.H. OFFICE OF STATE PLANNING, OCTOBER 1993.

Employment by Town, Manufacturing and Non-Manufacturing 1980 and 1990 - BRENTWOOD AND AREA COMMUNITIES

	1980			1990			Avg. Annual % Growth		
TOWN/AREA	Manuf.	Non-Manuf.	Total	Manuf.	Non-Manuf.	Total	Manuf.	Non-Manuf.	Total
BRENTWOOD	24	57	81	38	224	262	4.7%	14.7%	12.5%
Epping	-----	-----	415	65	528	593	-----	-----	3.6%
Exeter	1743	3624	5367	1267	5039	6306	-3.1%	3.4%	1.6%
East Kingston	-----	-----	35	-----	-----	NA	-----	-----	NA
Fremont	120	44	164	124	163	287	0.3%	14.0%	5.8%
Kingston	83	269	352	73	714	787	-1.3%	10.3%	8.4%
TOTAL	1946	3937	6333	1529	6444	7973	-2.4%	5.1%	2.3%
Rock. County	17917	38051	55968	14479	62686	82085	-2.1%	5.1%	3.9%
New Hampshire	116595	206632	323227	105608	323922	429530	-1.0%	4.6%	2.9%

Source: NH Dept of Employment Security

Business Establishments by Town, Manufacturing and Non-Manufacturing 1980 and 1990 -BRENTWOOD AND AREA COMMUNITIES

	1980			1990			Avg. Annual % Growth		
TOWN/AREA	Manuf.	Non-Manuf.	Total	Manuf.	Non-Manuf.	Total	Manuf.	Non-Manuf.	Total
Brentwood	3	14	17	6	39	45	7.2%	10.8%	10.2%
East Kingston	-----	-----	13	-----	-----	NA	-----	-----	NA
Epping	-----	-----	44	8	73	81	NA	NA	6.3%
Exeter	26	306	332	16	411	427	-4.7%	3.0%	2.5%
Fremont	6	14	20	8	32	40	2.9%	8.6%	7.2%
Kingston	8	49	57	9	95	104	1.2%	6.8%	6.2%
TOTAL	40	369	466	41	611	652	0.2%	5.2%	3.4%
Rock. County	304	3348	3652	397	5305	6322	2.7%	4.7%	5.6%
New Hampshire	1918	19144	21062	2284	27946	30230	1.8%	3.9%	3.7%

Source: NH Dept of Employment Security

Table 5 offers a look at the median and per capita income reported in the 1980 and 1990 census. As displayed Brentwood's median family income is slightly higher than both the State and County for 1990 but its per capita level is lower than the County and higher than the State. It is also interesting to note that the Town has a very low percentage of persons living below the poverty level.

Table 6 offers a tabular look at the age distribution for Brentwood and surrounding towns in 1980 and 1990. Understandably, with the Rockingham County Nursing Home located in Town the senior population is nearly four times as large in Brentwood as in other communities the County or the State.

Table 7 offers a summary of the educational backgrounds of Brentwood's residents. The table compares the information from the 1980 and 1990 census with some interesting results. There has been a dramatic drop in respondents who attained less than a ninth grade education from 16.5% of the total respondents in 1980 to less than 10.6% in 1990. There has also been a decrease in the number of high school students not completing their studies through the 12th grade. Remarkably the levels of high school graduates and post high school educational attainment are nearly unchanged between the two study years. Those receiving high school diplomas remained at approximately 35% for both years while those respondents professing to college with no degree increased by a little more than 2% over the decade. Those with a BA degree showed only 3% increase between the two study years. Unfortunately the 1980 census did not specifically ask about associate degrees or graduate and professional degrees so comparisons along these lines will have to wait until the 2000 census.

The final table in the community profile section Table 8 details information about Brentwood residents and their places of work and commuting times and distances. There were 1,165 respondents to the census that indicated they were employed in 1990. Of these the vast majority commuted alone in an automobile (79.2%). Nearly sixty percent (57.4%) indicated that they commuted less than 25 minutes to their jobs. This relatively short commute is understandable in light of the fact that a little more than half (56%) of the working population are employed within Rockingham County. Remarkably, more than 20% work in Brentwood and an additional nearly twenty percent (17%) work in nearby Exeter. As revealed on Table 8 the remaining major work destinations are Portsmouth, Plaistow, Stratham, and Seabrook.

Income in Brentwood and Area Communities Median and Per Capita - 1979 & 1989

TOWN/AREA	- 1979 - Median Family Income	- 1979 - Per Capita Income	- 1989 - Median Family Income	- 1989 - Per Capita Income	Percent of Persons Below Poverty Level
BRENTWOOD	$20,625	$6,101	$47,222	$16,112	1.9%
East Kingston	$21,964	$7,608	$46,914	$15,713	1.2%
Epping	$15,407	$6,980	$40,122	$14,208	6.4%
Exeter	$19,481	$7,392	$42,556	$18,531	5.2%
Fremont	$20,101	$6,654	$43,199	$14,841	1.9%
Kingston	$22,672	$7,419	$51,332	$18,382	1.6%
Rockingham Co	**$21,181**	**$7,445**	**$46,942**	**$17,694**	**4.4**
New Hampshire	**$19,724**	**$6,966**	**$41,628**	**$15,959**	**6.4**

Source: 1980 Census STF3A; 1990 CPH-5-31, Table 9

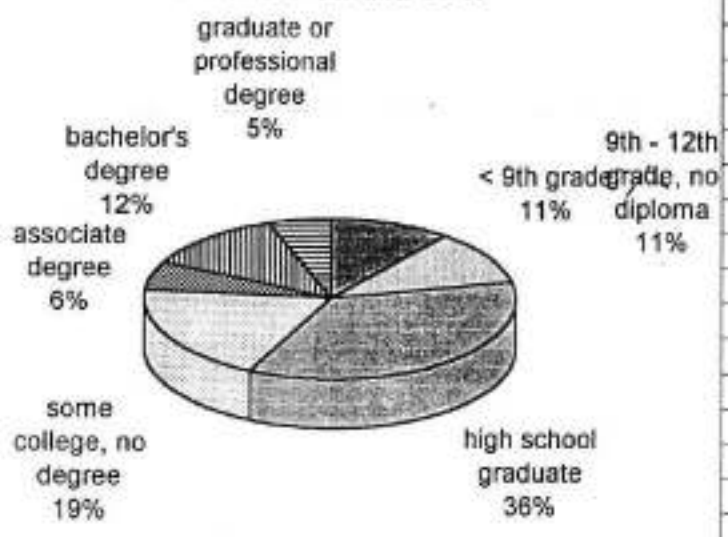
1980-1990 AGE DISTRIBUTION

	AGES					1980					AGES					1990				
Town	<5	5-13	14-19	20-24	25-34	35-44	45-54	55-64	65-74	75+	<5	5-13	14-19	20-24	25-34	35-44	45-54	55-64	65-74	75+
BRENTWOOD	**112**	**288**	**197**	**95**	**297**	**283**	**189**	**147**	**143**	**256**	**142**	**295**	**213**	**144**	**323**	**538**	**309**	**188**	**148**	**290**
	5.6%	**14.3%**	**9.8%**	**4.7%**	**14.8%**	**14.1%**	**9.4%**	**7.3%**	**7.1%**	**12.8%**	**5.5%**	**11.4%**	**8.2%**	**5.6%**	**12.5%**	**20.8%**	**11.9%**	**7.3%**	**5.7%**	**11.2%**
Epping	278	503	385	262	723	384	309	289	217	110	444	766	279	345	1110	904	459	377	285	193
	8.0%	14.5%	11.1%	7.6%	20.9%	11.1%	8.9%	8.4%	6.3%	3.2%	8.6%	14.8%	5.4%	6.7%	21.5%	17.5%	8.9%	7.3%	5.5%	3.7%
Exeter	618	1407	1217	838	1724	1295	1094	1069	969	793	872	1497	831	727	2315	1999	1301	1000	951	988
	5.6%	12.8%	11.0%	7.6%	15.6%	11.7%	9.9%	9.7%	8.8%	7.2%	7.0%	12.0%	6.7%	5.8%	18.5%	16.0%	10.4%	8.0%	7.6%	7.9%
Fremont	98	205	142	92	246	172	115	124	87	52	273	343	176	130	642	452	231	143	96	86
	7.4%	15.4%	10.7%	6.9%	18.5%	12.9%	8.6%	9.3%	6.5%	3.9%	10.6%	13.3%	6.8%	5.1%	25.0%	17.6%	9.0%	5.6%	3.7%	3.3%
East Kingston	77	191	133	57	176	180	112	84	80	125	158	183	82	64	295	256	137	90	42	51
	6.3%	15.7%	10.9%	4.7%	14.5%	14.8%	9.2%	6.9%	6.6%	10.3%	11.6%	13.5%	6.0%	4.7%	21.7%	18.9%	10.1%	6.6%	3.1%	3.8%
Kingston	305	604	442	298	789	551	391	327	255	149	471	771	446	339	1068	1022	644	356	261	213
	7.4%	14.7%	10.8%	7.2%	19.2%	13.4%	9.5%	8.0%	6.2%	3.6%	8.4%	13.8%	8.0%	6.1%	19.1%	18.3%	11.5%	6.4%	4.7%	3.8%
Region	1183	2595	2074	1344	3167	2314	1819	1713	1496	1336	1889	3085	1581	1410	4686	4150	2437	1798	1522	1608
	6.2%	13.6%	10.9%	7.1%	16.6%	12.2%	9.6%	9.0%	7.9%	7.0%	7.8%	12.8%	6.5%	5.8%	19.4%	17.2%	10.1%	7.4%	6.3%	6.7%
Rock. Co.	13542	28326	20117	16231	35886	24425	18220	15789	10986	6823	19937	31647	18258	16356	49114	44045	26099	17789	13208	9392
	7.1%	14.9%	10.6%	8.5%	18.9%	12.8%	9.6%	8.3%	5.8%	3.6%	8.1%	12.9%	7.4%	6.7%	20.0%	17.9%	10.6%	7.2%	5.4%	3.8%
N. H. State	62512	128767	103769	83624	157396	107028	90121	84426	61788	41179	84565	139157	89673	82962	204823	182632	112215	88196	71471	53558
	6.8%	14.0%	11.3%	9.1%	17.1%	11.6%	9.8%	9.2%	6.7%	4.5%	7.6%	12.5%	8.1%	7.5%	18.5%	16.5%	10.1%	8.0%	6.4%	4.8%

Source: 1980 and 1990 U.S. Census of Population and Housing Table STF1

Educational Attainment - Persons 18 and over

	1980		1990	
< 9th grade	221		212	10.6%
9th - 12th grade, no diploma	206		221	11.0%
high school graduate	465		712	35.5%
some college, no degree	237		384	19.2%
associate degree	N/A		120	6.0%
bachelor's degree	128		247	12.3%
graduate or professional degree	79		109	5.4%
Totals	1336		2005	100.0%



Source: 1990 Census STF3A, Table P60

Employment Commuting Patterns

Town of Brentwood - 1990

Means of Transportation		
Mode	Number Employed	Percent of Total
Drive alone	923	79.2%
Car pool	115	9.9%
Public transportation	2	0.2%
Walk	42	3.6%
Other	2	0.2%
Work at home	81	7.0%
Total	1,165	100.0%

Work Destinations		
Working:	Number Employed	Percent of Total
In town	241	20.6%
Out of town	929	79.4%
In county	820	89.2%
Out of county	99	10.8%
In state	919	78.5%
Out of state	251	21.5%

Travel Time		
Minutes	Number Employed	Percent of Total
<5	36	3.3%
5 - 9	101	9.3%
10 - 14	160	14.7%
15 - 19	140	12.9%
20 - 24	187	17.2%
25 - 29	59	5.4%
30 - 34	130	11.9%
35 - 39	60	5.5%
40 - 44	31	2.8%
45 - 59	77	7.1%
60 - 89	75	6.9%
90 or more	33	3.0%

Commuting Destinations			
Total employed living in Brentwood:			1165
Work Destination	Number Employed	Work Destination	Number Employed
Brentwood	241	Boston, Ma.	29
Exeter	200	Hampton	27
Portsmouth	70	Kingston	24
Plaistow	53	Epping	24
Stratham	46	Lee	20
Seabrook	39		
Haverhill, Ma.	31		
North Andover, Ma.	29		

Source: 1990 U.S. Census of Population and Housing, STF 3A; Tables P45, P48, P49, and P50.

HOUSING DISTRIBUTION BY TYPE
Brentwood and the Surrounding Communities

	1980							1990							1980 - 1991		
		Single Family		Multi-Family		Manufactured			Single Family		Multi-Family		Manufactured		Units	Percent Growth:	
TOWN/AREA	Total	number	%	number	%	number	%	Total	number	%	number	%	number	%	added	Total	Avg.Annual
BRENTWOOD	598	478	79.9%	31	5.2%	89	14.9%	778	640	82.3%	46	5.9%	92	11.8%	180	30%	2.67%
Exeter	4406	2355	53.4%	1314	29.8%	737	16.7%	5280	2306	43.7%	1952	37.0%	1023	19.4%	874	20%	1.83%
Epping	1181	826	69.9%	211	17.9%	144	12.2%	2059	1252	60.8%	407	19.8%	400	19.4%	878	74%	5.72%
Danville	439	356	81.1%	33	7.5%	50	11.4%	960	592	61.7%	76	7.9%	292	30.4%	521	119%	8.14%
Fremont	461	386	83.7%	54	11.7%	21	4.6%	920	750	81.5%	102	11.1%	68	7.4%	459	100%	7.15%
Kensington	450	400	88.9%	26	5.8%	24	5.3%	585	511	87.4%	22	3.8%	52	8.9%	135	30%	2.66%
Kingston	1518	1185	78.1%	198	13.0%	135	8.9%	2115	1673	79.1%	267	12.6%	175	8.3%	597	39%	3.37%
Newfields	301	244	81.1%	54	17.9%	3	1.0%	324	280	80.2%	50	15.4%	14	4.3%	23	8%	0.74%
East Kingston	362	296	81.8%	8	2.2%	58	16.0%	494	423	85.6%	12	2.4%	59	11.9%	132	36%	3.16%
REGION TOTAL /AVG.	9716	6526	67.2%	1929	19.9%	1261	13.0%	13515	8406	62.2%	2934	21.7%	2175	16.1%	3799	39%	3.36%
ROCKINGHAM CO.	68132	45559	66.9%	17423	25.6%	5150	7.6%	101773	62681	61.6%	32097	31.5%	7808	7.7%	33641	49%	4.09%
NEW HAMPSHIRE	347758	218351	62.8%	108575	31.2%	20832	6.0%	503541	297474	59.1%	164178	32.6%	41889	8.3%	155783	45%	3.77%

SOURCES: (1) "Current Estimates & Trends in New Hampshire's Housing Supply, Update: 1991."
N.H. Office of State Planning, November 1992.
(2) 1980 and 1990 U.S. Census Bureau

Housing Costs in Exeter and Area Communities
Rental and Owner Occupied Housing Units - 1990

BRENTWOOD	$517	222%	$169,400	263%
Epping	$473	203%	$123,300	191%
Exeter	$539	231%	$154,000	239%
Fremont	$571	245%	$133,600	207%
Region Average	**$233**	**100%**	**$64,478**	**100%**
Rockingham Co.	**$541**	**232%**	**$149,800**	**232%**
New Hampshire	**$479**	**205%**	**$129,400**	**201%**

Source: 1990 Census of Population and Housing, Summary Population and Housing Characteristics, Bureau of the Census.

Occupied Housing Units and Persons per Unit
1980 & 1990 US Census

BRENTWOOD	***543***	***755***	***3.4%***	***3.7***	***3.4***
Epping	1149	1846	4.9%	3.0	2.8
Exeter	4182	4975	1.8%	2.6	2.5
Fremont	449	865	6.8%	3.0	3.0
Kingston	1415	1911	3.1%	2.9	2.9
Area Total	**7738**	**10352**	**3.0%**	**2.8**	**2.7**
Rock. County	**65951**	**89118**	**3.1%**	**2.9**	**2.8**
New Hampshire	**323493**	**411186**	**2.4%**	**2.8**	**2.7**

Source: 1980 and 1990 US Census

Table 12
Housing Costs
Rental and Owner Occupied Housing Units

TOWN/AREA	Median Rent 1990	Percent of Rock. Co. Average	Median Value Owner Occup. Units - 1990	Percent of Rock. Co. Average
Brentwood	***$517***	***96%***	***$169,400***	***113%***
Epping	$473	87%	$123,300	82%
Exeter	$539	100%	$154,000	103%
Fremont	$571	106%	$133,600	89%
Kingston	$524	97%	$148,500	99%
Area Total/Avg.	**$525**	**97%**	**$145,760**	**97%**
Rock. County	**$541**	**100%**	**$149,800**	**100%**
New Hampshire	**$479**	**89%**	**$129,400**	**86%**

Source: 1990 Census of Population and Housing, Summary Population and Housing Characteristics

Table 13
Median Housing Purchase Prices -- 1990 and 1992
Brentwood and Area Communities

Communities	1990 Sample Size*	1990 Median Price	1992 Sample Size*	1992 Median Price	Percent Change 1991-1992
BRENTWOOD	***9***	***$125,048***	***11***	***$105,048***	***-16.0%***
Epping	14	$120,750	24	$88,404	-26.8%
Exeter	21	$136,287	50	$109,189	-19.9%
Fremont					
Kingston	15	$130,071	13	$110,928	-14.7%
Area Total/Avg	59	$46,560	98	$37,597	-19.2%
Rockingham County	1,133	$119,048	1,095	$112,381	-5.6%
New Hampshire	3,956	$107,524	3,470	$99,048	-7.9%

Source: N.H. Housing Finance Authority.
Purchase Price Median, 4 Quarters 1991 and 1992.

*Sample sizes under 50 are not statistically reliable.

[D:\towns\brentwoo\mp\housing\houstab4.xls]

TABLE 14
Percent of Households By Income
1990 Census

TOWN/AREA	Percent of Area Population	Income Ranges					
		$0 to $14,999	$15,000 to $29,999	$30,000 to $49,999	$50,000 to $74,999	$75,000 to $99,999	$100,000 and over
BRENTWOOD	*10%*	*3%*	*7%*	*4%*	*8%*	*12%*	*12%*
Epping	20%	11%	12%	13%	19%	13%	8%
Exeter	48%	32%	29%	26%	44%	49%	56%
Fremont	10%	2%	2%	2%	6%	13%	16%
Kingston	22%	7%	8%	10%	30%	25%	21%
TOTAL	100%	100%	100%	51%	100%	100%	100%

Source: 1990 U.S. Census, STF3A - Tables P80, P107, and P110.

Housing Units in Brentwood and Area Communities 1980 & 1990

TOWN/AREA	Housing Units 1980	Housing Units 1990	Percent Increase 1980-1990	AAGR '80-'90	Persons Per Occupied Housing Unit 1980	Persons Per Occupied Housing Unit 1990
BRENTWOOD	**598**	**778**	**30%**	**2.7%**	**3.14**	**2.89**
Epping	1181	2,059	74%	5.7%	2.96	2.76
Exeter	4,406	5,346	21%	2.0%	2.59	2.45
Fremont	464	920	98%	7.1%	2.93	2.94
Kingston	1,683	2,015	20%	1.8%	2.90	2.93
Region Total/Avg	**4,406**	**5,346**	**21%**	**2.0%**	**0.24**	**0.22**
Rockingham Co.	**69,375**	**101,773**	**47%**	**3.9%**	**2.84**	**2.72**
New Hampshire	**349,001**	**503,541**	**44%**	**3.7%**	**2.75**	**2.62**

Note: "AAGR" = Average Annual Growth Rate

Sources: "Current Estimates & Trends in New Hampshire's Housing Supply, 1980-1990" N.H. Office of State Planning, January, 1992.
1990 Census of Population and Housing, Summary Population and Housing Characteristics - New Hampshire, 1990 CPH-1-31, Table 5.
1980 Census - STF-1, Table 35.

Section 4 - Community Facilities

A. Municipal Government

The Brentwood Town Offices are located on Dalton Road just of NH Route 111-A, just east of the intersection with NH Route 125. The building was built in 1978, using mostly volunteer labor, and donated material. The Town Office complies with federal regulations regarding handicapped accessibility. The building is located on a 30-acre parcel of Town-owned land. Some on-site expansion is possible but a good portion of the parcel is wet.

Offices of the selectmen, town clerk, tax collector, treasurer, welfare director, building inspector, planning and zoning adjustment boards, and police department are located in the Town Office. Records of other Town Boards are maintained in the building and most Town Boards meet in the meeting room.

Municipal employees include the selectmen, administrative assistant, town clerk, deputy town clerk, tax collector, building inspector, various board secretaries; treasurer, auditor, police officers, director of public works, road agent, librarian and assistant, welfare administrator, assessors, and election workers. Some members of the Brentwood Volunteer Fire - Rescue Department are classified as call pay individuals These individuals get paid for services if they are called; some members of Fire - Rescue choose not to get any renumeration from the town. Volunteer workers include members of the planning board, zoning board of adjustment, budget committee, conservation commission, solid waste delegates, recreation commission, recycling committee, and library trustees.

There have been a number of improvements to the Town Offices in the recent past. These include installation of a uni-sex bathroom meeting federal requirements for handicapped access; installation of a new phone communications network giving separate lines to the major departments; purchase of new computers enabling the Town Clerk, Administrative Assistant and Planning Board to work on independent office equipment; and remodeling of the Planning Board office to create approximately 30% more space.

Recommendations

1. The Town should begin planning efforts to determine the feasibility of expanding the Town Offices or relocating to a larger facility.

2. Purchase or build a fireproof vault for the storage of Town records.

B. BRENTWOOD FIRE DEPARTMENT

The Brentwood Fire Station, located at 148 Crawley Falls Road originally was a two bay structure built in 1947 by all volunteer labor and donated materials. Additions were added in 1976 and 1990, again without public funding, and it is owned and operated by the Brentwood Volunteer Firemens' Association. It is now a seven bay facility which includes a dispatch center, meeting hall, training room, and administrative offices. It also serves the community as an evacuation center with its own auxiliary power supply. Building upkeep and maintenance is performed and paid for by the Association and the Ladies Auxiliary. The building was updated for energy efficiency with the assistance of the State of N.H. Office of Energy.

Equipment

The first equipment purchase undertaken by the Fire Department was a 1932 Dodge with a 275 gallon oil tank and a garden hose. In 1953, a Chevrolet 500 gpm pumper was purchased. In 1970, a Ford Maxim 1000 gpm pumper was added to the Fire Department's inventory. In 1987, two Class A pumpers were purchased to replace the 1953 and 1970 units. The equipment owned by the Fire Department consists of the following:

Engine 1 - 1987, I.H.-KME 1250/1000 pumper
Engine 4 - 1987, Hahn-KME 1500/1000 pumper
Tanker 1 - 1975, Mack/shop-built 3000 gallon tanker
Forestry 1 - 1954, military 4x4 shop-built forestry
Rescue 2 - 1992, Ford F350 1 Ton
Ambulance - 1979, Ford modular ambulance
HAZMAT Trailer - 1994, shop-built
26 Portable Radios
37 Pagers and chargers
10 Mobile radios
1 Base radio
35 sets of personal equipment
15 SurviveAir Packs
12 SurviveAir Bottles
3 500 watt portable lights
3 generators (1000, 1700, and 5000 watt units)
1 Pair mast trousers
2 Portable Oxygen Kits
1 Ambulance stretcher
1 Sherman stretcher
1 Chair Stretcher
2 Short boards
2 Insulated floating water rescue suits
Miscellaneous supplies and equipment for medical emergencies

3 Foam inductors
1 Portable pump
1 Floating pump
2 Chainsaws
K12 Rescue saw
2 2200 gallon Fold-A-Tanks

Hose

3400 feet of 4 inch
2000 feet of 3 inch
600 feet of 2.5 inch
2450 feet of 1.75 inch
850 feet of 1.5 inch
50 feet of 6 inch hard suction

1 Defibulator kit
2 Portable suction kits
1 Stokes stretcher
1 Scoup stretcher
4 Long boards
1 Floating stretcher

Each piece of fire apparatus carries a full compliment of nozzle adaptors, ladders, tools and salvage equipment The rescue and hazmat trailer carry equipment and supplies necessary to assist ambulance and fire apparatus at every type of fire, rescue, recovery or hazmat incident that may occur.

The ambulance is fully stocked with medical supplies and equipment to respond to all medical emergencies.

Operations

The present Fire Department staff for Brentwood includes a chief, seven officers, and 37 fire and rescue personnel. The department is run on an on-call basis.

Brentwood is a member of a 56-town mutual aid pact. The number of calls to which fire and rescue personnel respond continues to increase. Hazardous materials emergencies are on the rise and have become a major problem not only for Brentwood but fire departments

across the country. Rescue personnel as well as fire responders face an increased risk of exposure, to blood borne diseases and viral infections.

The Fire Department has enforcement duties pertaining to hazardous materials as well as handling spills, leaks, and fire involving such materials.

Recommendations

1. Initiate a program to recover costs associated with the provision of emergency services to county facilities.

2. Establish a capital reserve fund for the purpose of replacing the tanker currently owned.

3. Full-time firefighters and EMTs covering daytime hours for 8:00 a.m. to 4:00 p.m. will be necessary in the near future.

4. A secretary should be hired for the Department as at least a half-time position..

5. Purchase a computer for administrative work, ambulance billing, state reports, payroll, and budget reports.

6. Purchase additional equipment for response to HAZMAT calls.

7. Continue aggressive training of fire and rescue personnel to minimize liability to the Town and to meet State and Federal regulations.

8. The Planning Board and the Fire Department must continue to work closely together on fire codes and standards.

9 Formulate a plan for the orderly transfer of ownership to the Town of the fire station and hall in the event the volunteer Firemen's Association is unable to continue maintaining the property due to lack of income and increasing maintenance costs.

C. POLICE DEPARTMENT

The Brentwood Police Department is located in the basement of the Town Office Building. The facility includes an evidence room, conference room and Chief's Office. All of these rooms are in good condition and are adequate for the current level of operations.

Equipment

The Police Department currently has two cruisers. The oldest is a 1989 Chevrolet, in good condition, but will need replacement by the year 1995. The second vehicle is a 1990 Chevrolet also in good condition. Following is a list of other equipment and the quantities of each, owned by the Police Department:

5 Phoenix SX Mobile 11 channel Radio
2 Motorola Convert-Com 4 Channel Radio

3 12 Channel General Electric Portable Radio
3 Motorola GP 300
1 General Electric 12 Volt Power Supply
1 Whelen WS-295 Control Boxes
1 Kustom Signal Radar Unit
2 Whelen Edge 9000 Bar Light
2 Mossberg Pump Action 12 Gauge Shot Gun
1 Power Amplifier
1 Vega Vehicle Pager

Operations

The Police Department staff includes a chief, deputy chief, sergeant, juvenile officer/matron, animal control officer; with a total of eleven on the payroll. All positions at this time are part-time positions. The majority of calls consist of accidents, prowlers, domestic disputes, speeding and attempted burglary. A mutual aid agreement has been signed with the Towns of Fremont, Exeter, Kingston and Epping.

Recommendations - The following recommendations are listed in order of importance:

1. Hire a full-time officer by June of 1995.
2. Purchase an up-to-date computer system.
3. Regularly scheduled replacement of fully equipped cruisers.
4. Replace existing mobile radios by 1997. (six radios in all)
5. Fund two full-time officers by the year 1998.

D. MARY E. BARTLETT MEMORIAL LIBRARY

The Brentwood Free Library was dedicated as the Mary E. Bartlett Memorial Library in May 1975. It was established in 1892 with a gift from the legislature. The library moved from home to home, until it was finally located at the present sight on Dalton Road. This location allows the library to be located in close proximity to other Town services such as the Town offices, school and fire hall. It is however somewhat difficult to find the first time. The building is the old school house with an addition constructed by volunteers with donations of labor and materials by many Brentwood citizens.

The library is staffed by two people. It is open 30 hours per week September through June and 23 hours per week during the summer month. The most pressing personnel need at this time is the necessity of having more than one employee at the library at one time. It is difficult to serve the number of patrons that come to the library at one time. It is not unusual to have fifty books circulate within one hour. This does not include books returned, reference questions, and phone calls.

Space is at premium, despite the recent addition. The number of patrons has increased dramatically. Bookshelves are filled and new shelving will be necessary. There is only one table

for students to do research. More space will be needed as more shelving is added.

At this time the Mary Bartlett Library has no separate meeting space. All programming is conducted in the library proper. Programming includes story hours, a summer reading program, book discussion groups, speakers, and an active Friends of the Library group. A separate meeting room would allow programming to take place without disturbing those who are studying, looking for books or browsing. During non-operating hours, the library facility is available for use by community groups. The library has both an entrance and a bathroom which are handicapped accessible. The shelving is not spaced to accommodate a wheel chair.

Maintenance is very important. The structural integrity of the older section of the building was recently evaluated when the floor sagged. A full evaluation is necessary. The library trustees would like to see painting and other maintenance done on a schedule.

LIBRARY SERVICES

The following figures represent an average year of activity at the Mary E Bartlett Memorial Library.

Public Service Hours		1555
Total attendance in the library for the year		4969
In-library use		986
Total reference transactions* completed		986
Material circulation		
a.	Adult	5580
b.	Juvenile	6239
c.	Other (include magazines and A-V)	4300
Total circulation for the year		**16,119**
Interlibrary loan		
a.	Provided to other libraries	0
b.	Received from other libraries	211
Total number of adult programs		5
Total number of juvenile programs		50
Total attendance at adult programs		90
Total attendance at juvenile programs		624

Library Recommendations

1. Complete a study of the structural integrity of the entire facility and undertake correction of any deficiencies found.

2. Enlarge the staff of the library to allow two individuals per shift.

3. Establish a capital reserve fund to provide for the future expansion of services at the library. This expansion to include both additional space (especially a meeting room) and new equipment (computers, shelving, study tables).

4. Initiate a regularly scheduled maintanance program for the facility.

E. The Swasey Central School

The Swasey Central School was built in 1950 with additions in 1967, 1975 and a major renovation which was completed and dedicated in September of 1989. The school sits on a 9 acre site. It is now all on one floor which makes it entirely handicapped accessible. The school has two wings - a primary wing housing grades one through three and an intermediate wing housing grades four through six. The two wings are joined together by a middle section which includes a library, a gymnasium, the cafeteria and the office. The enrollment as of June, 1994 was 198 with each grade containing approximately 33 children.

We currently have 8 straight grade classrooms and 2 multi-aged classes. Class size runs from a low of 15 to a high of 24 with an average class size of 20. In addition to an administrator, nurse, secretary, and ten classroom teachers, we employ part-time music, art and physical education teachers. We also have tow full-time special education teachers, one of whom has counseling responsibilities. Several part-time teachers include a speech and language therapist, an occupational therapist, a psychologist, a Chapter I tutor, 5 special needs aides, an office aide, 2 cafeteria employees and 2 custodians.

The school has adequate space to support our current instructional program and enough room to support a 25% growth in population. The only area which needs enlarging is our gymnasium which serves as gym, cafeteria and auditorium. A gym which doubles as a cafeteria causes problems with scheduling because gym classes cannot occur from 11:45 - 1:15 each day. Also, while the auditorium can easily accommodate all of our children, it does not accommodate the large number of parents who come to all-school productions. A stage would be a valuable addition so that students can get experience in performance.

The school is used extensively in the late afternoon and evening for Boy Scouts, Girl Scouts, Aerobics, Basketball, after-school sports, Brentwood Recreation, School Board meetings, Variety show, Concerts and a variety of other social events (suppers, etc.)

School Enrollment 1985-1994

(Enrollment as of 9/30 of each year)

GRADES	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
1	35	31	30	31	30	30	29	27	35	35
2	27	38	31	36	29	32	29	32	28	28
3	25	32	36	36	35	29	36	26	32	34
4	22	24	31	33	36	38	31	33	33	34
5	28	22	26	36	34	36	41	30	32	34
6	21	27	26	31	36	32	33	41	30	33
TOTAL	158	174	180	203	200	197	199	189	190	198

Source: Town of Brentwood Annual Reports, 1985-1994

Projected School Enrollments 1995-2005*

GRADES	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	26	35	24	26	26	25	25	25	25	25	25
2	33	26	35	24	26	26	25	25	25	25	25
3	33	34	27	36	25	27	27	26	26	26	26
4	35	36	37	29	39	27	29	29	28	28	28
5	36	36	37	38	30	40	28	30	30	29	29
6	31	35	35	36	37	29	39	27	29	28	28
TOTAL	194	202	195	189	183	174	173	162	163	162	161

Enrollment projections taken from SAU #16 (Exeter Area) facilities study prepared by the New England School Development Council and released on February 15, 1995.

Swasey Central School Recommendations

21. Purchase a stage for student performances.

22. Continue to upgrade computer capabilities.

23. Continue to explore the need for a special education preschool at the Swasey Central School.

24. Evaluate the heating and venting systems and indoor air quality at the Swasey Central School and correct any deficiencies.

F. BRENTWOOD RECREATION

Brentwood Recreation consists of 2 active groups, the Brentwood Recreation Commission, and the Brentwood Recreation Center, Inc.

The Commission is a group of 5 volunteer residents who are approved and appointed to the commission by our town selectmen, for a specific term. The commissioners duties include designating programs as well as planning their implementation. It is their intention to include programs for all ages at some point during the year. It is also their duty to oversee the town property that was designated for recreational use by a vote in the 1984 town meeting.

The Brentwood Recreation Center, Inc., is a membership of volunteers, chartered as a non-profit organization whose mission is to help provide low cost recreation to the town, particularly to its' youth. The Rec. Center maintains a slate of officers, as well as a board of directors. This group is also the owner of the 7.5 acre piece of property with the large 40' x 80' unfinished building on Smith Road, along with its fenced in Little League field, parking lots and picnic/pavilion area. The BRC, Inc. also has built and maintained the "Library field", a fenced in Little League on private property owned by Martin and Vi Lindon, the large Babe Ruth hardball field and girls softball field on the adjoining town property behind the BRC property, that also doubles for soccer fields each fall. The BRC also helps mow and maintain the school property playing fields, which now include a small baseball field and large field for recess's and pickup sports games.

Since the Swasey School was enlarged to include a small gymnasium, the BRC has worked with the school board to create sport and activity times for the youth and adult recreation programs on week nights and weekends.

The properties and recreation programs have always been operated and funded through volunteers and many fund-raisers. Changes in society have effected the BRC as well as other organizations in our town. Recent years have brought a sharp decline in the amount of time available and the number of volunteers interested in providing recreation entirely through voluntary actions. In 1992, the townspeople voted to help subsidize the BRC by assisting them in paying for part of their insurance costs. In 1994, a warrant article was passed to financially help the BRC by providing funds for safety equipment and funds for more field equipment. These have been very positive signs that the town is more aware of the need for recreation, by showing its willingness to help when needed.

Equipment and Assets
40' x 80' x 12' unfinished building, weather tight with storage basement, kitchen, and utilities
20' x 40' picnic pavilion with 10 picnic tables
10' x 10' storage building
1984 Ford 1510 diesel tractor w/60"" bucket loader & 60" Rear Mower
60" Rear Tractor Scrapper Blade
Miscellaneous hand tools & sports associated equipment
3 pool tables with equipment.
1 table tennis table
2 Batting cages with pitching machines
13 baseball/softball teams uniforms and equipment
6 teams of basketball equipment
4 teams of coccer equipment with goals

Hershey track supplies and equipment
Fenced little league park (BRC Property)
Fenced little league park (Lindon Property)
Fenced softball field (Town Property)
Babe Ruth baseball field (Town Property)
T-Ball field (Swasey School Property)

Recommendations

Short-Term

1. Secure & Provide additional playing fields
2. Initiate small working budget through town budget
3. Create outdoor tennis/basketball courts at BRC property
4. Provide safe ice skating area
5. Make BRC building available for 3 season use
6. Upgrade and pave access road to BRC/Town property
7. Research possibility of acquiring "Library" ball field for town property

Long-Term

1. Completion of BRC building for year-round use
2. Provide hiking/nature trails for public use
3. New well for building and irrigation
4. Development of hiking and nature trail system
5. Install irrigation on ball fields
6. Gift/Lease BRC property to town

Staffing Requirements

Present Staff:	All volunteer coaches, grounds maintenance; coordinators
Near Future Staff:	Enlist help from Town Public Works Department for grounds Maintain volunteer network as long as practical
Long-Term Goals:	Part-Time/Full-Time Recreation Director

RECREATION AREAS -

Description	Location	Size	Activities	Features	Remarks
Recreation Center	Route 125, 1/4m. North of 111A, on west side of highway	7.5 acre	Baseball, Picnic, Soccer, skiing	Ballfield, picnic area 2 story 40'x80' building w/parking	access to town properties
Town Land	" "	8.5 acre	Baseball, Softball Soccer, X-Country Skiing, Golf	Large multi-purpose open field	access to other town properties
Town Land	" "	60 acre	Open wilderness	Wooded, partial wet	open terrain power lines
Swasey School	111A, ½m. East of Route 125	5+ acre	School buildings Gymnasium	Ballfields, playground, Gymnasium	adjoins other town properties
Town Land	" "	6 acre	Open play area	Fields & Woods	partial wet
Lindon Field	Dalton Road	1 acre	Baseball field	Fenced park	behind library

Section 5 - Construction Materials

One of the newest chapters required for a master plan is the Construction Materials Chapter. The enabling statute that addresses the purpose and description of a master plan was amended by the New Hampshire Legislature in 1989. RSA 674:2, VIII-a requires the following:

> "A construction materials section which summarizes known sources of construction materials which are available for future construction materials needs, including, at a minimum, the location and estimated extent of excavations which have been granted permits under RSA 155-E, as well as reports filed pursuant to RSA 155-E:2, I(d) with respect to non-permitted excavations."

The purpose of this chapter is to identify which construction materials are relevant and to locate these deposits using the soil survey of Rockingham County prepared by the Soil Conservation Service (SCS). Other sources of information are also used as appropriate. The soil survey identifies deposits of roadfill, sand, gravel, and topsoil as construction materials. Each soil type listed on the soil survey has a name and is shown on the map using a number followed, in most cases, by a letter from A to E. The number indicates the composition of the soil and the letter represents the slope. The letter A is a 0-3% slope, B is a 3-8% slope, C is a 8-15% slope, D is a 15-25% slope, and E is greater than 25% slope.

The SCS rated the performance of each soil type based on its physical characteristics and test data conducted during the SCS survey. For each intended use of the soil, the SCS gave the soil a ranking. The ratings of "good", "moderate", "fair", and "poor" are used for roadfill and topsoil. For sand and gravel, the soils are rated as "probable" or "improbable" as to the possibility of sand or gravel being present.

It should be noted that the soil maps are intended for general town wide land use planning. Due to the mapping techniques used, there may be different soil types within a mapped area of another soil type. The smallest soil polygons mapped are usually in the two to three acre range. Because of these limitations, the soil maps should not be used for site specific land use planning. More detailed on-site soil identification is recommended for parcel level work. The construction materials identified in this chapter are based on these SCS maps. The information is not designed or intended to be used for definitive identification of construction materials.

The soil types that are likely to contain any of the four construction materials and are found in Brentwood are listed in Table CM-1. Each soil number and name is provided, as well as the number of acres of that type of soil found in Brentwood. The source for the soil information is the SCS soil map as digitized by Complex Systems of the University of New Hampshire and provided to the Rockingham Planning Commission in digital format. Calculations of the number of acres for each soil type are based on this digital information. Each of the four types of construction materials are listed in Table CM-1. For roadfill, if a soil has a rating of good, it was indicated. For sand and gravel, only the probable rating is listed. In the case of topsoil, there were no soils which had a good rating so the only soil with a moderate rating was listed. Except for this case, if a soil had a rating less than good or probable it was left blank to make the table easier to read. Only the soils that had a good or probable rating in any category were included in the table.

SOIL NUMBER	SOIL NAME	ACRES IN BRENTWOOD	ROADFILL	SAND	GRAVEL	TOPSOIL
12 B,C	Hinckley	105.40	Good	Probable	Probable	Probable
26 A,B,C	Windsor	756.90	Good	Probable	Improbable	Probable
30 A,B	Hartland	251.40	Fair	Improbable	Improbable	Good
32 A,B,C	Boxford	409.50	Probable	Improbable	Improbable	Probable
33 A	Scitico	1,403.00	Probable	Improbable	Improbable	Probable
38 A,B	Elmridge	981.20	Probable	Improbable	Improbable	Fair
42 B,C	Canton	129.90	Good	Improbable	Improbable	Probable
43 B,C	Canton	94.70	Good	Improbable	Improbable	Probable
44 B,C	Montauk	129.60	Fair	Improbable	Improbable	Probable
45 B,C	Montauk	64.10	Fair	Improbable	Improbable	Probable
62 C	Charlton	8.30	Probable	Improbable	Improbable	Probable
63 B,C	Charlton	61.20	Good	Improbable	Improbable	Probable
66 B,C	Paxton	127.20	Good	Improbable	Improbable	Fair
67 B,C	Paxton	107.10	Good	Improbable	Improbable	Probable
67 D	Paxton	12.00	Good	Improbable	Improbable	Probable
129 B	Woodbridge	68.90	Fair	Improbable	Improbable	Probable
134 '	Maybid	249.50	Probable	Improbable	Improbable	Probable
295 '	Greenwood	85.70	Probable	Improbable	Improbable	Probable
298 '	Pits	387.00	Good	Probable	Probable	Probable
299 '	Udorthents	37.40	N/A	N/A	N/A	N/A
305 '	Rippowam	169.50	Probable	Improbable	Improbable	Probable
313 A,B	Deerfield	644.90	Fair	Probable	Improbable	Probable
395 '	Chocorua	60.20	Probable	Probable	Improbable	Probable
495 '	Ossipee	65.10	Probable	Improbable	Improbable	Probable
510 A,B,C	Hoosic	541.90	Good	Probable	Probable	Probable
538 A	Shaker	642.60	Probable	Improbable	Improbable	Probable
547 A,B	Leicester	122.00	Probable	Improbable	Improbable	Probable
	TOWNWIDE	CATAGORY	ACRES			
		GPPP	1034.3			
		GIIF	127.2			
		GPIP	756.9			
		FPIP	644.9			
		FIIG	251.4			
		PIIP	2985.7			
		PIIF	981.2			
		N/A	37.4			

Roadfill

Table CM-1 shows that ten soils in Brentwood are rated as good for use as roadfill. These ten soils total up to 2323 acres. The largest single soil type that is good for roadfill is the 510 A-D, Hoosic, which has 542 acres in Brentwood.

Sand

Sand is a very valuable material used in many kinds of construction. There are six soil types in Brentwood that the SCS have given a probable rating for the presence of sand. The total size of the potential sand producing soils is 2496 acres.

Gravel

Gravel is a most sought after construction material for many types of industries. Due to the geology of Brentwood and much of the coastal region, gravel deposits are not very plentiful. In Brentwood, there are only three soil types where finding gravel is rated as probable. This area covers a total of 1034 acres. The hoosic soil found in Town accounts for over half of the area which is classified as probable for yielding gravel.

Topsoil

Topsoil deposits are the smallest of the four construction materials found in Brentwood. One of the soils, the 30 A, B, Hartland was rated good for topsoil and this covers an area of 251 acres. In addition, two soils, 38 A and B, Elmridge and the 66 B and C, Paxton were rated as fair for topsoil. These types covered 1108 acres of land in Brentwood.

A review of Table CM-1 reveals that no soil found in Brentwood ranked highly in all the construction materials categories. However soils such as the Hinckley, Windsor and Hoosic ranked well in more than one of the categories.

Existing Excavations

As the map on the next page shows, there are several active excavation sites in Brentwood. For the most part these are located in the Northeast section of Town along Pine and Deerhill Roads. The largest of these is owned by the State of New Hampshire and is being used for the construction of the expanded NH Route 101. When the project is completed the site will be reclaimed with constructed wetlands as part of the required wetlands mitigation involved with the corridor expansion.

Identification of Stratified Drift Aquifers

The Brentwood Water Resource Management and Protection Plan contains information on the stratified drift aquifers located in Brentwood. In 1990, the U.S.G.S. completed the most through and accurate study of the region's groundwater resources to date. The report is entitled, Geohydrology and Water Quality of Stratified Drift Aquifers in the Exeter, Lamprey, and Oyster River Basin, Southeastern NH.
As expected the aquifers match up fairly closely with the sand and gravel soils from the SCS soils map. When sand and gravel deposits are saturated with water, an aquifer is formed. There are, however, many instances where glaciers deposited sand and gravel on the top of hills or on hillsides; these are referred to as eskers or drumlins. These areas would not contain large amounts of groundwater and would not show up on the U.S.G.S. maps. Aquifers will always contain good sand and gravel, but sand and gravel deposits are not always good aquifers. Copies of this study and its attendant maps can be found in the Town Planning Board office.

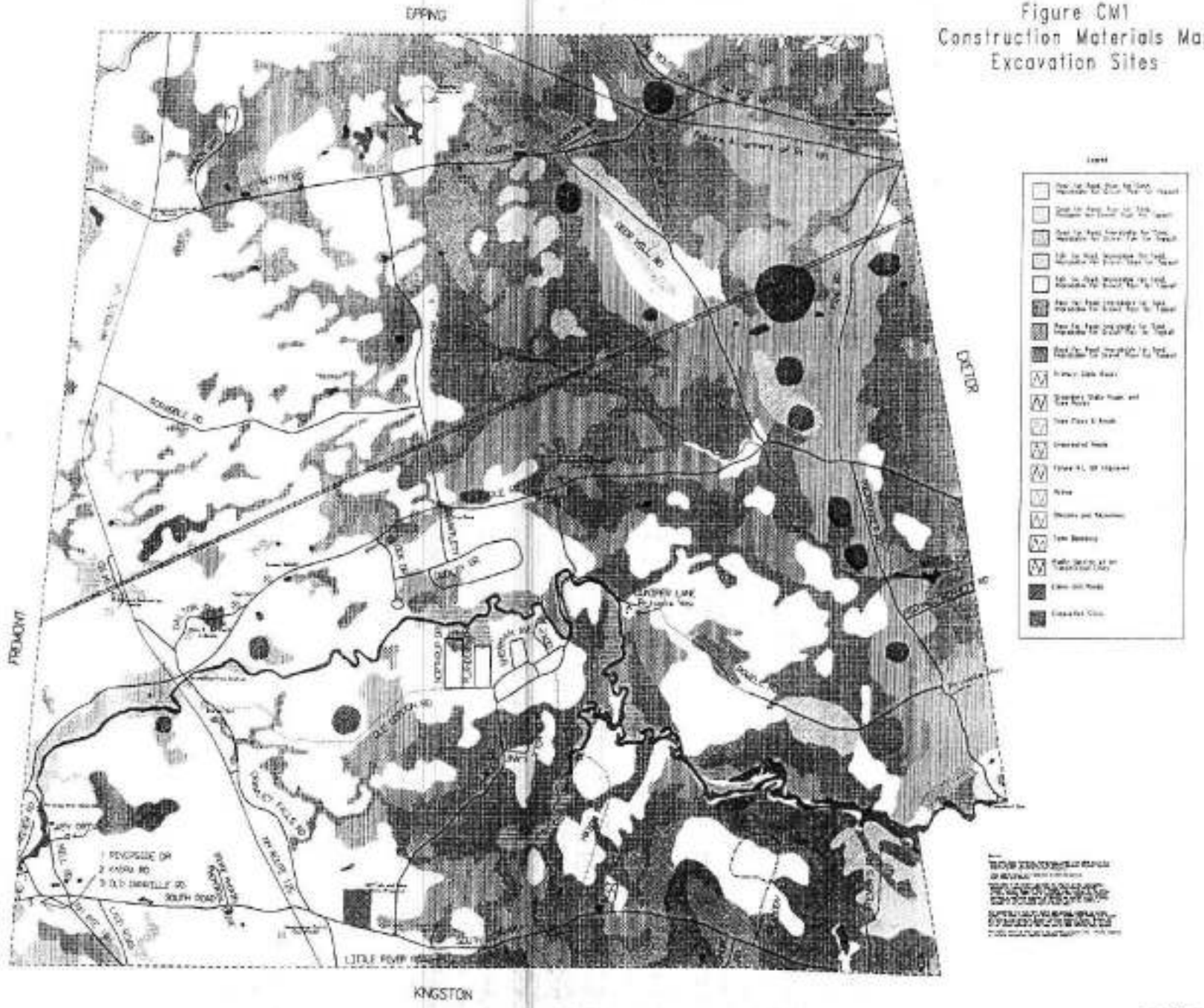
Excavation Regulations

In 1984, the Brentwood Planning Board adopted Excavation Regulations that were based on a model developed by the Rockingham Planning Commission. These regulations incorporated all of the required provisions from RSA 155-E. Excavations are permitted in the commercial/industrial zone in Brentwood if the Planning Board issues an excavation permit. This is done by the Planning Board only after obtaining the required excavation and restoration plans and holding a properly noticed public hearing.

Recommendations

1. The Planning Board should institute a program to more consistently bring existing excavation operations into conformance with both the reporting and reclamation requirements outlined in RSA's 155-E:2,(I),d, and 155-E:5.

Figure CM1
Construction Materials Map
Excavation Sites



Section 6 - Non-taxable Facilities In Brentwood NH

Rockingham County Facilities

The Town of Brentwood has, over the course of time, become the *de facto* county seat for Rockingham County. As of 1995, Brentwood is home to five major county facilities: the Rockingham County Jail / House of Corrections (and Sheriffs Department), the Rockingham County Nursing Home, Rockingham County Water Treatment Facility and the Rockingham County Wastewater Treatment Facility. In addition, by 1996 the new Rockingham County Superior Court is scheduled to be operational which effectively locates all major county functions within the town.

With the exception of the new Superior Court all of the county facilities are located on approximately 400 acres situated on both the north and south sides of North Road in the northern section of town. The Superior Courthouse is located on an approximately 22 acre piece of land located on the west side of NH Route 125 immediately north of the Kingston town line.

The county complex on North Road includes approximately thirty buildings. Besides the facilities run by Rockingham County that are listed above there are a number of other activities located at the complex. Part of one building is utilized by UNH Cooperative Extension services; one building houses the County Human Services division and one building is utilized as a motor services garage.

Description of Facilities

Rockingham County Nursing Home

The Rockingham County Nursing Home is a 300 bed facility serving the elderly population of Rockingham County. The facility is approximately 232,000 square feet in size and is located on an 83 acre site on the north side of north road. The facility was originally constructed in 1912, additions were added in 1938, 1958, 1973,1985 and 1992. Plans for improvement of the facility call for the completion of the second floor of the Driscoll building which is currently just a shell. In addition there are planned building renovations to insure that the facility remains in compliance with state and federal requirements such as the Americans with Disabilities Act of 1990.

Rockingham County Jail / House of Corrections (and Sheriff's Department)

The Rockingham County Jail consists of a 101,500 square foot facility located on the same 83 acre parcel as the Rockingham County Nursing Home. The facility was constructed in 1981 and underwent a substantial addition in 1992. The jail has 431 beds and serves as the only criminal detention center in Rockingham County. With the most recent addition the facility is expected to remain in excellent condition for the next several years. No planned improvements exist at this time and such improvements would be based in large part upon future inmate population trends.

Rockingham County Wastewater Treatment Facility

The Rockingham County Wastewater Treatment facility is located on the same parcel as the county jail and nursing home. The facility is 2,280 square feet in size. It was constructed in 1992 in conjunction with the program of expansion mentioned above for both the nursing home and the jail. The facility is designed to treat 165, 000 gallons of wastewater per day.

Rockingham County Courthouse Facility

The Rockingham County courthouse facility is located on a 22 acre parcel of land on the west side of NH Route 125 on the Brentwood-Kingston town line. The facility is expected to open in 1996 ands will house all significant court facilities for Rockingham County. The building is 100,000 square feet and will include 9 courtrooms. The Rockingham County Superior and Probate courts, seventeen county attorney's offices and the Rockingham County Registry of Deeds. The facility was designed to handle these facilities for a fifty year period so there are no plans for modifications or expansions in the time horizon of this master plan update.

State of New Hampshire

In addition to the substantial Rockingham County land holdings in the Town of Brentwood the State of New Hampshire chose a site in Brentwood to serve as a model for wetlands mitigation for the major improvements and upgrade of NH Route 101 between Raymond and Hampton. This project involved taking by eminent domain an enormous parcel of land from the Town's northeast quadrant that was formerly prime commercial/industrial land. The site is in excess of 400 acres. At one time very nearly approved for a multi-lot industrial subdivision, the State of NH has taken this land and constructed a man-made wetland environment to serve as replacement for those wetland systems destroyed by the road construction project.

Fiscal Impact of Non-taxable Properties Upon the Town Of Brentwood

In an effort to understand the fiscal implications that these non-taxable facilities have on Brentwood the Planning Board ask the Office of the Selectmen to provide the property assessments for both the State of New Hampshire and the County of Rockingham. The figures are startling as revealed below.

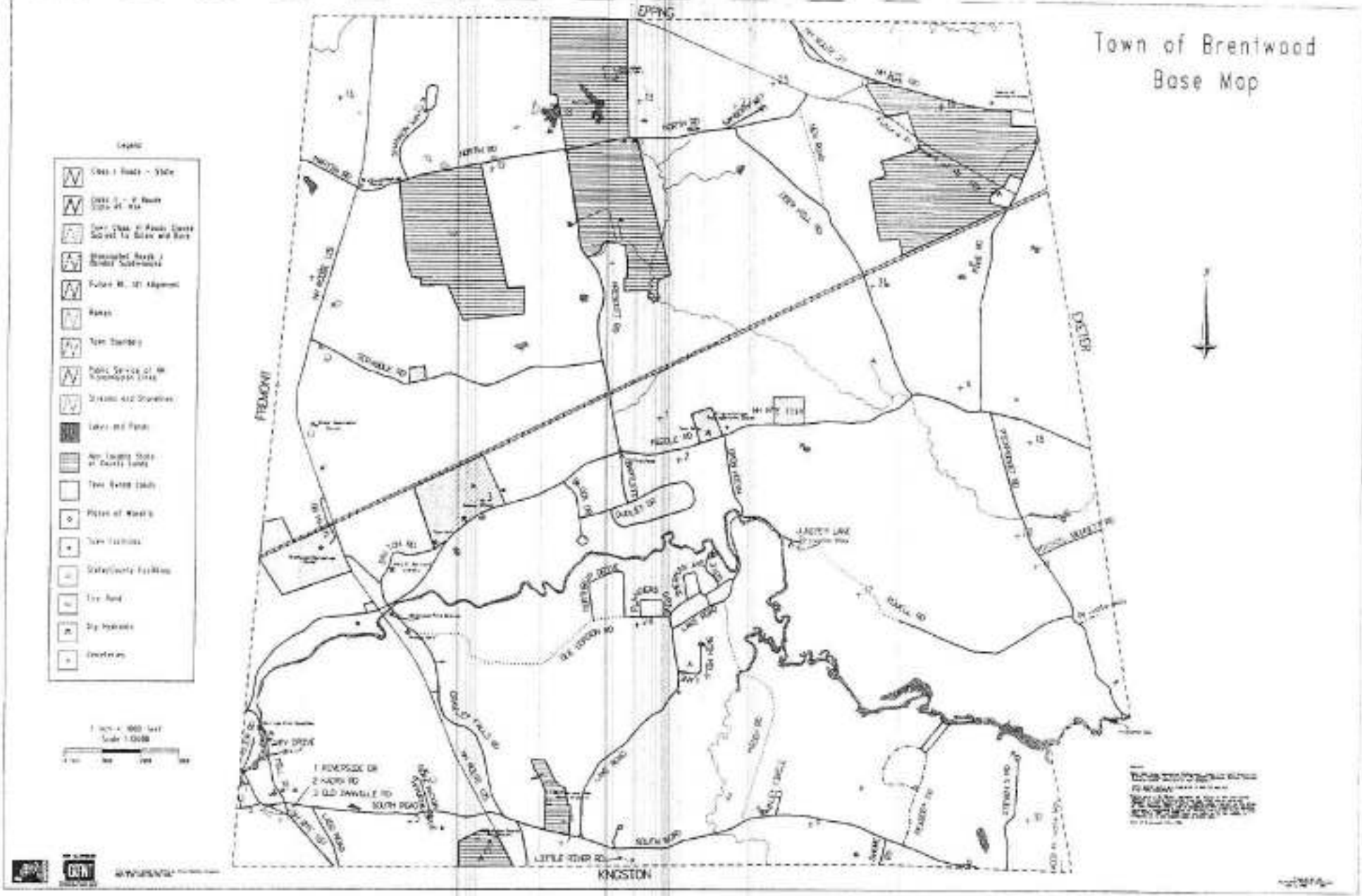
Property Owner	Total Value
Rockingham County	$16, 132, 356
State of New Hampshire	$3,761,800

Between these two governmental entities the Town of Brentwood loses approximately $19,900,000 in taxable value annually. Considering that the Town has a net local assessed valuation of $133,559,667 according to the most recent figures available from the NH Department of Revenue Administration, the Town of Brentwood is made to forego nearly 15% of its potential tax-generating land area. It is fairly obvious that no other community the size of Brentwood is being asked to accept such a disproportionate impact upon their tax base in Rockingham County or perhaps the entire State.

Recommendation

1. The Town of Brentwood should continue its efforts at securing compensation from both the State of New Hampshire and the County of Rockingham for the lost economic benefit and continued drain upon municipal services that result from the location of these tax-exempt facilities in Brentwood.

Town of Brentwood
Base Map


EPPING
FREMONT
EXETER
KINGSTON
NORTH RD
ROMAN RD
ROWELL RD
PICKLE RD
DUDLEY RD
HIGHLAND DR
LADY LAKE
OLD COACH RD
OLD COACH RD
DANIELS
DANIELS
DANIELS

UNIVERSITY of NEW HAMPSHIRE
COOPERATIVE EXTENSION

Brentwood Community Profile Report

Brentwood, New Hampshire
October 26 & 27, 2001

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Appendices

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OVERVIEW OF COMMUNITY PROFILES

The Community Profile is a process by which communities take stock of where they are today and develop an action plan for how they want to operate in the future. Whether the issue is a quality school system, an air pollution problem, lack of adequate affordable housing or solid waste disposal, the need for effective problem-solving skills is the same. A community must have strong leaders, from all sectors, who are able to work together with informed involved citizens to reach agreement on issues. The Community Profile assists communities to develop their problem-solving ability. It is a self-evaluation tool that draws heavily on the collective wisdom of the participants and is not a test or a comparison between communities. It provides a method for citizens to affirm community strengths, identify concerns and problems, and then to help a community structure collaborative approaches to meet these challenges creatively, set directions for the future, and manage change.

The original Civic Profile emerged from the Governor's Commission on New Hampshire in the 21st Century as a process and a mechanism that communities could use to strengthen their civic infrastructure. The National Civic League, along with several university studies, identified those qualities that make a community work - that help communities plan for the future and survive such dramatic change as extreme population growth, plant shut-downs or military base closings.

In 1995, the League of Women Votes in the Upper Valley, working with UNH Cooperative Extension and UVM Cooperative Extension, identified ten key qualities that help a community to work well now and sustain its social, economic, and environmental health for the future. This is the model that was adapted by the University of New Hampshire Cooperative Extension Profile and are the "tools" of the community self-assessment.

Creating a Community Profile in Brentwood

How the Community Profile came to be:

June 20, 2000 – Joan and Charles Pratt approached the Selectmen about holding a Community Profile in Brentwood. Judy Bush from UNHCE showed the video on the Profile and the Selectmen voted to support a warrant article urging the formation of a Community Profile in Brentwood.

March 24, 2001 – Voters approve warrant article #23 "to raise and appropriate the sum of $1,200 for the purpose of conducting a Community Profile through UNHCE". Joan Pratt and Ed Berry appointed co-chairs of Steering Committee by Selectmen.

April 23, 2000 – Memorandum of Understanding between Town of Brentwood and UNHCE signed.

May 9, 2001 – First Steering Committee meeting. Meetings held every 2 weeks from May until event in October 2001.

UNH Cooperation Extension

Brentwood Community Profile

Grace Tabernacle Church
October 26 & 27, 2001

Agenda

Friday Evening

5:30 Sign-In & Potluck Dinner

6:30 Welcome- Charlie French, Extension Specialist in Communities
- Overview of Community Profile Process
- Who is here?

Mosaic and Vision
- What is Brentwood like now?
- What do we want Brentwood to be like in the future?

Historical Overview – Gene Orcutt
- Where has Brentwood been?

7:45 Presentation of Community Profile components
1) Effective Community Leadership
2) Informed Citizen Participation
3) Sense of Community
4) Fostering Healthy Families, Individuals and Youth
5) Lifelong Education and Learning
6) Community Services, Facilities, and Utilities
7) Recreation and Cultural Heritage
8) Working Landscape and the Natural Environment
9) Economic Vitality
10) Growth and Development
11) Transportation

8:00 Break/Move into small groups

8:15 Small group discussions of components

Random assignments to small groups, one component per group
- Strengths of Brentwood in the component area
- Weaknesses of Brentwood in the component area
- What would you like to see in the future?
- What are the 5 key issues that need to be addressed?

9:30 Formal adjournment

Saturday

8:00 Coffee and check-in

8:30 Small group reports
- Each of the eleven small groups report to the large group, three minutes each.

9:15 Selection of key issues – participants select small group/issues

9:45 Break

10:00 Small groups meet for key issue discussion:
- Define the problem or opportunity
- Project goals - identify what you want to accomplish
- Identify potential projects/solutions
- Evaluate potential projects using impact-feasibility grid
- Select 3 projects to bring to the full group

11:45 Full Group: report back from small groups

12:15 Lunch and voting
- Which projects do you think we should move forward on?
- Which are the most important projects for Brentwood right now?

1:15 Individual selection of project development groups

1:20 Project development: small groups
- Principal leadership
- Resources needed
- Potential obstacles/solutions
- Action steps and timeline

3:10 Full group: report back from small groups
- Thank you's
- Coordination of follow-up efforts

3:30 Adjourn

Brentwood Community Profile
Friday Evening

The Brentwood Community Profile was conducted at the Grace Tabernacle Church over two days: Friday evening, October 26, 2001 and all day Saturday, October 27, 2001. About 135 participants attended on Friday, with 65 attending on Saturday.

The event began Friday with potluck dinner. Charlie French, Extension Specialist in Communities, gave us an overview of the profile process and an introduction to the goals for the two days. Its goal is strengthening community involvement; its key idea is sustainability - balancing economic and environmental factors while thinking about the impacts of our actions for the next seven generations.

We spent a few minutes meeting each other, learning how long we had lived in town, where we live in town, where we work, and how many of us had children in the schools. We were then asked to offer descriptions of what our town was like right now and what we would like it to be like in the future. Adjectives and phrases were called out and recorded on large easels labeled "NOW" and "FUTURE" at the front of the room. Here are the results:

THE MOSAIC - What is Brentwood like today?

- Jail is next to the nursing home
- Losing open space
- Lack of public access to open land and river
- Changing from agriculture to bedroom community
- Friendly
- Too expensive
- No downtown
- Family-oriented
- Divided in many ways
- Remote for college students
- Very aesthetically attractive
- Exploding
- Quiet
- Naïve
- Geographically divided—spread out
- No post office
- Too many cars
- Remote for teenagers
- Still rural
- Smoggy
- More liberalism taking over
- Conservatism
- Core of faithful volunteers
- No place to eat or drink
- Economically challenged
- Lack of back land
- Spiritually oriented
- Lively town meetings
- Lack of affordable housing
- County seat—lots of county buildings (a + and a -)
- Parents very involved in grammar school
- River system that adds diversity
- Handy to mountains and Boston
- Green and forested
- Get to see wildlife here
- No grocery stores
- Desirably located
- Lack of business tax dollars
- Lack of elderly housing
- Patriotic and democratic
- No one says anything detrimental about jail
- Lots of used car lots
- Businesses confined to 1 or 2 corridors
- Aquifer in town
- Facing tax challenges
- 27 cemeteries

THE VISION - What do we want Brentwood to be like in the future?

- Retention of rural feeling
- More town center with sidewalks
- More affordability for older people to live in retirement
- Safe places to walk
- Planned attractive commercial development
- Children's playground
- Civic involvement
- Protection of river system for wildlife and water quality
- Scheduled low cost environmental friendly transportation
- Teaching nature preserve or working farm
- Planned growth
- Preservation of open land and public access to woods, water and fields
- Aesthetically pleasing
- Public neighborhood gathering spots
- Preservation of historic houses in town
- Bank and post office
- Beautification of commercial establishments
- Community website
- Low, stable taxes
- Restoration of stone walls
- Control of heavy truck traffic on roads
- Beautiful public library and grade school
- Large auditoriums for town meetings
- Continuation of citizen volunteer government
- More incentives for people to hold onto land
- Large blocks of open space owned by town or whoever
- As much like it is now as possible
- Increased forms of communication
- Large blocks of privately owned land with conservation easements
- Donation of 60-80 acres for disabled people
- Planned community shelter in case of disaster (civil defense)
- More bike trails
- Social activities for teenagers
- Social activities for college students
- Much like it was
- Community trail system
- Food cooperative
- More diversity
- Bigger civil defense

Town History

Next Gene Orcutt presented historical snapshots to help answer the question "Where has Brentwood been and where is it now?".

The presentation was not given from extensive notes. What we tried to show in the opening remarks was that whether you have lived in town for two months or twenty years, the history of Brentwood belongs to you. Without respect to any timeline we tried to present anecdotal information to show that coming together to do what needs to be done for the common good is rooted in history of the town. Public buildings now standing are there solely because of volunteerism. The life our forefathers lived surprisingly reach beyond the town limits to the large issues of their day. People's willingness to spend their time, energy and resources was made possible because they could see that what needed to be done made sense, good common sense. If we are true to our traditions that will be our position.

COMMUNITY PROFILE ELEVEN COMPONENTS

After we developed a mosaic and vision for Brentwood, and digested some of the history, Charlie

French introduced us to the idea of discussing Brentwood within the framework of 11 qualities which can be used to profile a community. These topics, drawn from the work of the National Civic League and adapted by UNH Cooperative Extension are important components of any successful community. These components make a community work well now and sustain the cultural, economic and environmental health and vitality for the long-term future.

Civic Infrastructure

1. Effective Community Leadership
2. Informed Citizen Participation
3. Sense of Community

Community Infrasture

4. Fostering Healthy Families, Individuals and Youth
5. Lifelong Education and Learning
6. Community Services, Facilities and Utilities
7. Recreation and Cultural Heritage

Environment

8. Working Landscape and the Natural Environment

Economy

9. Economic Vitality
10. Growth and Development
11. Transportation

Next, 11 small groups of approximately 10 people each were randomly formed, one group for each of the components. The small groups adjourned to various rooms where facilitators lead the groups in their discussions and recorders made notes on more large tablets.

Each group considered the definition of their component and was asked the questions below in order to begin the discussion. Participants were asked to list the strengths of Brentwood as they saw them, and then to list its concerns. Next the groups gave some thought to the problems and issues they thought were important to the town's future. Finally, each group was asked to identify five key issues which need to be addressed by the town. These were brought back to the whole group and highlighted in three-minute summations presented by a member of each small group.

1. Effective Community Leadership

Facilitator: Allen Cook Recorder: Janis Sommer
Participants: Janine Christiana, Brian Kenyon, Alma Vahey, Phyllis Mathouser, Kris Magnusson, Tracy Waldron, Marilyn Morehead

Statement of Purpose:

The public, private and non-profit sectors must all develop leaders who can cooperate with each other in enhancing the long-term future of the community. Leadership must be responsive, honest, efficient, enlightened, fair and accountable. Leaders should be representative of their community, and should have both a grasp of the community's problems and the ability to envision an economically secure, environmentally sound and socially viable future. Leaders should be attuned

to the potential to exploit opportunities and to solve problems of the community by cooperating with other neighboring communities.

Questions to think about:

- Is there active leadership in all three sectors in the community: public, private and non-profit?
- Do leaders seek out the interests and ideas of local citizens?
- Do they represent diverse community interests (age and gender groups, length of time they have resided in the community, etc.)?
- Do leaders demonstrate knowledge, accountability, professionalism, and innovation?
- Is leadership results-oriented?
- Do leaders demonstrate long range (20+ years) thinking? Do they understand the impacts of their actions on the long term health and vitality of the community?
- Are leaders willing to consider and utilize alternative methods for delivering services, and to undertake regional solutions where appropriate?
- Do all three sectors actively recruit, train, and empower new leaders?
- Do leaders have a common forum to discuss issues with other leaders in the region?
- How do region wide policy conflicts get resolved?

Group Response- Strengths:

- People hanging in there
- Quite a few people step up
- Breadth of participation
- A lot of quiet leadership without credit wanted (behind the scene)
- Friendly and warm
- Encourage creative solutions particularly not to increase taxes
- Maintain balance
- Improved attention to conservation
- Attention to public land use
- Strong friendship

Group Response- Concerns:

- Lacking—expecting too much of too few
- Putting self interest first
- Lack of bridge building between the old and new
- Communication of accurate information
- Fear or lack of participation from new leaders due to the grip of the old
- No new leadership evolving
- Appreciation of the fact that growth affects leadership and service
- Lack of incentive to transition
- In this rapid growth cycle we lack the expertise to transition forward
- No empowerment for future leadership
- Lack of respect and cooperation from the Selectmen to other departments
- Lack of visual and vocal support for the school
- Resource competition among departments
- Stereotypes
- Town run more like a business
- Communication with landowners in town about land conservation options (easements and land

trusts)
- Conflict of interest within town leadership (nepotism)
- Recognition of the appearance of the above
- More professional behavior

Vision for the Future:
- Well-being checks on homebound (welfare office)
- Outreach to landowners concerning conservation and trusts
- More frequent town information meetings
- Make town meetings closed ballot (secret)
- More realistic evaluation of impact of growth
- Use documents we have for future planning (i.e. impact studies)
- Update Master Plan and enforce it
- Being committed to the cost of enforcing our town regulations and Master Plan

Key Issues for Now and the Future:
1. Brentwood is supported by non-elected volunteers which provides a breadth of quiet leadership and accomplishment.
2. Lack of bridge building between the old and new and the geographic challenge.
3. Lack of respect and cooperation and professionalism within the community.
4. Run the town more like a business.
5. Update and be committed to the enforcement of the Master Plan (i.e. land conservation options).

2. Informed Citizen Participation

Facilitator: Tracie May Recorder: Brenda Marotto
Participants: Bob Matthewson, Kathy Waterson, Dot Lowe, Linda Rousseau, Diane St. Jean, Ann Dillon, Rachel Greene-Lowell, Debbie Briscoe, Phyllis Thompson, Tom Buswell

Statement of Purpose:

If a community is to be strong, citizens must participate through voting in local elections, serving on governmental boards, attending public hearings and being active in civic organizations. Declining ability of government to meet community needs means that philanthropy and volunteerism become even more important. All citizens need to develop knowledge and skills to contribute to community life. All sectors within a community -- private, public, and nonprofit -- must each take responsibility for the community's civic education and generate and share information with the public. Sharing in problem solving and planning for the future as a community increases pride in the community and can result in an ethic of giving and sharing as a way of life.

Questions to think about:

- Do citizens know how the system works?
- Is it easy for newcomers to learn how to get involved in the community?
- How do people find out what is going on in the community?
- What is the level of volunteerism and philanthropy in the community?
- Which are the best areas and which are the weaker areas?
- Are citizens actively involved in major projects?
- Do citizens volunteer to serve on local boards and committees?

- Is participation pro-active or reactive?
- Do civic organizations and local businesses actively contribute to community functions?
- Do citizens have the information they need to make good decisions?
- Is there both adequate and balanced media coverage of local events and issues?
- How well do local committees and boards communicate with each other and the public and with other boards and committees throughout the region?
- Are local citizens actively involved in civic and business organizations and clubs that involve interaction with residents of neighboring communities?
- Do civic education efforts involve the entire community?
- Do schools, churches, youth and civic groups provide citizen education and promote community service?

Group Response- Strengths:

- 5-10% know how system works (knowledgeable core group)
- Helpful, informative Town Hall staff
- Brentwood newsletter
- Good word of mouth communication
- Variety of clubs and organizations
- Lots of ways to become involved
- Lots of people volunteer
- People are vocal and dynamic about their passions
- Active recruitment of volunteers
- Good town moderator—school and town meetings
- Older town families are patient and gracious with newcomers
- Variety of youth athletic opportunities
- Good written info about town (town directory, recycling list)
- Town is small enough that we can make a difference (townspeople care)
- Townspeople display lots of positive energy
- Openness and support for new initiatives (can find like-minded people to work on a project and achieve goal)
- Family-oriented
- People know each other

Group Response- Concerns:

- Balancing growth, taxes, attracting business
- Having a town center
- Not having kids at Swazey Elementary School
- No town website (newsletter not on newsline)
- Town, library, schools not working together on web design
- Town is divided—can lead to lack of collaboration
- Diverse groups not talking with each other
- Townfolk don't always understand political process
- Need frequent, regular orientations for newcomers
- Getting more folks to meetings in town as a means of keeping themselves informed
- Need more informational meetings for the public
- Need site where public postings can happen
- If there are different town websites, must be linked
- No scheduled communication plan is published

- Need to know upcoming meeting agendas
- Town doesn't inform residents via email

Vision for the Future:

- Welcome packet for newcomers (including town organizations and groups with contact names)
- Town website with links and/or email contacts for all town groups
- Town telephone book
- Newcomer night
- Town cable channel
- Collaboration between town groups, committees, departments
- Annual meeting of all town committees and groups to discuss annual plans and schedules
- Ability to email town hall
- Online town chats/suggestion box
- Periodic town profiles (every 5 years?)

Key Issues for Now and the Future:

1. Online and Internet technology to enhance communication (scheduled communication plan, website, email, town chats, online newsletter, online town center virtual tour).
2. Collaboration and joint planning between town organizations and committees.
3. Town orientations—formal and informal information sessions on ongoing basis (welcome packets, newcomer nights, town procedures and practices, town resource materials, centralization of resource materials).
4. Town profile repeated every 5 years.
5. Creating town center concept.

3. Sense of Community

Facilitator: Paula Van Buskirk Recorder: Karen Blass
Participants: Celia Felsenberg, Linda Cowie, Paul Mergener, Lanie Ellery, Peter Waterson, Carol Ann Head, Sue Sutch, Marion Arkell, Elizabeth Burtt, Judy Kentman, Roger Garon

Statement of Purpose:

A community is made up of different people with different interests, experiences and backgrounds. These characteristics may divide a community into natural groups but there must be cooperation among them if the community is to work well. Increasing social complexity presents challenges to reaching consensus or resolving conflicts but also provide opportunities for cultural enrichment. As disagreements arise, neutral forums and processes are needed where all opinions can be heard and consensus encouraged. In addition, programs are needed to increase communication and understanding of different perspectives among groups and within the community as a whole.

Questions to think about:

- How much communication is there among diverse interest groups in the community such as natives/newcomers, summer/year round residents, young parents/retirees, as well as business community, commuters, etc.?
- Are such groups involved in identifying community goals and in resolving community issues?
- Do all groups have skills to become involved in the community?
- Do formal and informal forums exist for sharing ideas and resolving public issues?

- Are collective decisions which represent broad input reached and implemented?
- Do groups cooperate in resolving broad disputes?
- Do small, specific conflicts escalate into larger issues?
- Does the community deal with critical issues before they become crises? How is this done?
- How would you define the self image of the community? Is it a positive one?
- How is social and cultural diversity celebrated in the community?

Group Response- Strengths:

- Volunteerism good
- Lindy's Country Store—people gather—impressed by it
- Library too a gathering place
- People very helpful—advice
- Brentwood newsletter
- Brentwood recreation
- Senior's organization
- Historical Society
- Garden Club
- Friends of Library
- Pilgrim United Church
- All churches provide sense of community
- Apple Annie's every fall and their newsletter
- Credit to Joanie and Charlie for what they do
- Swazey Central School
- 4th of July parade and fireworks
- Variety show
- Halloween party for children
- Tonight is great example—very impressive
- Close feeling in her neighborhood—old-fashioned idea of neighborhood really knowing each other
- Going to the falls, fishing in river, canoeing (Rec. Dept.)
- Rec. Dept. does a lot—skating rink, trips
- Volunteer fire, civil defense

Group Response- Concerns:

- No senior housing—looking at other towns
- Growth
- No public transportation—live alone, what happens when can't drive
- No center—no community gathering place
- Ritter Farm developed but was the center—past Selectmen wanted it to be bought to centralize town
- Different factions—don't communicate
- Very rural—so hard to create a center
- But town hall/library could be that
- No commons—no geographic open space for gatherings
- No Post Office—only in NH (it's the county seat!)
- No phone exchange for Brentwood
- Taxes too high for what we get
- Hard to bring in any commercial business

- Water supply has impact on business growth
- Route 101 expansion negatively impacted ability for industry to come in
- Strange zoning practices—strange lot sizes/configurations by Route 12S-all commercial
- Zoning for private lots has changed a lot—impacted by soil testing (not size of lot)
- Not much encouragement to keep acreage—taxes high
- Snowball affect of farms disappearing, then others do—North Road and Deer Hill for example
- Nothing for young people to do—puts them on the road
- No safe roads to Exeter—bike riding
- Build a new school instead of adding on next time
- No grocery store
- No place to eat
- Family restaurant needed
- We need a bar and bowling alley
- Ice cream
- Thought new courthouse would make a difference—it didn't (for more businesses)

Vision for the Future:

- New senior ordinance—she volunteered to work on it—never heard
- Phil Auger w/ Cooperative Extension could assist folks with conservation easements. Lots of tax breaks—land becomes more valuable with development. Landowners have rights still. Good for young—but not as much for those closer to retirement.
- Controlled development so sense of small community is maintained. Get town to come up with Master Plan. No way to stop growth now. Limit # of permits? Can be brought to court, though. Like Fremont. Master Plan can hold up in court. Takes a long time though.
- Houses being built on wetlands (should protect wetlands more)
- Some places should not have development like Deer Hill—too steep. They can't drive up driveway even.
- Want transportation
- Look at weaknesses—address all those!!
- Economically viable for businesses to come here
- Lindy's good example of successful business—they can make, why not others?
- Really want family restaurant—not pizza
- Instead of Burger King/McDonald's—junk food no other place
- Nice quiet—relaxing restaurant
- Commons area really needed—may have happened if proposed today
- Hard to be in public position—someone always disagrees with you. People get burned out.
- We need momentum—get together follow-up is needed (otherwise it will die
- Do this again in 5 years at least
- 60% growth by 2020 in Rockingham county—makes a difference for your plans. Need for short and long-term view

Key Issues for Now and the Future:

1. Opportunities and places or locations needed for ongoing connection with community members (not just once or once a year at an event).
2. Look for ways to attract businesses that will make a positive contribution to our town and provide ways to connect as well (restaurants, etc.).
3. Encourage more people to volunteer by communicating opportunities to Brentwood citizens—be specific about commitment level.

4. Increase channels of communication—newsletter-great. Get it to more people. Need website, cable of meetings, etc.
5. Need Master Plan for balanced growth. Include plan for senior housing. Need to preserve nature and conserve our natural resources.

4. Fostering Healthy Families, Individuals and Youth

Facilitator: Howard Hendrickson Recorder: Rita Guarino
Participants: Doug Lavoie, Will Herrick, Andrew Rickenback, Timothy Hannan, Andrea LaRiviere, Ellie Thompson, Sarah Brenner, Mary Neely, Deanna Dawson, Lise McNaughton, Mary Berry

Statement of Purpose:

All citizens have a need for food, clothing, shelter, and for the education of their children. Although some needs are met by local, state, and federal programs, caring communities still keep a neighborly eye on fellow citizens. Things like pre-school programs, youth services, low-income housing, after-school extracurricular youth programs, and preventive health and substance abuse programs help to strengthen the social foundations of a community.

Questions to think about:

- Are education and social services provided equitably?
- What services does the community provide to its neediest citizens?
- Does the community, through its schools or other programs, offer counseling on parenting or family relationships?
- What local or regional programs or services are offered? What are needed? For daycare/substance abuse/recreational/youth counseling?
- Are these services adequate? Are they well utilized? Under-utilized?
- Are school programs adequate for the community's needs?
- Is school planning forward thinking and open to regional solutions?
- Does local government address qualitative concerns about service?
- Does government consider and utilize alternative methods of service delivery?

Group Response- Strengths:

- Brentwood Recreation
- Brentwood Seniors
- Garden Club
- County Farm
- Friends Library
- Ladies Auxiliary
- 4th of July celebration
- Variety Show
- Wayne Robinson
- Town officials
- PTA—Swazey School volunteers
- Fire/Rescue volunteers
- Lindy's Store—communication and center
- Library
- Youth athletic teams

- Health program—flu shots
- Brentwood Newsletter
- Churches
- Scouting programs
- DARE program
- Babysitters/Red Cross/CPR
- Community Profile
- Adult daycare
- Rockingham Nursing Home
- County-connected

Group Response- Concerns:

- No supermarket
- No Post Office
- Town not user-friendly for aging population and/or pedestrians
- Need public transportation like a trolley
- Schools over-crowded
- Stabilize taxes
- People on fixed incomes endangered
- Connecting with new people
- Need more adequate daycare
- No after-school programs
- Bring K-8 children back to Brentwood
- Need substance abuse program
- Need parenting support program
- Need tax relief support for retired/disadvantaged homeowners
- Need affordable senior housing
- Need possible homeless shelters

Vision for the Future:

- Expand BRC—new programs
- More facilities for adults
- Establish a restaurant
- Establish a sports bar
- Community health center
- Public transportation (like a trolley)
- Cultural center for teens/adults
- A means to encourage civic involvement—like an open house

Key Issues for Now and the Future:

1. Need affordable housing for Seniors.
2. Need to connect with new residents.
3. Expand scope of BRC to include cultural activities for teens and adults.
4. Need Community Health Center offering full range of health and social programs.
5. Need a means to encourage civic involvement like an open house.

5. Lifelong Education and Learning

Facilitator: Don Petterson Recorder: Joan Pratt
Participants: Emily Schmalzer, Ellen Finch, Fran Pimentel, Ray Jones, Steve Dawson, Charlie Pratt, Samantha Tatanczuk

Statement of Purpose:

All citizens have a need for food, clothing, shelter and for the education of their children. Although some needs are met by local, state and federal programs, caring communities still keep a neighborly eye on fellow citizens. Things like pre-school programs, youth services, low-income housing, after-school extracurricular youth programs, and preventative health and substance abuse programs help to strengthen the social foundations of a community.

Questions to think about:

- Are education and social services provided equitably?
- What services does the community provide to its neediest citizens?
- Does the community, through its schools or other programs, offer counseling on parenting or family relationships?
- What local or regional programs or services are offered? What are needed? For daycare/substance abuse/recreational/youth counseling?
- Are these services adequate? Are they well utilized? Under-utilized?
- Are school programs adequate for the community's needs?
- Is school planning forward thinking and open to regional solutions?
- Does local government address qualitative concerns about services?
- Does government consider and utilize alternative methods of service delivery?

Group Response- Strengths:

- Our librarians (M. Moorhead are an asset and Joyce)
- New school addition a strength (physical plant)
- Good education going on at Swazey and in SAU 16—excellent quality and support
- Teachers really care about students at Swazey
- Cooperative Extension (County)—about land (Phil Auger) and many other services
- Good parent volunteer program in schools
- Close to continuing education facilities and UNH
- Lifelong learning system works well (library)
- Many well educated people in community in general, we are a diverse and well educated community
- Access to private as well as public schools
- Local organizations provide educational opportunities (Historical Society, Garden Club, library, etc.)

Group Response- Concerns:

- Lack of environmental education
- Training in community leadership (to assume new roles in town government)
- Problem with motivation on town issues need to voice opinions, vote instead of complaining about things
- Public meetings need to be formal education in running public meetings

- Use all the human resources to the fullest
- Library needs to expand non-fiction books
- Is better access to Exeter Library possible?
- Our school taxes don't go directly to schools
- Students need to know value of property and environment

Vision for the Future:

- Have a way to facilitate adult group learning
- After-school (educational) programs provided through the school
- Well-publicized program to use time and talents of older citizens with young people in schools, or after school
- Some program of environmental education for all ages
- Institutions can hopefully keep pace with technology
- Expand library as valuable resource
- Training in community leadership
- Fully funded, 1st class elementary school for Brentwood
- The town learns to keep the things we value
- Less time with computers in school and more time in active participation

Key Issues for Now and the Future:

1. Training in community leadership and participation.
2. Environmental education programs.
3. Library—expanded services, programs and facilities.
4. Maintain adequate educational facilities for a growing school population.
5. Using adult community resources in all possible ways.

6. Community Services, Facilities and Utilities

Facilitator: Howard Cadwell Recorder: Bruce Stevens
Participants: Andy McClure, Holly Gilbert, Walter Finch, Jonathan Ellis, Sue Jones, Nina Kewley, Bruce Buck, Victor Schmalzer

Statement of Purpose:

Public buildings, schools, sidewalks, sewers, roads, and the public water support -- are basic to the existence of a community. They absorb most tax dollars and sharply influence the community's quality of life.

Questions to think about:

- What schools and other public facilities exist in the community?
- What facilities or services are needed?
- Are public water sources protected?
- How does the community handle disposal of its wastes?
- Does the town have a plan for financing the maintenance, expansion and replacement of its public facilities? Is it open to regional solutions for future infrastructural needs?
- Is there adequate housing available for elderly or disabled individuals? For people of lower income?
- Are public buildings such as schools and town hall adequate for our needs? Are they accessible

to people with disabilities? Are they energy efficient?

- Do officials address qualitative concerns about facilities and systems and utilize alternative methods of service delivery?
- Are officials professional and entrepreneurial in meeting public facility needs?
- Are appropriate physical connections being made, such as public transportation between housing and job (or shopping) sites?

Group Response- Strengths:

- Road system—good shape
- Education facilities strong
- Adequate police/fire service
- Current town hall adequate for next 25 years
- Library system strong
- Historical building very serviceable
- Town Recreational Department well staffed—good program opportunities
- Senior citizen program active and participating in community
- Town administration is well run—good service provided
- Town aquifer a good resource
- Town roadside trash pickup/recycling very convenient/well used
- Community newsletter very informative
- Emergency response—police/fire/rescue very good
- Police provide good traffic control

Group Response- Concerns:

- Municipal winter/spring clean-up (roads, sand etc.) needed
- Dumping of debris along town road sides
- Need to encourage inter-community trash handling programs
- Need for town to develop community trail (bike paths) for inter-community travel
- Bike safety on town roads very dangerous—most dangerous roads (Middle Road, North Road)
- Posted speed limits too high for safety of residents
- Lack of space for community events to be held
- Need for recycling program for electronic appearance
- Great need for expanded services at library
- Improved access to 125 from 111A, South Road, etc. to maybe traffic signals
- Establish essential of commuter link from town to new Exeter rail service
- Need for long-term maintenance schedule for town buildings
- Staffing challenges for full-time public services (Fire/Police/Rescue) due to fewer people available during daytime
- Need for action plan to address potential disaster-related incidents in town
- Concerns that town may not be able to finance municipal services to keep up with growth demands
- Important that town be able to support newly required services without undue stress on tax base
- Inadequate commercial zone for new commercial growth. Need commercial business to enlarge tax base
- Town lacks water/sewer infrastructure to support community
- Expand soil typing inventory of town to identify opportunities for future business development

Vision for the Future:

- Protection standards for water protection for future
- Preservation/expansion of town center to foster sense of community
- Encourage community system of trails/access ways to promote rural community
- Leasing town property for phone towers for revenue conservation
- Town should purchase/gain easements to attain more permanent open space (open space less expensive for town to own vs. development)
- Town should grant increased financial assistance to promote open space

Key Issues for Now and the Future:

1. Scaling future community services/facilities with controlled /affordable tax rates. Rationally matching increased town services with expanding population base.
2. Identify and preserve public/private lands with government funding. Tie in bike paths/trail systems/wildlife corridors.
3. Investigate possible expansion of town's commercial zone to attract beneficial low impact commercial development.
4. Traffic control and safety (upgrades to Rte 125 intersections i.e. Middle Road, speed control on town road network, tie-in of west and east sides of Rte 125)
5. Preserve and develop town center as means of enhancing/retaining our rural history (encourage public/private involvement in this venture)

7. Recreation and Cultural Heritage

Facilitator: Bob Gilbert Recorder: Dave Brenner
Participants: Niki Reed, Jeff Wagner, Peter Kamberelis, Patti Buck, Kriss Bouchard, Diantha Wade, Susan Cox

Statement of Purpose:

The cultural life of a community can be a strong source of pride for citizens. Arts, theater, local festivals and celebrations all reflect and build a community's positive sense of itself and strengthen the fabric of all social interactions within the community.

Questions to think about:

- What ways does the community celebrate itself?
- What are the special cultural centers, events and festivals within the community?
- Are these events well known within the community? Outside the community?
- Does the community preserve and enhance what is special and unique about its cultural heritage?
- Are children encouraged to participate in cultural events?
- Are citizens part of larger regional cultural events?

Group Response- Strengths:

- Strong recreation program (well-publicized)
- Outdoor skating rink
- Good area of country
- Community involvement is encouraged
- Skating was donation
- Fireworks/4th of July shows community spirit

- Library is central to recreation and cultural heritage
- Library provided for very young and adults
- Exeter Library available for teens
- Soccer/volunteers/coaches exceptional
- Parents at snack bar great
- Historical great resource
- Groups have been creative in funding (ie. library donations)
- Community commitment
- Resources for horses/trails/walking/biking i.e. river and woods
- Library build with volunteers
- Trail system partially completed
- Conservation land available for trails
- Big building available at BRC (heated)
- Model available from other communities for public/private cooperation in trail expansion
- Potential with special trees. historical sites, rare plants, flora, fauna, millsites, Pickpocket Dam. across from school
- Lindy's serves as town center—provides information
- New recreation director
- County property—open land (Master Gardener Program)
- Cultural strength in agricultural base (farming-rural-opportunity to stay in touch with this with teaching farm)
- County land good site for Wind Farm teaching center for renewable energy resources
- Wind towers could be good backdrop for jail and Route 101
- History—old sites are wonderful asset (there is so much history that dates back so far)
- Keeneborough Grange is intact—2nd floor of Historical Society
- County farm goes back to 1815—oldest building 1850
- Grants available for people to maintain barns up to $200
- UNH grants available to help maintain barns
- Historical bike tour done by Mr. Schroeder at Swazey

Group Response- Concerns:

- Library not teenage-oriented
- Historical Society under-utilized
- Need to publicize trail system that exists
- People without kids in home are less aware of cultural and recreational opportunities (more publicity needed)
- Booklet needed for trails
- Info needed from rec center
- Need method to tell people of recreational resources
- Lack of publicity and info to preserve old houses and barns
- Need more regular publicity for recreation cultural issues
- Need to gain serious commitment
- All work costs money—property taxes high—can't do stuff without finances
- Biking, walking not safe with speeding cars and trucks
- We lose kids when go to Exeter
- BRC not set up for teens
- No place for teens to gather, especially in wee hours after other activities
- Need master researcher and grant writer to help fund projects (especially nature-oriented and

safety-oriented)

- People who have been here a while can't afford to stay—they are part of our heritage (we don't communicate with them and could lose them)
- People without a lot of money feel alienated need balance for sense of community
- No elderly housing
- Need people to be more intermixed
- We have a lack of multi-generational activities (should be opportunities for groups together)
- Need ways/creative funding for programs
- Find way for older people to stay in homes and for them to share knowledge and experience
- Need older people in schools for history lessons

Vision for the Future:

- Trails-mark old buildings, landmarks, special trees, etc.
- Page on community website for recreation
- Community cable access channel
- Archaeological survey and digs to document history
- Local business to purchase ads or website
- Senior housing ordinance may help—is being discussed
- Need to include everyone in town as part of our heritage
- Older people may volunteer at teaching farm
- Could benefit from non-profit industry
- Cooperative effort with seniors and elementary school (i.e. reading program)
- Older people sharing life experiences (i.e. WWII)
- Need evolution of public buildings to bring town together—possible school becomes town building when we need new school
- Need sign in front of school saying what's happening
- Need schedule for concerts/games, etc
- Need to manage what happens to 125
- Bridge to cross 125 at BRC, or at least a light
- A space for local artists to display could be multi-use building (i.e. town hall)
- Restore safe tunnel route under 125 to BRC
- Create funding organization "CFO" to find funding
- Open land—rec trails—historical sites, nicer than Stratham with few cookie cutter houses (meadow trees, land aesthetic)
- Preservation of land
- Expanded library and Historical Society
- Trails that can be followed (trail map—organized)

Key Issues for Now and the Future:

1. Recreation and cultural heritage important to well-being of community.
2. Publicity for recreation and cultural heritage.
3. Funding for #2.
4. Build on volunteer spirit and community support.
5. Intergenerational programming.

8. Working Landscape and the Natural Environment

Facilitator: Kevin Johnston Recorder: Roger Brown
Participants: Joe Bouchard, Alan Clough, Mindy Chudrow, Jane Savage, Kate Parks, Joyce Miller, Merrill Dwyer, Linda Vadas

Statement of Purpose:

The natural assets of a community consist of places of natural beauty that contribute significantly to the quality of the residents. Streams, rivers, walking trails, working farms, clean air, pastures and open land help determine a community's personality. They contribute to the everyday pleasures of community life. A sustainable community practices effective management of natural assets so as not to undermine their existence or ability to function over time.

Questions to think about:

- What are your town's special water and land sites?
- Is there a broad community interest and participation in maintaining these?
- How healthy are the natural systems within the community?
- What stresses are the local economy and population putting on those natural systems?
- Are there ways to increase the resilience of the local natural systems to allow them to respond to adverse or changing conditions?
- Are current systems, such as waste management, handled in a way that preserves the integrity of natural systems in the community without damaging the integrity of natural systems elsewhere?
- Are the existing businesses environmentally sound?
- Are the public water sources protected?

Group Response- Strengths:

- Exeter River
- Old timers
- Open space
- Encouraging commercial/civic mindedness
- Trails
- Good water
- Agricultural land (working farms)
- Diverse wildlife

Group Response- Concerns:

- Preserving open space
- Traffic patterns
- Controlling trail traffic
- Air quality (125 & Pine)
- Attracting environmentally-friendly industry
- Keep people engaged
- Aid for elderly landowners
- Legal defense
- Planned growth

Vision for the Future:

- Guidelines to promote wildlife corridors/trails system
- Wildlife preserves
- Perfect Master Plan
- Town center
- Reduced speed limits
- Walking paths along roads
- Preserved open spaces
- Sign

Key Issues for Now and the Future:

1. Preserving open spaces.
2. Traffic (safety, noise, pollution).
3. Preservation of habitat (uplands and wetlands).
4. Maintaining and upholding Master Plan as it relates to growth management.
5. Enhanced town center.

9. Economic Vitality

Facilitator: Jane Byrone Recorder: Terri Schoppmeyer
Participants: John Schumaker, Craig Jameson, Karen Schumaker, Vasilka Nicolova, Alan Quinn, Skip Parks, Dick Clark, Marc Potvin, Ronald Vadas

Statement of Purpose:

The need to maintain flourishing workplaces is of great importance to communities. A sustainable community includes a variety of businesses, industries, and institutions which are environmentally sound, financially viable, provide reasonable wages and benefits to workers, and provides those workers with opportunities to develop their skills through training, education, and other forms of assistance to prepare for the community's future needs. Government, businesses and public service organizations are all important in attracting new investment and in developing new businesses that suit the character of the community.

Questions to think about:

- What types of businesses, industries, and institutions make up the economic base of the community? Of the region?
- How diverse is the economic base? Is one sector or one employer dominant or is there a wide variety of sectors and employers?
- Are the existing businesses environmentally sound?
- Are there locally available education opportunities to provide residents with skills that match the needs of local businesses?
- What business services are lacking in the community?
- What types of jobs are available to residents in terms of security, wage levels, skill levels, and benefits?
- Do wages allow the majority of the population to enjoy a reasonable life style?

Group Response- Strengths:

- 3 areas zoned for commercial development

- For the most part—this is clean industry (i.e. not dealing with hazardous waste)
- Benefited by having lumberyard, hardware store
- Lots of capacity left in the above 3 areas
- Town has ample water resource…clean water
- Route 125 and Route 101 will bring in more traffic with potential for commercial growth
- Growing our employee/workforce base as people moving into Brentwood
- County Courthouse is a draw, people coming to work there with money to spend
- Our community is a welcoming community

Group Response- Concerns:

- Do not have a business development committee
- Do not have any support services
- No infrastructure (no bank, no Post Office)
- Money is leaving the town by not having these supports and infrastructure—the challenge is to bring in business
- Develop a town website
- Need a part-time planner
- How do we market the town
- Maintaining the rural character of the town with economic development
- Balance economic development with maintenance of rural character
- ID what we want for business
- Need traffic control
- Get an economic development group together
- Attract businesses with our limited services
- Find resources for a marketing study
- Lots of groundwork to be done before we can get businesses to come
- Develop more structured zoning based on usage—what is more advantageous to the town

Vision for the Future:

- Town center—co-located services
- Development compatible with town rural character/historical architecture
- Don't want to look like Route 1 or Plaistow
- Tasteful residential development
- Co-develop with the town of Epping

Key Issues for Now and the Future:

1. Town business development committee and town website.
2. Plan and co-develop with Epping.
3. Infrastructure development for support services—banks, Post Office, restaurants/food.
4. Develop more structured zoning based on usage compatible with rural character/historical architecture.
5. Part-time planner.

10. Growth and Development

Facilitator: Ben Sutch Recorder: Nancy Adams
Participants: Eugene Orcutt, Robert Pollock, Anna Quinn, Eric Sommer, Meredith Metivier, Kathie Wikar, Bobbie Jameson

Statement of Purpose:

Local control of businesses is important to the economic health of a community. The more often money circulates within the community before leaving, the more the community benefits. Locally controlled businesses allow employees to have a voice in the decisions that affect them.

Questions to think about:

- What percent of the community's businesses, industries and organizations are locally owned?
- What percent of the community's businesses, industries and organizations have linkages to the local environment, social structure or economy?
- To what extent do local businesses purchase products from each other?
- What additional business services are needed that could be locally provided and locally owned?
- Is there an adequate supply of locally owned, locally controlled credit available for local businesses?
- Do employees have a voice in the decisions of their employer?
- Is there a reasonable distribution of wealth across the population or is there a wide gap between the haves and the have-nots. How has this distribution changed over time?

Group Response- Strengths:

- Town is trying to promote natural resources and land conservation
- New homes are attractive with well laid out streets, etc.
- New folks are good people
- Wonderful library
- Still rural
- Class size still small
- Citizen response to issues—good community response
- Pretty land and houses
- Horses and cows
- Make the most of resources i.e. police chief plows roads
- Good municipal facilities i.e. town hall
- Still has small town feel
- Interest in addressing issues
- Zoning is contained for industrial and commercial
- Good recreation facilities and potential for future
- Strong sense of community

Group Response- Concerns:

- Trucks
- What is definition of growth and development
- Lack of focus on issue
- Too much through traffic
- Retirement and fixed income folks are pressed due to greater taxes, etc.

- Dichotomy between old and young people ie. school needs vs. money
- Perhaps bring in folks from larger model communities to learn from them re: growth
- When does town reach size for full-time manager
- Nucleus of town employees are being taxed beyond breaking point—lack of candidates
- Moratorium on building permits until growth plan is completed
- How does Master Plan control growth
- Incentive to landowners to maintain property and not develop land

Vision for the Future:

- Tax benefits to keep land open
- Incentive to landowners to maintain property/land open and not developed
- Town needs a heads-up on future property sales so able to preempt purchase
- Brentwood could benefit from controlled business growth
- Vision statement for the future
- Put process in place to deal with unexpected events
- Need to put in place "controls" for undesirable business activities i.e. adult bookstore
- Need to be proactive not just reactive
- Top 10 list of most important community issues/goals in line with vision statement
- No additional rentals, young/single family housing, elderly housing, etc. to maintain low taxes
- Library needs to keep pace with growth
- More activities for youth i.e. community center
- Town website for info on various community activities
- Local cable TV community access for Selectmen meetings, Planning Board
- No easy way to communicate with residents about town events, meetings, etc.
- What process do we use for community to decide future direction
- Preserve the river corridor
- Impact of development on well/water
- Business use of water on impact of town water supply
- Give teeth to Zoning Board to control/manage growth
- Keep taxes down

Key Issues for Now and the Future:

1. Need a vision statement on future of town (establish objectives and goals).
2. Controlled growth (define growth, need a process for town to deal with unexpected events in future, Master Plan).
3. Responsible environmental management (incentives for preservation of open land and environmental resources, water protection, historical character).
4. Quality of life (maintain historical character, library, rec center, school).
5. Improved communication (website, cable TV for Selectmen meetings, Planning Board).

11. Transportation

Facilitator: Ed Berry Recorder: Rollie Barnaby
Participants: Paul Robinson, Lyn Hendrickson, Jean Clough, Elyse Seeley, Martha Clark, Heather Carley

Statement of Purpose:

Brentwood's strategic location and economic importance bring many people to live, work, and shop here. Roads get most of us where we need and want to go, and most people drive their own cars

for convenience. However, more vehicles sharing the roads results in increased highway maintenance, air pollution, and traffic congestion. Alternatives to automobile travel include pedestrian and bicycle travel, and bus and rail transportation.

Group Response: Strengths:

- Only 3 state (main) roads that go through town
- Easy access to 101
- Easy access to new rail system
- Easy access to 95 and 495
- Town roads reasonable well-maintained
- Good job on snow removal
- Close to Manchester airport
- Many pretreated roads to travel
- Lot of good trails (many undiscovered)
- Good roads to run (jog) on
- Police patrol 111A
- Lot of cul de sacs (dead ends) for small children to ride bikes and play
- Most roads wide enough
- Town does good job of protecting neighborhood and side roads for safety
- Townspeople appreciate and protect trails
- Parents try to carpool
- Lack of congestion and environmental problems caused by transportation
- Bridle paths available that lead to places like the library

Group Response- Concerns:

- Heavy truck traffic on 111A to avoid weigh station on 101
- Poor policing on 111A especially by schools
- Traffic going too fast on 111A
- Traffic too fast on side roads
- Cars using side roads as "shortcuts"
- Snow removal not good on town roads (inconsistent)
- New England Dragway noise
- Lack of parking at public functions: Town Hall, Schools, Fire Station, etc.
- More information on carpooling
- Lack of support for carpooling
- Too dangerous to carpool to and from school, lack of place for children to load and unload
- Lack of shuttle service to train stations, Exeter etc.
- Lack of planning for future public transportation
- Living in Brentwood requires a car--have to travel for services
- Good access to 101, 95, 495 etc.—promotes growth
- Emergency evacuation plans are inadequate
- People need education for using public transportation—carpooling etc.
- Lack of knowledge on local trail systems

Vision for the Future:

- Community website dealing with trails, biking, carpooling, public transportation etc.
- Educational material on transportation issues
- Town newsletter

- Public transportation to Exeter rail system
- Feasibility study on using rail system
- More police patrolling Brentwood roads
- Study on police needs
- More parking at public meeting places
- Central meeting place with lots of parking
- More trails
- Keep Brentwood the way it is now

Key Issues for Now and the Future:

1. Safety/traffic control.
2. Education and planning on future and present transportation issues.
3. Maintain and enhance recreational trail systems.
4. Protecting and enhancing aesthetic value of Brentwood's by-ways and roads.
5. Parking for public functions in Brentwood.

Saturday Morning

Everyone reassembled bright and early Saturday morning in the Brentwood Tabernacle Church, where we were greeted by hot coffee, tea and delicious baked goods. There were a few folks there who had not been present Friday evening and they soon felt the enthusiasm of the rest of the group. Similarly, a few members of the Friday night small groups were missing. However, most of the people were stalwarts who had signed on for both days.

The 11 easels from the small groups of the night before were arrayed across the front of the room, each bearing a list of the key issues for that topic area. Our working day began with short presentations from a member of the each of the groups, explaining their group's list.

Charlie French then presented us with his version of a condensed list of overarching issues which he felt had come up repeatedly in various ways in the small group lists. The entire group worked together to evaluate and refine this list. After some discussion, 7 key issues emerged as important to study for the future of Brentwood.

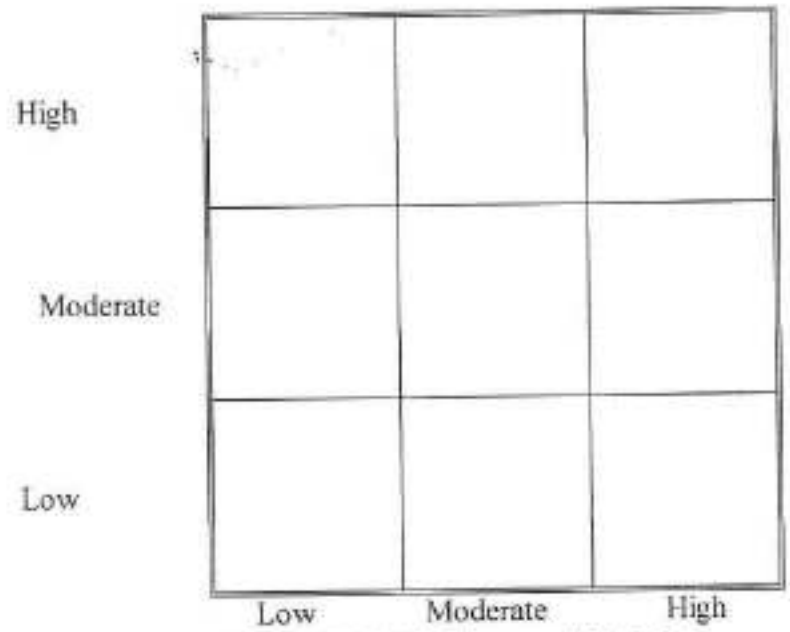
Key Issues

1. Infrastructure
2. Preserving Rural and Cultural Heritage
3. Planning for Growth
4. Volunteerism
5. Creating a Sense of Community
6. Lifelong Learning
7. Communications

PROJECT IDENTIFICATION AND EVALUATION

After a short mid-morning break, participants each chose which of the 7 key issues they would like to discuss further and broke into small groups accordingly. Each topic attracted enough people to form a small working group.

The task of each group was to think about problems that existed in each area and then to brainstorm possible solutions/answers to the issue identified. We did that by thinking out loud for half an hour or so about "problems" and "goals." Then we suggested solutions, from practical to fanciful to idealistic. The next step was to evaluate the reality of each possible solution/project using the following impact/feasibility grid.



Using the grid above, we copied each of our proposed solutions onto sticky notes. For each solution, the group decided together what the feasibility and impact of the solution would be. Then we placed the sticky note in the appropriate box.

Based on the grid, each group chose three solutions and wrote them up as proposals on their easel to be presented to the large group. Some groups chose only proposals with high impact/feasibility ratings, while others chose projects from a variety of ratings. Small projects, which were highly feasible, but of low impact, were favored by those who wanted to start small and accomplish something quickly. Long term, difficult projects had advocates who were willing to commit to longer struggles with high rewards. Many of the groups proposed a combination of proposals. Verbatim notes from each of the groups are presented below.

Key Issue #1 Traffic and Safety

Facilitator: Allen Cook Recorder: Janis Sommer
Participants: Kevin Johnston, Lynn Hendrickson, Howard Hendrickson, Susan Cox, Gail Bergeron, Deanna Dawson

Problem/issue to be addressed:

1. Trucks and heavy vehicles (construction, semi, waste management)
   Speed
   Noise
   Pollution
   Weight
   Uncovered
2. South Road isolated (fire and safety)
3. Increased traffic going through town and within town
4. Motorcycle and bicycle traffic—especially on weekends
5. Times of heavy traffic (early morning 6:30-8:00 and afternoon 3:30-5:00)
6. Traffic around schools (why aren't people using buses)
7. 125 light issues (i.e. 111A)
8. Minimize access to 125 (businesses)
9. Parking for functions
10. Need for alternative transportation

Projects:

- Speed traps/control (identify problems areas) road enhancement to control speed
- Improving road markings and signage
- A better system of biking and walking paths/trails
- Enforcement of "no thru" trucking
- Develop regional plan for alternative transportation (work with other area towns)
- Parking for fireworks moved to Dragway
- Investigating why students don't take bus
- Traffic control at peak times (law enforcement)
- Minimize access to 125 (consider access roads)
- Park and ride to train

Project Evaluations:

High Impact/High Feasibility
None

High Impact/Moderate Feasibility
None

High Impact/Low Feasibility
None

Moderate Impact/High Feasibility
- Minimize access to 125—consider access roads
- Park and ride to train
- Develop regional plan for alternative transportation (work with other area towns)

Moderate Impact/Moderate Feasibility
None

Moderate Impact/Low Feasibility
•A better system of biking and walking paths/trails

Low Impact/High Feasibility
None

Low Impact/Moderate Feasibility
None

Low Impact/Low Feasibility
•Traffic control at peak times (law enforcement)
•Speed traps/control
•Road enhancement to control speed--identify problem areas
•Enforcement of no thru trucking
•Parking for fireworks moved to Dragway
•Investigating why students don't take the bus
•Improved road markings and signage

Key Issue #2 Recreation

Facilitator: Don Petterson Recorder: Joan Pratt
Participants: Sarah Brenner, Ann Dillon, Bobbie Jameson, Debbie Briscoe, Tony Guarino, Jonathan Ellis

Clarification of the problem/issue to be addressed:

- Traditional rec has been physical activities—perhaps it can be broadened to include all kinds of other activities for all age groups
- Also to include people of all abilities
- Include things that bring people of all ages together inside as well as outside
- Create and expand trails for wheelchairs

Possible Projects/Solutions:

- Develop "unofficial" trails into official trail network
  a. collaborate with Recreation Department landowners
  b. education of landowners and community at large—landowner packet and control
  c. signs, mapping (including distances), publicizing
  d. consider accessibility for people of all abilities
  e. other than foot traffic: horse, bike, ski i.e. different kinds of trails and different use vs. multi-use
  f. organize committee to oversee trail system for maintenance etc. (volunteers)
- What is the definition of job and can we impact definition of part-time Recreation Director to reach all age and ability groups to expand programs
  a. coordinate BRC activities with other activities and groups i.e. Garden Club
  b. include art, photography and cultural activities in accessible places
  c. get residents to volunteer skills as teachers
- Funding
  a. explore grants/availability of federal, state, private

b. do we have grantwriters—find them
c. town obligation—extent
d. community vs. rec center as funding source

- Publicity
  a. use website page
  b. publish maps and multigenerational activities—available at town hall, library, include in newsletter, town report
- Added programs—have organized trail walks
  a. possible educational walks (animals, footprints, etc.)
  b. cross country ski trails—map, publicize
- Restore trails behind school
- Expand programs
  a. publishing list of old houses/buildings
  b. walk/carpool/tour of old buildings
  c. photography, art etc.
  d. architectural heritage
- Town pub/restaurant—in some old building with B + B? ice cream?
- Consider road safety for jogging, walking, biking, traffic/recreation—width, trees, etc.—shoulders, paving

Project Evaluations:

High Impact/High Feasibility
•Consider road "widening" for bike safety (trees, traffic, shoulders)

High Impact/Moderate Feasibility
•Explore grants, find grant writers, determine extent of town obligation

High Impact/Low Feasibility
•Bike trails
•Explore Recreation Director job description (expand to reach all ages and ability groups, expand programs)
•Restore trails
•Add programs (trail walks, educational activities on trails, cross-country days, canoeing)
•Develop "unofficial" trails into official trails (education, accessibility, landowner packet, community to oversee)
•Expand programs (photography, art, house tour, graveyards, publish list of old houses, drawing, painting, weaving, quilting)

Moderate Impact/High Feasibility
•Town restaurant/pub/bed and breakfast/ice cream

Moderate Impact/Moderate Feasibility
•Publicity (use website, publish maps, publish multi-generational activities)

Moderate Impact/Low Feasibility
None

Low Impact/High Feasibility
None

Low Impact/Moderate Feasibility
None

Low Impact/Low Feasibility
None

Key Issues #3 & 7 Programs, Services and Facilities & Volunteerism and Citizen Engagement

Facilitator: Ed Berry Recorder: Terri Schoppmeyer
Participants: Elyse Seeley, Jane Byrne, Phyllis Thompson, Fran Pimentel, Dick Clark, Sue Sutch, Paul Robinson, Linda Cowie, Marilyn Morehead, Brian Kenyon, Mary Berry

Potential Projects:
Volunteers

- Define the role of volunteers
- How to publicize volunteer opportunities
- ID current volunteer opportunities
- Establish a volunteer coordinator
- Get groups on a website
- Volunteer handouts/welcome wagon
- Build a facility that handles healthcare, social services, educational opportunities, outreach
- Look at changing zoning laws to address affordable housing
- Minimum standards for accessible housing (universal design)
- Seek out government aid for affordable housing
- Research concept of in-kind contributions from builders towards affordable housing
- Encourage affordable housing projects with groups such as Habitat for Humanity, churches
- Develop a running master calendar with a coordinator to publicize events and avoid event conflicts—on web and available at town office, library

Project Evaluations:
Not noted

Key Issue #4 Communication

Facilitator: Tracy May Recorder: Doug
Participants: Heather Carley, Anna Quinn, Janine Christiana, Tracy Waldron, Tom Buswell, Roger Goun, Marion Arkell, Merril Dyer

Clarification of the Issue:

- Need outreach for new people
- Need communication for committees/town government
- Interest in website
- Newsletter is wonderful
- Gap in knowledge
- Need to consider now—computer options—newsletter is great
- Computer can facilitate give and take

- Has been interest for newsletter online—as well as print
- Take best parts of newsletter and expand
- School has website, library is planning one—opportunity to link
- Can town center concept be helpful with site
- Can consolidation help with funding efforts (continuity)
- Centralize budgeting—look and feel
- Calendar coordinated by 1 person
- Program available for people to manage their own content under 1 umbrella
- Meetings on cable TV would help with scheduling
- Danger of people staying home and watching—not participating
- Information session by volunteers for new residents
- Welcome package—with current newsletter and town map with info from groups
- Need info on government—Selectmen, Planning Board—what they do, terms, make it non-intimidating—who are current people (profiles) with organizational chart
- Need contact information
- Need minutes online with agendas for next meetings
- Minutes are on school site but not necessarily timely
- Minutes could be in PDF—not pre-typed
- Websites live or die on freshness of content and interactivity
- Need both people to set up site structure and people to add/update content which requires less technical skills
- Welcome packet important—but can be very basic. Now no one is welcoming people at all
- New people list can be gotten from post office
- We could just send postcard—people could call for someone to visit or pick up packet (personal touch is nice)
- Town needs info—school numbers. Survey could be included with welcome package
- Teacher cannot provide lists because of privacy—must go through volunteers (hard to get information when you need it)
- May exchange links rather than consolidate i.e. with school site
- Streaming media for website (video on website)
- Advertising in newspaper at small business
- Business on town website
- Business may pay for ads—business pages
- Web cost can be almost nothing to 10-20K+
- Website can grow and be reinvented—maybe 1st get content and then refine
- Other town sites are great resources, with broad range of offerings
- Link to county and state
- Communication starts with initial human interaction—town offices and library, etc. Need town working to be welcoming to new residents
- Feels like town hall run by people who resent new people
- Smoke free tavern
- Welcome meetings—transfer of knowledge
- Need to intelligently renegotiate cable contract
- Intro sessions good thing for new volunteers
- Distribute newsletter content in new ways
- Newsletter is used for gathering content

Project Evaluations:

High Impact/High Feasibility:
- None

High Impact/Moderate Feasibility:
- Info sessions—intergenerational
- Welcome package—postcard
- Survey—could be included in welcome package

High Impact/Low Feasibility:
- Advertising—public relations
- Website—opportunity to link to other town groups
- Newsletter

Moderate Impact/High Feasibility:
- Cable TV use—reuse with streaming

Moderate Impact/Moderate Feasibility:
None

Moderate Impact/Low Feasibility:
None

Low Impact/High Feasibility:
None

Low Impact/Moderate Feasibility:
None

Low Impact/Low Feasibility:
None

Key Issue #5 Growth and Development

Facilitator: H. Cadwell Recorder: Bruce Stevens
Participants: Doug Cowie, John Potter, Paul Mergener, Brenda Marotto, Marc Potvin, Emily Schmaker, Ursula Mackey, Kris Magnusson

Problem Definition:
1. Citizen management of town growth vs. developers' management
   - Preserve rural character
   - Examine the cost/benefit analysis of new growth
   - Communicating pending development projects to community prior to planning action being taken
   - addressing a comprehensive vision statement
2. Lack of communication between town and landowners concerning land purchase options
3. How do we purchase private land rights
4. Need proactive approach modeled to manage growth

- financing land purchases

Solutions:

- From citizen management approach—need more citizen involvement on Planning Board
- Need to institute zoning ordinances based on Master Plan recommendations
- Ongoing updates to Master Plan
- More resources for Planning Board (Planning Board, legal assistance)
- Educate community about legal implications of all growth limitations in community
- Advocate for state legislative changes to enabling legislation allowing town to govern growth
- Expand scope of impact fees and provide funding for same
- Caps on growth
  - Subdivision
  - Cap on building permits
- Empower and mandate the Planning Board to implement growth management strategies
- Form long-term outreach strategy for land acquisition working with Conservation Commission and Board of Selectmen
- More enforcement of local zoning ordinances
  - Hire part-time code enforcement officer
  - Involvement of all town departments in long-term planning (CIP)
- Creating more scenic road designations
- Cooperating with other towns to avoid duplication of services and experiences—regional approach to solving like problems
- Educate citizens on lower cost benefits of open space and elderly housing possibilities

Project Evaluations:

High Impact/High Feasibility:

- Citizen effort to enact state laws to manage growth

High Impact/Moderate Feasibility:

- Sub-division approval cap
- Building cap
- Expand impact fees and fund expansion to develop and implement these fees

High Impact/Low Feasibility:

- Empower/authorize/mandate Planning Board to research/implement all growth management strategies
- More resources for Planning Board (legal counsel, part-time planner)
- Institute zoning ordinances based on Master Plan--ongoing updates to Master Plan
- Involvement of all town departments in long-term capital improvement planning

Moderate Impact/High Feasibility:

- Collaborate with other towns—regional approach to growth; learn from other's experiences

Moderate Impact/Moderate Feasibility:

- Educate community about legal implications of zoning
- Scenic road designations

Moderate Impact/Low Feasibility:

- More enforcement of local zoning ordinances (code enforcement officer)
- More proactive citizen participation with Planning Board

Low Impact/High Feasibility:

None

Low Impact/Moderate Feasibility:

None

Low Impact/Low Feasibility:

None

Issue #6 Business Development

Facilitator: Ben Sutch Recorder: Rita Guarino

Participants: Alan Quinn, Adam Clough, Donald Haley, Eugene Orcutt, Eric Sommer, Nina Kewley, Meredith Metivier

Clarification of the Issue/Problem:

- Find compatible businesses/diverse—avoid impact of services
- Start with current resources
- Spend money here
- Learn from mistakes i.e. old (used) car lots
- Restricted, improved zoning
- Variances impact on zoning
- Financial management
- Revenue analysis and sources
- Cell phone tower
- Harvesting lumber—town property
- Windmill
- Cooperative industrial park
- Green businesses
- Fiscal balance
- Water management
- Limited development
- Hold current zoning zones
- Town natural resource inventory
- Businesses resource inventory

Zoning

- Develop strategic plan
- Rural urban center
- Architectural restrictions
- Signage
- Prohibit undesirable businesses
- Expansion of existing businesses sites
- Operational plan
- Reestablish development committee and/or hire a planner

Project Evaluations:

High Impact/High Feasibility:
- Develop strategic plan
- Operational plan
- Reestablish development committee and/or hire planner

High Impact/Moderate Feasibility:
- Improved zoning statutes

High Impact/Low Feasibility:
None

Moderate Impact/High Feasibility:
- Business resource inventory

Moderate Impact/Moderate Feasibility:
- Town natural resource inventory

Moderate Impact/Low Feasibility:
None

Low Impact/High Feasibility:
None

Low Impact/Moderate Feasibility:
None

Low Impact/Low Feasibility:
None

Key Issue # 8 Open Space and Rural Character

Facilitator: Paula Van Buskirk Recorder: Charlene Baxter
Participants: Karen Landry, Sue Jones, Jack Wagner, Roger Brown, Elizabeth Burtt, Rachel Greene-Lowell, Jen Savage, Judy Kaufman, Diantha Wade, Martha Clark, Alma Vahey, Laverne Liffard, Dolly Lyford, Celia Felsenberg, Sam Brenner, Craig Jameson, Ronald Vadas, Lise McNaughton, Kate Parks

Clarification of the Issue/Problem:
- Loss of green
- "Forces" threatening open space
- Need to manage those "forces"
- Way to control, have access to "open land/country land"
- Envelop county land into town "open space"
- Disconnected persons buying open spaces
- Agriculture "production" land being lost will affect ability to sustain ourselves
- Access through others' property
- Forest management need exists
- Leaving land open will be more of a problem

- Develop "working" or "teaching" farm
- Problem—lack of integration between development and the preservation of open space

Problem Statement:

- A need exists to balance economic development and importance of keeping rural character because of lack of integration between growth and development and preservation of open space

Solutions:

- Town purchase of land
- Land trust
- Town purchase of conservation easements
- Educate citizenry about tax facts of life
- Economic tax incentives to maintain open space
- Wildlife refuge
- Build appreciation for land = bike paths, trails
- Develop town regulations to support open space
- Agriculture and environmental education
- Go after state and federal and grant money
- Higher impact fees
- Sell land to people who will keep it "open"
- Purchase land for resale for preservation use
- Tax incentives for easements
- Cluster housing to keep green space
- Fundraising for land purchase
- Build where cleared space is; not cut down trees
- Ask developers to designate some land for trails "green space"
- Attend commissioners meetings and urge maintaining green space
- Encourage landowners considering land sales and keep their land
- Change Brentwood sign—identify it as a rural community

Project Evaluations:

High Impact/High Feasibility:

- Federal and state money
- Sell land to people who will keep it "open"
- Encourage landowners considering land sales to keep their land

High Impact/Moderate Feasibility:

- Town purchase of land
- Land trust
- Tax incentives for easements
- Town's fundraising for land purchase

High Impact/Low Feasibility:

- Ask developers to designate some land for trails and green space
- Cluster building
- Develop town regulations to support open space
- Educate citizenry about "tax facts for life"

- Town purchase of conservation easements

Moderate Impact/High Feasibility:
- Build where cleared space is not cutting

Moderate Impact/Moderate Feasibility:
- Wildlife refuge
- Connected trails
- Purchase land for resale for preservation use
- Attend county commissioners meetings and urge maintaining green space

Moderate Impact/Low Feasibility:
- Economic tax incentives to maintain open space
- Agriculture and environmental education

Low Impact/High Feasibility:
None

Low Impact/Moderate Feasibility:
None

Low Impact/Low Feasibility:
- Change Brentwood sign—identify it as a rural community

Saturday Afternoon
PROJECT SELECTION

We returned to the large group after lunch break. A member of each small group presented the projects that the group had come up with. Charlie French led a short discussion about whether some projects overlapped and could be combined with other closely related ones.

Every participant received five adhesive dots to use to "vote" on projects they thought were important for Brentwood to work on right away. Each voter could place as many dots as they wished by any project, distributing their five votes as they pleased. The projects receiving the most votes would then be discussed in small groups. The list of project ideas follows.

Group #1 Traffic and Safety

1. Enforce current traffic laws (no through trucking, peak traffic control—speed, identify problem areas for speed, investigate road enhancement—speed bumps or grids **(19 votes)**

2. Minimize direct access to 125—consider access roads **(1 vote)**

3. Addressing congested traffic times—bussing students, parking town events (fireworks parking at Dragway) **(2 votes)**

Group #2 Recreation

1. Expand trail system and develop official trail network (bike/walk, accessibility, landowner packet, committee to oversee, road safety for trail/recreational use) **(combined with another project)**

2. Expand/publicize recreational programs (explore recreational direction job description, add/expand programs, coordinate between different organizations, accessibility, multi-generational, seek volunteer "teachers") **(14 votes)**

3. Funding (grants, grant writer, town budget, non-profit designation) **(3 votes)**

Group #3 Programs, Services and Facilities (including volunteerism and engagement)

1. Change zoning laws to encourage affordable and elderly housing **(12 votes)**

2. Coordinate a group of trained volunteers who will welcome newcomers, deliver handouts, resources and identify existing organizations **(combined with another project)**

3. Build or fund a community center **(3 votes)**

Group #4 Communications

1. Website building on existing newsletter and linking to related sites to include virtual town center **(34 votes)**

2. Newcomer orientation including: welcome package and regular scheduled welcome & information night **(combined with another project)**

3. Community Access Cable TV (hosted at community pub or ice cream parlor) **(1 vote)**

Group #5 Growth and Development

1. Develop citizen management approach to growth not developer management plan **(combined with another project)**

2. Empower, authorize, direct and fund the Planning Board to research and implement all growth management strategies in accordance with Master Plan **(60 votes)**

3. Educate citizens about tax savings related to senior housing and open space conservation **(combined with another project)**

Group #6 Business Development and Improvement

1.Develop strategic plan to include business & natural resources inventories and best practices of other towns **(14 votes)**

2. Operational plan to include reestablishing development committee and/or hire a planner **(3 votes)**

3. Improved zoning statutes (aesthetic improvement and manage growth) **(25 votes)**

Group #7 Preserving Rural Character

1. Developing an educational program that will: teach citizens about tax facts; educate landowners about alternatives to selling for development; agricultural and environmental education; value of green space and wildlife corridors **(38 votes)**

2. Town purchase of conservation easements resulting in less development and growth as well as lower tax impacts (find sources of funds, identify land for easements) **(40 votes)**

4. Develop a network of trails: educate and identify trails with landowners and determine uses, and get permission (create a trail committee) **(45 votes)**

ACTION STEPS

After the voting, the group decided to focus in on the top 5 projects. These were:

Work with Planning Board on Growth Issues
Town Website
Conservation, Lands and Easement
Trail System
Educate Citizens About Tax Savings Related to Senior Housing and Open Space Conservation

Participants once again self-selected themselves into small groups according to the project that interested them most. Each group was asked to define the following:

- Critical Steps to Implementation
- Resources Needed
- Principal Leadership (group or individual)
- Potential Obstacles with Possible Strategies to Overcome Them
- Timeline for Implementation
- Action Step Coordinator

Some of the groups used these steps as a way to focus their discussions and notes, while others did not. Hence, the reports that follow are in a number of different formats.

Project #1 Work with Planning Board on Growth Issues

Facilitator: Allen Cook Recorder: Janis Sommer Spokesperson: Kris Magnusson
Participants: Marilyn Morehead, Paul Robinson, Eric Sommer, Emily Schumaker, Marc Potvin, Paul Mergener, Jane Byrne, Marion Arkell, Meredith Metivies, Andrew Rickenbach, Ursula Mackey, Kris Magnusson, Jim Rioux, Linda Cowie

Goals:

- manage growth
- support Planning Board with actions and money
- make the land use documents accessible at the Brentwood Library
- put in the newsletter that it is available
- identify which growth management tools which can be used together legally for managing growth
- provide senior housing

Existing Initiatives:

- Epping, E. Kingston, Exeter
- identify permanent senior housing solutions that might not be currently defined in state laws as such
- creating incentives for builders
- finances, zoning fees

Obstacles:
- opposition from developers and residents
- educational obstacles
- town Planning Board (i.e. lack of planning resources)
- court decisions
- need for senior housing ordinance

Solutions:
- professional study and financing to bring to town a warrant by March

Leadership:
- Rockingham Planning Commission
- Town Planner

Resources:
- 2 full days being added to planner schedule per month subject to town approval
- steering committee (1. Impact fees: 2. Growth management CIP)

Action Steps:
- section for Planning Board in newsletter
- join steering committee
- secure funds to frontload
- establish more subcommittees

Timeline:
- November 6—information sheet to hand out at election
- our group at Planning Board meeting on November 1 (Jim, Marion, Kris, Mark, Emily will attend)

Meeting: **November 1, 2001 @ 7:30 at Town Hall**
Convener: **Kris Magnuson 772-2719**

Project #2 Town Website

Facilitator: Tracie May Recorder: Bruce Stevens Spokesperson: not noted
Participants: Janine Christiana, Mary Berry, Tracy Waldron, Anna Quinn, Alan Quinn, Phyllis Thompson, Tom Buswell, Lyn Hendrickson, Ann Dillon, Merril Dwyer, Roger Garon, Tracie May

Goals/Objectives:
Goal of website
- working
- living
- need for links to be useful information
- linking individuals in community
- tool to help people meet in community
- town-wide calendar of events
- efficient communication
- town boards/commissions (telephone numbers of members)
- directory of services within town boundaries

- source of resources in Brentwood (businesses/services/database of town information)
- source of information for people new to town with links to groups/services in town
- means of town boards/committees receiving input from citizens
- establishes image/vision theme of Brentwood and communicates same
- listing of town boards/positions and information as to how volunteers can participate
- need to determine how site is established/hosted/updated
- next meeting—design and view sites from other towns
- historic content to be included on site
- work with town newsletter/Swazey/Library sites (hot link) for coordination
- tie in to Profile process and photos of Profile project

Obstacles:
- how does group fund this project (public vs. private)
- who are we from a legal issue
- issue of privacy policy
- current updates of information on site
- usability of site (ease of maintaining)
- ownership/web master procedure
- how compatible will this site be with Selectmen's town site

Solutions:
- organize/fund site—how to initiate
- avoid duplication of effort
- definition-town or community website
- need for uniform/consistent listings and format
- search for grant money (need grant writers and tech. writers)

Leadership:
- Linda Rousseau
- Cindy Buckles
- Marilyn Morehead
- Jane Byrne
- Sue Sutch
- Recreation Director—Donna Gill
- Ed Berry/Joan Pratt
- Extension/UNH--input

Resources:
- web hosting expense
- development money
- graphic design/content development
- materials—computer at town hall for access)
- central person to accomplish updates—how to solicit information from town groups

Action Steps:
- check out other sites (other towns—everyone)
- understand town's R.F.P.
- meet with Selectmen (11/13—Tom, Meril)

- next website meeting—11/7
- convener is Anna Quinn
- Meril to explore grant writing
- group meetings at 7pm
- agenda for meeting—content exploration (logo and name)
- develop action outline of issues to discuss with Selectmen
- feedback from people/organizations for consideration at meeting

Meeting: November 7, 2001 @ 7:00 at Grace Tabernacle Church Media Room
Convener: Anna Quinn 772-0727

Project #3 Conservation, Lands, Easements

Facilitator: Ed Berry Recorder: Terri Schoppmeyer Spokesperson: not noted
Participants: Nina Kewley, Ronald Vadas, Lise McNaughton, Jonathan Ellis, Doug Cowie, Kevin Johnston, Alma Vahey, Dolly Lyford, Lawrence Lyford, Diantha Wade, Elizabeth Burth, Fran Pimentel

Goals:
- pamphlet on options for land conservation
- town purchase of conservation easements
- find source of funds
- identify land for easements/other conservation option
- development long-term financing plan for buying town land and/or easements
- establish a land conservation strategy (land identification, funding and education)

Existing Initiatives:
- Conservation Commission
- Rockingham Conservation District
- Exeter River Local Advisory Committee
- Rockingham Land Trust
- Audubon Society
- NH Sierra Club
- Farmland Trust
- NH Society of Protection of Forests
- UNH Cooperative Extension
- LCHIP
- Trust for Public Lands

Potential Obstacles:
- funding (lack of)
- communication
- education of potential donors
- existing land use laws (local, state)
- deep pocket developers
- bank mortgages (possible reduction of value?)
- limitations on tax relief
- availability of professional advisement
- time restraints
- lack of knowledge of when potential conservation land becomes available
- tax maps aren't digitized

- locked into program once you agree to participate

Potential Solutions:
- funding—approaching existing institutions, organizations, tax base, private funding, conservation fund, town budget, bond issue, gifts
- communication—educational seminars, in-house education proposals to targeted landholders
- recognition of people contributing to land conservation

Leadership:
- large landowners
- longtime residents
- residents already granted easements
- Conservation Commission
- Selectmen
- Planning Board
- professionals—lawyers, bankers, financial planners, surveyors, Phil Auger (Coop. Ext.), environmental educators, real estate people

Resources:
- money
- existing organizations/groups relating to conservation efforts
- maps
- natural resource survey—assisted by RC Planning Commission and UNH Graduate Students

Action Steps:
- publicity
- leading group of people
- tap resources and get info
- identify land that's available and those parcels we want to target
- develop a model/presentation or approach (how are we going to go about this?)
- contact people that have already given land/easements to identify problems, benefits and/or both
- develop an ad hoc committee

Timeline:
- put conservation, land easement issue on Conservation Commission meeting on 11/14/01 (today's group will make effort to attend)

Meeting: November 14, 2001—Next Conservation Commission Meeting
Convener: not noted

Project #4 Trail System

Facilitator: Ben Sutch Recorder: R. Guarino Spokesperson: not noted
Participants: Susan Cox, Bobbie Jameson, Jen Savage, Sue Jones, Deanna Dawson, Sarah Brenner, Carol Ann Head, Jody Hanscom, Jeff Wagner, Doug Brenner, Elyse Seeley, Debbie Briscoe, Howard Cadwell

Goals and Objectives:
- Trail Committee exists
  objective: to develop a trail system and educate the public
- create an inventory and map

- determine a usage policy
- encourage alternative means of travel around town
- linking parts of community
- linking different communities
- educating landowners
- rest areas along trails
- educate users on usage and maintenance
- creating landowner package (RSAs; a revocable agreement; uses of land)
- integration with open land and master planning
- work with developers to set aside land for trails
- trail signage
- maintenance events
- handicapped accessible
- improve road shoulders

Existing Initiatives:
- trail committee
- a trail building is in progress
- inventory in progress
- landowner package in progress
- trail restoration incorporated with Swazey School outdoor classes

Potential Obstacles:
- landowner permission
- identifying trails
- person power—volunteers
- land acquisition
- access blocked by development
- disagreement on usage
- public disinterest
- lack of funding

Leadership:
- Debbie Briscoe/Trails Committee
- Archie Schroeder/School Staff
- user groups
- Conservation Commission
- BRC
- developer liaison contact
- landowner group liaison contact

Resources:
- grant money
- volunteers
- accessible land
- cooperative landowners
- communication tools

- equipment
- town maps
- Exeter River Watershed Group
- GPS and mapping software
- construction material

Timeline:
- November—organize next meeting
- expand trail committee/define roles and membership drive/all ages
- renew landowner package
- organize trail walk
- create maps/inventory and formulate trail development strategy
- write grants

Action Steps:
- expand trail committee and define roles
- membership drive open to all age groups
- legal review of landowner package
- organize a trail walk
- create maps—inventory
- formulate trail development strategy (usage strategy)
- write grants
- organize walking/ski clubs
- create educational/historical/environmental hikes
- develop trail signs
- coordinate with road agent and others in building shoulders

Meeting: **November 5, 2001 @ 7pm at town building**
Convener: **Debbie Briscoe 778-3987**

Project #5 Educate Citizens About Tax Savings Related to Senior Housing and Open Space Conservation

Facilitator: Paul Van Buskirt Recorder: Joan Pratt Spokesperson: not noted
Participants: Brenda Marotto, Celia Felsenberg, Sam Brenner, Brian Kenyon, Roger Brown

Goals and Objectives:
- assemble facts about tax use and cost benefit
- disseminate facts—how?
- agricultural/environmental/educational facility
- liaison with Rockingham County Botanical Garden (new project)
- education about benefits of spending money vs. negatives for growth management strategies

Existing Initiatives:
- Botanical Garden/UNH Cooperative Extension
- newsletter (to disseminate facts)
- library, town office
- flyers in/on mail box, paper box
- Conservation Commission (inventory)

- Planning Board Steering Committee
- inventory of town-owned lands, forest
- maps
- current use tax fund (penalty)

Obstacles and Solutions:
- perception that this will cost money (solution: overcome misconceptions via meetings of town departments and leaders)
- how to get correct info out—overcome "lack of info" and "misinfo" (solution: informed citizens attend meetings and speak out and find volunteers)
- find volunteers who are educated and will SPEAK OUT
- community division—coordinate efforts to maximize effectiveness
- where to have all this take place—town buildings, Grace Church

Leadership:
- County Extension—Nancy Adams, Phil Auger, etc. (consulting)
- educators
- farmers
- selectmen, Conservation Commission rep. (John Ellis)
- lawyers
- Rockingham Land Trust
- DRA representative
- UNH teacher interns
- Rockingham Planning Commission (Glen Greenwood, Olive Tash, Kate Parks, Brenda Marotto)

Resources:
- donations—books
- materials—develop fact sheets—make them interesting and readable
- resources—Coop. Ext., library
- costs—paper
- Fish and Game
- existing landscape

Action Steps:
- meeting to plan nature tour at Brenda's—for example, visit 4 conservation easements (town-owned land or working farms) in Brentwood with education about same (Roger will be there)
- nature tour in Brentwood—one day event with several stops in Brentwood with different "docents" (money raiser with a focus on how to preserve these areas)
- after-school program for kids
- tax research—myth vs fact (disseminate info via newsletter and take info to town leaders—Brenda)
- create an advisory committee to report info to Conservation Commission or Planning Board

Timeline:
- 1st week of December for organizational meeting at Brenda's
- Brenda will contact people in this group sooner—aim to have some "event" before town meeting

Meeting: **not noted**
Convener: **not noted**

CONCLUSION

Each small group reported back their plans to the entire group. The full group discussed next steps to keep up the momentum from the Profile, with each group appointing someone to maintain contact with the Brentwood Profile Steering Committee.

The meeting adjourned at 3:30 PM.

APPENDIX

Brentwood Community Profile Participants

Janine Christiana
Brian Kenyon
Alma Vahey
Phyllis Mathouser
Kris Magnusson
Tracy Waldron
Marilyn Morehead
Bob Matthewson
Kathy Waterson
Dot Lowe
Linda Rousseau
Diane St. Jean
Ann Dillon
Rachel Greene-Lowell
Debbie Briscoe
Phyllis Thompson
Tom Buswell
Celia Felsenberg
Linda Cowie
Paul Mergener
Lanie Ellery
Peter Waterson
Carol Ann Head
Sue Sutch
Marion Arkell
Elizabeth Burth
Judy Kentman
Roger Garon
Doug Lavoie
Will Herrick
Andrew Rickenback
Timothy Hannan
Andrea LaRiviere
Ellie Thompson
Sarah Brenner
Mary Neely
Deanna Dawson
Lise McNaughton
Mary Berry
Emily Schmaker
Ellen Finch
Fran Pimentel
Ray Jones
Steve Dawson
Charlie Pratt
Samantha Tatanczuk
Andy McClure
Holly Gilbert
Walter Finch
Jonathan Ellis
Sue Jones
Nina Kewley
Bruce Buck
Victor Schmalzer
Niki Reed
Jeff Wagner
Peter Kamberelis
Patti Buck
Kriss Bouchard
Diantha Wade
Susan Cox
Joe Bouchard
Alan Clough
Mindy Chadrow
Jane Savage
Kate Parks
Joyce Miller
Meril Dwyer
Linda Vadas
John Schumaker
Craig Jameson
Karen Schumaker
Vasilka Nicolova
Alan Quinn
Skip Parks
Dick Clark
Marc Potvin
Ronald Vadas
Eugene Orcutt
Robert Pollock
Anna Quinn
Eric Sommer
Meredith Metivier
Kathie Wikar

Bobbie Jameson
Paul Robinson
Lynn Hendrickson
Jean Clough
Elyse Seeley
Martha Clark
Heather Carley
Kevin Johnston
Howard Hendrickson
Gail Bergeron
Sarah Brenner
Ann Dillon
Tony Guarino
Jane Byrne
Phyllis Thompson
Doug Cowie
John Potter
Brenda Marotto
Marc Potvin
Ursula Mackey
Adam Clough
Donald Haley
Karen Landry
Roger Brown
Jen Savage
Judy Kaufman
Laverne Liffard
Dolly Lyford
Sam Brenner
Jim Rioux
Lawrence Lyford
Jody Hanscom

Brentwood Community Profile Facilitators and Recorders

Jane Byrne
Ben Sutch
Bob Gilbert
Howard Hendrickson
Tracie May
Don Petterson
Paula Van Buskirk
Howard Cadwell
Kevin Johnston
Allen Cook
Ed Berry
Rita Guarino
Joan Pratt
Roger Brown
Janis Sommer
Bruce Stevens
Doug Brenner
Terri Schoppmeyer
Rollie Barnaby
Karen Blass
Charlene Baxter

Brentwood Community Profile Steering Committee

Ed Berry and Joan Pratt, co-chairs
Tracie May
Rita and Tony Guarino
Amy Robinson
Howard Cadwell
Sue Sutch
Ben Sutch
Eugene Orcutt
Bruce Stevens
Doug Brenner
Marilyn Morehead
Allen Cook
Kris Magnussen
Mary Berry

GROWTH MANAGEMENT

We begin this chapter with an analysis of the status of the law in New Hampshire on Growth Management. We include this information to show that we have taken a hard and serious look at the directives and requirements of the State Legislature and the New Hampshire Supreme Court and have considered our actions carefully.

Definition of Growth Management

Planning is no longer based simply on how large a community should grow in terms of hopeful aspirations, but should consist of realistic estimates based on sound planning principles. Planning and growth management should consider the availability and cost of service expansion and a system to time that growth at a pace coordinated with facilities and service capacity expansion. For this Master Plan and Growth Management Chapter, the following definition is used:

> **Growth Management is a conscious government program intended to influence the rate, amount, type, location, and quality of future development linked to the adequate availability of services, facilities, and infrastructure. In addition growth management must consider the steps**

necessary to insure the protection of natural resources as this is one of the most direct ways to provide for the rural character and high quality of life that the residents of Brentwood have endorsed in other sections of this master plan.

This is the operational idea which defines the goals of a comprehensive growth process for Brentwood.

Growth Management in the Revised Statues Annotated (RSA)

A discussion of growth management in New Hampshire must begin with an examination of the power and legal authority that a municipality has to influence development. The basis for the power in the State legislature is found in the United States Constitution. This power, reserved to the states, is given to local governing bodies through "enabling statutes".

Generally, the State legislature has decided that the municipality should have the authority to regulate the use of land for the health, safety, and welfare of the people; this authority is more commonly known as the "police power" of the states. In New Hampshire this power manifests itself in the ability to adopt master plans, zoning

ordinances, building codes, various commissions, authoritative boards, and other innovative techniques, and finally, growth

control ordinances. This power is offset by the individual and property rights guaranteed in the US and New Hampshire Constitutions.

The first step of the analysis must examine the nature of the power that is given to the town. In RSA 672:1, the findings supporting, and purposes of, land use tools are laid out by the legislature. New Hampshire has favored local control of land use through local governments and boards and the inclusion of citizens in this process. See RSA 672:1,IV. Chapter 673 continues with the nature and administrative structure of the Boards and Commissions whose duty it is to enforce and maintain these tools.

Under Chapter 674, the tools themselves are laid out. These statutes include how the tools are created, the limits to their use, and guidance for the town's utilization of these powers.

The Planning Board and The Master Plan. The Planning Board has the duty to create and maintain the master plan. RSA 674:1. The Planning Board is authorized to advise the municipality on development issues, recommend ordinances to the legislative body, and exercise additional powers as deemed necessary by the citizens. RSA 674:1. The purpose of the master plan, adopted by the Planning Board, is described in RSA 674:2; its preparation and adoption requirements are found at 674:3 & 4 respectively. The master plan is the guiding document of the municipality that "shall generally be comprised of a report [and

information]...designed to show as fully as possible and practical the planning board's recommendations for the desirable development of the territory legally and logically within its planning jurisdiction". RSA 674:2. The master plan is advisory and is the foundation for further actions of the town. Once the master plan is adopted, the town will have the information necessary to begin planning efforts. The town may begin to adopt the familiar specific tools of land use controls and thus begin to formulate a growth management plan.

Growth management can be effected in any number of ways; it can be indirect through the various land use control methods available through RSAs, or it can be a limitation of growth specifically based on a timing of growth, also available through the RSAs, but requiring certain other prerequisites and scientific findings. We will begin by describing the indirect effects and mechanisms found in the RSA.

Capital Improvements Program. The Capital Improvements Program, found at RSA 674:4-8, provides for a plan that addresses the estimated capital expenses for a planning period of six years. This program, by limiting expenditures, can in turn have an effect on growth through limits on the necessary infrastructure to support development. For instance, if there are no services present in a particular area, there would not be support for scattered and premature development if proposed. The Supreme Court of New Hampshire has also mandated that "towns, acting in good faith, "must develop plans to insure that

municipal services, which normal growth will require, will be provided for in an orderly and rational manner.'" Rancort v. Town of Barnstead, 129 NH at 50 (1986), citing Beck v. Town of Raymond, 118 NH at 800 (1987). These cases are discussed further below.

Zoning Ordinance. New Hampshire authorizes local governments to adopt zoning ordinances at 674:16(I); the procedure for enactment is found in the requirements at RSA 675. According to 674:18, before a town may enact a zoning ordinance the Planning Board must adopt a general statement of objectives as well as the land use section of the master plan. The purposes of the zoning ordinance are found at 674:17. Exclusionary and spot zoning are two major aspects of zoning that are often confronted in zoning issues. Exclusionary zoning is discussed at 672:1,III-e, which states, " All citizens of the state benefit from a balanced supply of housing which is affordable to persons and families of low and moderate income. Establishment of housing which is decent, safe, sanitary and affordable to low and moderate income persons and families is in the best interests of each community and the state of New Hampshire, and serves a vital public need. Opportunity for development of such housing, including so-called cluster development and the development of multi-family structures, should not be prohibited or discouraged by use of municipal planning and zoning powers or by unreasonable interpretation of such powers." Spot zoning is the unreasonable singling out of a limited area for use inconsistent with the

surrounding areas for the sole benefit of the limited area's owner(s).

Site Plan and Subdivision Regulation Statutes. New Hampshire has authorized Site Plan and Subdivision Regulations. The authority enabling the Planning Board to adopt these regulations is at RSA 674:36 for Subdivision; and RSA 674:44 for Site Plans with the power to regulate at 674:35 and 674:43 respectively. Between these two statutes the Planning Board is given broad discretion to ensure well planned and appropriate growth. The laws are essentially similar to their provisions. These statutes provide for the Planning Board to adopt regulations that include the following sections that are taken from the State statute (sections that are not relevant to this issue are removed):

> (a) Provide for the safe and attractive development or change or expansion of use of the site and guard against such conditions as would involve danger or injury to health, safety or prosperity...
>
> (b) Provide for the harmonious and aesthetically pleasing development of the municipality and its environs...
>
> (c) Provide for open spaces and green spaces of adequate proportions...
>
> (h) Include such provisions as will tend to create conditions favorable for health, safety, convenience, and prosperity.

§ II of 674:36 (subdivision) includes:

> (a) Provide against such scattered or premature subdivision of land as would involve danger or injury to health, safety, or prosperity by reason of lack of water supply, drainage, transportation, schools, fire protection, or other public services, or necessitate the excessive expenditure of public funds for the supply of such services.
>
> (f) Require, in proper cases, that plats showing new streets or narrowing or widening of such streets submitted to the planning board for approval shall show a park or parks suitably located for playground or other recreational use.
>
> (g) Require that proposed parks shall be of reasonable size for neighborhood playgrounds or other recreational uses

Both sections have provisions for setting conditions precedent that deal with the cost of facilities that the subdivision or site will require. The Site Plan Regulations also contain a listing of what is required in the regulations.

The case law on these statutes is voluminous. Most of these cases examine the authority of the Board in rejecting development

based upon either of these mechanisms. The Court has upheld town ordinances and actions under regulations enacted according to these statutes that were rationally based upon the enabling language in the statutes.

Innovative Land Use Controls. This statute is the most broad and creative section of New Hampshire land use law. Found at RSA 674:21, the statute lists techniques which may be utilized by a municipality when adopted according to 674:16 and in accordance with 675:2, II. This statute includes a list of potential growth management techniques beginning with "Innovative land use controls may include, but are not limited to:". This language gives broad authority for a municipality to adopt almost any technique under this section. Each technique that is mentioned in the master plan could, theoretically, be authorized through this statute. The remainder of the statute is devoted to a description of and requirements for impact fee ordinances 674:21 (V), their adoption, calculation, and administration.

Timing of Growth. The State of New Hampshire has allowed specifically for the timing of growth. This can be achieved only after the Planning Board has adopted both a master plan and a capital improvements program. The statute authorizing this process is RSA 674:22. There is no guidance on how the ordinance should be written or what may be considered. However, the ordinance shall be "based upon a growth management process intended to assess and balance community development needs and consider regional development needs." A

recent case where the town of Barnstead enacted such an ordinance is discussed more fully below. Another case, decided under the prior law, Stoney-Brook Development Corp. v. Town of Danville, 124 NH 583 (1984), stated that growth control should regulate and control, not prevent, growth.

There is also at 674:23 provision for interim growth management regulations, for unusual circumstances.

Growth Management and The Supreme Court of New Hampshire.

The New Hampshire Supreme Court has turned a favorable eye toward growth management, even going so far as to allow strict growth timing control ordinances. The following cases illustrate some of the Court's reasoning and its willingness to uphold such ordinances as long as they meet the Court's requirements. Most of the rules laid down by the Court can be utilized as guidance for a town that wishes to enact such controls. Aside from allowing the town to withstand a legal challenge, these cases contain objective and sound advice for local governments in anticipating the issues that may be faced. The Town of Brentwood is well served in reviewing the language of these cases to guide in the development of a growth management plan for the community.

Beck v. Town of Raymond, 118 N.H. 793 (1978). This case is among the early New Hampshire Supreme Court rulings that examine growth control and limitations. The Court stated that growth controls must be "reasonable and nondiscriminatory" and that they "should be the product of careful study and should be reexamined constantly with a view toward relaxing or ending them." The Court stated that the controls should be accompanied by "good faith efforts to increase the capacity of municipal services [and] must not be parochial; that is controls must not be imposed simply to exclude outsiders, especially outsiders of any disadvantaged social or economic group." The Court stated that towns "must develop plans

to insure that municipal services, which normal growth will require, will be provided for in an orderly and rational manner."

Stoney-Brook Development Corp. v. Town of Danville, 124 N.H. 583 (1984). The Court in this case examined a growth control ordinance under the prior statute. The statute was similar to the current law and the reasoning is still applicable. This case shows much of the New Hampshire Court's attitude and disposition toward growth management. The Court lays out the requirements and reasonable effects of growth control. The Court stated that the growth rate must not be an arbitrary figure. The rate can only be decided after a "careful study". The rest of the case concerns the requirements for passing a growth timing control. The Town of Danville had a comprehensive community plan which was not considered the equivalent of a master plan or a capital improvement program.

Rancourt v. Town of Barnstead, 129 N.H. 45 (1986). This is one of the most recent, and perhaps most important, cases concerning growth management and control. The case centers on the Town of Barnstead and its utilization of RSA 674:22, providing for timing of development. Through this case the New Hampshire Supreme Court found statutory approval for urban growth control ordinances. In addition, the Court has laid out a clear analysis of the evidence required for the ordinance to pass judicial scrutiny. This case is extremely useful in adopting a Timing of Development ordinance.

In Rancourt, the Court struck down a town ordinance on growth limitations because "scientific and statistical evidence of growth projections cannot function as the sole guide as to what constitutes a reasonable growth limitation established by a particular town." However, the Court did provide a substantial amount of guidance for municipalities enacting such ordinances in the future.

The town of Barnstead had an allowed three percent growth rate in its master plan as adopted by the planning board. There were no ordinances passed by the town in addition to this plan and its restriction on growth. The board voted down a proposed subdivision

because: 1) of the impact it would have on the growth rate; 2) impact of the schools; and 3) "a concern for natural resources". The plaintiff attacked the refusal, claiming that the master plan's growth rate was not enacted in accordance with the statutory provisions. The Court agreed with this argument, stating that the statute required the town legislative body to pass ordinances "which provide for a limited growth based on community and regional development needs." Id. at 48. The figures that the town relied upon for its growth projection were supplied by the State Planning Office which the Court characterized as "unrealistic and...not reflect[ing] the actual growth experience in the town of Barnstead."

The Court emphasized that growth limitation is not to be an ad hoc analysis by the board but must be legislative in nature. Once the ordinance has been passed, the Courts may strike it down only if it is unlawful or unconstitutional.

The Court then moved to the examination of the three-percent growth rate. The Court has held "that growth controls cannot be permanent or unreasonable...and [must be] continually re-examined in order to relax or eliminate them." Rancourt, citing Beck v. Town of Raymond, 118 N.H. 793, 800 (1978). The Court cited a previous ruling stating, "Towns may not refuse to confront the future by building a moat around themselves and pulling up the drawbridge." In light of the rigidness of the three-percent figure, and the finding that it was unrealistic, the Court found the growth rate to be unreasonable.

In this case, the Court found that growth limitations are valid, but that the evidence upon which the ordinance rests must include consideration of:

> "the cost of extending municipal services, the capacity of the town's existing citizenry to adjust to the higher tax burden necessarily associated with an extension of municipal services, the probable use of the dwellings, the availability

and suitability of undeveloped land in neighboring towns and the overall growth of the region in which the town is located,...".

The Court neatly summed up its position by stating "Put simply, to date we have held that a growth control ordinance is valid only if it restricts projected normal growth no more than is necessary to allow for an orderly and good faith development of municipal services."

Britton v. Town of Chester, 134 N.H. 434 (1991). The Court struck down an ordinance that limited 1.73% of the town's property for development as affordable housing. The court did not apply the statutory provisions at 672:1,III-e; instead it determined that the town had exceeded its authority to enact zoning for the "welfare of the community". The Court found that the word "community" in RSA 674:16 includes more than the limit of the town boundaries; the Court found that the appropriate area includes the region in which the town in located. This is important when analyzing the scope of the growth experienced by the Town and the surrounding area. The Court concluded that the ordinance, in effect, wrongfully excluded development of low and moderate income housing. This exclusion constituted an invalid exercise of the municipality's power to zone for the welfare of the community under the enabling legislation.

Ettlingen Homes, Inc. v. Town of Derry & a., 141 NH 296 (August 12, 1996). This decision has serious ramifications regarding the analysis a planning board may engage in in the determination of "scattered and premature" development, and provides useful discussion of growth management as it relates to school facilities.

The facts of this case involve a developer seeking subdivision approval in the Town of Derry for dividing an 81 acre parcel into 23 residential lots. The planning board denied the application finding it to be scattered and premature as defined in their regulations. The provision in Derry's regulations mirrored an earlier form of RSA 674:36 and provided that the planning board could deny an application based on:

> "such factors as scattered or premature subdivision of land as would involve danger or injury to health, safety, or prosperity by reason of lack of water supply, drainage, transportation, or other public services, or necessitate an excessive expenditure of public funds for the supply of such services.

Derry Land Development Control Regulations V, B(4) (1993); see RSA 36:21 (1970) (repealed 1983)."

The applicant argued that the disapproval exceeded the authority of the planning board and constituted illegal growth control. The trial court found that the applicant had not met the burden necessary to overturn the planning board decision. The applicant then brought this appeal to the Supreme Court, arguing that the planning board's decision was invalid under the scattered and premature language in the regulations and "constituted illegal growth control." The review by the Court was limited, stating, "[*o*]ur inquiry...is whether the planning board exceeded its subdivision control authority in denying the plaintiff's application." If the Court were to find that the evidence did not support the trial court's conclusion, or that conclusion was "legally erroneous," the Court would reverse.

First, the Supreme Court stated that this case, like Zukis v. Fitzwilliam 135 NH 384 (1992), and Garipay v. Hanover, 116 NH 34 (1976), did not involve an examination of growth control provisions. Reviewing these cases, which involved the question of how existing roads that were inadequate could cause future development to be premature, the Court quoted Garipay stating that the board's duty is to "ascertain what amount of development, in relation to what quantum of services available, will present the hazard described in the statute and regulations. At the point where such a hazard is created, further development becomes premature." The Court's view of the board's inquiry is "the effect of the proposed development

on the community, not the effect of further development in general on the community."

Continuing, the Court attempted to distinguish a finding of scattered and premature from growth control. Citing Rathkopf's *The Law of Planning and Zoning*, the Court distilled this distinction to a difference between a balance of the development concerns of an entire community versus the more specific focus on a particular development, including consideration of the compatibility of the use of the land with surrounding development, the highest and best use of the land, and the financial interests of the purchaser, developer, and town. It seems that although the effect is exactly the same, namely that the growth is limited through "growth control" or "scattered and premature", the means to reach this end is critical.

The Court admits that any denial of approval will limit growth. In terms of "premature" the Court stated that the Board must consider current as well as anticipated realities. The board in this case considered the "realities" of the schools. The Court recognized that this is a legitimate and statutorily permitted inquiry. However, citing to the testimony provided by a planning board member at trial, the Court found that the board's concern that the Town could not afford the expansion in services that the development required were considerations for growth control regulation, not for a finding of "scattered and premature".

Although the Court legitimized the concern for expenditures as found in the statute, the provision does not serve to replace comprehensive growth control regulation. Thus the Court concluded that "the circumstances of the school facilities...do not constitute a 'danger to health, safety, or prosperity by reason of the lack of ...schools'".

It seems that this decision eliminates the possibility that the conditions of schools can be the sole reason for finding that development is scattered and premature. However, there are many questions left unanswered. Why are schools mentioned in the statute

if they are not an appropriate aspect for the analysis to determine "scattered and premature"? Also, what happened to the last part of the statute, which provides that the planning board can provide against scattered and premature subdivision that will "necessitate the excessive expenditure of public funds for the supply of such services"?

In its analysis, the Court cites cases involving unsafe roads. The Court seems to conclude that there must be a hazard or danger to health, safety, or prosperity without providing any guidance or analysis as to how inadequate school facilities do not present such a danger. The Court fails to mention the effect of increased expenditure of public funds for increases in school facilities. More property taxes is one such anticipated reality. Also, school crowding and poor education facilities can be unhealthful, unsafe, and even dangerous to the long term prosperity of the students and the community.

Given the Court's finding, it would be difficult to imagine a situation where consideration of schools would allow for a finding of scattered and premature. The only possibility is that the bus route may be too far away, or too dangerous, but these concerns are not excessively expensive to address or fall under the analysis for the road situation as in Zukis and Garipay. However, the language in the decision is clear that schools are an appropriate consideration for a comprehensive Growth Management Plan.

The most recent action undertaken by the Supreme Court with regard to growth management involves the manner by which local planning boards can make provision for off site improvements that are necessary as a result of new development. On November 15, 2000 the Supreme Court of New Hampshire issued its opinion in the case ***Simonsen V. Town of Derry****. This case has implications for all New Hampshire communities that require developer-financed off-site improvements and impact fees. The*

opinion of the Court has stirred debate in planning circles throughout the State and several beliefs about what this case means for land-use planning in New Hampshire have been developed.

This case revolved around the Planning Board of Derry and its decision to approve a plan to expand a 9-hole *private* golf course to an 18-hole *public* course. The Board approved the plan contingent on the payment of $7,500 for off-site improvements necessitated by increased traffic. The plaintiff appealed the Board's decision, ultimately appealing the case the NH Supreme Court, on the grounds that the Town's assessment of fees for off-site improvements would meet the definition of an "impact fee" under NHRSA §674:21. The town did not have an impact fee ordinance at the time the "fee" was assessed.

The Court's decision states:

> ***"...we conclude that NHRSA §674:21, V(i) does not preserve the "existing authority" of a planning board under NHRSA §674:44 to condition the approval of a site plan upon the applicant's payment of money for off-site improvements. While the statute authorizes municipalities to impose impact fees, it comprehensively regulates the municipality's implementation of such fee...we conclude that a construction of the statute permitting municipalities to charge impact fees without adopting an impact fee ordinance...would be illogical."***

While the implications of the decision are uncertain, what does seem clear is that if a municipality wishes to charge a fee for off-site improvements an impact fee ordinance must be adopted. What the language of NHRSA §674:21 and the Supreme Court's decision on Simonsen, fails to specify is whether the impact fee amount needs to be identified or can be established through the enabling language of the ordinance.

In the past the Brentwood Planning Board has customarily required fees for off-site improvements, or required developers to complete off-site improvements associated with their specific development. Simonsen clearly states that off-site fees can only be required if an impact fee ordinance has been adopted. Simonsen would also seem to suggest that requiring a developer to complete the off-site improvement is, in effect, the same as a monetary contribution.

In light of this decision it seems clear that Brentwood should adopt an impact fee ordinance to insure the Town has the ability to assess for necessary off-site improvements required by a new development.

The statutory powers of the Planning Board to regulate subdivisions under NHRSA §674:36 relative to "*scattered and premature*" development remains unchanged. If a Planning Board is of the opinion that there is a direct health and safety concern identified "off-site" as a result of a project, and the Board can

substantiate the concern, the Board can require the off-site improvement as a condition of approval.

Voluntary contributions from developers for off-site improvements should always be encouraged. Most developers recognize the need for various improvements on and off-site and most are generally willing to voluntarily agree to contribute to or provide entirely for these necessary improvements.

GROWTH IN BRENTWOOD

Population Growth

The first way to analyze growth is to look at historic population totals as well as population projections for the future. The most reliable data is presented by the US Census. The New Hampshire Office of State Planning (OSP) publishes population data based on the census data. Although speculative, and even discounted in a Supreme Court case (see discussion of the Rancourt decision above), the projections may still be used as part of the basis for analysis of current and future growth trends.

A proper analysis must detail comparative growth rates. This analysis allows one to appreciate the true impact of growth for the Town of Brentwood. These comparative numbers are presented in multiple formats below. These charts and tables show the population as reported through the US Census and NH OSP. State, county and regional comparisons are also detailed.

An important factor to analyze is population growth trends in Brentwood's surrounding region, known here as Brentwood's "community". These towns are Epping, Kingston, Fremont, Exeter, Newfields, East Kingston, Stratham, and Kensington. They were chosen because they are geographic abutters, are in the same cooperative school district (excluding Kingston, Fremont, and Epping) and display rough similarity in available land for development and demographic make-up. We have adopted this surrounding region, as our "community" as defined in the Britton

case discussed above. This community will be most impacted by our actions and we chose them to insure that our planning and growth management efforts are in accordance with a balanced approach to both our own needs and those of our community.

In order to "close the loop" on our community planning, we have also widened the lens of our view to include, where available, the county, and the entire State. This has allowed us to uncover population trends experienced in the Town, the Community, and the State.

The table below displays historic and projected population values for Brentwood and its community and spans the years 1980 to 2020. The data was obtained from the NH OSP.

POPULATION HISTORY AND PROJECTIONS										
	Population							Annual Growth Rate	Projected Annual Growth Rates	
Town	1980	1990	2000	2005	2010	2015	2020	1980-2000	2000-2005	2000-2020
Brentwood	2004	2590	3197	3441	3659	3981	4315	2.4%	1.68%	1.81%
East Kingston	1135	1352	1784	1908	2011	2156	2331	2.0%	2.1%	2.4%
Epping	3460	3460	5476	6946	7554	8520	9559	2.3%	3.63%	3.22%
Exeter	11024	12481	14058	15749	16657	17948	19224	1.2%	3.10%	2.10%
Fremont	1333	2576	3510	3579	3797	4119	4453	5.0%	1.40%	1.66%
Kensington	1322	1631	1893	2113	2266	2498	2748	1.8%	2.16%	2.23%

Kingston	4111	5591	5862	7215	7811	8743	9745	1.8%	3.69%	3.09%
Newfields	817	888	1551	1371	1437	1532	1634	3.3%	-0.18%	0.85%
Stratham	2507	4955	6355	7172	7898	9089	10370	4.8%	3.42%	3.54%
Total	27713	37226	43686	51402	55101	60742	66710	2.76%	2.85%	2.49%
Regional Total	134145	161071	178997	203636	217573	238477	260243	1.5%	3.52%	2.61%
Rockingham Co. Total	190345	245845	277786	313079	335204	367620	400846	1..5%	3.50%	2.61%

* New Hampshire Office of State Planning Estimates
Source: New hampshire Population Projections: Total Population for Cities and towns 2000-2020, NHOSP 10/97, 1998 Population Estimates of New Hampshire Cities and Towns, NHOSP

From the chart, Brentwood ranks about in the middle in total population increase compared to its community. That is, the actual number of persons added to Brentwood is in the mid-range (2.4%) when compared to the community. However, the town is projected to grow at a rate well below the surrounding communities and the region and state as a whole. These projections do not agree with local experiences as borne out by review of development activity and the number of building permits issued.

We must look at population data as an indicator of growth, not a definitive statement. A truer estimate of the growth that is being experienced is displayed by the recent increase in the numbers of lots being created for residential development, the number of building permits, school enrollments, and tax rate increases.

Building Permit Information

Another way to measure growth and determine the appropriate remedial effort is to analyze the historical trend and present numbers of new housing units within Brentwood. By comparing this to the surrounding communities it can be determined if Brentwood is experiencing its fair share of growth or a disproportionate amount of growth as compared to the community. This information, provided for the period 1980-1999, is displayed below.

Housing Growth Summary - 1980-1999

Brentwood and Surrounding Communities

Units Added 1980-1990	1990 Stock	Average Annual Growth 1980-1990	Units Added 1990-1999	1999 Stock	Average Annual Growth 1990-1999
180	778	2.67%	254	1,032	3.19%
132	494	3.16%	138	632	2.78%
878	2,059	5.72%	336	2,395	1.69%
940	5,346	1.95%	543	5,889	1.08%
459	920	7.15%	342	1,262	3.57%
135	585	2.66%	112	697	1.97%
597	2,115	3.37%	193	2,308	0.98%
23	324	0.74%	200	524	5.49%
1073	1,917	8.55%	490	2,407	2.56%
4,417	14,538	3.65%	2,608	17,146	2.28%

Source: Housing stock data for 1980 and 1990 are from U.S. Census.
Housing stock data for 1999 is from NH Office of State Planning, 2001.

The chart above shows Brentwood ranked sixth in its regional community for housing growth in the period from 1980-1990. However, in the 1990's that rank went from sixth to third. Additionally, the chart illustrates that Brentwood is experiencing the allocation of a disproportionate amount of new building permits relative to its community or region. Brentwood's Average Annual Growth (AAG) for the 9-year study period is 3.19%. The 2.59% AAG experienced by the community as a whole is significantly lower. These new units result in higher populations, particularly school aged children, because the developments which have recently been constructed or are in the process of construction are geared toward families.

The table below shows the building permit history of Brentwood and the surrounding area. Brentwood has had significant growth for a community of its size.

Building Permit Comparison
Brentwood and Surrounding Towns

Community	1996	1997	1998	1999	2000	2001	1996-2001 Total
Brentwood	24	33	44	31	49 11 (MF)	66 4 (MF)	*247* *15 (MF)*
East Kingston	8	10	10	8	12	13	*61*
Exeter	33	45 1 (MF)	62	86	36 4 (MF)	28	*290* *5 (MF)*
Kensington	11	20	26 3 (MF)	16	12	22	*107* *3 (MF)*
Newfields	27	28	19	9	8	6	*97*
Stratham	38	35 6 (MF)	48 2 (MF)	67 3 (MF)	46 6 (MF)	32 2 (MF)	*266* *19 (MF)*
Epping	25	25 6 (MF)	46	62 10 (MF)	93 6 (MF)	16	*267* *22 (MF)*
Fremont	26 3 (MF)	22	47	65	49 2 (MF)	20	*229* *5 (MF)*
Kingston	19	15	12 2 (MF)	26	12	13	*97* *2 (MF)*

(MF) = Multi-family building permits issued.

Year	Lots Created by Subdivision
1990	12
1991	8
1992	17
1993	27
1994	4
1995	23
1996	41
1997	33
1998	44
1999	43 house lots 60 unit Condominium Development
2000	49
2001	40 house lots 12 commercial lots

As shown above , since 1996 the Town has seen a significant number of residential building lots created.

As shown below there is a rough correspondence between the building permits issued and the number of lots created. Although the relationship is not exact, the numbers bear a close relationship.

Year	Residential Building Permits Issued
1990	15

1991	9
1992	25
1993	32
1994	32
1995	17
1996	24
1997	33
Year	Residential Building Permits Issued
1998	44
1999	31
2000	49 11 Condominium units
2001	66 Single family units 4 Condominium units

By focusing on the community as a whole, a percentage for appropriate or "normal" growth can be determined. A 2.6 percent growth rate for new home building permits would be an appropriate goal for growth control, allowing additional development but at a slower more sustainable pace.

With the present pattern of building lot creation in mind, in order for the Town of Brentwood to accommodate reasonable growth the AAG rate should be at or near 2.6 percent. Other factors such as tax rate increase and school enrollments and enrollment projections and how these numbers compare to community and State numbers aid in this determination. Future analysis will always allow for modification of this figure.

RECOMMENDATION

It is therefore recommended that if permit limitations are adopted the number of permits issued allow for an Average Annual Change of 2.6 percent (including exempt, prior approved lots) for the first year. This rate reflects the normal expected and reasonable rate of growth for Brentwood.

Subsequent years must be determined as the information in this chapter is continuously updated. This update must occur yearly to insure that the actions of the Town comply with the directions of the New Hampshire Supreme Court.

If a permit limitation is not the course of action chosen by the town an alternative is a mandatory phasing requirement. This is a methodology used to lessen the impact of new developments upon municipal services. Under such a plan the Town requires larger subdivisions to phase their developments over a number of years. The agreement between the developer and the Town is established prior to planning board approval. The agreement establishes how many lots may be developed in any given year and also establishes which and to what degree attendant site improvements are made. In this way the town is able to spread the impacts of growth over a number of years and allow the community to better prepare and respond to the increased service levels necessitated by the development.

Alternatively, if the Town wishes to take a non-regulatory approach to growth management, the most direct route is a municipally supported program of land acquisition. If land is removed from the development arena entirely development can not occur. As discussed at the end of this chapter there is a wealth of documentation available to the community that shows that open space results in lower costs for municipal services than any other land use. (See open space section, page 29.)

GROWTH, TAXATION, AND TOWN SERVICES

The consequences of uncontrolled and disproportionate growth have a significant impact upon the residents of Brentwood. Comparing tax rates across communities is yet another measurement for growth trends. Intimately related to rapid growth is an increase in

demand for town services and facilities. The impact on services can be measured by increased calls upon police and fire services, as well as increased demand for school services. Though the impact on these services can be surreptitious and not readily noticeable, the impact on tax rates often provides an early warning sign that town utilities and services are being overburdened.

As the number of residents grows the services required to provide the quality of life that is a part of Brentwood's heritage also increases. This quality of life includes safety in the form of quick response by the fire and police officers, safe roads, and adequate recreational facilities, Town office facilities, library facilities, and school facilities. Since Brentwood has grown so rapidly in the last twenty years, the Town has not had an opportunity to reach an equilibrium that balances the services provided and the number of residents present or projected. The impact of growth on Town services is discussed below.

TABLE OF ASSESSED VALUATIONS AND PROPERTY TAXES

Year	Assessed Valuation for Local Tax Purposes	Total Equalized Valuation (TEV)	Statutory Limit for Bonded Debt (1.75 % of TEV Changed to 3.0 % in 1997)	Revenues raised by Property Taxes	% Change in Property tax Revenues From Previous Years
1993	$133,484,349	$119,887,199	$2,098,026	$2,989,408	n/a
1994	$133,559,677	$117,614,864	$2,085,260	$2,769,321	-7.36%
1995	$137,874,512	$130,226,924	$2,278,971	$2,896,916	4.61%
1996	$141,228,652	$152,569,628	$2,669,968	$3,290,175	13.58%
1997	$148,084,680	$153,626,479	$2,688,463	$3,363,289	2.22%
1998	$156,564,012	$167,279,389	$501,838	$3,830,953	13.90
1999	$162,476,605	$188,035,095	$3,290,614	$3,468,384	-9.46%
2000	$171,715,454	$231,508,074	$6,945,242	$4,320,917	24%
2001	$183,062,651	n/a	n/a	$5,064,721	17%

As the table above displays, the Town has had a fairly stable history relating to revenues raised by property taxes. There has been a steady increase over the years with some slight fluctuations. The table that follows is an historical review of the tax rate and assessment ratio for 1993 to 2000, and again with minor fluctuations the upward trend has been fairly constant. Again, there will be a significant impact to the tax rate due to the approval of the school expansion.

TAX RATES AND ASSESSMENT RATIO FOR TOWN OF BRENTWOOD

1993-2001

YEAR	TAX RATE	RATIO
1993	$21.85	not available
1994	$21.90	116%
1995	$21.88	116%
1996	$24.13	108%
1997	$23.63	94%
1998	$25.08	95%
1999	$24.80	87%
2000	$27.87	87%
2001	$30.64	74%

Town Services

The impacts of growth on a town can be seen very clearly by studying the changes that occur over time to the services offered by the community. In Brentwood, as is the case with any number of small rural communities in New Hampshire, municipally supplied services are fairly limited. These include for the most part schools, fire and police protection, highway maintenance, library facilities and some form of solid waste disposal. What follows below is a look at the services provided in Brentwood and how these have changed in the recent past.

Police Department

From a growth management perspective there are two facets of the police department to review with respect to growth in town. One is the activities of the department as reflected by the number of annual responses completed. The table below gives this information for the past several years.

Year	Number of Police Responses
1995	2845
1996	4360
1997	4063
1998	4373
1999	4016
2000	4763
2001	6544

As displayed the department has seen an increase in calls of nearly 200% in the last seven years. This may be the result of the hiring of full time police officers for the Town but it seems clear that once in place these officers have been immediately needed.

The second indicator of growth with respect to the police service is reflected in the change in the Department's annual operating budget. Below this information is provided.

Year	Annual Operating Budget

1995	$62,097
1996	$71,277
1997	$125,356
1998	$120,477
1999	$171,172
2000	$196,548
2001	$220,903

The town has seen an increase in the annual operating budget of the police department that exceeds even the increases found with response calls. Likewise this figure reflects a change in the nature of the department from part to full time.

Fire Department

The Brentwood Fire Department has been subject to the same degree of increasing service costs as the police department . Contributing to the increase in the budget is the fact the department has recently hired full time personnel. This was accomplished after recent concern regarding the lack of daytime coverage in the absence of a full time force. This shift toward a full time department is reflected in the operating budgets starting in 1999. The Fire Department now has two full time firefighters.

Year	Number of Fire and Ambulance Response Calls
1995	251
1996	282

1997	259
1998	255
1999	246
2000	331
2001	400

Year	Fire Department Annual Operating Budget
1995	$53,912
1996	$58,662
1997	$59,498
1998	$54,200
1999	$62,255
2000	$105,595
2001	$111,194

Highway Department

As shown below the highway department has experienced a 30% increase in its operating budget in the past seven years. This figure will undoubtedly increase as a result of the road construction being undertaken during the current residential building boom. Subdivisions approved since 1998 have resulted in 5.3 miles of new roadway that will become the responsibility of the Town to maintain and repair. (See table below)

Year	

	Highway Department Annual Operating Budget
1995	$132,212
1996	$167,585
1997	$149,506
1998	$170,290
1999	$171,842
2000	$163,677
2001	$173,426

Subdivision Name or Road Name	Road Length
Windy Brook (Sanderson Cluster Development)	3715 feet
Rowell Road Realty Trust Phase II	785 feet
Rowell Road Realty Trust Phase III	800 feet
Rowell Road Realty Trust Phase IV	2600 feet
Rowell Road Realty Trust Phase V	6454 feet
Amanda's Way	3100 feet
Deer Hill Trust Phase II	1900 feet
Deer Hill Trust Phase II	3200 feet
Hidden Brook	1633 feet
Dudley Brook	1409 feet
Mills Falls	5202 feet

Solid Waste

With the exception of 1999 the costs incurred by the Town for disposal of solid waste has shown the same upward trend experienced by other Town services. The anomaly experienced in 1999 was caused by two factors. For the first time the Town's waste hauler returned money at the end of the contract period and the Town changed its disposal policies by excluding commercial enterprises from the program. However, the former waste management agreement expired and the new agreement signed in 2000 represents a substantial increase in cost for this service.

Year	Solid Waste Annual Operating Budget
1995	$125,561
1996	$133,067
1997	$138,838
1998	$126,788
1999	$126,006
2000	$131,987
2001	$163,761

Motor Vehicle Registrations

Motor vehicle registrations serve as a good indicator of growth for two reasons. First they reflect the increase in population occurring in the Town , and second, they suggest the increase in traffic associated with growth. As detailed below the fees taken in for motor vehicle registrations have more than doubled in the past seven years. Although a portion of this increase is a reflection of increased service by the Town Clerk (she now has decals available that previously required a trip to the State Police facility in Epping), this service represents less than one percent of the annual fees raised.

Year	Motor Vehicle Registrations and Fees
1995	$214,988
1996	$251,329
1997	$280,637
Year	Motor Vehicle Registrations and Fees
1998	$349,834
1999	$391,894
2000	$441,248
2001	$514,087

Library

In the past seven years the library's operating budget has nearly tripled, reflecting a trend toward higher service levels and a shift toward full time staffing.

Year	Bartlett Library Annual Operating Budget
1995	$31,746
1996	$38,500
1997	$45,308
1998	$61,962
1999	$70,011

2000	$76,716
2001	$86,856

Schools

The schools servicing Brentwood have seen continuous growth throughout the 1990's. These include the Swasey Central School, providing education from kindergarten through fifth grade; The Exeter Region Cooperative Middle School, serving grades six, seven, and eight; and finally the Exeter Region Cooperative High School, providing services for students in grades nine through twelve.

As Table S-1 indicates there has been on average a four percent growth in students from Brentwood since 1990. This time frame has included the institution of a new kindergarten program as well as a region-wide reorganization that has seen the shifting
of grade levels whereby sixth grade was removed from the elementary school and placed at the middle school after the communities in the cooperative school district constructed a new middle school facility.

Even more startling are the figures for Brentwood revealed in Table S-1 below. This table presents enrollment projections for the Town prepared by the New England School Development Council (NESDEC). These projections indicate that the growth in student enrollments for the next 10 years will double. These projections are based upon a number of factors including conservative assumptions about the pace of residential growth in the communities.. Unfortunately for Brentwood, the conservative nature of these assumptions is being betrayed by the realities of the current development cycle.

TABLE S-1

BRENTWOOD SCHOOL ENROLLMENT TOTALS

Year	Grade								Total
	K	1	2	3	4	5	6	7	
1989-90	0	31	30	35	36	33	36	32	25	374
1990-91	0	30	32	29	38	36	32	36	36	383

1991-92	0	33	29	35	31	41	33	33	36	389
1992-93	0	27	34	27	32	30	41	32	34	374
1993-94	0	34	28	32	33	32	30	39	30	391
1994-95	0	26	33	33	35	36	31	37	39	409
1995-96	18	42	27	33	32	36	35	34	34	426
1996-97	27	34	36	32	35	37	37	37	30	436
1997-98	35	34	35	42	37	35	38	37	36	462
1998-99	35	51	38	34	43	42	36	43	42	493
1999-00	37	44	49	39	38	45	45	38	46	520
2000-01	35	44	45	52	38	41	47	44	43	551
2001-02	40	48	47	58	53	42	44	54	46	607

As revealed in the tables on pages GM-15 and GM-16, the final three years of the decade saw a dramatic jump in building activity. This is especially important in Brentwood because of the nature of the residential development occurring in Town. The building permit valuations (provided annually in the Town Reports) indicate that the trend is toward very large, multi-bedroom homes specifically geared to families with children.

TABLE S-2

BRENTWOOD SCHOOL ENROLLMENT PROJECTIONS

Year	Grade									Total
	K	1	2	3	4	5	6	7		
2002-03	53	68	65	55	51	59	48	45	54	679
2003-04	50	72	70	68	60	54	61	51	48	725
2004-05	51	68	74	74	74	64	56	65	55	774
2005-06	51	69	70	78	81	78	67	59	70	831
2006-07	51	69	71	74	85	86	81	71	63	879
2007-08	51	69	71	75	81	90	89	86	76	926
2008-09	51	69	71	75	82	86	94	94	92	980
2009-10	51	69	71	75	82	87	89	100	101	101	1027

Table S-2 details projected school enrollments. This projected enrollment is a very serious piece of the Town's growth puzzle because there is need for expansion at all of the school facilities currently in existence. The Swasey Central School is already exceeding capacity and has had to bring in one modular unit to house the current fifth grade. The Town has begun constructing a major expansion that will significantly increase classroom capacity. The Cooperative Middle School is in the best shape, in that the building was constructed just four years ago and is in very good condition. However, this facility is already feeling growing pains and according to SAU 16 administration figures the CMS has capacity for onlyan additional 150 students above present enrollments. Without regard to increasing enrollment from any of the other communities in the Exeter Region Cooperative School District, the Town of Brentwood can consume this excess capacity in the 2008-09 school year based upon present projections. The senior high school facility is in dire need of repair. The Cooperative School District is in the process of a major renovation/rebuilding plan that has been delayed by court action. This delay has resulted in an unanticipated increase in the cost of the project.

The residents of the Town must anticipate considerable tax increases to accommodate the current and projected growth at each education level. In order to address these growth pressures the Town should consider a number of actions geared toward curbing present growth rates and providing relief where possible from the present and future tax implications of growth. These recommended actions are outlined in the following section.

The Board of Selectmen for the Town and the Brentwood School Board have been in fairly continuous discussions over the past two years with respect to space needs at both the Town offices and the Swasey Central School. This level of communication has not always been the norm for the Town's two taxing entities, but is definitely worthy of commendation. This cooperative attitude should be harnessed by the Planning Board as it accomplishes its required annual updates to the Town's Capital Improvements Program (CIP). A committee should be established to oversee this annual update, and it is of paramount

importance that all three groups participate. It may be worthwhile to establish a semi-annual meeting schedule to facilitate this continued cooperation. In this way the CIP will remain a viable document as is necessary for any community growth management program.

Community Responses to Growth

Since the adoption of the growth management chapter of the master plan in 2001, the Town has undertaken a number of activities directed to the goal of addressing the rapid growth experienced in the recent past. These can be divided into two areas.

The first of these areas involves the heightened activity by residents interested in becoming more involved in their community. A group of citizens worked with representatives of UNH Cooperative Extension to hold a Community Profile session in Brentwood. This program brought together a large group of residents to discuss a number of issues of importance to Brentwood including community leadership, community services and facilities, recreational opportunities in town and growth and development concerns.

The participants of the Community Profile program channeled their energy into the formation of four Action Groups. These four areas are growth management (the highest rated priority of the Community Profile process), formulation of a community website, conservation of open space, and trail creation and protection. Each of these groups intend to offer ways for the community to respond pro-actively to the pressures of growth.

The second area in which growth has been addressed by residents is through regulatory change. The Town has adopted both an impact fee ordinance and a phasing of development ordinance to provide the Town with tools to offset the costs associated with rapid residential development In addition the Town will have the opportunity to adopt provisions for the construction of senior housing at March town Meeting 2002. The impetus behind this action is to provide flexibility in the Town's ordinances for a type of housing stock that typically generates less financial burden upon Town services than single family development.

From a slightly different perspective, the Town is beginning to formulate an action plan for the anticipated growth that is expected to result from the major regional retail and industrial facility approved by the Town of Epping at the intersection of NH Routes 125 and 101. The approval calls for approximately 400,000 square feet of new retail facilities (a likely Walmart Super Store) and 300,000 square feet of general office/light industrial space. It is very likely that this major center will bring significant interest to the NH Route 125 corridor both north and south of the site. With this in mind the Planning Board
has decided to prepare a study that will result in changes to the Town's zoning ordinance and site plan review regulations. These changes are necessary to prepare the Town for the probable arrival of national retailers that follow in the wake of newly established "big box" developments.

OPEN SPACE

Open space is both an objective of and an important tool for growth management. As indicated at the outset of this chapter, (p. GM 1), the protection of natural resources, which includes open space, is one of the primary elements of the rural character identified elsewhere in this Master Plan as important to the residents of Brentwood. The purpose is to preserve a sense of the town's heritage and to provide a livable community in the present. The preservation of open space was one of the most urgent needs identified by participants in the Community Profile held in October, 2001. Therefore, the Growth Management tools described in this chapter should whenever possible used in such a way as to preserve open space, and open space corridors for wildlife and for recreational use.

At the same time, the preservation of open space itself serves the purposes of growth management; if open space is preserved, other growth management tools such as impact fees, phasing, or the imposition of a temporary cap on building permits become less necessary. An economic study conducted in 1994 by UNH Cooperative Extension and the Rockingham County Conservation District in Deerfield, Stratham and Fremont (the latter two towns in Brentwood's community) shows that open space, even

open space under current use taxation, generates more in tax revenue than it costs in town services (Does Open Space Pay?, Philip A. Auger, Extension Educator, Forest Resources, UNH Cooperative Extension, 1996.) Open space makes no demand on schools, libraries, the highway department, waste disposal services. Further, as the study points out, if land is taken out of open space and converted to housing, it will often cost far more than is generated in taxes. Therefore, the positive revenue ratio of open space lands is complemented by the additional cost avoidance benefits."

Open Space for New Hampshire: A Toolbook of Techniques for the New Millenium (prepared by Dorothy Tripp Taylor for the New Hampshire Wildlife Trust, 2000) states: People in towns with more open space pay LOWER taxes than those in more developed communities. Open space costs towns less to provide serv ices for than it generates in tax income, while year-round residential properties cost towns MORE for services than they generate in income. Activities directly and indirectly dependent on open space provide 16% of all jobs in the state, account for 25% of the gross state product and provide 35% of total state and local tax revenues.

Among the techniques for the preservation of open space identified by Does Open Space Pay? are 1) conducting an inventory of open space; 2) initiating educational programs for landowners on current use taxation and conservation easements; 3) identifying landowners who need help in preserving and passing on their lands to their children; 4) establishing significant and consistent funding sources, such as devoting part or all of the Current Use penalty tax to this purpose. Some of these steps have already been taken or are being taken in Brentwood; the Community Profile has resulted in significant citizen involvement in establishing a trails network and in seeking voluntary conservation easements from landowners with land they would like to preserve as open space. These efforts should be encouraged and should continue to receive official support. The Conservation Commission in 2001 asked for and was voted the commitment of half of the Current Use penalty tax revenues each year. This percentage should be increased and the Town should endorse and begin funding of a program to purchase open space and/or easements on open space.

Recommended Actions in Response to Growth

1. The Town should consider enacting a timing of development ordinance that caps the number of building permits at a reasonable limit. The analysis above indicated that the appropriate number should be in the area of 2.5-3.0 percent annually. Such an action should be undertaken with the understanding that these permit limitation are temporary and should be removed when growth-related pressures can be shown to have lessened.

2. The Town should review the impact fee ordinance adopted by voters at the November 2001 Special Town Meeting and determine the efficacy of expanding the fee structure beyond schools to incorporate other community facilities.

3. The Town should develop the supporting methodology for the mandatory phasing requirements that the Voters of Town Meeting approved in 2001.

4. The Town should establish a Capital Improvements Program (CIP) committee to facilitate the annual update of this document. This action takes on additional importance if either of the previous recommendations are undertaken because the CIP is a statutory prerequisite to such actions. Every effort must be made to ensure that the boards of both the Swasey Central School and the Exeter Area Cooperative School District participate with the Planning Board and the Board of Selectmen in maintaining this document. A semi-annual meeting schedule may be one way of facilitating this activity.

5. The Town should endorse and begin an annual funding of a local program to purchase open space. It is in the Town's best interest both financially and from the perspective of natural resource preservation to establish an aggressive program for insuring that important natural areas not be subjected to continued development pressure.

6. The Planning Board should review its cluster ordinance to insure that it maintains its purpose of providing flexibility in the design of subdivision that results in the protection of open space.

7. The Planning Board should review the entire town regulatory framework with an eye toward balancing the needs of development with the needs of the community to preserve Brentwood's unique natural environment. This review needs also to insure that new development does not create a circumstance under which the town is unable to assume the costs associated with the provision of adequate municipal services.

8. The Town should embark upon a review of the existing Town Master Plan and should consider a process for accomplishing the preparation of one to three chapters each year.

general/towns/brentwood/mp/growth/growthmanage1-01

FUTURE LAND USE

1.0 INTRODUCTION

The intent of the Future Land Use chapter is to describe and establish a broad vision for the town's future land development. Its preparation requires a careful evaluation and synthesis of all other parts of the Master Plan. This evaluation must take into account many factors, including community goals, the ability of the land to support development, existing land use patterns and zoning, expectations of property owners and local land use laws and regulations.

This chapter is both general and specific. As a policy document, the Master Plan establishes general policies and goals with which to guide development of the built and natural environs of the town. As a Plan it goes further to specify the types of uses appropriate for various areas of town, as well as the specific measures that will help bring about desired future development. These measures may include changes in zoning and site development regulations, new initiatives in land protection or changes in town policy.

The future land use map found in this chapter is a representation of the desired direction of future development in town. While it is a useful tool for visualizing the recommended development pattern, the map is not intended to be a formal zoning map. The boundaries are general guidelines that will be revised as zoning amendments are refined by the Planning Board and adopted by the townspeople.

The Future Land Use chapter provides guidance to private and public entities in their land use decisions. Both town government and private developers should reflect upon the needs, values and goals outlined in this chapter in making their land use decisions.

2.0 EXISTING NATURAL CONDITIONS

Development Constraints

Land not suited for development includes wetlands, buffer areas around wetlands and shoreland buffer areas. The significance of these areas and the town's zoning requirements are described below:

- Wetlands. The importance of preserving and protecting wetlands is well established in other sections of this plan. They perform vital ecological functions, as well as their value for open space, wildlife and passive recreation all of which contribute to the town's rural character. Future development should be directed away from wetland areas to the greatest extent possible. It is equally important to prevent building

in such areas because of the potential negative impact on water quality, public health. In addition, building too closely to wetlands can detract from their natural ability to assist in handling excess water during flood events. The town's existing Wetlands Ordinance will continue to regulate future development with regard to wetlands.

- Buffer areas around wetlands. A wetlands ordinance that prohibits development in wetlands does not necessarily protect wetlands from harmful uses occurring immediately adjacent to them. For those uses permitted within close proximity to wetlands, adequate buffers are necessary in order to insure the protection of the wetland. The town's Zoning Ordinance establishes a 100' or 50' buffer around wetlands (dependent upon the classification of wetland); prohibited uses include structures and associated construction activity. A Conditional Use Permit process exists to allow, in appropriate circumstances, the construction of access ways through wetlands in order to allow upland development. Natural vegetation should be protected or restored in this area as much as possible to control erosion and sediment from contaminating wetlands, and to provide cover for wildlife.
- Buffers along river corridors. Protecting river shorelines helps preserve wetlands, reduces flooding damage, serves to maintain important wildlife travel corridors and preserves the scenic beauty and recreation value of the river. The town has a local shoreland protection district that regulates building activities within a 300 foot buffer of its five rivers and streams.

Land with limited suitability for development includes 100-year flood hazard zones and aquifer recharge zones,. The town currently regulates development within both areas. There are currently no public water supply sources in Brentwood.

- 100-Year Flood Hazard Zones. Floodplains are undesirable locations for development because of the associated risks to life and property. In addition, construction in the floodplains worsens flood hazards downstream and the inundation of subsurface sewage disposal systems can cause water pollution and a public health hazard. As part of its Zoning Ordinance, the town of Brentwood has adopted specific regulations for development in special flood hazard areas as prescribed by the Federal Emergency Management Agency (FEMA). Development within these flood hazard areas should continue to be limited to those land uses compatible with areas prone to flooding and should be in conformity to FEMA regulations.
- Aquifer recharge zones. Maps prepared by the US Geological Survey (1991) identify the stratified drift aquifers in Brentwood. These aquifers are recharged from precipitation and run-off that infiltrates from land directly above the aquifer. As such, aquifer recharge zones are not suited for any type of development that caries a high risk of contamination. Once contaminants leak into the ground, they can spread rapidly through an aquifer and destroy it as a water supply. While there are currently no public water supplies within Brentwood' aquifer recharge zones, thousands of private wells in town depend on these aquifers. The land over Brentwood's aquifer recharge zones is currently zoned variously for commercial/industrial and residential development; the Zoning Ordinance includes a chapter with specific guidelines for developing above these delineated areas.

3.0 EXISTING LAND USE -

In this section, existing conditions and findings are presented for major categories of land uses found in Brentwood. These include: Residential/Agricultural; Commercial /Industrial; Multi-Family/Professional Office; Town Center District 1. There is also a description of efforts to retain open space town-wide.

3.1 Residential Agricultural District

3.1.1 Findings

The majority of Brentwood is zoned for residential/agricultural uses. This district requires a minimum lot size of two acres. As listed in the Zoning Ordinance, permitted uses in this district include:

- Single-family homes
- Manufactured housing, mobile homes and trailers
- Accessory housing units by special exception
- Home occupations of persons residing in buildings in which offices are located
- Public buildings, schools, parks and recreation areas
- Family day care
- Churches and other places of worship by special exception granted by the Zoning Board of Adjustment
- Agricultural operations
- The boarding of horses

Home occupations are allowed in the agricultural/residential district, provided they meet the standards outlined in the Zoning Ordinance. While the Planning Board does not currently regulate the approval/permitting of this activity, it is likely that the number of home occupations in Town is increasing, due in part to technological advances in computers, the internet and telecommunications that make working at home more and more feasible and commonplace.

The residential/agricultural district constitutes roughly 80% of the land area in town. Brentwood has experienced significant residential growth in the last ten years making it one of the fastest growing communities on the seacoast. Although the overwhelming majority of this growth has been in the form of single family detached structures on two acre lots, the town has a history of trying innovative measures for the provision of housing. The town zoning ordinance allows multi family residential housing, cluster residential development of both single family and multi family units. In 2003 the town passed an elderly housing ordinance aimed at giving senior citizens expanded opportunity to remain within the community when their lifestyle no longer requires a large single-family detached unit. One of the town's responses to the high level of residential growth experienced in the last half decade was to return to a two acre minimum lot size requirement in order to retain open space, especially in conjunction with cluster housing.

The boundaries of the residential zone are expected to remain fairly unchanged. Low density (two acre lot size) single-family development is expected to continue to develop throughout the residential–agricultural district. Home occupations are expected to continue to exist. The Planning Board has had requests to review the elderly housing ordinance because attempts to utilize the present ordinance have failed to result in successful projects. If no density bonus is offered within the context of the elderly housing framework the private sector seems most satisfied with focusing upon construction of single family residences. The Planning Board has been very enthusiastic about the senior housing concept and should evaluate the different avenues that could make the concept more acceptable to the private development sector. These options include increasing the density allowed by either reintroducing soil type lot sizing or establishing a fixed unit density allowed only in senior housing developments.

Historically the residential –agricultural district has been a mix of these two uses. Agricultural endeavors such as farming and the raising of horses and other livestock have occurred throughout the town. In a study prepared by Complex Systems at the University of New Hampshire, review of aerial photographs of the town in the years 1962, 1974 and 1998 reveals a continuous decline in agricultural enterprises over the last thirty-six years. As one might expect, this decline in agricultural activity has been accompanied by a significant increase in the residential category over the same time frame.

Town of Brentwood	**1962**		**1974**		**1998**	
Land Use Category	Acres	% of Town	Acres	% of Town	Acres	% of Town
Residential	322.2	3.0	585.0	5.4	1,303.6	12.0
Industrial/Commercial	12.8	0.1	57.2	0.5	254.5	2.3
Mixed Urban	60.6	0.6	46.3	0.4	72.9	0.7
Transportation/Roads	90.4	0.8	104.1	1.0	133.4	1.2
Railroads	0.0	0.0	0.0	0.0	0.0	0.0
Auxilliary Transportation	0.0	0.0	0.5	0.0	40.7	0.4
Playing Fields/Recreation	0.0	0.0	1.2	0.0	7.1	0.1
Active Agriculture	1,793.5	16.5	1,375.9	12.7	1,019.5	9.4
Farmsteads	50.7	0.5	41.5	0.4	15.8	0.1
Forested	7,962.5	73.3	7,893.7	72.7	7,142.7	65.8
Water	34.2	0.3	54.9	0.5	128.9	1.2
Open Wetlands	201.3	1.9	183.4	1.7	206.1	1.9
Idle/Other Open	334.9	3.1	519.3	4.8	537.7	4.9
Total Acreage	10,863.0					

It seems clear that as a district the residential land use is far outpacing agricultural activities in Town. The Town should consider taking steps to encourage agricultural uses as an important way to preserve Bentwood's rural character.

3. 2 Business

3.2.A – Commercial Industrial Zone

The town has three business Districts. The largest of these districts is the Commercial /Industrial Zone. This zone is located along the corridors of New Hampshire Routes 125 and 27 as well as along the northern three quarters of Pine Road and part of Crawley falls Road. As listed in the Zoning Ordinance the following uses are permitted in the Commercial/Industrial Zone:

- Shops restaurants and other retail businesses
- Medical and other professional offices
- Garages and filling stations
- Places of worship
- Public educational use
- Hospitals and nursing homes
- Manufacturing and warehousing
- Food service industry

This zone has been an active area for a multitude of commercial and industrial uses over the years. The area along Pine Road has developed into a concentrated heavy industry location. Although its location along the western edge of town has minimized most negative impacts to townspeople that can arise from this type of use, the single greatest concern in the area is water quality. The town's most significant groundwater resources are located beneath these industrial uses so care must continue to be taken in the siting and expansion of activity in this area to prevent groundwater contamination.

Perhaps the most pressing issue before the Town with respect to economic development is the impact likely to occur from the large-scale retail development recently established in Epping. A new 200,000 square feet Walmart Superstore opened in 2004 just north of the Brentwood town line on NH Route 125. Historically, these retail facilities spur additional franchise retail establishments that thrive on the increased traffic. It is reasonable to anticipate that the NH Route 125 corridor in the northern half of town will experience increased retail activity as Walmart solidifies its position in the region.

Although the town has not seriously planned to install a municipal sewer system or a wastewater treatment facility within the planning horizon of this Master Plan, Brentwood has had very preliminary advances from the town of Epping with regard to the possibility of expanding Epping's water service southward along the NH Route 125 corridor. To do so would require a great deal of forethought by the town. Such an endeavor could allow increased development density within the commercial zone, which could prove beneficial economically. However, before such density could occur the town would need to evaluate its current development regulations. The town is rightfully concerned about the type of development that occurs within its boundaries and time should be spent working toward attracting the highest quality development possible – development with the greatest tax contribution and the least impact on the rural character of the town.

3.2.B Town Center District 1

As discussed above, the Commercial / Industrial Zone has served as the only business district in Brentwood for many years. As in many New Hampshire communities, development patterns in Brentwood segregate residential, commercial and industrial uses. This is different from the historical development pattern of New Hampshire communities, which were typically developed with a more dense, mixed-use town center surrounded by increasingly less dense residential development and large tracts of agricultural lands and open space. In 2002 a group of citizens and town officials worked together to create a new business area in the center of town. This district, the Town Center District 1 was created to allow an area of mixed commercial and residential use. This district placed near the major town services (municipal offices, fire station, school, and library) was intended to create a centralized location of service businesses for the local population that more closely mirrored traditional New England development patterns. This zone was envisioned in the 1988 Community Master Plan as a neighborhood commercial area that could possibly establish a viable town center for Brentwood.

The uses allowed within this district are permitted either by right or by special exception. These are separated below by paragraph

Those uses allowed by right in the zone are as follows:

- Residential use whether single-family, two-family dwelling, or manufactured housing; bed and breakfast inns; cluster residential development
- Outdoor recreational uses including forestry, public parks and historic areas open to the public;
- Agricultural uses such as tree farming, commercial timbering and non commercial harvesting of forest products;
- Institutional uses such as day care facilities, senior citizen centers, funeral homes and governmental buildings;
- Commercial uses such as retail/service operations, business or professional offices, banks and restaurants.
- Residential accessory apartments;

Those uses allowed by special exception are as follows:

- Agricultural and forestry uses such as landscaping operations;
- Institutional uses such as private schools, non-profit lodges; hospitals and clinics; places of worship, cemeteries and public utility facilities.

The Town Center District 1 is the newest district in the town and the least evolved. Over the next several years the town will need to closely monitor the ability of the district to achieve its development goals. Because it is a centrally located mixed use zone the Planning Board will need to be vigilant in making sure the uses allowed are well integrated into the predominantly residential existing land uses. The Planning Board is contemplating expanding this district so that it encompasses the southern stretch of Crawley Falls Road in the future. This expansion may rely on the success of showing that mixed-use development can take place without creating undue land use conflicts between property owners.

3.2.C Professional Office Multi-Family District

This district, located between North Road and NH Route 27 was established in the late 1980's as a Planning Board response to two separate manifestations of land use needs. On the one hand the New Hampshire State legislature passed a law (RSA 672:1,III-d) that required town's to provide "a balanced supply of housing which is affordable to persons and families of low and moderate income". At the same time, the town was aware that the county was studying the feasibility of relocating the County Courthouse from Exeter to the complex of land in north Brentwood. It seemed that if the new courthouse were to be located in this part of town professionals such as lawyers, surveyors, title researchers and others with close ties to such a facility should be able to locate offices in this area. The Planning Board also felt that many of the residential structures in this area would lend themselves nicely to professional office redevelopment. As a result of these two occurrences, the multi-family / professional office district was developed. The uses in this zone are as follows:

- Multi-family dwellings, including condominiums;
- Professional office facilities developed in a manner consistent with existing residential and agricultural uses.

The district has had both success and failure during its existence. The town's first multi family development has been constructed the district. A development of sixty, six-unit town houses is nearing completion and has succeeded in diversifying the town's housing stock. The quickness with which the units have sold in this development is an indication that such housing types are in demand in Rockingham County.

From the professional office development side of the equation there has been less success. Shortly after the town adopted the new district in 1991, the County Commissioners decided to purchase additional land on NH Route 125 in South Brentwood for the new courthouse facility instead of siting the structure on their land on North Road. This decision effectively negated the primary reason professional office development was earmarked for this area of town. Consequently there has been no movement by the private development sector to locate such facilities to this area of town in the last decade.

4. Non- Zoning Related Actions Regarding Existing Land Use

The town of Brentwood has taken aggressive steps to preserve the rural character of the town in light of the remarkably sustained growth in residential development experienced since the mid-1990's. As discussed in detail in the master plan growth management chapter the town of Brentwood has experienced some of the most sustained residential expansion in the region and the state in the past eight to ten years. As a result, a grass roots effort to protect the un-built environment of the town has resulted in a number of actions aimed at slowing the rate of conversion of undeveloped open areas to residential use.

4.1 The Brentwood Open Space Committee

The town has taken a systematic approach to protection of open space. In the 1990's the Conservation Commission along with regional partners like the Rockingham Land Trust and the Rockingham County Conservation District, began concerted efforts to protect land along the Exeter River as well as other areas in town. Through their diligent efforts approximately 2,876 acres were protected through conservation easements along the river and throughout town. In 2003 the town authorized an open space bond measure at Town Meeting that appropriated two million dollars to be used to purchase land or the development rights of land to prevent these properties from being converted to residential developments in the future. A committee was established to develop a process of ranking parcels for protection and prioritizing these parcels according to site specific criteria. Countless hours have been invested by volunteers in contacting property owners, holding site walks, coordinating the involvement of land development specialists, all in an effort to utilize these public monies to their greatest potential**.**

Provided below is the Open Space Committee's evaluative system that enables members to assess point values to specific criteria when evaluating land for purchase or other suitable protection. In addition to these criteria, the Open Space Committee has also created a set of guidelines (to follow) that establish when a parcel is not suitable for protection using public funds. In this way the community is reducing the cost to it of future residential development while at the same time protecting the natural environment of the town.

LAND PARCEL ASSESSMENT AGAINST FUNDING CRITERIA (Revised 5/26/04)

Criterion	Parcel Attrib.	Points
1. Development Potential (up to 36+ points):		
a. Size of parcel & developable portion: i. 5-10 acres of developable upland (8 points) ii. 10-25 acres of developable upland (16 points) iii. 25-50 acres of developable upland (24 points) iv. 50+ acres of developable upland (24 points) v. Plus 3 points for each 200 ft of developable frontage on a Class V or higher road, beyond the base lot frontage (open ended)		
b. Parcel is likely to change ownership within five or at most ten years (6 points)		
c. Imminent threat of development: active negotiation to sell for development, with documentation (name of potential buyers, copy to offer, or equivalent) (6 points)		
2. Water Resources Protection (up to 15 points):		
a. Aquifer & well protection – property contains aquifer or wellhead recharge area: i. <500 ft.^{2} aquifer present and/or wellhead protection area (2 points) ii. 500-1,000 ft.^{2} aquifer present (3 points) iii. 1,000-2,000 ft.^{2} aquifer present (4 points) or iv. 2,000+ ft.^{2} aquifer present (5 points)		
b. Watershed protection – property protects significant undeveloped wetlands or shoreline of a water body:		

i. Wetlands present (1 point) ii. Vernal pond(s) or seasonal stream (1 point) iii. Perennial stream(s) or ponds (up to 3 points) iv. River(s) (up to 5 points)		
3. Agricultural Potential (up to 12 points):		
a. 10 acres or more of productive agricultural soils (Soil Productivity Index >60) (6 points)		
b. Presence of active agricultural use (pasture/animal husbandry, orchard, tree farm, crops) (6 points)		
4. Scenic, Historic or Archaeological Value (up to 10 points):		
a. Property contains a scenic view cherished by the public, as viewed from a public road, access point, trail, or waterbody; or protects a cherished view (5 points)		
b. Property contains unique cultural or historical buildings or historical/archaeological artifacts: i. Inhabited farmhouse and/or barn built prior to 1880 contained in parcel or adjacent house lot with same owner as parcel (4 points) ii. Other artifact or structure with recognized historical or archaeological significance (1 point)		
5. Wildlife Protection & Natural Condition of Land (up to 12 points):		
a. Landcover is predominantly natural landcover, such as forest, orchards, natural barren areas, grasslands, crops or wetlands (4 points)		
b. Property supports specialized habitats for wildlife populations that are valued but not rare, such as deer yard, waterfowl wintering or breeding areas, riparian habitats, or wildlife corridors (4 points)		

Criterion	**Parcel Attrib.**	**Points**
c. Property supports specialized habitat for rare, threatened or endangered species and/or rare natural communities as determined by the NH Natural Heritage Inventory or other State program (4 points)		
6. Greenway Linkages & Recreational Value (up to 20 points):		
a. Property connects other protected lands: i. Abuts one other protect parcel (3 points) ii. Links two or more unconnected, protected parcels (6 points) iii. High potential of preventing development on valued adjacent and unprotected parcels (6 points)		
b. Property has recreational value: i. Will be subject to revocable trail easement, but not deed access (2 points) ii. Will be subject to deeded public access via trails (5 points) iii. Will provide interconnection with abutting public trail system, in addition to deeded public access (4 points) iv. Will provide deeded public access to a recreational waterbody (2 points)		
7. Availability of Funding Leverage from Landowners or Third Parties (up to 46 points)		
a. The percentage ratio of the Town's cost to protect the parcel relative to the market value of the parcel or easement*: i. 1-15% (21 points) ii. 16-30% (18 points) iii. 31-50% (14 points) iv. 51-70% (10 points)		

v. 71-90% (5 points)		
b. The Town's cost to protect the parcel relative to the number of potential houselots if the parcel were instead developed (cost per houselot avoided)^: i. $0-$7,000 net Town cost per houselot avoided (25 points) ii. $7,001-$14,000 net Town cost per houselot avoided (20 points) iii. $14,001-$21,000 net Town cost per houselot avoided (15 points) iv. $21,001-$28,000 net Town cost per houselot avoided (10 points) v. $28,001-$35,000 net Town cost per houselot avoided (5 points)		
TOTAL POINTS		

A property may meet the selection criteria favoring a land preservation proposal and still may not be accepted based on other considerations (see attached list).

* For an easement, this percentage ratio would equal [net purchase price to town for the easement (after landowner donations and third party funding) + any town funded expenses to set up the easement] divided by [appraised fair market value of the easement]. For land donation/acquisition, this ratio would equal [net purchase price to town for the parcel (after landowner donations and third part funding) + any town funded expenses to evaluate and close the purchase] divided by [appraised fair market value of the property without conservation restrictions].

^ The town's net dollar outlay after all landowner donations and third party funding, divided by the number of estimated potential houselots as shown in property appraisal or other acceptable analysis of development potential.

Some additional considerations which may result in a land protection proposal being declined by the Town:

1. The property is found to be irreparably contaminated or the cost of cleanup is too high.
2. The property is deemed not large enough to be significant for the conservation purpose of the proposed project.
3. Considering the limitations of available funds, other land protection proposals are deemed to have higher merit.
4. There is reason to believe that the land/easement would be unusually difficult to manage or enforce.
5. The Town, in certain situations, may need a degree or type of public access that is unacceptable to the landowner.
6. Adjacent properties are being, or are likely to be, developed in a manner that would significantly diminish the conservation or public values of the property in question.
7. The landowner insists on provisions that the Open Space Committee believes would seriously diminish the property's primary conservation or public values or the town's ability to enforce an easement and/or manage the land.
8. Ethical or image problems exist in association with the acceptance of the project.
9. The proposed open space or public value is part of a development proposal that, overall, is likely to have significant adverse impact on conservation resources.

4.2 Class VI Roads and Municipal Trails

Subdivision Regulations in Brentwood do not allow subdivision of property on Class VI roads, although a single building permit is allowed under certain conditions. By Town Meeting vote in 2001, portions of several Class VI roads (Ole Gordon Road, Rowell Road and Haigh Road) were re-designated as municipal trails. At the same time several roads in town were declared Scenic Roads, and a Trails Committee began to develop a network of voluntary trails on private and public land. The re-designation at Town Meeting of a Class VI road to a Municipal Trail is irreversible except by Town vote. All these actions were designed to recognize the value of open space and to preserve the scenic beauty, wildlife habitat and rural character of the town.

5.0 Future Land Use

As detailed in the discussion above, the town of Brentwood has developed a number of strategies to guide the pattern of development. Zoning has been used historically to establish major areas for commercial and residential development. In the past these uses have for the most part been segregated. New residential uses have been primarily developed in the interior areas of town. Industrial and commercial development has been with few exceptions directed to the outer edges of the community using NH State Routes 125 and 27 as well as Pine Road for these activities. Important in the context of each of these kinds of development is an understanding that the town has always put a high priority on protecting natural resources. The town's wetlands, shorelands, floodplain and aquifer protection ordinances in combination influence nearly every development proposal that is reviewed by the Planning Board. This full complement of resource protections is mirrored in only a few of the communities in the County.

In the recent past the town has expressed a desire to become more sophisticated in its zoning approach. Actions such as the establishment of senior housing, and the Town Center District 1 have indicated a move towards less structured separation of land uses and the potential for the return to a more traditional New England development pattern. In addition the town recently adopted an impact fee ordinance that assists the town in the process of providing capital improvements by assessing fees for specific services to new development.

5.1 Commercial Uses

As detailed on the Future Land Use Map, the town should continue its efforts to expand and upgrade economic development in the commercially zoned areas. Special attention should be given to studying potential growth along the NH Route 125 corridor. In light of increased development activity in the abutting regions of Epping, the town should rationally investigate the pro and cons of any offer by the town of Epping to extend sewer and water into Brentwood. This kind of infrastructure expansion would result in development densities heretofore not experienced by Brentwood and such a course of action requires extensive consideration by the Planning Board and other town officials. The intensity of development that could arise from such an endeavor has already spurred the Planning Board into revising their signage, landscaping and lighting requirements. As Epping moves toward retail build-out in their south-eastern quadrant, the town of Brentwood should consider looking at a wide range of land use controls, such as zoning for nodal development, access management and architectural review, to deter the "franchising" of NH Route 125 in a way similar to NH Route 1 in Seabrook

and NH Route 125 in Plaistow. These are just a few of the ways in which Brentwood could continue to grow but in a manner appropriate to a small rural community.

5.2 Residential Uses

The town has evolved a great deal with respect to residential land use in the past fifteen years. There have been zoning standards developed to encourage "clustered" or open-space residential developments that have resulted in no fewer than four such developments town-wide. In addition, the town has adopted standards to allow the creation of multi-family housing as well as housing for seniors. There are also standards for the conversion of single family structures into two family structures. All of these actions have placed the Town in the position of offering more residential diversity than any other town of similar size in the region. The town should consider adopting inclusionary requirements for affordable housing that could tie the creation of affordable units to each subdivision that is proposed. The State of New Hampshire has been seriously considering this method for providing affordable housing in previous sessions of the General Court. Brentwood would be well prepared to deal with a possible state imposed mandate by taking aggressive steps now to deal with this region-wide issue.

In addition the Town should take steps to promote agricultural activities in the residential-agricultural zoning district. Historically this has been a mixed district and remains so but recent trends show a reduction in agriculture and an increase in residences. The Town should investigate ways to encourage agriculture in order to promote rural character and continue the long established agricultural tradition of the town. These steps can include reviewing local regulations to determine how farm-friendly they are; minimizing site planning requirements for agricultural enterprises; providing adequate buffers between agricultural land uses and other activities; and incorporating agricultural activities as allowed uses in the open space elements of cluster subdivisions.

5.3 Retention of Open Space

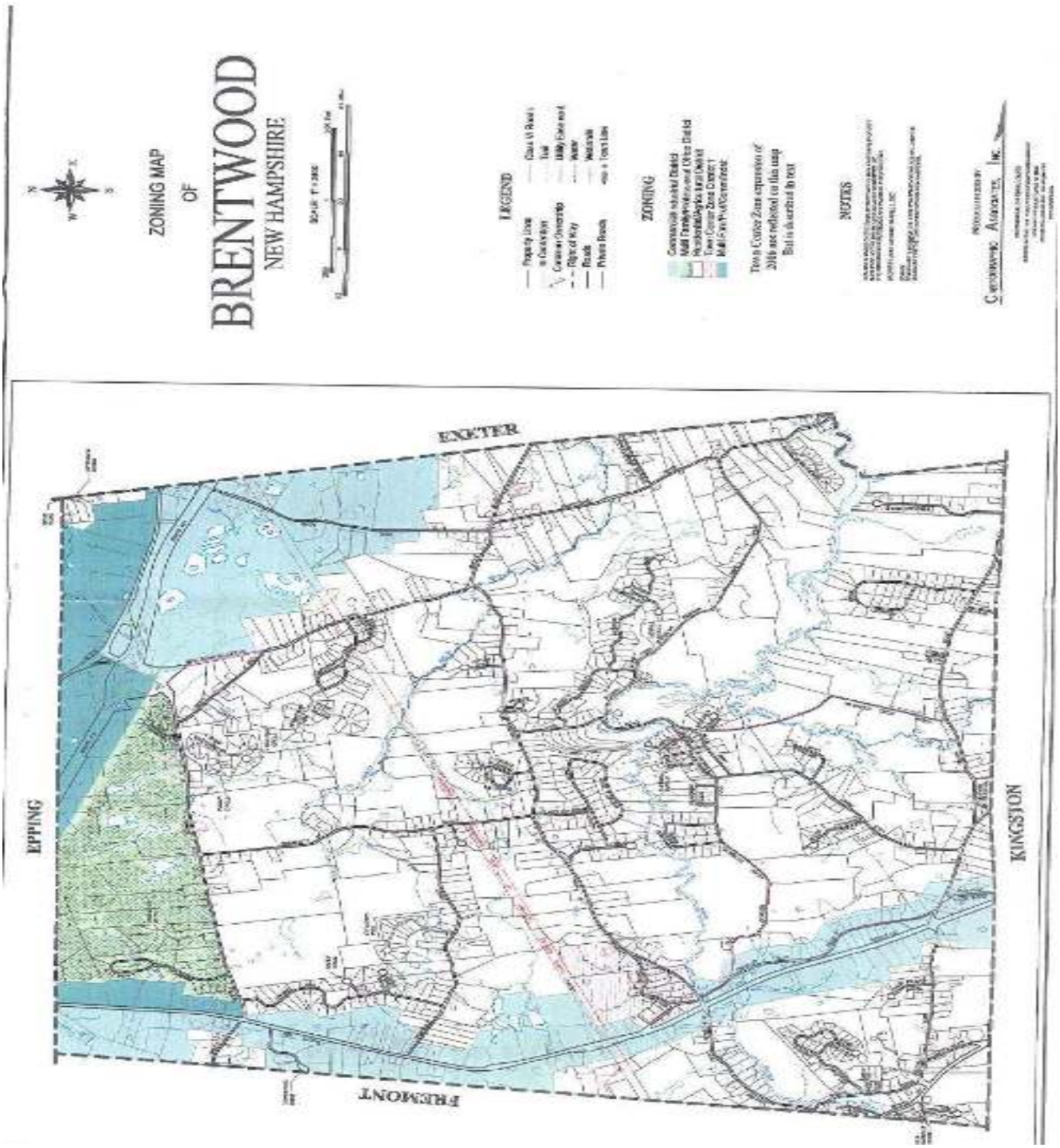
The town should continue to aggressively acquire easements and property in order to protect open space. The Exeter River, Little River and Dudley Brook should continue to be a focus of land conservation efforts. The town should strive to protect remaining agricultural activities whenever the opportunity arises and in instances where the agricultural use may be abandoned, efforts should continue to preserve these lands with the goal of potential future agricultural use. Finally, conservation efforts should also place a priority on expanding existing protected areas when the opportunity to do so arises, and on sound management of all protected areas for desirable wildlife habitat.

Future Land Use Recommendations

1. The town should monitor the success of the Town Center District 1 with an eye to expanding this type of mixed use zoning to other areas in the community.
2. Local concerns about the potential impact from business growth include increased traffic and congestion, aesthetics and the risk of undermining the Town's quality of life. To address some of these concerns, the

town should continue to carefully review site plan applications with regard to visual and traffic impacts, architectural standards, landscaping and signage.

3. The town should continually monitor its land use controls to insure that they are accomplishing their stated objectives. Of particular note as an example, the Town should work cooperatively with development professionals to enhance the senior housing ordinance. The present ordinance has resulted in no developments and the Town should determine the cause for this and respond accordingly.
4. The town may wish to re-evaluate the logic behind the professional office zone since the courthouse failed to locate in this section of town. Perhaps there is a more reasonable use of the land located in this district.
5. The Town should investigate the appropriateness of pursuing inclusionary requirements in all subdivision in order to expand the town's stock of affordable housing.
6. The town should continue its open space preservation efforts.
7. Although the town does not plan to install a municipal sewer system or a wastewater treatment facility within the planning horizon of this Master Plan, the Town might wish to explore the possibility of extending water and sewer service from Epping southward on NH Route 125.
8. The town should investigate ways to preserve agricultural activities throughout Brentwood and should establish a Town Agricultural Commission to represent the farming community, to encourage agricultural enterprises and to work for the preservation of farmland.


ZONING MAP
OF
BRENTWOOD
NEW HAMPSHIRE
LEGEND
ZONING
NOTES
EXETER
EPPING
KINGSTON
FREMONT

Community Vision Statements

This chapter offers three sets of guidelines for the future of Brentwood. The first set is derived from the Town's involvement in a community profile exercise overseen by UNH Cooperative Extension Service. The second set of guidelines are the Smart Growth principles developed by the New Hampshire Office of Energy and Planning, and the final set of guidelines were developed by the New Hampshire Association of Regional Planning Commissions. Each of these instruments provides direction for the Town in meeting the future needs of its residents.

The Town of Brentwood participated in a visioning process developed by the University of New Hampshire called, "Community Profiles", in the fall of 2001. This program asks residents to come together for one weekend and discuss the strengths and weaknesses of their community and establish a framework for addressing community-wide issues in a constructive way. One of the benefits of this program is that the assembled group develops a set of priority projects and attendant actions necessary to accomplish the priority project. In several instances these priority projects provide invaluable direction to the community master planning process.

In this section the vision of the Community Profiles participants are reviewed. In addition, the priority projects determined by the Community Profile are discussed with respect to their relevance to the community master planning process. The following list is taken directly from the Community Profiles Report and details the response by participants when asked "***What do we want Brentwood to be like in the Future***?" No attempt has been made to edit these responses so some may directly conflict with one another.

- Retention of rural feeling
- More town center with sidewalks
- More affordability for older people to live in retirement
- Safe places to walk
- Planned attractive commercial development
- Children's playground
- Civic involvement
- Protection of river system for wildlife and water quality
- Scheduled low cost environmental friendly transportation
- Teaching nature preserve or working farm
- Planned growth
- Preservation of open land and public access to woods, water and fields
- Aesthetically pleasing
- Public neighborhood gathering spots
- Preservation of historic houses in town
- Bank and post office
- Beautification of commercial establishments
- Community website
- Low, stable taxes
- Restoration of stone walls
- Control of heavy truck traffic on roads
- Beautiful public library and grade school
- Large auditoriums for town meetings
- Continuation of citizen volunteer government
- More incentives for people to hold onto land
- Large blocks of open space owned by town or whoever
- As much like it is now as possible
- Increased forms of communication
- Large blocks of privately owned land with conservation easements
- Donation of 60-80 acres for disabled people
- Planned community shelter in case of disaster (civil defense)
- More bike trails
- Social activities for teenagers
- Social activities for college students
- Much like it was
- Community trail system
- Food cooperative
- More diversity

- Bigger civil defense

The following comments are the result of Community Profile participants being asked to detail their ideas for the future of Brentwood. These ideas have been group into 5 topic areas simply to facilitate their inclusion in the master plan.

Future Land Use Visions

- More realistic evaluation of impact of growth
- Use documents we have for future planning (i.e. impact studies)
- Update Master Plan and enforce it
- Being committed to the cost of enforcing our town regulations and Master Plan
- Look for ways to attract businesses that will make a positive contribution to our town and provide ways to connect as well (restaurants, etc.).
- Maintaining and upholding Master Plan as it relates to growth management.
- Town center—co-located services
- Development compatible with town rural character/historical architecture
- Don't want to look like Route 1 or Plaistow
- Tasteful residential development
- Co-develop with the town of Epping
- Infrastructure development for support services—banks, Post Office, restaurants/food.
- Develop more structured zoning based on usage compatible with rural character/historical architecture.
- Tax benefits to keep land open
- Incentive to landowners to maintain property/land open and not developed
- Town needs a heads-up on future property sales so able to preempt purchase
- Brentwood could benefit from controlled business growth
- Vision statement for the future
- Put process in place to deal with unexpected events
- Need to put in place "controls" for undesirable business activities i.e. adult bookstore
- Need to be proactive not just reactive
- Top 10 list of most important community issues/goals in line with vision statement
- No additional rentals, young/single family housing, elderly housing, etc. to maintain low taxes
- No easy way to communicate with residents about town events, meetings, etc.
- Give teeth to Zoning Board to control/manage growth
- Keep taxes down

Future Community Facilities Vision

- Welcome packet for newcomers (including town organizations and groups with contact names)
- Town website with links and/or email contacts for all town groups
- Town telephone book
- Newcomer night
- Town cable channel
- Collaboration between town groups, committees, departments
- Annual meeting of all town committees and groups to discuss annual plans and schedules
- Ability to email town hall
- Online town chats/suggestion box
- Periodic town profiles (every 5 years?)

•Need to connect with new residents.
•Expand scope of BRC to include cultural activities for teens and adults.
•Need Community Health Center offering full range of health and social programs.
•Need a means to encourage civic involvement like an open house.
•After-school (educational) programs provided through the school
•Expand library as valuable resource
Preservation/expansion of town center to foster sense of community
Leasing town property for phone towers for revenue conservation
• Library needs to keep pace with growth
• More activities for youth i.e. community center
• Town website for info on various community activities
• Local cable TV community access for Selectmen meetings, Planning Board
• Study on police needs

Housing Visions
•Need affordable housing for Seniors.

Natural and Water Resources Protection Visions
•Outreach to landowners concerning conservation and trusts
•Town should purchase/gain easements to attain more permanent open space (open space less expensive for town to own vs. development)
• Town should grant increased financial assistance to promote open space
•Protection standards for water protection for future
Guidelines to promote wildlife corridors/trails system
• Wildlife preserves
• Perfect Master Plan
• Town center
• Reduced speed limits
• Walking paths along roads
• Preserved open spaces
• Preservation of habitat (uplands and wetlands).
• Preserve the river corridor
• Impact of development on well/water
• Business use of water on impact of town water supply

Future Transportation Visions
• Community website dealing with trails, biking, carpooling, public transportation etc.
• Educational material on transportation issues
• Public transportation to Exeter rail system
• Feasibility study on using rail system
• More police patrolling Brentwood roads
• More parking at public meeting places
• Central meeting place with lots of parking
• More trails
• Keep Brentwood the way it is now

After reviewing all of these vision policies the participants of the Community Profile program arrived at seven priority projects that were determined to be of the greatest importance to the Town. These action areas are as follows:

- Infrastructure
- Preserving Rural and Cultural Heritage
- Planning for Growth
- Volunteerism
- Creating a Sense of Community
- Lifelong Learning
- Communications

Of these seven planning for growth, infrastructure, preserving rural and cultural heritage and creating a sense of community are frequently addressed in various sections of the master plan. Volunteerism, lifelong learning and communications are not really topics well suited to community master plan discussions.

In addition to the ideas developed through the Community profiles process the Brentwood Planning Board endorses the concepts outlined by the New Hampshire Office of Energy and Planning as found in their anti-sprawl report entitled, ***"Achieving Smart Growth in New Hampshire"*** These concepts are enumerated below:

- Maintain traditional compact settlement patterns to efficiently use land, resources and infrastructure investments.
- Foster the traditional character of New Hampshire downtowns, villages, and neighborhoods by encouraging a human scale of development that is comfortable for pedestrians and conducive to community life.
- Incorporate a mix of uses to provide variety of housing, employment, shopping, services and social opportunities for all members of the community.
- Preserve New Hampshire's working landscape by sustaining farm and forest land and other rural resource lands to maintain contiguous tracts of open land and to minimize land use conflicts.
- Provide choices and safety in transportation to create livable, walkable communities that increase accessibility for people of all ages, whether on foot, bicycle, or in motor vehicles.
- Protect environmental quality by minimizing impacts from human activities and planning for and maintaining natural areas that contribute to the health and quality of life of communities and people in New Hampshire.
- Involve the community in planning and implementation to ensure that development retains and enhances the sense of place, traditions, goals, and values of the local community.
- Manage growth locally in the New Hampshire tradition, but work with neighboring towns to achieve common goals and more effectively address common problems.

The following principals were developed by the New Hampshire Association of Regional Planning Commissions to articulate a framework to achieve good planning in New Hampshire. Central to these principles is the concept that decisions are made at the local level, in the spirit of

regional cooperation, with public participation. As such the Brentwood Planning Board finds them to be helpful in forming a vision for Brentwood's future.

Rather than enumerating specific recommendations, the principles are intended to establish a broad framework to assist communities in making decisions. The planning principles can improve the outcome of development and ultimately the quality of New Hampshire communities in the future.

The principles have been organized within four general categories: **prosperity, sustainability, mobility and livability**. We recognize that the principles are strongly interrelated and often relevant to more than one category, and therefore they are best considered as a comprehensive framework rather than individual principles.

Prosperity

The Brentwood Planning Board believes that planning for economic development should be fully integrated in the planning process. Too often the needs and concerns of economic development are considered separate from, and even at odds with, community planning. Communities need to understand and plan for the development they want, while keeping in mind the development they wish to avoid. Prosperity must be considered both at the broad level of community and region, but also at the individual level of property owner.

Planning objectives must therefore seek to achieve a balance of interests which is effective in achieving community objectives yet fair to the individual. A prosperous region considers long-term costs and non-monetary values in policy decisions, and employment opportunities are in balance with the cost of living.

Principles to achieve prosperity for the community:

1. Concentrate development where services and utilities are available or less costly to provide.

2. Actively support the economic and cultural vitality of regional and local centers by channeling growth toward them and providing the ingredients needed for successful mixed use.

3. Prevent costly problems in the future by carefully considering potential environmental impacts of alternative development scenarios today.

4. Ensure that those with limited means have access to affordable housing and have sufficient funds for nutrition, health care, education and other necessities.

5. Work cooperatively in the region to support a sustainable diversified regional economy, and support mechanisms to share the costs and benefits of growth.

6. Seek opportunities to benefit from the economies of scale necessary for cost effective high quality infrastructure and services.

7. Conserve the working landscape of rural areas to maintain rural economy and tourism.

8. Develop a transportation system that supports economic development by being both financially efficient and effective at moving both people and products.

9. Create an environment attractive to employers who offer livable wages.

Sustainability

The Brentwood Planning Board believes that a central role of planning is to ensure the long term value and sustainability of the environment that maintains choices for future generations. The dominant from of development we have experienced in the past half century, characterized by sprawl and an inefficient use of land and resources, will not achieve this sustainability. There exists an urgent need, therefore, to redirect future development in ways that conserve land and open space, protect irreplaceable water resources and wildlife habitats, and preserve the basic ecological services that the natural environment provides.

Poorly planned development, whether resulting in too much development too fast, development of the wrong type, or in the wrong place, can have harmful and costly consequences for generations to come.

Principles to achieve sustainability for the community:

1. Preserve environmentally sensitive areas and link them together with other undeveloped open space into a network of beneficial corridors and large land areas for a diverse mix of wildlife and plant to flourish.

2. Encourage in-fill development in existing built areas.

3. Promote best forest management practices.

4. Utilize best management practices to minimize construction around prime and important agricultural soils from development so that land will continue to be available for farming.

5. Implement water quality monitoring programs, develop plans to protect those resources, and protect water quantity.

6. Encourage wide ranges of housing opportunities in more urban zones, decreasing the need to look outside of the core developed areas in order to construct multifamily or affordable housing.

7. Use low impact development strategies in retrofitting existing developments and in designing new developments.

8. Design new facilities and retrofit existing facilities to provide for efficient energy use and better air quality.

9. In order to prevent depletion of resources, match the intensity of development with the carrying capacity of natural resources.

Livability

The Brentwood Planning Board believes that good planning principles should be applied to local decisions to direct development in ways that maximize public benefit and contribute to quality of life. The communities we plan for and build are the communities we will live with (and in) for generations. Although future development will be mostly determined, as it has been in the past, by private investment decisions, development should be encouraged to create communities that offer such attributes as town centers with mixed uses, walkable neighborhoods, housing affordable to a wide range of incomes, aesthetically attractive buildings that 'fit' the character of the community, the preservation of historical landmarks and scenic landscapes. It also means planning for development that provides ample opportunities for daily interaction and which builds the social and cultural fabric of the community.

Principles to achieve livability for the community:

1. Emphasize development of town and village centers to create walkable communities.

2. Encourage building size, architecture, signage and site design that enhances the aesthetics of the built environment.

3. Promote infill development and redevelopment to bring vitality to Town center and to maximize use of built-up areas.

4. Encourage appropriate mixed use in the existing Town center, and in new planned developments to increase opportunities for residents to work close to home.

5. Create well integrated network of sidewalks, walking trails and bicycle facilities to create safe alternative modes for short distance travel and for recreational use.

6. Identify and preserve key natural, cultural and scenic resources to help preserve the appearance and character of places even as they grow and change.

7. Work toward growth in housing to match growth in employment, and ensure that new housing includes a balance of styles, densities, and a distribution of prices that are affordable to a range of income levels.

8. Identify and conserve a system of open space and conservation areas in Brentwood to protect wildlife habitat, scenic vistas and endorse passive recreational opportunities.

9. Preserve, improve and create public spaces such as the Brentwood Plains, pocket parks, and playgrounds to provide for civic and cultural gatherings.

Mobility

Brentwood Planning Board believes that to have prosperous and livable communities, we must have a transportation system that provides for the safe and efficient movement of people and goods. Our transportation system creates the connection that makes our regions and communities work. That system also plays a major role in influencing how and where future development occurs. To date, the system consists almost exclusively of roads and highways for the automobile. As our communities have grown larger, more congested and more dispersed it has become increasingly difficult to "keep up" with the need to expand the capacity of those facilities.

We must move toward a more balanced transportation system which makes appropriate use of other modes of travel to meet our needs, such as bus, rail, pedestrian and bicycle modes for moving people, and freight rail for moving goods. We must create and plan development in ways which reduce the need for travel rather than accelerate it. We must also increase investment in local and secondary roads and highways to increase capacity in congested areas and reinforce the existing regional process for prioritizing these needs.

1. Advocate and plan for the most efficient use of the existing and future transportation systems.

2. Develop a true multi-modal transportation system with appropriate support for the pedestrian, bicycle, transit and passenger rail modes.

3. Regional decision making processes should have a meaningful role in selecting and prioritizing transportation improvements.

4. Place a high priority on transportation system safety.

5. Make transportation investments and land use decisions that are mutually supportive.

6. Support the implementation of land use codes that encourage the use of bicycle and pedestrian modes and discourage the use of the private automobile for short local trips.

7. Increase roadway network connectivity and provide additional route choices in all new development.

8. Implement access management techniques that will preserve existing roadway capacity.

9. Support adequate investment in all modes of transportation within the system.

Brentwood, New Hampshire

Natural Resources Inventory

Town of Brentwood, New Hampshire
Conservation Commission
1 Dalton Road
Brentwood, NH 03833

May, 2007



Funding for this project provided by the New Hampshire Coastal Program

Brentwood, New Hampshire
Natural Resources Inventory

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Cover photograph courtesy of Reid Bunker, Brentwood Conservation Commission

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Natural Resources Inventory
Brentwood, New Hampshire
April, 2007

1.0 PROJECT SUMMARY/INTRODUCTION

Brentwood is a predominantly rural town with a population estimated by the NH Office of Energy and Planning to be 4,105 in 2005. The town covers 10,863 acres in southeastern New Hampshire, and is located in Rockingham County along the Exeter River. Brentwood's rural character in combination with the rivers, streams, forests, and farms provides a high quality of life for Brentwood residents and excellent habitat for native plants and animals.

This Natural Resources Inventory (NRI) is a description and analysis of the significant natural resources found in the town of Brentwood. It covers water, wildlife, forest, natural communities, agricultural, and soil resources. It also lists lands in Brentwood that have been permanently conserved to protect their natural resources for the benefit of future generations.

This information is intended to be a resource for landowners, town officials, and citizens who are the long-term stewards of Brentwood's natural resources. Specifically, the NRI can be used to:

- Educate and promote awareness about Brentwood's natural resources;
- Document current conditions so changes over time can be assessed;
- Develop natural resource protection land conservation priorities and a plan for Brentwood;
- Provide a basis for master planning, ordinance revisions and planning decisions.[1]

New Hampshire's population is increasing more rapidly than any other state in the Northeast, and Brentwood is the fastest growing community in Rockingham County. The population grew 27% between 2000 and 2004, four and half times the statewide rate for New Hampshire. Brentwood, along with the other towns in the state, must accept the challenge of conserving significant resources in the face of increasing development and population pressures. This report should provide the community with a sound foundation upon which land use decisions can be based.

A Natural Resources Inventory is never "finished" as the availability of new data and new mapping capabilities make it necessary to update the inventory periodically. Information in this inventory was compiled from many sources. References and acknowledgements are found at the end of this report.

[1] Stone, Amanda J.L., *Natural Resources Inventories, a Guide for New Hampshire Communities and Conservation Groups*, UNH Cooperative Extension, Durham, NH. 2001.

2.0 TOPOGRAPHY

Topography in Brentwood does not vary greatly, with the highest elevation of 250' found along Long Meadow Drive in the northeast part of town and along South Road in the southeast. This type of topography is common in southeastern New Hampshire, where the hills are low and their sides generally not steep and the valleys are flat and often wetland.

2.1 Steep Slopes

Slopes in excess of 25% should not be built upon especially where soils are thin or highly erodible. In addition, road access is very difficult where slopes are so steep. With that said, Brentwood has relatively few steep slopes. The town is characterized by its basically flat areas with 0-8% slope, and gently rolling hills with an 8-22% slope.

2.2 Ecological Regions

Like the rest of New England, Brentwood was shaped by glaciation. The motion of the glacier moved large amounts of rock and soil materials and smoothed the surface giving a more rounded appearance to the surface. However, the glacier also left us with coarse, stony and often infertile soils.

By combining knowledge of the physical environment with what is known of the distribution of plants and animals, the U.S. Forest Service has divided New Hampshire into the following three principal biophysical or ecological regions or sections:

- Southern New England Coastal Plain and Hills Section (southeastern part of NH);
- Vermont-New Hampshire Upland Section (southwestern part of NH);
- White Mountain Section (Northern part of NH).

Brentwood is located in the Southern New England Coastal Plain and Hills Section which can be further divided into three subsections:

- Gulf of Maine Coastal Lowland (immediate coastal region);
- Gulf of Maine Coastal Plain (southern portion);
- Sebago-Ossipee Hills and Plain (northern portion).

Brentwood is in the Gulf of Maine Coastal Plain, a subsection characterized by broad, hilly plateaus and drumlins leading to the coastal zone.

2.3 Land Cover

Map 1 is a Land Use Map for Brentwood. The data on this map are from the 2001 New Hampshire Land Cover Assessment which is based on LANDSAT satellite imagery. This data source is accurate to within approximately 0.2 acres. A detailed explanation of the methodology behind these data can be found in *New Hampshire Land Cover Assessment Final Report*; Complex Systems Research Center, UNH, January, 2002. Table 1 below details the acreage and percent of the Town for each Land Cover type.

Table 1 Brentwood Land Cover

Land Cover	Acres	Percent
Mixed Forest	3986	36.7
Other Cleared	1327	12.2
Hay/Pasture	917	8.4
Beech/Oak	851	7.8
Other Hardwoods	847	7.8
White/Red Pine	624	5.7
Transportation	619	5.6
Developed	395	3.6
Disturbed	395	3.6
Non-forested Wetlands	289	2.5
Hemlock	238	2.3
Open Water	214	2.0
Forested Wetlands	130	1.2
Row Crops	20	.3
Orchards	9	.2
Pitch Pine	2	.1
Total	**10863**	**100.00**

3.0 SOILS

Understanding the nature and properties of soils is critical to managing and conserving our natural resources. Through its Soil Survey Program, the Natural Resources Conservation Service (NRCS) studies and inventories soil resources across the country. Soil scientists make this study in order to determine what soils are present, where they are located and how they can be used. Soil surveys contain information in the form of detailed soils maps, data tables and text narratives that can be used in order to determine appropriate uses for the land. Soil surveys also contain predictions of soil behavior for selected land uses and highlight limitations and hazards inherent in the soil and the impact of selected land uses on the environment.

It is important to note that these soil survey maps are designed for general planning purposes and are not at a scale appropriate for site specific use. A site specific soils map should be done by a licensed professional soil scientist wherever there are concerns about the capability of the land for development. The soil survey maps should not be enlarged because this would imply more accuracy in the data than is present.

3.1 Rockingham County Soils Maps

The most recently published edition of the Rockingham County Soil Survey was issued in 1994. This information has been digitized into a GIS map by the Rockingham Planning Commission. The maps for the Natural Resource Inventory include the following soils information:

- Prime farmland soils – These are soils that have the best combinations of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops, and are also available for these uses (the land could be cropland, pastureland, forest land, or other land, but not urban built up land or water). Prime farmland produces the highest yields with minimal expenditure of energy and economic resources, and farming it results in the least damage to the environment. There are 1,354 acres of prime farmland soil in Brentwood. Map 3 highlights Active Farmland.

- Soils of statewide importance – This is land, in addition to prime farmland that is of statewide importance for the production of food, feed, fiber, forage, and oilseed crops. Criteria for defining and delineating this land are determined by the NH Department of Agriculture. Generally, these soils are nearly prime farmland that can economically produce high yields of crops when treated and managed according to acceptable farming methods. There are 1,093 acres of soils of statewide importance in Brentwood.

- Very poorly (Hydric A) and poorly drained (Hydric B) soils – These soils are generally referred to as wetlands. The areas are wet, since water moves through the soil so slowly that the water table remains at or near the surface of the ground for the greater part of the year. The reference to "very poorly" and "poorly" refers in part, but not exclusively to, the amount of time water remains at or near the surface. Very poorly drained soils generally occupy level or depressed sites, are frequently ponded, and commonly have soils with a thick dark colored surface layer and gray subsoil. Poorly drained soils occupy nearly-level to sloping sites, are ponded for short periods, have a dark colored surface layer with grayish, mottled subsoil. There are 522 acres of very poorly soils (Hydric A) soils and 2,552 acres of poorly drained (Hydric B) soils in Brentwood. Wetland soils are identified on Map 4.

3.2 Sand and Gravel Deposits

Brentwood has 387 acres of sand and gravel deposits, which can be seen on Map 5, Geologic Map. There are two active sand and gravel pits in town, the Magnusson pit on Route 125 and the Fralic pit on Old Gordon Road.

3.3 Soils Recommendations

Soils determine how land should and should not be used. It is important that land use decisions be based on accurate soils information.

- Require site specific soil mapping or HISS mapping on all subdivision applications. Soil mapping must be completed by a Certified Soil Scientist in accordance with the Site-Specific Standards, either HISS standards or Site-Specific Mapping. Site-specific mapping requires that a report be submitted by the Certified Soil Scientist. The Certified Soil Scientist should be required to stamp all plans that show the delineated soils.

- Identify and map prime wetland soils to increase protection of highest functioning wetlands.

4.0 WATER RESOURCES

Brentwood's water resources consist of a hydrologically connected system of rivers, streams, brooks, small ponds, wetlands, and groundwater. Brentwood's surface and groundwaters are intricately interconnected. In some locations and under some conditions, the surface waters recharge the groundwater and in other locations and conditions, the groundwaters feed our rivers, ponds, wetlands and streams and keep surface waters flowing even during droughts. The quality and quantity of one can significantly affect the other.

Our water resources are vital for habitat for plants and animals. Undeveloped shoreline areas are essential for almost all wildlife species during some portion of their life cycle. Brentwood residents rely upon clean groundwater from private wells. These rivers, streams and ponds, and the quality of their waters and shoreline, are very important to the quality of life for residents and visitors. Fishing, canoeing and swimming in Brentwood's waters are popular activities.

4.1 Watersheds

A watershed is defined by the height of land around a basin that feeds water into a particular river system. How people use land within a watershed determines the quality of the water in the lakes, streams, wetlands, and groundwater below. Brentwood lies within two watersheds, the Exeter River watershed and the Piscassic River watershed. There are four smaller sub-watersheds within the town associated with the Fresh River, Little River (north), Little River (south), and Dudley Brook. The Fresh River drains into the Piscassic River watershed. Dudley Brook drains into the Little River (north) into Exeter, which flows into the Exeter River. The Little River (south) in Brentwood originates in Kingston and flows to central Brentwood and into the Exeter River. Each watershed is shown as a different color on Map 6, Flood Hazard Areas and Watershed Map.

1. Exeter River Watershed—The Exeter River flows from west to east across the southern portion of Brentwood and serves as the primary public water source for the town of Exeter. The watershed encompasses ten communities, Chester, Danville, Sandown, Raymond, Fremont, Brentwood, Kingston, East Kingston, Kensington, and Exeter. The river flows over the Great Dam in downtown Exeter, and becomes the tidal Squamscott River, a primary tributary to Great Bay. The watershed encompasses 10,051 acres ,or 92.5%, of town. There are two dams on the River in Brentwood, Pickpocket Dam and Phillips Dam. Some of the fastest growing communities in New Hampshire are located in the Exeter River watershed, creating a challenge for communities trying to balance growth and development with protection of drinking water supplies and natural resources.

The Exeter River Local Advisory Committee (ERLAC) was formed in 1996, and developed a management plan for the watershed in 1999. ERLAC partners with watershed communities to advocate for stewardship of the river's natural state. For additional information, they may be contacted at 156 Water Street, Exeter, NH 03833. ERLAC maintains a website at www.exeterriver.org.

2. Piscassic Watershed—The Fresh River, a tributary to the Piscassic River, flows for approximately half a mile through the northeast corner of Brentwood. The river continues on for an equally short stretch through Epping and into Exeter. The Piscassic watershed covers 812 acres, or 7.5%, of Town.

4.2 Ponds

There are over thirty small ponds located within the Town of Brentwood. A majority of the ponds are located in areas with poorly to very poorly drained soils. Many of the ponds are located along intermittent streams. The largest cluster of ponds is located along North Road in the northwest corner of Town. The State of New Hampshire defines a "Great Pond" as a pond greater than 10 acres in size. These water bodies are considered public waters. There are no Great Ponds in Brentwood.

4.3 Rivers and Streams

The Exeter River and its three named tributaries in Brentwood - Dudley Brook, Little River (north) and Little River (south), are important natural resources in town. The Exeter River flows for 6.7 miles, from west to east, through the Town of Brentwood. From one end to the other, the River drops from an elevation of 110 feet to 70 feet above mean sea level. The Exeter River is classified by the State of New Hampshire as a Class B river, which means it is safe for swimming and fishing.

Table 2 Brentwood's Named Rivers and Streams

Watershed	River/Stream
Exeter	Exeter River
Exeter	Dudley Brook
Exeter	Little River (north)
Exeter	Little River (south)
Piscassic	Fresh River

Dudley Brook flows for approximately 4 miles, from west to east, through the center of Town, and gives rise to a significant wetland complex. The Brook drops from an elevation of 100 feet to 80 feet at the Brentwood/Exeter town line. NH DES classifies the Brook as Class B.

The Little River (south) flows north for approximately 1.7 miles, dropping from an elevation of 80 feet at the Kingston border to 70 feet at the confluence with the Exeter River.

The Little River (north) flows east for approximately 1 mile before crossing the town line with Exeter and flowing for another three miles where it meets Dudley Brook

The Piscassic River crosses a small 2,000' portion of Town in the northwestern corner. The River's elevation is 130' above sea level and its classified by NH DES as a Class A river, the highest and best classification for river quality.

The Fresh River flows through northeastern Brentwood for about 2,600'. The River elevation is 110' and is also classified by NH DES as a Class A river.

There are over seventeen intermittent streams located within the Town of Brentwood. Most of them are unnamed, flow seasonally, and are located in areas with poorly and very poorly drained soils.

These rivers and streams played an important role in the settlement and early industry of the town. There were several mills (grist, saw and carding mills) at each of at least four sites: Pickpocket Falls, Little Falls, Crawley Falls and Phillips Falls, plus a sawmill called the "Delicut" on what is now the Schmalzer property.

Numerous aquatic species call these rivers and streams home. The water courses and their adjacent riparian corridors are important habitat and travel corridors for most of Brentwood's terrestrial wildlife. In addition, many bird species are attracted by the water and the food sources that are located nearby.

Development pressure is increasing along Brentwood's rivers and streams. There are no significant human withdrawals of water from Brentwood's streams or rivers. However, as development pressures mount, streamsides and stream integrity will be threatened.

4.4 Shoreland Buffers

Shorelines of lakes, ponds, rivers and streams are called riparian areas, corridors, or buffers. Wider, forested buffers along these areas are more effective than narrow, grassy ones according to *Introduction to Riparian Buffers*; Connecticut River Joint Commission for NH and VT, September 2000. This same report offers the following buffer requirements as seen in Table 3.

Table 3 Riparian Buffer Requirements

Function	Buffer Width, Feet
Stabilize banks	35' – 50'
Filter sediment to protect water quality	35' if slopes less than 15%
Filter dissolved nutrients & pesticides to protect water quality	100' to 500', 100 feet removes about 60% of pollutants.
Protect fisheries	At least 100'
Protect wildlife	300' minimum
Flood control	Varies with size

It is important to note that the buffer should be wider if the adjacent land is sloped, if the land use is intensive, if the soils are erodible, if the land is a floodplain and if the stream or river naturally meanders.

Buffers, land alongside rivers, streams and ponds, should be left in a naturally vegetated state to protect water quality and wildlife habitat. Vegetation growing along the shore filter pollutants from runoff, promoting groundwater infiltrations, and stabilizing stream banks to control erosion.

The quality of water and habitat in rivers and streams depends upon surrounding land uses and management practices. Sediment from erosion destroys spawning habitat and fills stream beds. Removal of streamside vegetation raises water temperatures and can destroy habitat for trout and many other species upon which fish depend.

4.5 Water Resource Recommendations

- Protect riparian corridors, especially vegetated buffers, to maintain water quality and wildlife habitat.
- Educate the public about non-point pollution from road salt, pesticides, fertilizers, sediment and other pollutants in water runoff.
- Protect the few remaining undeveloped areas of river and stream frontage.
- Prevent the spread of exotic aquatic plants to uninfected lakes and ponds through education and by monitoring at boat launches.

5.0 WETLANDS

Wetlands, as defined by the Environmental Protection Agency, the NH Department of Environmental Services and the Brentwood Zoning Ordinance are those areas that are inundated or saturated by surface or groundwaters at a frequency and duration sufficient to support and that under normal circumstances do support a prevalence of vegetation adapted for life in saturated soil conditions. Thus a wetland is defined by the three "H's": hydrophytes or wetland vegetation, hydrology and hydric soils.

Wetlands are an integral part of Brentwood's natural resources. They are important for removing excess nutrients and sediment from the water, slowing and storing floodwaters, promoting groundwater infiltration, and providing habitat for a variety of vegetation and animal life. In addition, wetlands provide recreational, educational and research opportunities. They add to the visual resources of the Town, especially in the fall when the red maples turn scarlet. Wetlands are most often found along streams and adjacent to ponds and lakes. They can be found in clustered complexes that are of great value. Vernal pools are a special type of wetland that dry out completely in the summer and have no fish population. They are especially valuable for amphibian reproduction, but have not been mapped for Brentwood. Please see Section 6.0 of this report for more information on vernal pools.

There is a diversity of wetland types in Brentwood, including areas of open water with emergent vegetation such as cattails, forested wetlands, and scrub-shrub wetlands. The principal types of wetlands with standing water in the spring have been mapped from aerial photos by the National Wetlands Inventory (NWI) of the U.S. Fish and Wildlife Service. The NWI wetlands do not include all wetlands, particularly those that do not typically have standing water in the spring. Therefore, this is an underestimate of the amount of wetlands. The more significant, wetlands, however, are included in the NWI.

The NWI classification codes for Brentwood describe the dominant vegetation type as well as the hydrology of each wetland. For the purposes of this map, these codes were categorized by the dominant vegetation type.

- **Emergent wetlands** are those wetlands with non-woody vegetation that grows above the land and/or water surface. Cattail marshes are one example of emergent wetlands.
- **Forested – deciduous wetlands** are wetlands with deciduous trees as the dominant vegetation type. Red maple swamps are one example of forested – deciduous wetlands.
- **Forested – evergreen wetlands** are wetlands with evergreen trees as the dominant vegetation type. Hemlock, balsam fir and white cedar are examples of evergreen trees that might be dominant in a forested – evergreen wetland.
- **Forested – dead wetlands** are wetlands where a once forested wetland has been flooded (usually by a beaver impoundment) and the standing trees are dead. These wetland types often become nesting areas for great blue herons until the trees fall down and the impounded water becomes densely vegetated.
- **Deciduous – shrub wetlands** are wetlands where the dominant form of vegetation is deciduous shrubs. Highbush blueberry, silky dogwood, sweet gale and winterberry are common deciduous shrubs in Brentwood wetlands.
- **Evergreen – shrub wetlands** are relatively uncommon. These wetland types are dominated by shrubs that do not lose their leaves. Leatherleaf and labrador tea are broadleaf evergreen shrubs. Other evergreen shrubs might be balsam fir, black spruce and other evergreen trees that have not yet reached tree size.
- **Unconsolidated bottom wetlands** are those wetlands with open water over most of the surface area of the wetland. Vegetation may grow in these wetlands below the surface of the water and/or may float on the water but is typically not visible early in the growing season when the aerial photography used to classify wetland types is taken.

The areas and number of each wetland type in Brentwood are shown below in Table 4. The wetlands count does not reflect separate wetlands, but patches of wetlands classified as a particular type. The total area for NWI wetlands in Brentwood is 1,357 acres or 12.5% of the town's land and water area.

Table 4 2001 National Wetland Inventory Wetlands in Brentwood

Wetland Type	Count	Acres
Emergent (e.g. cattails)	59	230.51
Forested - Deciduous	171	675.65
Forested - Evergreen	27	109.41
Forested - Dead/Beaver Impoundment	5	22.63
Deciduous - Shrub	81	231.48
Evergreen - Shrub	1	0.51
Unconsolidated Bottom	93	75.27
Total NWI Wetlands	**442**	**1357.03**

In Brentwood, as elsewhere, wetlands are being filled in, particularly for building roads and driveways to access building sites. Development has additional negative impacts on wetlands through increased runoff, erosion and sedimentation, fertilizers and pesticides on lawn and garden areas and removal of natural vegetation in adjacent upland areas. Table 5 below shows the increase in development activity since 1996.

Table 5 Building Permits in Brentwood

Year	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06
Total Permits	103	111	125	138	136	162	149	135	154	102	131
Permits for Dwellings	24	33	44	31	49	66	53	38	39	17	29

5.1 Significant Wetlands

A comparative study of the functions and values of the different wetlands in Brentwood is not yet complete. Such an analysis would be necessary to prioritize significant wetlands in the Town and to provide the data necessary to designate some wetlands as Prime under RSA 482-A: 15. These wetlands, when designated as such, receive special consideration from the Wetlands Bureau of NHDES. When a wetland is designated as Prime by a community, it is recognized as a valued natural resource, and protected as such.

Although prime wetlands have not yet been identified, a great deal of research has been done on wetlands in Brentwood, most notably by the Audubon Society of New Hampshire and the Brentwood Conservation Commission. The Conservation Commission estimates there are 60 wetland complexes in Brentwood.

Table 6 Brentwood's Large Wetlands and Wetland Complexes

Name	Location
Dudley Brook	Prescott Rd./Middle Rd./Pickpocket Rd./Rowell Rd.
Dudley Brook south branch	Scrabble Rd./Prescott Rd.
Dudley Brook/Little River (north)	Brentwood/Exeter border
Little River (south)	Brentwood/Kingston border

In 1998, the Audubon Society of New Hampshire (ASNH) conducted a wetlands inventory for the entire Exeter River watershed. Wetland systems in the ten watershed communities were studied and three systems in Brentwood were identified as priority wetlands in the watershed. These systems were labeled Dudley Brook, Bloody/Dudley Brooks/Little River (north), and Little River (south). These three priority wetland systems identified by ASNH were evaluated simply for descriptive purposes rather than for comparative analysis using a methodology developed by the Army Corps of Engineers. The methodology describes twelve wetland functions: groundwater recharge/discharge; floodflow alteration; fish/shellfish habitat; sediment /toxicant/pathogen retention; nutrient removal; production export (produce food for or usable product for consumption); sediment/shoreline stabilization; wildlife habitat; recreation; educational/scientific; uniqueness/heritage; and, visual quality/aesthetics.

Below, is a summary of ASNH's findings for each system:

Dudley Brook –The Dudley Brook complex is located west of Pickpocket Road. Several small streams feed into Dudley brook. The area was originally dominated by agriculture and changing land uses (from active farmland to abandoned farmland and residential) are changing the nature of this system. This wetland is fragmented by Pickpocket and Rowell Roads. The entire complex is 290 acres in Brentwood and Exeter. The complex is primarily scrub-shrub wetland with several beaver impoundments and emergent vegetation sections. The Dudley Brook complex was determined to have eleven wetland functions, with fish/shellfish habitat, sediment/toxicant retention, and wildlife habitat being the principal function/values.

Dudley Brooks/Little River (north) – Although this wetland system is located primarily in Exeter, it receives drainage from Dudley Brook and Little River (north) in Brentwood. The complex encompasses 300 acres in Brentwood and Exeter. The system is mostly forested with small sections of scrub-shrub and emergent areas. Several of the forested areas feature dead wooded vegetation. The system was determined to have ten wetland functions, with floodflow alteration and wildlife habitat being the principal functions/values.

Little River (south) – The Little River (south) wetland complex is located primarily in Kingston and straddles two subwatersheds. The entire complex encompasses 510 acres in Brentwood, Kingston, Fremont and Danville. The eastern section is in the south central portion of Brentwood adjacent to South Road, Route 107, and Haigh Road. The system features dead wooded emergent vegetation. The complex was determined to have ten functions/values. Principal function/values include groundwater recharge/discharge, sediment/toxicant retention, wildlife habitat, and educational/scientific value.

In a separate and comprehensive analysis begun in 2002, the Brentwood Conservation Commission used the New Hampshire method to develop a broad view of wetlands in town for providing insight for state and local wetland protection criteria and wetland

buffer standards. An initial inventory of six sites was done by University of New Hampshire students as part of a Senior Project course. An additional twenty-eight sites were inventoried by Conservation Commission members to give a town-wide perspective on wetland resources. The NH method provides a step-by-step evaluation process that is completed both in the field and in the office. It is simple enough to be used to judge wetland size and richness, but also has the potential to be scientific enough to develop a comparative functional value system. The Method uses a 14-point ranking system to evaluate important qualities in wetlands. The values developed during the evaluation process are used to make comparisons of wetlands in town. All guidelines were followed for the appropriate completion of each evaluation.

The New Hampshire Method's 14 wetland functional values used to inventory the wetlands include; ecological integrity, wetland wildlife habitat, finfish habitat, educational potential, visual/aesthetic quality, water-based recreation, flood control potential, groundwater use potential, sediment trapping, nutrient attenuation, shoreline anchoring, urban quality of life, historical site potential, and noteworthiness. These values were looked at as four categories. Wetland ecology encompasses ecological integrity, wetland wildlife habitat, and finfish habitat. Public use is the category for educational potential, visual/aesthetic quality, and water-based recreation. Water quality encompasses flood control potential, groundwater use potential, sediment trapping, nutrient attenuation, and shoreline anchoring. Finally, urban quality of life, historical site potential, and noteworthiness are grouped into uniqueness. It should be noted that no site met the urban quality of life criteria; therefore N/A was shown for that value.

The sites evaluated were grouped into 3 size ranges for better comparison purposes. The size groups were 1 to 9 acre wetlands, 10 to 19 acre wetlands and 20 plus acre wetlands (Table 1). Secondly, the sites were all compared eliminating the wetland size as a factor (Table 2). From both of these comparisons some general observations have been made within the wetland functional values to provide some guidance in determining wetland protection and buffer standards.

When wetlands were looked at by the three size ranges, it was evident that wetland size impacts the results to the point that all small wetlands in each range dropped out in terms of importance and rank. There is the important issue that wetland size does matter regarding the variety of valuable functions it provides. The larger wetland complexes perform more water quality functions as well as offering more diverse habitats. Therefore, it must be noted that large wetland complexes are usually of more value to protect than small wetlands.

The second comparison showed conclusively that wetlands with perennial watercourses running through or along them recorded the highest values for both wetland ecological value and water quality value. Larger blocks (50+ acres) of undeveloped land surrounding a wetland were a key component of the higher wetland ecological value sites. All sites that occur along the Exeter River, Dudley Brook and Little River are critical for protection because of the high wetland values attributed to them because of the perennial waters and because of the biodiversity they support. Sites with high water quality values occur both at head waters for streams and along streams/rivers themselves.

Even unprotected small, intermittent streams can be sources of sediment and can contribute to large fluctuations in water levels downstream. Wetlands serve as filters for water quality and sites with large wetland complexes generally ranked higher. Sites that score highest for public value have an important educational component where they are in close proximity to public and private schools. The other important public values seemed to occur at sites with perennial streams that are accessible for recreation and for viewing. Uniqueness for sites in Brentwood usually only occurs where there is some type of historic potential associated with a watercourse.

This wetland evaluation did not look at pinpointing any specific parcels for protection. It is the hope of the Brentwood Conservation Commission that funding will be allocated soon for the production of an in-depth survey of all wetlands in town to create a prime wetlands map. Although buffer recommendations are made below, sensitive wetland ecosystems need additional protection. Creating a prime wetlands map would help the town identify the most important wetland ecosystems to protect within the town, and guide the town in modifying current regulations.

5.2 Wetland Buffers

In addition to retaining the wetland itself, the undeveloped uplands surrounding the wetland are also essential for a healthy wetland. Maintaining a buffer of a naturally vegetated upland area adjacent to wetlands and surface waters is important to reduce the adverse effects of human activity on these water resources. Vegetation in buffers intercepts rainfall, slows meltwater and promotes infiltration. In addition, a vegetated buffer provides habitat for species dependant on the wetland system and travel corridors for larger mammals. A minimum upland buffer width around wetlands and other shorelines of 100 feet is recommended and 300 feet is desirable to maintain good habitat.[2]

The first step to protecting wetlands and the functions they provide is protecting the land surrounding them. A look at current zoning regulations in Brentwood shows a limited amount of protection to buffers compared to recommendations from "Buffers for Wetlands and Surface Waters", A Guidebook for New Hampshire Municipalities published in 1997 by the NH Department of Environmental Services. The guidebook states that "100 feet is recommended as a reasonable minimum buffer width under most circumstances." It explains that research has shown that 100 feet will generally provide a 60% or higher removal rate of pollutants. Because of the impacts to human health of tainted water supplies, buffers larger than 100 feet may be prescribed around existing or potential water supplies. Buffers of 100 feet protect wildlife species that are aquatic or that stay very close to the wetland edge, but would provide little or no life support for others. Water quality in wetlands and surface waters is important for all wildlife, not just aquatic.

[2] Chase, Victoria. Buffers for Wetlands and Surface Waters. Office of State Planning, Audubon Society of New Hampshire, UNH Cooperative Extension, 1995, revised 1997.

Current Brentwood zoning regulations require a 75 foot buffer between septic systems and Hydric A or B soils. Buildings currently have a setback of 100 feet from Hydric A soils and 50 Feet from Hydric B soils. Septic systems, which generate excess nutrients and pathogens, are not at the minimum recommended setback and are potentially very detrimental to wetland systems. Septic systems have a finite useful life until replacement is needed; unfortunately replacement is seldom done until the system fails. Hydric B wetlands are usually a waterbody's first defense against pollutants. In order to have pollutant removal occur before overflow enters a wetland than Hydric B wetlands need just as much buffer as Hydric A soils to provide an acceptable rate (60%) of pollutant removal. Buffering wetlands and surface waters should make up only one piece of a comprehensive natural resource protection plan. As this town faces more development pressures on natural resources, changes in zoning may need to be instituted, coupled with protection through acquisition or easements, to protect a broad spectrum of water resources.

Brentwood has also adopted a Shoreland Protection Ordinance which increases buffer requirements along the Exeter, Piscassic, Fresh and Little Rivers as well as Dudley Brook. The Brentwood shoreland protection district protects surface water resources by prohibiting building and septic system construction closer than 150 feet to the surface water as well as minimizing the amount of natural vegetation that can be removed within 75 feet of the surface water. The ordinance also has a small number of prohibited land uses that are viewed as being too potentially dangerous to the surface water resource to be allowed within 300 feet of the surface water.

5.3 Wetland Recommendations

- Educate the public as to what they can do to protect wetlands and why. This should include the importance of reducing non-point source pollution from sedimentation, fertilizers, pesticides, and hazardous wastes.
- Continue to work with the Wetlands Bureau of NHDES to enforce State laws and rules.
- Conduct a comparative study of wetlands in Brentwood.
- Consider increasing the setback for septic systems to 100' from wetland soils.
- Consider Prime Wetland designation for some wetlands.

6.0 VERNAL POOLS

Little is known about the number and location of vernal pools in Brentwood. Given their importance for maintaining biodiversity, this is unfortunate. One of the problems is that vernal pools are not easy to identify for most of us and people need to know what to look for. Although vernal pools may vary in size from a few square feet in area to over a number of acres and may

be located in a number of different sites – woods, floodplains or gravel pits—they do have certain features in common. Although they appear in the same place year after year they are defined as a temporary bodies of water because most dry up in hot weather or times of drought. All of them are contained bodies of water without any permanent outflow.[3] They do not support fish and are therefore excellent breeding grounds for species whose eggs would provide an excellent food source were fish present. Some species are so dependent on vernal pools for their survival that their very presence is taken to establish that a particular basin of water is indeed a vernal pool. Not surprisingly, these are known as indicator species.

An essential inhabitant of vernal pools is the fairy shrimp. These are tiny crustaceans that are found throughout the country. They are the earliest creatures to be seen in the spring, often appearing in March when their early mating leaves eggs on the floor of the pool. These are designed to survive drying out, intense heat, freezing, and even being eaten by birds and, despite everything, will hatch the following spring when the pool is once again filled with water. Should there be a dry spell that prevents this from occurring, the eggs are prepared to wait out the weather.

Some amphibians are also indicator species of vernal pools. Indicator species in New Hampshire are the spotted salamander and the wood frog. Wood frogs are one of the earliest creatures to be seen in the spring, often appearing in March, when their early mating makes it possible for the eggs to develop before the pool dries up. The wood frog call sounds very much like the quacking of ducks and is an early sign of spring. This frog is brown with a black mask, and is often seen in the woods during the summer.

Spotted salamanders lay their eggs in vernal pools as well and migrations of salamanders to breeding areas usually take place after the first heavy rain in early spring. Although both the spotted salamander and the wood frog may be found mating in more permanent waters, eggs laid in vernal pools have the best chance of surviving. The spotted salamander will often lay her eggs in October and, if the pool is still dry, will stay with them keeping guard until Fall rains arrive.

Many other species use vernal pools although they do not have the same dependency upon them. Among the amphibians the species are four-toed salamander, Eastern newt, spring peeper, American toad, the gray treefrog, and the green frog. Among the invertebrates, there are clam shrimp, fingernail clams, and amphibious snails, caddis flies and other aquatic insects. Although no reptile is among the indicator species, the spotted turtle, the earliest turtle to appear in the spring, sometimes moving about in March, often uses such pools as a source of food and a place for courtship and mating. Blanding's turtles have been known to overwinter in vernal pools. Both of these species are endangered in New Hampshire and their appearance is of special interest to the Non-Game and Endangered Species Division of New Hampshire Fish & Game. In fact, if you think you may have a vernal pool on your property, it is possible to obtain a documentation form from Fish & Game and they would welcome a report on the sighting of any of the reptiles or amphibians mentioned here. Such reports may also be given to the Audubon Society of New Hampshire.

[3] Information for this segment of the Natural Resource Inventory comes from *Identification and Documentation of Vernal Pools in New Hampshire*, ed. Anne Tappan (New Hampshire Fish and Game Department Nongame and Endangered Wildlife Program, 1997).

If you think you have a vernal pool on your property try to identify it while causing as little disturbance as possible. A trip to the pool at night should enable you to hear the wood frogs quacking in early spring. Following a spotted salamander migration will eventually lead you to such a pool. Daytime exploration would consist of finding the eggs of these amphibians. Wood frog eggs lack a surrounding gelatinous capsule and do not look as though they are holding a consolidated shape. They are attached to twigs just below the surface of the pond. Salamander eggs are surrounded by a firm jelly-like substance with individual eggs visible inside. The egg mass is attached to sticks, grass, weeds or reeds usually eight to ten inches below the surface. The upper part of the egg is dark brown or gray and the lower part dirty white or dull yellow. Adults of these species may also be seen. It is, of course, essential to disturb the animals as little as possible in your effort to identify a vernal pool. In reporting such findings to the Nongame and Endangered Wildlife Program at 2 Hazen Drive in Concord (603-271-2462) photographs of the site would be enormously helpful.

6.1 Vernal Pool Recommendations

Vernal pools provide a unique type of wildlife habitat and are crucial breeding grounds for a number of amphibians. As such, efforts should be made to protect this habitat and the species that it supports. Some methods to accomplish this goal include:

- Identify and map vernal pools on subdivision plans and site plans in order to provide an opportunity to mitigate the impacts to these sensitive areas;
- Education, including a brochure for residents about Brentwood's land use regulations and conservation policies;
- Keep log landings, roads and trails out of vernal pools and the area adjacent to them. Busy roads near a vernal pool can lead to massive annual mortality and local extinctions;
- Maintain shade around a vernal pool in order to keep it from drying up too quickly and to maintain water temperatures;
- Keep slash out of a vernal pool during forestry operations and during development;
- Maintain the upland (non-wetland) habitat where many vernal pool dependent species spend most of their life cycle.

7.0 GROUNDWATER AND DRINKING WATER

Water in the saturated zone (below the water table) under the surface of the earth is called groundwater. It starts as rain and snowmelt, which then seeps down from the surface and saturates materials such as soil, sand, gravel and rock below the water table. Like surface waters, groundwater moves, although more slowly. As with surface water, the movement of groundwater is driven by gravity, which creates hydraulic head or water pressure. Groundwater moves from areas of high head to areas of low head. Pumping wells create areas of low hydraulic head, causing groundwater to move from the surrounding area toward the well. In

general, the greater the amount of water being pumped from a well, the greater the area of land that contributes water to the well. The wellhead protection area is an approximation of the contributing area. Groundwater and surface water are interconnected. Depending on the site, the time of year, the weather, and nearby withdrawals and discharges, groundwater may discharge to surface water or vice versa.

Nearly all of Brentwood's residents rely upon groundwater for their drinking water with wells drilled into underlying sand and gravel deposits. The U.S. Geologic Survey has characterized Brentwood as having two types of stratified drift aquifers, labeled as "Stratified-Drift Aquifer" and "Stratified-Drift Aquifer Over Glacial-Estuarine Silt and Clays". The boundaries of the primary recharge areas for these aquifers are depicted on Map 8, Groundwater Resources Map.

7.1. Aquifers and Aquifer Recharge

An aquifer can be defined as a formation, group of formations, or part of a formation that contains sufficient saturated, permeable material to yield significant quantities of water to wells and springs. There are bedrock aquifers and sand and gravel aquifers with the latter being the most productive. A small portion of the town consists of sand and gravel aquifers. These are glacial deposits of sand and gravel that hold significant amounts of water in the pore spaces between the particles of sand and gravel. This groundwater is continuously replenished by rain and other surface waters.

Groundwater is vulnerable to contamination, most often from leaking underground storage tanks, poorly maintained septic systems, improper disposal of hazardous chemicals, or vehicle accidents. Gravel pits are often located in or over aquifers. Land over aquifers tends to be favored for development because it is relatively level and easily excavated. The identification and careful monitoring of land uses near aquifers is important.

The ability of an aquifer to supply water is called transmissivity and is measured in ft^2/day. Most of the aquifers in Brentwood have a transmissivity of less than 500 ft^2/day or less and are not considered adequate for a public water supply. There are two areas in Brentwood with aquifers with transmissivity between 2000 and 3000 ft^2/day; one area is in the northeast section of town between Deer Hill Road and Pine Road and the other area is in the southeast corner of town stretching along Pickpocket Road to Cross Road.

Aquifer recharge is the process by which rainwater and snowmelt seep down through the soil into an underlying aquifer. Many natural processes determine how much of the water actually reaches the aquifer and how much evaporates, is consumed by plants and animals or runs off the ground surface into surface water bodies. Much attention has been directed to the importance of protecting surface waters and wetlands from filling and contamination, but there has been much less effort directed towards protecting critical aquifer recharge areas. These are areas where contamination would directly impact potable water supplies in the aquifer. In addition to eliminating contamination

sources, water must be allowed to seep into the ground in order to protect both the quality and the quantity of water in an aquifer. Requiring new development to retain all stormwater and melt water on site will help to maintain pre-development levels of recharge. A useful publication in this regard is *Managing Stormwater as a Valuable Resource*, published by the NH Department of Environmental Services in 2001.

7.2 Public Water Supplies

The majority of drinking water supplies in Brentwood are from bedrock wells ranging in depth from 145' to 550' below ground surface. According to NH Department of Environmental Services as of October, 2006, Brentwood has nine active public drinking water supplies: A Place to Grow day care, Bessie's Lunch restaurant, Grace Ministries International day care, Gymnastics at Brentwood recreational facility, Lindy's Country Store, Rockingham County Complex, Swasey Central School, The Castles at Brentwood private day school, and Three Ponds Campground. Two of the wells located at the Rockingham County Complex are gravel packed wells. Map 8, the Groundwater Resources Map shows a Drinking Water Protection Area around seven of these wells. Springs have been used as drinking water sources by two commercial bottling operations, Northern Springs located on Pine Road, now out of business, and Brentwood Springs on Route 27. Ideally, these areas should be protected from any potential contamination in order to ensure the quality of the drinking water.

NH Department of Environmental Services has prepared a Drinking Water Source Assessment Report for Brentwood . This report assesses the vulnerability of each public water system to contamination. For example, the Swasey Central School well received highly vulnerable ratings in the following categories: within 1000' of a state highway, proximity to a septic system(s), the amount of agricultural land within the wellhead protection area and inappropriate land uses near the well. The Town of Brentwood has a sanitary protection radius of 75' around a private drinking water well. The goal of the sanitary protection radius is to protect drinking water wells from contamination associated with private septic systems. For more information on Best Management Practices (BMPs) to protect drinking water supplies, the NH Department of Environmental Services has three useful fact sheets, *Protecting Groundwater Resources*, *Municipalities Have a Key Role in Protecting Groundwater Resources* and *Protecting Public Drinking Water Sources Based on Source Assessment Reports* can be found in the Appendix.

7.3 Contamination Sources

Groundwater quality can be impaired by a variety of materials. Sources of groundwater contaminants include landfills, commercial and industrial wastes, agricultural fertilizers, human sewage, and road salt. NH DES has mapped known and potential contamination sites as part of a groundwater hazards inventory. The inventory is a list of sites registered with NHDES which may be known or potential threats to groundwater. The known sites are locations where contamination of the soil or groundwater has occurred and has been cleaned up or is being monitored by NH DES. A complete listing of these sites can be found in the Appendix.

Potential contamination sources include underground storage tanks, facilities that generate hazardous waste, large junkyards and point/non-point potential pollution sources. Point/non-point potential pollution sources include the Town salt shed on Middle Road. The Appendix contains a complete listing of potential contamination sources.

7.4 Impervious Surfaces

When a watershed is increasingly covered with pavement, buildings, and other compacted surfaces that are impervious to water, significant changes in water quality and quantity result. When rain falls on impervious surfaces, it runs off faster into surface waters, carrying with it sediment and pollutants from road surfaces, lawns, construction sites, and parking lots. Flooding, warming, and channelization of streams results. Infiltration of rainfall into the ground to replenish groundwater is reduced, impacting the quantity of groundwater available for withdrawals for drinking water.

This type of run-off, called "non-point source pollution" is now the most serious threat to water quality for New Hampshire and for Brentwood. Construction and site designs that promote retention and infiltration of rainwater and runoff, narrower streets and driveways when possible, shrub and tree buffers to waterways, and more compact development patterns can protect Brentwood's water quality and quantity as the town grows.

Studies conducted in the northeast have documented that by converting as little as 10% of a watershed to impervious surfaces, stream water quality and organisms begin to deteriorate. Above 25% impervious surface, water quality is seriously degraded. On-going research by the NH Coastal Program and US Geologic Survey in the Exeter River watershed has documented the effects of urbanization on stream quality. Results to date from this study indicate that the percent of urban land use in riparian buffer zones and the percent of impervious surface in a watershed can be used as indicators of stream quality. Sites studied along the Exeter River with greater than 14% impervious surface generally showed changes in water quality and habitat conditions.

The NH Estuaries Project and UNH Complex Systems Research Center studied the degree of impervious surface cover in the coastal watersheds over the period 1990 - 2005. These analyses showed that the average impervious surface cover in Brentwood was 5% in 1990, 7.7% in 2000, and 9.5% in 2005. The number of miles of road in Brentwood was also analyzed during the same time period for Class I, II, III, IV, and V roads. Road miles in Brentwood in 1990 were 38.54, 45.02 in 2000, and 49.91 in 2005. The objective of this indicator is to estimate the rate of low-density residential development in towns.

7.5 Groundwater and Drinking Water Recommendations

- Require that stormwater and melt water be retained on site when land is developed.
- Modify the Brentwood Zoning Ordinance to prohibit or restrict new potential contamination sources from locating in a wellhead protection area.
- Continue to hold but more widely advertise an annual household hazardous waste collection program for residents

- Continue land conservation and protection efforts along rivers and streams.
- Educate the public as to what they can do to protect groundwater. This should include the importance of reducing non-point source pollution from fertilizers, pesticides, and hazardous wastes. The public should also understand the importance of aquifer recharge.

8.0 AGRICULTURAL RESOURCES

Agricultural land is valued in Brentwood for the food that its farmers produce, some of which is locally available. It is also valued for its scenic beauty and diverse habitat. Brentwood's farmers and farm families help other residents connect with the town's rural heritage and promote better land management. Much of the character of the town we owe to those who have sustained their farms and agricultural lands for generations.

8.1 Agricultural Soils

New Hampshire is losing its most productive farmland. Between 1982 and 2000, nearly 18,000 acres of prime farmland became unavailable for production of crops, feed, forage or fiber. Most was lost to urban and rural development. Only 2% of New Hampshire soils classify as prime farmland. (Prime Farmland: land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops and is also available for these uses.) Cropland, usually the most productive agricultural land, has declined 30% statewide from 1974 to 2000. Discussions with residents indicate a growing concern with the future of Brentwood's rural heritage. Increasing expenses and lower profits from farming are factors. The pressure from escalating development and rapidly increasing land loss through subdivisions is a major concern.

An analysis of 2001 landcover data shows that 9 acres of the town was in orchard, 20 acres was in row crops and 917 acres (8%) was in hay or pasture. Hay is grown on a commercial basis by the County Farm on North Road. There are many Brentwood residents who hay or have their fields hayed but are not commercial operations. It should be noted that the above is not an inclusive list as there are numerous other residents unknown to us who have horses, sheep, chickens and other livestock. In addition, many people raise vegetables, fruit and herbs for their own consumption and to share with their neighbors.

In order to get a more accurate understanding of the value of agriculture to Brentwood, the Town could complete an Agricultural Profile. A copy of the fact sheet *Developing an Agricultural Profile for Your Town* is available from the UNH Cooperative Extension.

8.2 Grasslands

Grasslands are an ever diminishing and crucial requirement for many birds, including meadowlarks, bobolinks, woodcock, and killdeer) which are under increasing pressure from loss of habitat. The 2006 NH Fish and Game Wildlife Action Plan estimates there are 1,607 acres of grasslands in Brentwood, with 10% of these lands protected from development through conservation easements.

8.3 Agriculture Recommendations

Agriculture is important to Brentwood in many ways. The commercial farms contribute to the town economically and the Town's residents are fortunate to enjoy locally grown produce, fruit, and Christmas trees. The open fields and farm structures are a part of the rural character that is so important to the Town. This is an important resource to be protected. Brentwood recognizes the value of agriculture and recently established an Agriculture Committee to identify ways in which the town can support agriculture, including identify agricultural enterprises and review town regulations to reduce conflict between agricultural and residential uses. Some recommendations to help sustain economically viable agriculture in Brentwood are:

- Educate the public that once important farmland soils are developed they are lost forever;
- Protect the Important Farmland soils that are necessary for economically viable agricultural activities.
- Reduce conflict between agricultural and residential uses by requiring a buffer when land is developed adjacent to a farm;
- Encourage residents to "buy local";
- Continue to educate farmland owners about the benefits of conservation easements on their property;
- Encourage farmers to follow "Best Management Practices" in the management of their farm.

9.0 FOREST RESOURCES

Brentwood's forests provide valuable habitat for plant and animal populations. The forests absorb rainwater, increase groundwater infiltration, and buffer surface waters from sedimentation and contamination. Near roads and homes, trees cool summer temperatures by 10 degrees or more, break winter winds, and filter dust and pollutants from the air. Forests host scenic recreational trails and hunting grounds. Our tourist industry and seasonal residents are attracted by healthy forests. In addition, well-managed forests provide a sustainable supply of maple syrup, home firewood and commercial wood products and jobs needed by New Hampshire residents.

9.1 Forest Cover

A forest is not merely a stand of trees. It is usually the total assemblage of trees; the substrate (soil or rock) on which they depend for anchorage and support, nutrition, moisture, and supply of oxygen to the roots; the other plants with which they interact in terms of mutual shelter, competition, benefit or antagonism; the animals that feed on, shelter under, or benefit the plants; the microorganisms that exert direct or indirect beneficial or antagonistic effects on the trees and other living organisms; and the soil and atmospheric climate, including fire and moisture, that influence the distribution and abundance of all the organisms in the forest.

A forest is comprised of several forest types. Forest types are distinctive associations or communities of trees, shrubs, and herbaceous plants. They are named for the predominant tree species occurring in the type. Common forest types in Brentwood include White Pine; Northern Hardwood (sugar maple, beech, yellow birch, red maple, white ash and smaller amounts of other species); Spruce-Fir, Red Oak, Hemlock, and Aspen-Birch. A forest type may be dominated by a single tree species or it may dominated by several species growing together. It is important to note that the NH Natural Heritage Bureau lists the Red maple floodplain forest as natural community of importance in Brentwood.

Brentwood's forests provide us with wood and food products, wildlife, scenic beauty, a modified microclimate, stabilization of steep slopes and snowpacks, the control of water flows, the creation and maintenance of stream habitat for aquatic animals, and recreation. In addition, forests constitute a major storage of carbon not only in the trees themselves, but in the forest soils as well. Most importantly, forests provide us with biodiversity.

NH is the second most forested state in the US trailing Maine. Brentwood is approximately 62% forested; the state average is approximately 85%.[4] Many of Brentwood's forests have grown from abandoned agricultural land and are now mature. However, due to increased development, the area of Brentwood's forests is decreasing.

The Land Cover for various forest types can be seen in Map 1, the Land Cover Map. The percentages for various forest types are shown in Table 7 below.

[4] NH Division of Forest and Lands

Table 7 Forest Land Cover

Land Cover	Acreage	Percentage
Mixed Forest	3986	36.7
Beech/Oak	851	7.8
Other Hardwoods	847	7.8
White/Red Pine	624	5.7
Hemlock	238	2.3
Forested Wetlands	130	1.2
Orchards	9	.2
Pitch Pine	2	.1
Total	**6687**	**61.8**

9.2 Forestry

Forestry can provide an important revenue source to the town, and if forests are sustainably managed, this can be an ongoing, stable income stream for landowners as well as the town. The Town receives a timber tax which is based on 10% of the value of timber harvested. Table 9 shows the timber tax received in each of the past 5 years. Revenue from this tax is deposited in the Town's general fund.

Table 8 Timber Yield Tax

Year	Amount
2006	$0
2005	$2,247.62
2004	$3,139.52
2003	$9,677.07
2002	$4.355.32
2001	$12,095.65

Responsible timber harvesting helps landowners afford to keep their forests as forests and provide many benefits for Brentwood as well. Currently there are 12 landowners enrolled in the American Tree Farm System, for a total of 669 acres. A Tree Farm is a privately owned forest managed to produce timber with added benefits of improved wildlife habitat, water quality, recreation, and scenic values. Town Forests and other publicly owned land may also be certified as a Tree Farm. To qualify, a landowner must:

- Dedicate at least 10 acres to growing and harvesting forest products;
- Have a written plan for the future management of their forest;
- Follow management recommendations prescribed by a licensed forester;
- Demonstrate a commitment to stewardship of their forest for multiple values.

In addition to land that has been officially designated as a Tree Farm, there are many acres that are actively managed under a Forest Management Plan written by a Licensed

Professional Forester. Foresters provide a variety of services to landowners including management plan preparation, timber appraisals, timber sale administration, wildlife habitat improvement, boundary marking, timber stand improvement, and recreational and aesthetic improvements. A list of Licensed Professional Foresters is available from the Cooperative Extension office.

9.3 Forest Soils

Forest soils have a range of productivity for different types of tree species and suitability for management. Forest Soils in New Hampshire have been classified for their productive value and operability and a classification of Forest Soils in Brentwood can be found in the Appendix.

9.4 Town Forest

The Brentwood Town Forest is on land situated behind the Town Office and the Swasey Central School on Route 111A. The total tract consists of 30.1 acres owned by the Town and 9.11 acres owned by the School. About 7 acres adjacent to the road are occupied by the Town Office and School, with a small tract of forest lying between them. The Town bought the land from the Congregational Church in 1948, and in 1978 the Conservation Commission was authorized to manage the forest by the approval of a warrant article at Town Meeting. In the late 1970s and early 1980s the Commission did undertake some limited timber stand improvement measures, such as pruning trees in some sections. There are several vernal pools in the Town Forest, which have been used in the past for public education workshops.

A Forest Management Plan was prepared for the Town by Consulting Forester Charles Moreno in March, 2004. The Plan states the Town Forest has approximately 21 acres of upland forest, 7.5 acres of wetland forest, and 2 acres of shrub swamp. The property contains abundant oak and beech, the nuts from which are food staples for a variety of wildlife. Hemlock, winterberry holly and high bush blueberry are also common. Moreno identified 4 vernal pools on the parcel. The Plan recommends three harvests of timber in the Town Forest between the years 2006 and 2040.

9.5 Forestry and Town Forest Recommendations

- Insure access and parking for public use.
- Follow the recommendations set in the Forestry Management Plan.
- Include the Town Forest in the American Tree Farm system. This would provide the public with an example of a managed forest. Information available from UNH Cooperative Extension: http://extension.unh.edu/Forestry/TreeFarm.htm
- Survey and mark boundaries.
- Develop trail maps and make them available.

- Develop a Town Forest Ordinance and signage informing residents of how the Town Forest should and should not be used.
- Add adjacent parcels to the Town Forests when possible. Larger forest blocks are easier to manage and can be more productive.
- Consider placing a conservation easement on all the Town Forests so that they are permanently protected.

10.0 NATURAL COMMUNITIES

The New Hampshire Natural Heritage Program defines a **natural community** as an assemblage of plants, animals and other organisms together with the natural physical environment in which they are found. Natural communities include different types of upland forests, grasslands, and wetlands, and they repeat on the landscape wherever suitable conditions occur. Brentwood's natural communities not only play a practical and essential role in keeping our soil, water and air healthy, a concept known as ecological services, but they provide us with diverse physical landscapes and scenic beauty.

Natural communities are defined by three characteristics:

- What plant species are present;
- The physical structure of the vegetation (short grasses vs. tall trees);
- The physical environment, which consists of the physical setting (pond shore or hillside), the water and nutrients present and the climate.

Natural communities are made up of living components that are closely interrelated and interact with one another and the environment. Humans are also a part of the living landscape and have a tremendous influence. Human disturbance of the natural environment is occurring at a faster pace than the natural communities can adapt to. It is vital we become aware of the natural communities we have in Brentwood in order to protect them.

Extensive wetland complexes, undisturbed river corridors, and rich forests are only a few of the natural communities occurring in Brentwood. Examples of natural communities that can be considered to be ecologically exemplary are increasingly harder to find in New Hampshire. Two new critical resources were released in 2006 to guide community protection of natural communities. The first is the New Hampshire Fish and Game *Wildlife Action Plan*. This plan is the most comprehensive wildlife assessment ever completed in New Hampshire, identifying 124 species and 27 habitats in greatest need of conservation. The second guide is the *Land Conservation Plan for New Hampshire's Coastal Watersheds*. This plan identifies 72 focus areas in 43 communities. In addition, the New Hampshire Natural Heritage Bureau in Concord has fact sheets that define, describe, list plant species present, and provide conservation considerations for the Natural Communities of New Hampshire. They may be contacted at www.nhdfl.org/formgt/nhiweb or 603-271-3623 for more information.

Protecting our natural communities is necessary to preserve the biological diversity of our Town and of New Hampshire. Biological Diversity, or **biodiversity**, is the variety and variability of all living organisms. This variety includes the diversity of plants, animals, fungi, algae, bacteria, and other microorganisms, their genetic variability, the natural communities in which they live, and the processes and interactions that weave the biological and physical elements of the planet into a complex web.[5]

11.0 PLANT COMMUNITIES

11.1 Rare/Imperiled Species

In 1987, the New Hampshire state legislature passed the Native Plant Protection Act (NH RSA 217-A) and formally recognized that "for human needs and enjoyment, the interests of science, and the economy of the state, native plants throughout this state should be protected and conserved; and their numbers should be maintained and enhanced to insure their perpetuation as viable components of their ecosystems for the benefit of the people of New Hampshire."

Currently, there are 288 species listed as endangered or threatened under the Native Plant Protection Act and that are tracked by the NH Natural Heritage Bureau. A complete listing of these species can be found on the NH Natural Heritage Bureau's website at www.nhfdl.org or by contacting them at Natural Heritage/DRED, PO Box 1856, Concord NH 03302-1856, 603-272-3623. Please contact them if you are aware of the location of any of these species, in order that the state-wide database may be made more complete. The Bureau has a policy of never releasing exact locations.

The Brentwood Conservation Commission encourages input from residents should they find an unusual plant species or a unique natural community. The Commission may be reached by calling the Town Office at 642-6400.

Endangered and threatened are defined under the NH Native Plant Protection Act as: **Endangered species** are those in danger of being extirpated from the state; **Threatened species** face the possibility of becoming "endangered".

The records of rare plant species in Brentwood are very old and the current status and location of these species is unknown. The listings recorded at the New Hampshire Natural Heritage Inventory can be found in the Appendix. A targeted botanical survey, with landowner permission, might determine whether these species or other rare species and plant communities are present.

[5] *New Hampshire's Living Legacy, the Biodiversity of the Granite State*, NH Fish and Game Department, 1996.

11.2 Invasive Species

Why include "Invasive Species" in a Natural Resources Inventory? It is important that those of us who reside in Brentwood be informed and aware of invasive species (plants, insects and fungal species) that have the potential to destroy and displace those natural resources that are vital to our biodiversity. According to the New England Wildflower Society, nearly 1/5th of New England's 3,000 plant species are in danger of disappearing from our region. In addition, invasive species are degrading public natural areas at an estimated rate of 4,600 acres per day. The Nature Conservancy estimates that 42% of all species on the Federal Endangered Species Lists are listed partly due to the effects of invasive species (and for 18%, invasive species are the sole reason for their listing).[7] According to the US Department of Agriculture website (www.usna.usda.gov/gardens/invasives.html), over $100 million dollars a year is spent in the United States combating invasive plants in wetlands alone. Rich, diverse plant communities can become barren, inhospitable expanses of invasive plants with little value to wildlife. Invasive plants may even deplete groundwater. The public must be educated to buy plants wisely and to control existing invasive plants. Additional information is available at Cooperative Extension offices.

What is an Invasive Species? An Invasive Species is a plant, insect, and/or fungal species that is not naturally native to a particular region and has the ability to thrive and spread aggressively outside its natural range. The Invasive Species thrives and spreads in a new habitat due to the fact it has no natural predators (insects, diseases and/or foraging animals) that naturally keep its growth under control as they would in their own native habitat.

Why and Where are Invasive Species a problem? Without any natural predators to prevent its spread, the invasive species, particularly in the case of plants, will put extreme pressure on native plants and animals. Ultimately the invasive plant will alter native habitats and reduce biodiversity by choking out native vegetation, threatening rare and endangered species and degrading wildlife habitat. With the loss of native vegetation and wildlife habitat also comes the loss of a number of our native animal, bird and insect species that depend on the native habitats to survive. Invasive species present the worst threat in wetlands, sand dunes, fire prone areas, and serpentine barrens where rare native plants are found.[8]

Invasive plants:

- Produce large numbers of new plants each season;
- Tolerate many soil types and weather conditions;
- Spread easily and efficiently, usually by wind, water, or animals;
- Grow rapidly, allowing them to displace slower growing plants;
- Spread rampantly when they are free of the natural checks and balances found in their native range[9].

[7] *Conservation Notes of the NE Wildflower Society*, Vol. 2, No. 3, 1998.
[8] United States National Arboretum.
[9] United States National Arboretum.

In 2000, the State of New Hampshire enacted legislation under House Bill 1258-FN which "requires the Commissioner of Agriculture, Markets, and Food to conduct research and educational activities which address the effects of invasive plant, insect and fungal species upon the state".[10] As a result of this legislation, the New Hampshire Invasive Species Committee was formed. A list of species prohibited and restricted in NH can be found in the Appendix.

12.0 BENEFICIAL INSECTS

Beneficial insects are a natural way to fight insect pests and protect our environment. When we encourage beneficial insects we are increasing our biodiversity and decreasing our dependency on poisonous chemical controls. Not only are we creating a more beautiful environment, but a safer one as well.

There are two categories of insects considered beneficials, predators and parasites. Predators are organisms that kill and feed on their prey outright. They are generally larger than their prey and must eat lots of prey to complete their development. Parasites are usually smaller and often weaker than their prey. They lay eggs on or within a host insect. The immature larvae use the host for food over time. A parasite will use only one or a few insects for food.[11]

You can entice beneficials to your yard and garden by providing them with the three basic necessities: water, food and shelter. In addition, you should avoid using and/or spraying broad-spectrum insecticides. The broad-spectrum insecticides are not selective in that they will kill not only the pest but the beneficial as well. Even the organic pesticides will kill the beneficials. A list of the more important beneficial insects we should encourage can be found in the Appendix.

13.0 WILDLIFE HABITAT

Brentwood's forests, grasslands, farmland, and abundance of water provide rich and diverse habitat for numerous animal species. An inventory of animals for Brentwood has never been conducted, so the extent of special habitats, rare species and common species is unknown. However, some information is available. These special habitats and unfragmented natural lands need to be conserved in order to prevent common species from becoming rare and rare species from being extirpated from New Hampshire.

13.1 Unfragmented Open Space

Large blocks of forest, wetlands and farmland that are unfragmented by development or public roads are valuable for many reasons. They:

- Provide essential forest interior habitat for species such as some songbirds that need to be distanced from human activity, pets, and the forest edge in order to survive;

[10] Final Version HB 1258-FN.

- Provide habitat for mammals that have large home ranges and prefer to avoid human contact, such as bobcat, otter, and moose;
- Enable owners of large parcels of forestland to conduct timber harvests that are economically viable;
- Minimize conflicts that can arise when managed forests and farms are surrounded and interspersed with development;
- Offer opportunities for remote recreation, including hunting, hiking and snowmobiling, where landowners allow.

Larger fragments are more likely to support viable populations of species and therefore act as a source of individuals that can then move to another fragment. Small fragments may be unable to support breeding populations. Persistent fragmentation may also lead to genetic changes and a loss of genetic diversity as populations are subdivided into small locally breeding populations.

Many large blocks of forestland are still intact in Brentwood. About 70% of Brentwood's forests are part of a contiguous area of forestland of at least 250 acres in size.[12] A threshold of 500 acres was used, which has some basis in conservation biology for the survival of many wildlife species.[13]

Table 9 lists the types of habitat found in Brentwood as determined by the NH Fish and Game as part of the 2006 Wildlife Action Plan.

Table 9 Habitat Acres, Acres Conserved and Percent Conserved

Habitat Type	Acres	Acres Conserved	Percent Conserved
Appalachian Oak-Pine	6596	1161	17.6
Hemlock-Hardwood Pine	883	33	11.3
Grasslands over 25 acres	1607	165	10.2
Floodplain Forest	886	283	32
Wet Meadow/Shrub Wetland	532	38	18.5
Peatland	142	3	6.6

Conserving these large blocks and connections between other significant habitat areas is important if residents want to retain the species that need larger and diverse home ranges and territories. It is important to note that the acreages above are for unfragmented blocks in the town and for blocks including the one mile buffer. Some areas should be studied further because the extent of unfragmented lands extends significantly into an adjacent Town making that block more important Habitat block size requirements for various animals is currently a subject of much study. The following data is from a draft Fish and Game Habitat Manual Analysis dated January 26, 2004.

[12] Sundquist, 1999

[13] Kanter, John, et als, 2001, and Patterns of Development Task Force, 1997.

Table 10 Unfragmented Block Requirements Per Species

Acres	Species
25	Minimum size for breeding pair of whip-poor-wills
100	Minimum size for a red-shouldered hawk
100	Area required for viable population of wood thrush
500	Approximate maximum dispersal area for wood, spotted or Blanding's turtle
1200	Minimum home range for northern goshawk
1320	Maximum home range for Cooper's hawk
3900-6144	Minimum home range for lynx
9400	Area required for breeding pair of northern goshawks
23,616	Average home range of male bobcat in Maine

13.2 Species of Concern

The NH Natural Heritage Bureau's database list three species of concern in Brentwood, Blanding's turtles, Wood turtle and the Brook Floater, an invertebrate mollusk. The Brook Floater is listed as Endangered in the State of New Hampshire. It should be noted that many species could be added to a list of species of concern if their habitat continues to be diminished. An extensive and detailed wildlife inventory should be completed for Brentwood.

The Bureau also lists Brentwood's Red maple Floodplain Forest as a Natural Community that is threatened by development. Red maple Floodplain Forest can be found along low lying areas adjacent to the Exeter and Little Rivers.

Despite the lack of a formal inventory of animal species in Brentwood, many interesting lists exist. People observing additional species should report their sighting to the Brentwood Conservation Commission, the New Hampshire Fish and Game Department or the Audubon Society of New Hampshire. Some of the species reported to the Commission are listed in the tables below, as are personal observations of Brentwood residents.

13.3 Significant Habitats

All wildlife needs food, shelter, water and space to survive. These life requirements are defined as an animal's habitat. Animals use a variety of strategies to find food, water and shelter in the environment and it is these strategies that determine the habitat needs for each species. Habitat is everywhere, yet some habitat is more important to wildlife than others. Habitat is more significant when it:[14]

- Supports a rare species;
- Represents a smaller percentage of the landscape;
- Provides an abundance of food or other resources;

[14] Identifying and Protecting New Hampshire's Significant Wildlife Habitat: A Guide for Towns and Conservation Groups, NH Fish and Game Department, 2001.

- Provides a buffer for wildlife against the effects of development;
- Supports several types of habitat.

The following habitat types are considered to be significant in New Hampshire:

a. ***Habitat of Rare Wildlife Species*** – examples include bald eagle wintering areas, peregrine nesting cliffs, common loon nesting areas and Great Blue Heron rookeries.
b. ***Unfragmented Lands*** – Large tracts of contiguous habitat that include a mix of forests, wetlands, riparian areas or other habitat which support wide-ranging mammals and forest interior birds.
c. ***Riparian Areas and Large Wetlands*** – Riparian areas along water courses, especially those areas that connect river corridors, wetlands and unfragmented lands. Large wetlands or wetland complexes that support a variety of wetland dependent wildlife. ***Agricultural and Other Open Land*** – Large fields and shrub lands that support species dependent on this open land type. This habitat has been disappearing in Brentwood as farmland is converted to development or reverts back to forest.
d. ***Other Unique or Critical Habitats*** - This habitat type is divided into the following groups:

    - Habitat that is rare statewide, for example pine barrens;
    - Habitat that is rare in a particular geographic area, for example mountains in southern New Hampshire;
    - Uncommon land features which provide unique conditions for certain species, for example denning sites in rock piles;
    - Habitat critical to certain species during a particular phase of their life cycle or a particular time of the year. Examples include vernal pools, waterfowl migration stop-over sites and deer wintering areas, all of which are found in Brentwood. Large wetlands are valuable stop-over sites for migrating waterfowl in the spring and fall. Canada and Brant geese, mergansers, pied-billed grebes, mallards, and many other species rest and feed here. Migrating geese also feed in the stubble of Brentwood cornfields in the late fall. Seeps or seepage wetlands are generally small areas (less than ¼ acre) that occur where groundwater comes to the surface. These sites are the first to green-up in the spring and are frequented by a variety of wildlife for that reason. Dependent species include bear, deer, moose, turkey, salamanders, migrating birds and woodcock.[15]

The New Hampshire Fish and Game Department recently completed the Wildlife Action Plan, which includes statewide mapping of significant wildlife habitat. These maps should be used to focus attention on areas that should possibly be protected and that should, at a minimum, be studied carefully before any destruction of the habitat occurs. More information on the Plan can be found in Section 14.[16]

[15] *Good Forestry in the Granite State*. NH Division of Forests and Lands and SPNHF. 1997.
[16] NH Fish & Game Department. 2006. Wildlife Action Plan

13.4 Fisheries

Fishing is a popular hobby and Brentwood's fisheries are an important natural resource. It is important to keep in mind that many of our fish have been contaminated by mercury and other pollutants. Before eating any fish, consult with the most recent advisories as to what is a safe consumption level.

Fish stocking by NH Fish and Game primarily takes place from mid-March to early July. The primary reason for this is water temperatures. Since trout cannot tolerate water temperatures warmer than the mid-70s, they need to be stocked prior to the onset of the warmest summer weather. NH Fish and Game stocks trout and other fish along the Exeter River between Route 121A in Sandown and the Great Dam in downtown Exeter. Dudley Brook is also stocked.

13.5 Wildlife Habitat Recommendations

Brentwood's wildlife, and the habitat that it requires, is an important component of the rural character of the town that is so important to its residents. Because the habitat maps highlight large, unfragmented blocks of land and wetlands, conserving key wildlife habitats will also work towards preserving rural character and water quality.

- Protect significant habitats.
- Decrease pollutants so that all wildlife, including humans have a safe food supply, clean air to breathe and clean water to drink.
- Protect riparian corridors with wetland buffer in a Wetland Ordinance.
- Keep unfragmented parcels unfragmented.
- Minimize impacts to significant habitat during development by requiring that a wildlife study be conducted.
- Apply principles of conservation design to minimize the impacts of development and preserve natural undeveloped lands.
- Identify and conserve wildlife corridors through parcels to facilitate wildlife movement across developed areas.
- Conduct scientific studies of potentially significant habitats possibly with interns from college-level programs.
- Educate the public about the value of wildlife habitat.

14.0 REGIONAL AND STATEWIDE NATURAL RESOURCE INVENTORIES

In 2006, two important reports were released, both providing important information about Brentwood's natural resources. The first report was the *New Hampshire Wildlife Action Plan* (WAP), written by the NH Fish and Game Department. The second was *The Land Conservation Plan for New Hampshire's Coastal Watershed* (Coastal Conservation Plan), developed by The NH Chapter of the Nature Conservancy, the Society for Protection of NH Forests, Rockingham Planning Commission, and Strafford Regional Planning Commission. Both of these reports are mentioned here because recommendations made in the plans can guide future land conservation and land development in Brentwood.

The WAP is the most comprehensive wildlife assessment ever completed in New Hampshire, identifying 123 species and 27 habitats in greatest need of conservation. Categories developed for the WAP include:

- Tier 1 – Highest quality habitat in NH
- Tier 2 – Highest quality habitat in an ecoregion or watershed
- Tier 3 – Other significant habitat (regional scale)
- Tier 4 – Locally significant habitat (town scale)

The amount of acres in each of these four categories was calculated for Brentwood, as was the number of acres conserved in these categories. Table 11 lists this information.

Table11 Summary of WAP Habitat Tiers

Tier 1 Acres	1065
Tier 1 Acres Conserved	282
% of Tier 1 Acres Conserved	26.5
Tier 2 Acres	785
Tier 2 Acres Conserved	62
% of Tier 2 Acres Conserved	7.9
Tier 3	2644
Tier 3 Acres Conserved	438
% of Tier 3 Acres Conserved	16.6
Tier 4 Acres	3105
Tier 4 Acres Conserved	537
% Tier 4 Acres Conserved	17.3

Map 12 shows the habitat areas identified by the WAP.

To develop the Coastal Conservation Plan, data from the WAP as well as other sources were used. The goal of this Plan is to focus conservation on those lands and waters that are most important for conserving living resources – native plants, animals, and natural communities – and water quality in the coastal watersheds. The Plan prioritized coastal watershed areas and

offers regional strategies for maintaining diverse wildlife habitat, abundant wetlands, clean water, productive forests, and outstanding recreational opportunities in to the future. The Plan used a science-based approach to develop criteria to highlight the most significant natural resource features. This wealth of data resulted in 75 Conservation Focus Areas in the 46 communities in the coastal watershed. Brentwood has 3 Focus Areas, labeled Bloody and Dudley Brooks, Dogtown Swamp, and Exeter River. The boundaries of all these areas go into the Town of Exeter. Brief descriptions of the significant ecological resources follow, and more information can be found in the Appendix.

- Bloody and Dudley Brooks – 550 acre focus area; part of a 1,350 acres unfragmented forest block identified as a Tier 1 priority in the WAP and located within a 5,600 acre aggregated forest bock; contains a Great Blue Heron rookery, an animal of conservation concern; 27 acres of prime farmland and 27 acres of farmland of statewide importance

- Dogtown Swamp – 160 acre focus area, part of a 660 acre unfragmented forest block and a 17,900 acre aggregated forest block; contains a Swamp White Oak basin swamp, an Exemplary natural community

- Exeter River – 620 acre focus area; a portion of a 2,000 acre unfragmented forest block identified as a Tier 2 priority in the WAP and located within a 17,900 aggregated forest acre block; Red maple floodplain forest; 60 acres of prime farmland and 34 acres of farmland of statewide importance

The loss of habitat through the conversion of land from its natural state to a developed landscape represents the single greatest threat of increased human activity on native wildlife. All animal species require certain habitat features to survive. Development typically eliminates or significantly changes many important habitat features found in the Focus Areas described above, thus reducing or eliminating the habitat value of that area.

14.1 Recommendations from the Regional and Statewide Natural Resource Inventories

- Regulate the location, density and design of development within Focus Areas to minimize harmful impacts while allowing for a reasonable level of development.
- Preserve large and contiguous blocks of natural, undisturbed vegetation, looking for opportunities to connect to undeveloped lands on adjacent parcels.
- Conserve rare and outstanding landscape elements, such as unique features or habitats, (for example, Brentwood's Red Maple swamps) by directing development to other areas.
- Identify and conserve wildlife corridors through the property to facilitate wildlife movement across developed areas.
- Maintain significant buffers of undeveloped land between important habitat areas and developed areas.
- Maintain or replace natural features and functions within developed areas (such as capturing rainwater).

- Conserve key wildlife habitats, which will also work towards preserving rural character and water quality.
- Educate residents about ways in which to manage land for wildlife.
- Require developers to review habitat conservation information in local and regional plans and manuals on habitat identification and protection.
- Apply principles of conservation design to minimize impacts and preserve natural undeveloped lands.
- Submit sightings of reptiles and amphibians to the NH Fish and Game Reptile and Amphibian Reporting Program

For more detailed information on the Wildlife Action Plan, visit the NH Fish and Game website, www.wildlife.state.nh.us. For more detailed information on the Land Conservation Plan for New Hampshire's Coastal Watersheds, visit the New Hampshire Estuaries Project website, www.nhep.unh.edu.

15.0 RECREATIONAL TRAILS

A much utilized, but often overlooked part of the Natural Resource Inventory of Brentwood is the extensive trail system that exists in town. Hikers, horseback riders, hunters, snowmobilers and ATV'ers all benefit from the trail system that has been developed. This system is comprised of many discontinued and non-town maintained roads, (see list), logging roads and age old trails. Through the permission and cooperation of the many resident and nonresident land owners, the trail system exists for the benefit of all to use and enjoy responsibly.

15.1 Trails

Old Haigh Road, Municipal trail – A section of the Old Haigh Road, a Class 6 road, is marked by granite bounds. The western end begins after a wooden bridge crosses the Little River. A trail on the Dow property follows the river northward to join the Exeter River. There is a large glacial erratic at their confluence. The Old Haigh Road trail continues in a southerly direction until shortly before the Class 6 portion joins South Road.

Ole Gordon Road, Municipal trail - A section of the Class 6 portion of Ole Gordon Road has been designated as a municipal trail. The boundaries are delineated by granite markers on both ends. A trail easement has been placed on the trails on the Kaufman/Goun property. They connect with the municipal trail. These trails meander in several loops through rolling woodland trails.

Rowell Road, Municipal trail – A section of the Class 6 portion of Rowell Road has been designated as a municipal trail. It is also bounded by granite markers on either side. The Merrill conservation easement property is on the northern side of the municipal trail. The trails on this land traverse through uplands, down to the Exeter river, and along the river. The western boundary meanders through wetlands before rising back up to Rowell road. The eastern boundary connects over a stone wall with a wide woodland trail on the Pratt property that leads back to Rowell Road.

New Road is a Class 6 road in the north end of Brentwood. It connects North Road just south of the Route 101 overpass to Deer Hill Road. The road is now a narrow trail. Part of it transects wetlands and is quite wet on either side. The road ends on Deer Hill Road adjacent to a driveway.

There is a network of trails on state land on the west side of Pine Road. The area is part of a wetlands reclamation project that resulted from the construction of Route 101. The trails are wide gravel roads that surround several ponds. There are coyote, fox, and great blue herons that share the space with other species.

The Town Forest behind the Swazey School has a small network of trails. They travel through the woods and go past a vernal pool at the border that joins the power lines.

A trail has been cleared that accesses land that the town bought from the Martins on South Road. It progresses north from South Road, meeting an existing woods road. The road eventually descends to the Little River. (A derelict plywood bridge crosses the river. It is unsafe.) There is a loop that follows the river to the east until it circles back to join the woods road.

Trails have been cleared on the town land that abuts the BRC land to the west of Route 125. The trails are shared with the archery club. They travel through woods, wetlands, and uplands. There are several loops. The terrain is flat to gently rolling.

15.2 Trail Recommendations

Brentwood residents enjoy being outside whether it be for snowmobiling, hiking, skiing or bird watching. Currently, there is an extensive trail system made up of Class VI roads, discontinued roads and other paths on private property. It is important that this trail system be preserved for future generations. Recommendations that might make this possible include:

- Prohibit development on Class VI roads only after a master plan for their use has been completed and only after an alternative trail system suitable for all trail uses has been developed;
- Develop a community trail system suitable for multi-use. All types of users should be involved in the planning process;
- Maintain trail connectivity during the subdivision process;
- Develop trail guides;
- Improve pedestrian trail systems on town-owned land;
- Develop a system for maintaining and constructing pedestrian trails. Ideas include a Trail Committee, possibly as a subcommittee of the Conservation Commission and Trail Work Days;
- Do not let one trail use destroy the trail for other users.

16.0 SCENIC RESOURCES

Forestland, farmland, and hundreds of years of human occupation make Brentwood a very scenic place. Views of forests, fields, rivers, streams and wetlands, particularly in juxtaposition, are enjoyed by residents and visitors alike. Many favorite scenic landscapes are viewed from public roads. These have been identified over the years in public meetings and surveys.

16.1 Scenic Vistas in Brentwood

The following is an attempt to compile all of this information, but the list should not be considered inclusive and it has not been prioritized. Only scenic resources that can be observed from a public road or are easily accessible are included. The labels listed below, such as SRV1, refer to points on the Scenic Resources Map.

South Road

SRV1: fields on western side of Shore Rd. and south side of South Rd. in foreground, mixed woods beyond with distant hills serving as a focal point.

SRV2: west of intersection of Shore and South Rd., old farmhouse and barn along road opening to expanse of fields in middle ground with distant views of Pawtuckaway ridge in background. The western view lends itself to spectacular sunsets. Sky is an important element of these two vistas.

SRV3: heading east, Martin property (town owned) on northern side of road. Long meadow vista framed by mixed woodlands, old farmhouse and barn in foreground.

Lake Road

LRV1: heading north, Starlit Hollow Farm on eastern side of road. Farmhouse and barn along road with paddocks in foreground, and beyond, fields with wetlands (cattails, swamp iris) in the middle ground and deciduous woods beyond and Skim Milk Farm colonial home at the top of the hill in background. This is a low area, with upland swamp directly across the road from this vista. Often, this open area is subject to ground fog.

LRV2: open fields north of Skim Milk Farm on the eastern side of the road planted in corn, road progresses through a white pine canopy with glimpses of the fields (winter vista) through the trees, stone walls (in disrepair) line both sides of the road in this section.

Haigh Road

HRV1: heading south, past the entrance to Rowell Road West, Haigh Rd. crosses the Exeter River. The bridge vista to the south comprises the river with gentle rapids, ending in a thick hemlock stand on the opposite bank where the river makes a bend.

Pickpocket Road

PRV1: heading north beyond the dam, eighteenth century farmhouses line the road on both sides opening to vistas of the Swasey Farm on the east side in the middle ground surrounded by open fields and ending in mixed woods in the background.

PRV2: at top of first hill heading north, large field on the western side of the road, a reproduction house in the middle with distant views to the forest.

PRV3: on the western side of the road, just past Rowell Rd. East heading north, there is an airfield, which affords a limited vista with woodlands in the background.

PRV4: view west over Dudley Brook at the bridge crossing.

Middle Road

MRV1: heading west, Creamery Brook Farm in the foreground on north side of road, fields before the farmhouse rise in elevation, woods beyond.

MRV2: on the southern side of the road, fields (hayed) and wetlands of Dudley Brook framed by uninterrupted forest.

MRV3: heading east, just past Deerhill Rd. intersection, Creamery Brook field (hayed) on north side of road rising to hilltop framed by mixed woods. Sky is an important element of this vista.

MRV4: fields (hayed) on south side of road, diagonally across the road from the Swasey Central School.

MRV5: heading east, after Maggie's Pond and old brown house on north side of road, vista over the wetlands of Dudley Brook, with fields in the middle ground studded by an occasional tree left by an active beaver. The old farmhouse on the western side of Deerhill Rd. is the focal point in the background, especially in winter with no vegetation.

MRV6: on south side of road, Grand Future Farm as middle ground with fields in foreground and in background. This is primarily a winter vista.

Deerhill Road

DHV1: heading north, horse farm on east side of road with old farmhouse in foreground, grazing pastures in foreground and middle ground, with high pastures and hayed fields in the background ending in a tree line. Sky is an important element of this vista.

DHV2: heading south, vista is of a long meadow on western side of road, after the Deerhill subdivision, with old horse barn and farmhouse along the road and distant views of Dudley Brook (often flooded in the Spring).

North Road

NRV1: after the Prescott Rd. intersection, heading west, open vista of Vahey property and the abutting Ladd Farm of UNH. This same vista, heading in the opposite direction, offers views of these same open fields culminating in stone walls and Vahey's large gray barn as focal points.

Prescott Road

PCRV1: heading south, after turning onto Prescott Rd. from North Rd., road has a "rollercoaster" sort of topography. Vista of large field belonging to the county framed by sizeable shagbark hickories lining the roadway.

16.2 Scenic Road Designation

The Town of Brentwood has designated some of the more rural noteworthy roads as "Scenic". South Road is designated as a "scenic road" from the intersection of Lake Road to eastern portion near Stevens Drive that borders with Kingston. The Town designated the entire lengths of Lake Road and Haigh Road as "scenic". The last segment of designated "scenic road" is from the Town boundary on Pickpocket Road by the dam to the intersection with Middle Road

A scenic resource that is often overlooked is the ***night sky***. Low levels of light pollution allow a clear view of stars, planets and other celestial objects. The Town of Brentwood has adopted an ordinance to control and limit lighting, especially along Route 125.

16.3 Scenic Resources Recommendations

- Review existing lighting requirements or limitations in the zoning and subdivision regulations and revise as needed to reduce light pollution.
- Identify scenic roads with appropriate signs.

17.0 PROTECTED LANDS

Brentwood's conservation and recreation lands enhance the quality of life for its residents and visitors in many ways. Hiking and snowmobile-trail users enjoy the natural beauty of Brentwood forests, fields, ridge tops and shorelines. Wildlife benefit from extensive areas of protected habitat. Water quality and quantity are safeguarded by conservation lands. Property values and the municipal budget also benefit from conservation land as open space absorbs negligible tax revenues compared to developed land.[17]

[17] Auger, Phil, *Does Open Space Pay?*, University of new Hampshire Cooperative Extension, Durham, NH 1994

For many decades, residents have donated their lands or conservation easements on that land, to the Town, the State, or non-profit conservation organizations for the benefit of future generations. The Brentwood Conservation Commission, Land Trust for Southeast New Hampshire, Rockingham County Conservation District, The Nature Conservancy, Society for the Protection of New Hampshire Forests, Audubon Society of New Hampshire and State of New Hampshire have all been active partners with Brentwood landowners in voluntarily conserving these lands. Occasionally, these groups have worked together to raise monies to purchase conservation easements on especially sensitive parcels.

Conserved lands are listed in Table 12. Some of these lands are in public ownership and have guaranteed public access. Some are protected with conservation easements and are owned by private individuals and families who retain control over whether to allow public recreational access to their lands. It should be noted that some of the Town owned lands are not permanently conserved, as the voters of the Town could vote to change to the use of these lands. Some of these lands, especially the Town Forests, should be protected in perpetuity with conservation easements.

Based on Conservation Commission records, the approximate total area of conservation lands in Brentwood is 1665 acres or 15.3% of the town. The Conservation Lands Map shows the location of these lands. These are not included in the table. Land owned by Rockingham County, approximately 300 acres of open space, is not permanently protected from development.

Table 12. The columns in the table have the following meaning:

Protection Method

- FO (Fee Ownership) means that the conservation parcel is owned by the Town, another governmental entity or a conservation organization.
- CE/DR means that the land is protected through a conservation easement or deed restrictions that are held by the Town, another governmental entity or a conservation organization.

Easement Holder – This is the conservation organization or government agency that either owns or holds the conservation easement.
DES – NH Department of Environmental Services
RCCD – Rockingham County Conservation District
SELTNH – Southeast Land Trust of New Hampshire
SPNHF – Society for the Protection of New Hampshire Forests

Acres – This is the approximate size. Discrepancies are frequent since some parcels have not been surveyed. The Town tax maps were used as the data source. These figures will differ from those found on the Conservation Lands map due to the digitizing process.

Public Access – Yes if public access is guaranteed. It should be noted, however, that many owners of conserved land who have retained the right to determine public access nevertheless leave their lands open to the public and unposted.

Table 12 Conservation Lands and Town Forests

Name	Location	Protection Method	Easement Holder	Acres
Stevens	South Road	CE	USDA	36
Merrill	Rowell Road	CE	Town	95
Suddeth/Dow	Old Haigh Road	CE	Town	13.2
Peabody Drive River Access	Peabody Drive	CE	Town	3.4
MSEA/Rislove/Turner Porter	Route 125	CE	Town/DES	8.8
Dow	Old Haigh Road	CE	Town	71.6
Dudley Brook/Golden	Lindon Drive	CE	Town/DES	8.6
Brown/Vadas	Rowell Road	CE	SELTNH	13.9
Brown	Middle Road	CE	SELTNH	76.8
Gove	South Road	CE	RCCD	42.2
Swasey	Pickpocket Road	CE	SELTNH	8
Ladd	Crawley Falls Road	CE	SELTNH	18.5
Robinson	South Road	CE	SELTNH	59.4
Schmaltzer	Middle Road	CE	SPNHF	63.6
Mill Falls	Fellows Road	CE	RCCD	47
Pratt	Rowell Road	CE	SELTNH	55
Household Realty/Windsor Meadows	Abbey Road	CE	Town	35.5
Mink Run/Lebreux	Lebreaux Drive	CE	DES	61.6
Brook Crossing/Golden	Lake Road	CE	Town	7.5
Town of Brentwood - Town Forest	Middle Road	FO	Town/DES	17.4
The Meadows/RRR	Haigh & Rowell Road	CE	Town/DES	53
Deerhill Farm Trust	Longmeadow Drive	CE	Town/DES	18
Windy Brook/Sanderson	North Road	CE	Town	51
Labonte Commercial Site	Route 125	CE	DES	15
Swasey	Pickpocket Road	CE	SELTNH	31.1
San-Fen Commercial Porter	Route 125	CE	Town	22.6
Burtt	South Road	CE	RCCD	111
Town of Brentwood (Stevens)	Haigh & South Road	FO	RCCD	65.7
Schmaltzer	Middle Road	CE	Town	47
Nekton	Middle Road	CE	Town	30
MacMullen	Middle Road	CE	Town	22
Hull	Middle Road	CE	Town	6

Foy (Greer)	South Road	CE	SELTNH	34.1
Pratt	Rowell Road	CE	RCCD	42
Parks	Middle Road	CE	RCCD	18.3
Crosby	Middle Road	CE	RCCD	27
Town of Brentwood (Hudgens)	Pickpocket Road	FO	SELTNH	85.07

Pimentel	Rowell Road	CE	Town	48
Van Buskirk	Rowell Road	CE	Town	23
Storm	Pickpocket Road	CE	Town	6
Austin	Scrabble Road	CE	SELTNH	90
Gove	South Road	CE	RCCD	16
Nicolova	Pickpocket Road	CE	RCCD	28.6
Shipley	Pickpocket Road	CE	SELTNH	49.7
TOTAL				1683.17

17.1 Current Use

Current Use is a method of taxation established by NH RSA 79-A which states in its purpose:

"It is hereby declared to be in the public interest to encourage the preservation of open space, thus providing a healthful and attractive outdoor environment for work and recreation of the state's citizens, maintaining the character of the state's landscape, and conserving the land, water, forest, agricultural and wildlife resources. It is further declared to be in the public interest to prevent the loss of open space due to property taxation at values incompatible with open space usage. Open space land imposes few if any costs on local government and is therefore an economic benefit to its citizens. The means for encouraging preservation of open space authorized by this chapter is the assessment of land value for property taxation on the basis of current use. It is the intent of this chapter to encourage but not to require management practices on open space lands under current use assessment."

Thus, Current Use is designed to help landowners keep their open space undeveloped by assessing the land at its present use rather than its highest potential use. It is important to understand that Current Use is not a method for permanent protection of open space land. Land placed in Current Use can be removed from that program should the landowner decide to develop the land, but there is a penalty called the Land Use Change Tax. Detailed information about Current Use is in the *Current Use Criteria Booklet* available from the Department of Revenue Administration online at www.state.nh.us/revenue. Approximately 4,937 acres of land in Brentwood is enrolled in the Current Use program, 45% of land in town. Table 13, below, highlights the trend of decreasing acres of land in current use between 1996 and 2006.

Table 13 Current Use in Brentwood 1996-2006

Year	Acres in Current Use
1996	5811.4
1997	5713.5
1998	5734.4
1999	NA
2000	5552.5
2001	5407.2
2002	NA
2003	5182.5
2004	5026.9
2005	5007.5
2006	4936.6

17.2 Protected Lands Recommendations

Currently, approximately 16% of Brentwood's lands are protected from development. In order to keep Brentwood a special place, the Town must endeavor to protect more of its lands from development but still allow for growth. This will be a challenge. Following are some steps to help the Town meet this challenge.

- A funding source for land protection should be maintained. Consider permanent protection of Town owned conservation lands and Town Forests by placing conservation easements on them.
- Assure monitoring strategies for land protected by the Town meet the standards and practices set by the national Land Trust Alliance.

18.0 SUMMARY AND RECOMMENDATIONS

As the preceding pages have shown, Brentwood is a special place. The wealth of its natural resources make it a delight for the people who live here and a destination for those from all over who enjoy the outdoors and the recreational opportunities it provides. As a critical part of the Great Bay Estuary watershed, Brentwood's importance to New Hampshire far exceeds its borders. It is tempting to want to protect it in its entirety. Change and development, however, are not only inevitable but essential if a community is to maintain its vibrancy. The challenge is

to provide for growth that is designed and intelligent rather than rampant and destructive. The areas where development can take place safely need to be identified and clearly defined. To that end we must keep the purity of rivers, streams and wetlands in mind. The open space and scenic vistas provided by our agricultural land and the excellent soil that land represents must be treated with respect. In addition, maintaining habitat for the biodiversity that exists in Brentwood is essential. It is the hope of the Brentwood Conservation Commission that this Natural Resource Inventory will be a valuable resource as we plan for the future of our Town.

19.0 ACTION PLAN AND NEXT STEPS

The Brentwood Conservation Commission has developed the following action plan based on NRI findings and recommendations:

The key natural features of Brentwood are:

- Rivers and streams and their associated wetlands
- Aquifers underlying Pickpocket, Pine and Epping Roads
- Remaining large blocks of open land, including prime farmland
- Drumlins (long, low hills) and rocky landscapes
- Forests with a diversity of woodland species

The Conservation Commission recommends future resource protection efforts include:

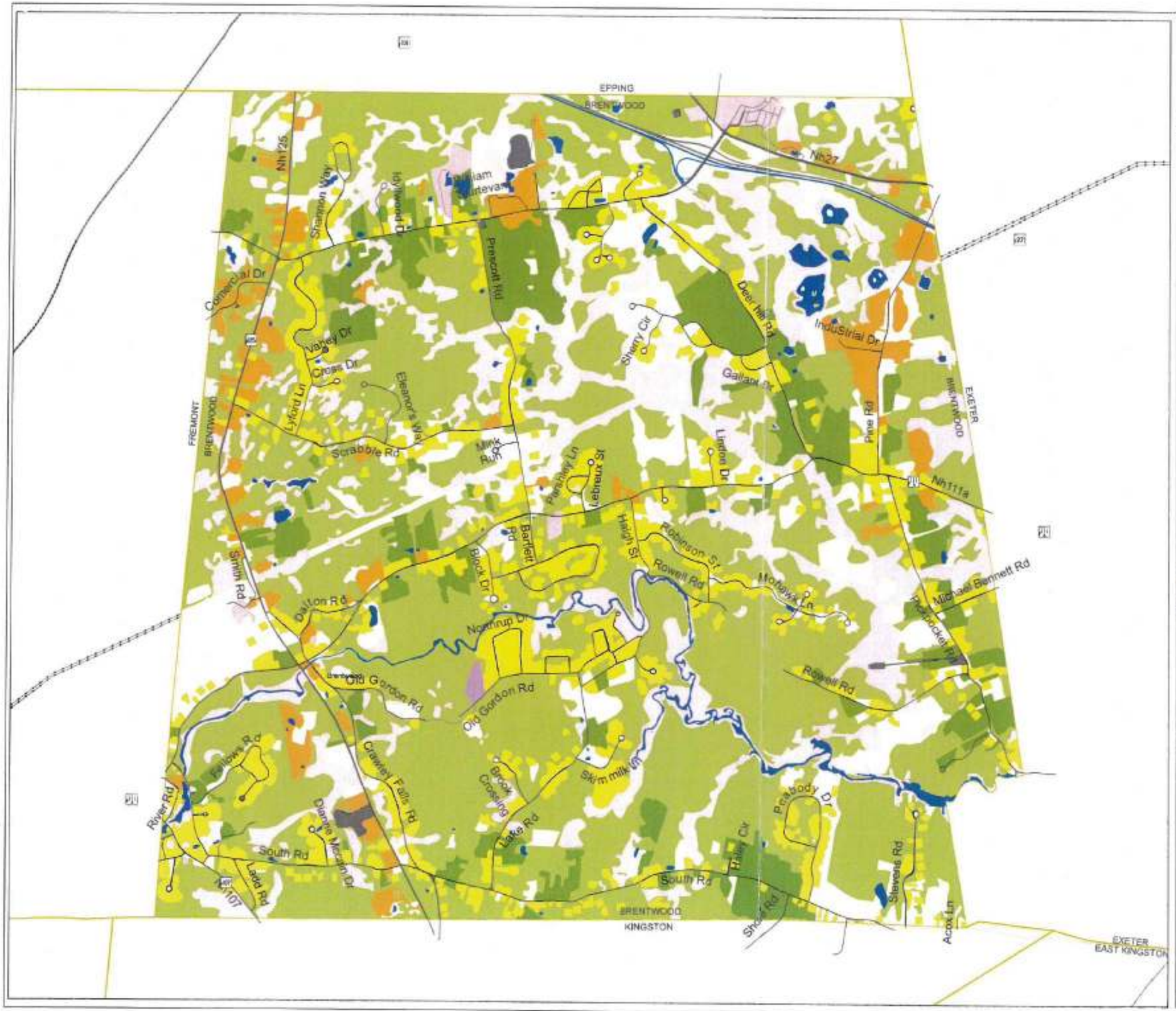
- Amending land use regulations to increase protection of riparian buffers and wetlands
- Identifying and mapping prime wetlands
- Working with owners of public and private land to secure conservation easements
- Protecting key natural features of Brentwood, listed above
- Supporting efforts of the Trails Committee
- Publishing a trail map of lands open to the public
- Conducting a wildlife inventory

Key steps needed to accomplish this include:

- Extending and expanding the 2003 Conservation Bond to continue land conservation efforts
- Pursuing grant funds for natural resource protection projects
- Completing a survey of prime wetlands
- Adopting land use regulations to protect key natural features
- Working with the County and State officials to conserve public land
- Educating residents about non-point source pollution and water resources

2005 Landuse Map
Brentwood Natural Resources Inventory

October, 2007



- Residential
- Industrial/Commercial
- Mixed Developed
- Transportion
- Outdoor & Other Urban
- Active Agriculture
- Forest
- Water
- Wetlands
- Gravel Pit or Quarry
- Vacant Land
- State Boundary
- Town Boundary
- County Boundary
- Power Transmission Line

BASE FEATURES

RPC Regional Roads

- State Primary System
- State Secondary System
- Public Road, municipally maintained
- Public Road, not maintained
- Private Road
- Trail

- Town Boundary
- Surrounding Towns
- Railroads
- Power Transmission Lines

Surface Water Features

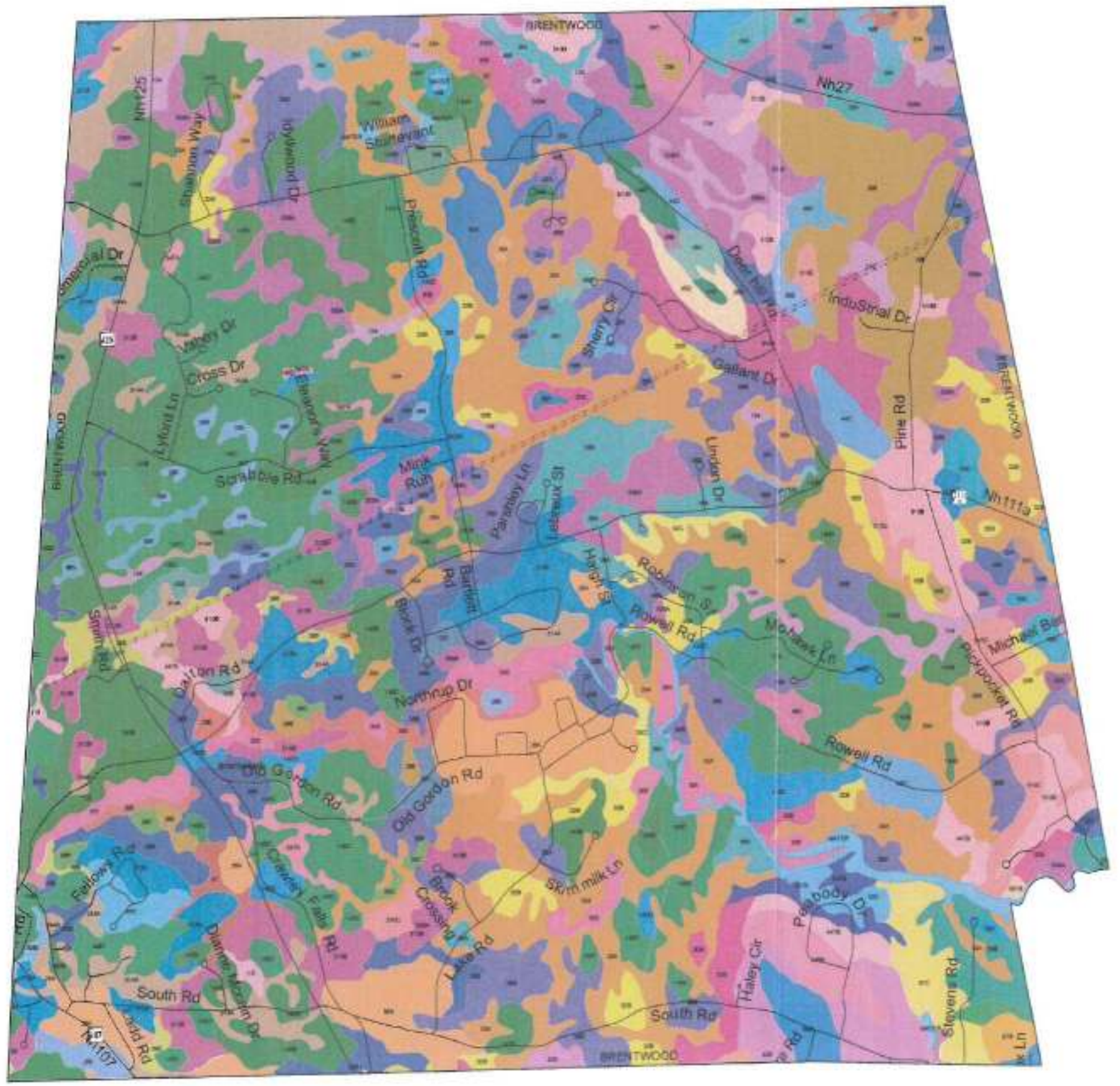
- Stream
- Intermittent Stream
- Marsh or Swamp Drains
- Bodies of Water

Base Features (transportation, political and hydrographic) were automated from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the study of Earth, Oceans and Space, University of New Hampshire, Durham, NH. 1992/1999. The roads within the Rockingham Planning Region have been updated by Rockingham Planning Commission and by NH Department of Transportation through ongoing efforts.

Rockingham Planning Commission

Soil Types Map
Brentwood Natural Resources Inventory

October, 2007



Soil Type							
115	305	446A	547B
125	30A	446B	597
129B	30B	447A	599
129C	313A	447B	62B
12A	313B	447C	62C
12B	314A	44B	63B
12C	32A	44C	63C
12E	32B	45B	63D
134	32C	45C	656A
140B	33A	45D	657A
140C	343C	460B	657B
140D	343D	460C	66B
141E	38A	495	66C
28A	38B	497	66D
26B	395	510A	67B
26C	397	510B	67C
26E	42B	510C	67D
295	42C	510D	67E
298	42D	531B	699
299	43B	533	799
29A	43C	538A	97
29B	43D	546A	997
	43E	547A	WATER

BASE FEATURES

RPC Regional Roads
- State Primary System
- State Secondary System
- Public Road, municipally maintained
- Public Road, not maintained
- Private Road
- Trail

Town Boundary
Surrounding Towns

Railroads
Power Transmission Lines

Surface Water Features
- Streams
- Intermittent Stream
- Marsh or Swamp Outline
- Bodies of Water

Base Features (transportation, political and hydrographic) were automated from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the study of Earth, Oceans and Space, University of New Hampshire, Durham, NH 1992/2003. The roads within the Rockingham Planning Region have been updated by Rockingham Planning Commission and by NH Department of Transportation through ongoing efforts.

GRANIT
Rockingham Planning Commission

Active Farms Map
Brentwood Natural Resources Inventory

October, 2007

Legend

Active Farms — H - Hayfields; C - Crops; O - Orchard / Christmas Trees; L - Livestock

Prime Farmland

Farmland Soils of Statewide Importance

BASE FEATURES

RPC Regional Roads
- State Primary System
- State Secondary System
- Public Road, not maintained
- Private Road
- Trail

Town Boundary Surrounding Towns

Railroads

Power Transmission Lines

Surface Water Features
- Stream
- Intermittent Stream
- Marsh or Swamp Outline
- Shores of Water

Locations of Active Farms were collected by Lisa McNaughton of the Town of Brentwood Conservation Commission. The GIS of Active Farms were reconciled onto a 1:24000 base map. Reconciliation done by RPC - August 2003

Base Features (transportation, political and hydrographic) were automated from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the study of Earth, Oceans and Space, University of New Hampshire, Durham, NH, 1998/99. The roads within the Rockingham Planning Region have been updated by Rockingham Planning Commission and by NH Department of Transportation through ongoing efforts.

FARMLAND SOILS

Prime Farmland

Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops, and is also available for these uses (the land could be cropland, pastureland, forest land, or other land, but not urban built up land or water). It has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed, including water management, according to acceptable farming methods.

In general, prime farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt content, and few or no rocks. They are permeable to water and air. Prime farmlands are not excessively erodible or saturated with water for a long period of time, and they either do not flood frequently or are protected from flooding.

Additional Farmland of Statewide Importance

This is land, in addition to prime and unique farmlands, that is of statewide importance for the production of food, feed, fiber, forage and oilseed crops. Criteria for defining and delineating this land are to be determined by the appropriate State agency or agencies. Generally, additional farmlands of statewide importance include those that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce as high a yield as prime farmlands if conditions are favorable. In some States, additional farmlands of statewide importance may include tracts of land that may have been designated for agriculture by state law.

Rockingham Planning Commission

0 0.5 1 Miles

0 0.5 1 Kilometers

1 inch = 2,000 feet

Wetlands Map
Brentwood Natural Resources Inventory

November 2007

Legend

Brentwood Prime Wetlands

Rockingham County Soil Survey

Wetland Soils

- Very Poorly Drained Soils
- Poorly Drained Soils

Hydric B - Non Hydric Complex or Association

BASE FEATURES

RPC Regional Roads
- State Primary System
- State Secondary System
- Public Road, municipally maintained
- Public Road, not maintained
- Private Road
- Trail

Town Boundary

Surrounding Municipalities

Railroads

Power Transmission Lines

Surface Water Features
- Streams
- Intermittent Streams
- Manor or Shoring Outline
- Bodies of Water

Wetlands shown on this map are derived from soils classified as "very poorly drained" and "poorly drained" by the USDA Natural Resources Conservation Service. Soil boundaries are from NRCS Rockingham County Soil Survey, published at 1:20,000 scale. Soil unit boundaries that coincide with water body boundaries in the field will not always coincide on this map, due to lower differing data sources and scales. Information shown on this map is for planning purposes only. Data submission completed by Complex Systems Research Center, UNH, October 1992. Soils delineation based on field work, conducted by the USDA Natural Resource Conservation Service, completed in 1985.

Base Features (transportation, political and hydrographic) were converted from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the study of Earth, Oceans and Space, University of New Hampshire, Durham, NH, 1992/1993. The roads within the Rockingham Planning Region have been updated by Rockingham's Planning Commission and by NH Department of Transportation through ongoing efforts.

Rockingham Planning Commission

Geologic Map
Brentwood Natural Resources Inventory

October 2007

LEGEND

- Glacial Erratics
- Elevation Contour -25 Foot Interval
- Drumlins
- Kame Terraces
- Sand & Gravel Pits

Soils with 'Probable' Rating to Yield:

- Sand
- Sand & Gravel

Bedrock Geology

- SOe - Eliot Formation
- De9 - Exeter Diorite
- SOk - Kittery Formation
- SOb - Berwick Formation

NOTES:

Glacial Erratics -measure from 15' to 40' at the base to 25' high.

Drumlins: Smooth rounded hills consisting of glacial till (mixture of clays, sands and boulders)

Kame Terraces: Steep ridges of sand and gravel found adjacent to glaciers, important for recharge of groundwater.

Brentwood sits on bedrock called the Eliot Formation, except for the eastern section of town which is impacted by the Exeter Diorite Massif.

BASE FEATURES

RPC Regional Roads

- State Primary System
- State Secondary System
- Public Road, municipally maintained
- Public Road, not maintained
- Private Road
- Trail

Railroads

Political Boundaries

- Town Boundary

Surface Water Features

- Stream
- Intermittent Stream
- Marsh or Swamp Outline
- Bodies of Water

Geologic formations for the Town of Brentwood were delineated by Ried Burnell from the Brentwood Conservation Commission, Drumlins, Kame terraces and glacial erratics were located on RPC's 1:24000 base data and automated in August 2003.

Sand and Gravel Deposits

This information was obtained from the 1984 Soil Survey of Rockingham County, New Hampshire produced by the Soils Conservation Service (now Natural Resource Conservation Service). Specifically this information came from Table 12: Construction Materials. Soils listed as 'Probable' for Sand and/or soils listed as 'Probable' for gravel were mapped. Additionally, soil units coded as Pits, sand and gravel' are shown. These are areas are active or recently abandoned gravel pits, sand pits, clay pits and areas that are mined for topsoil or roadfill.

Soil boundaries are from NRCS Rockingham County Soil Survey, published at 1:20,000 scale. Soil unit boundaries that coincide with water body boundaries in the field will not always coincide on this map, due to their differing data sources and scales. Information shown on this map is for planning purposes only. Data automation completed by Complex Systems Research Center, UNH, October 1999. Soils delineation based on field work, conducted by the USDA Natural Resource Conservation Service, completed in 1985 New Hampshire Bedrock Geology map was compiled by the Department of Geology at the University of New Hampshire. It was automated from paper and mylar maps at scale of 1:250,000.

Data automation was performed in 1992 by Complex Systems Research Center, Durham, NH.

Base Features

Base features (transportation, political and hydrographic) were automated from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the study of Earth, Oceans and Space, University of New Hampshire, Durham, NH; 1992-1999. The roads within the Rockingham Planning Region have been updated by Rockingham Planning Commission and by NH Department of Transportation through ongoing efforts.

GRANIT

Rockingham Planning Commission

0 0.5 1 Miles

0 0.5 1 Kilometers

1:24,000

Topography Map
Brentwood Natural Resources Inventory

November 2007

Legend

Elevation Contour -25 ft Interval

Class II Roads

Brentwood Roads

Hillshade

Value

High : 438.875

Low : -12.2695

BASE FEATURES

RPC Regional Roads

State Primary System

State Secondary System

Public Road, municipally maintained

Public Road, not municipally maintained

Private Road

Trail

Town Boundary

Surrounding Towns

Railroads

Power Transmission Lines

Surface Water Features

Stream

Intermittent Stream

Marsh or Swamp Outline

Surface of Water

Elevation Contour Lines were digitally generated from USGS 1:24,000, 7.5 minute digital elevation model (DEM) files. DEM files contain point arrays of surface elevations at a spacing of 30 meters in both the x and y directions. Contour lines were generated at an interval of 25 feet. Production and distribution by GRANIT, CERC, Durham, NH.

Base Features (boundaries, surface and hydrographic) were extracted from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the study of Earth, Oceans and Space, University of New Hampshire, Durham, NH, 03824-3525. The roads within the Rockingham Planning Region have been updated by Rockingham Planning Commission and/or NH Department of Transportation through ongoing efforts.

Rockingham Planning Commission

Unfragmented Lands Map
Brentwood Natural Resources Inventory

October 2007

Legend

Unfragmented Blocks

Block size

- Greater than 1500
- 1000-1500
- 750-999
- 500-749
- 250-499
- Less than 250

BASE FEATURES

RPC Regional Roads

- State Primary System
- State Secondary System
- Public Road, municipally maintained
- Public Road, not maintained
- Private Road
- Trail

Town Boundary
Surrounding Towns

- Railroads
- Power Transmission Lines

Surface Water Features

- Stream
- Intermittent Stream
- Marsh or Swamp Outline
- Bodies of Water

Unfragmented lands were created by the RPC using the road network from the 2006 Road Inventory project.

Base Features (transportation, political and hydrographic) were extracted from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the Study of Earth, Oceans and Space, University of New Hampshire, Durham, NH, 03824-3589. The roads within the Rockingham Planning Region have been updated by Rockingham Planning Commission and by NH Department of Transportation through ongoing efforts.

Rockingham Planning Commission

EPPING
BRENTWOOD
FREMONT
EXETER
KINGSTON
EAST KINGSTON

741.3 Acres
692.4 Acres
542.5 Acres
519.8 Acres
987 Acres
1484.5 Acres
565.9 Acres
650.6 Acres
2599.9 Acres
423.5 Acres
1129.1 Acres
368 Acres
354.7 Acres
309.4 Acres
291.6 Acres

NH125
NH27
NH111a
NH107
Shannon Way
Idylwood Dr
William Durfee Jr
Prescott Rd
Deer Hill Rd
Industrial Dr
Commercial Dr
Valley Dr
Cross Dr
Lyford Ln
Eleanor's Way
Scrabble Rd
Mink Run
Sherry Cir
Gallant Dr
Pine Rd
Parshley Ln
Lebreux St
Lindon Dr
Barbara Rd
Block Dr
Haigh St
Robinson St
Rowell Rd
Mohawk Ln
Pickpocket Rd
Michael Bennett Rd
Smith Rd
Dalton Rd
Northrup Dr
Old Gordon Rd
Fellows Rd
River Rd
Crawley Falls Rd
Brook Crossing
Lake Rd
Skim milk Ln
Peabody Dr
Haley Cir
Stevens Rd
Acox Ln
Dianne Mccain Dr
South Rd
Ladd Rd
Shore Rd

Groundwater Resources Map
Brentwood Natural Resources Inventory

November 2007

Legend

Brentwood_RSI_Final

Dated Roads

Drinking Water Protection Area

Source Water Protection Area

Stratified-Drift Aquifers in the Exeter, Lamprey, and Oyster River Basins

Transmissivity in Feet Squared Per Day

- Less than 500
- 500 to 1000
- 1000 to 2000
- 2000 to 3000
- Greater than 3000

Public Supply Wells & Intakes (Active)

BASE FEATURES

RPC Regional Roads

- State Primary System
- State Secondary System
- Public Road, maintained
- Public Road, not maintained
- Private Road
- Trail

- Town Boundary
- Surrounding Towns
- Railroads
- Power Transmission Lines

Surface Water Features

- Stream
- Intermittent Stream
- Marsh or Swamp Outline
- Bodies of Water

The transmissivity of stratified-drift aquifers quantifies the ability of an aquifer to transmit water, measured in feet squared per day. Transmissivity/Aquifer data was estimated by Complex Systems Research Center, UNH and is contained in the GRANIT Database. The aquifer data was generated as part of a larger study of groundwater resources in New Hampshire. The GRANIT was conducted under a cooperative agreement between the US Geological Survey and the NH Department of Environmental Services, Water Resources Division. It featured an assessment of the aquifers within identified wells and a town report.

The specific reports that cover the Town of Brentwood is the following:

US Geological Survey Open-File Report 92-65, "Basin lithologic and Stratified-Water-Quality Data for Stratified-Drift Aquifers in the Exeter, Lamprey, and Oyster River Basins, Southeastern New Hampshire." This study was prepared in cooperation with the NH Department of Environmental Services, Water Resources Division and was completed in 1992.

Drinking Water Source Protection Areas have been delineated by the NH Department of Environmental Services as part of the State's drinking water protection program under the Groundwater Protection Act, RSA 485-C. The coverage is limited to sources for community and non-community, non-transient public water systems. Under the SWAP's program, a protection area is the area from which water is likely to flow toward and reach a water supply source. This map shows wellhead delineations for groundwater sources and undelineated delineations for surface water intakes and groundwater sources under the direct influence of surface water. These areas are used by the Department of Environmental Services in setting priorities for protection activities.

Public Water Supply Sources

This data layer contains point locations of public water supply sources, including wells and surface water intake locations as registered with the NHDES, Water Supply Engineering Bureau. Locations were estimated by the U.S. Environmental Protection Agency Region I and by the NHDES Groundwater Protection Bureau and Water Supply Engineering Bureau. This dataset was obtained by RPC in March 2002.

Data Features (transportation, surface) and hydrographics were automated from the USGS Digital Line Graph data, 1:24,000, as contained in the GRANIT database at Complex Systems Research Center, Institute for the Study of Earth, Oceans and Space, University of New Hampshire, Durham, NH. 1992/1998. The roads within the Rockingham Planning Region have been updated by Rockingham Planning Commission and the Department of Transportation through ongoing efforts.



Rockingham Planning Commission

0 0.5 1 Miles

0 0.5 1 Kilometers

Forest Resources Map
Brentwood, New Hampshire

October 2007

LEGEND

Important Forest Soil Groups

- IA
- IB
- IC
- IIA
- IIB
- Not Considered

Registered Tree Farms

IA - Deeper, loamy textures, moderately well and well drained soils. Primarily hardwood sites. Few limitations for forest management.

IB - Sandy and loamy over sandy textures. Moderately well and well drained soils. Primarily hardwood sites. Few limitations for forest management.

IC - Sands and gravels derived from deposits of glacial outwash. Excessively, somewhat excessively, well drained, moderately well drained soils. Soils well suited for softwood production, especially white pine. Few limitations for forest management.

IIA - This diverse group includes many of the same soils as in Groups IA and IB. However, these soil mapping units have been separated because of physical limitations which may influence forest management, i.e. stony (approx. sandstone textures, surface boulders, excessive surface stones, and bedrock outcrops. Usually, productivity of these soils is not greatly affected by their physical limitations. However, management activities such as thinning, harvesting, and tree planting are frequently more difficult and costly.

IIB - The soils in this group are poorly drained. The seasonal high water table is within 12 inches of the surface. Productivity is generally less than the above groups and management activities are severely restricted by soil wetness. Abundant natural red spruce/balsam fir regeneration makes these stands desirable for pulpwood production in Northern New Hampshire.

BASE FEATURES

Roads
- State Primary System
- State Secondary System
- Municipal Roads
- Ramp / Other
- Unmaintained Roads (Class VI)
- Private Roads

Political Boundaries
- Town Boundary

Surface Water Features
- shoreline
- stream
- intermittent stream
- apparent wetland limit
- other water feature
- bodies of water

MAP DATA SOURCES

Registered Tree Farm Lots

Registered Tree Farm lots shown on this map were automated by the Rockingham Planning Commission (RPC) using a composite tax map, provided by the Town of Brentwood Conservation Commission. RPC received a listing of Registered Tree Farm owners from the Town. The list included a Tree Farm ID (shown on map) and Tree Farm total acreage for each owner. RPC was able to obtain the map & lot numbers for the lots owned by the Tree Farm owners, though not the specific tree farm lots. For Tree Farm owners that own several lots in Brentwood, all their lots are shown, though each lot may not contain a registered tree farm. If the Town is able to provide more precise locations for the Registered Tree Farms, RPC will correct the data shown on this map.

Important Forest Soil Groups

Important Forest Soil Groups identify soils according to the type of limiting precautions for which they are best suited. Information provided by Natural Resources Conservation Service, Concord, NH. Soil unit boundaries are from Rockingham County Soil Survey, 1994. Soil unit boundaries that coincide with water body boundaries in the field will not always coincide on this map, due to their differing data sources and scales. Information shown on this map is for planning purposes only.
Data automation completed by Complex System's Research Center, UNH, October 1999. Soils delineation based on field work, conducted by the USDA Natural Resource Conservation Service, completed in 1985.

Base Features

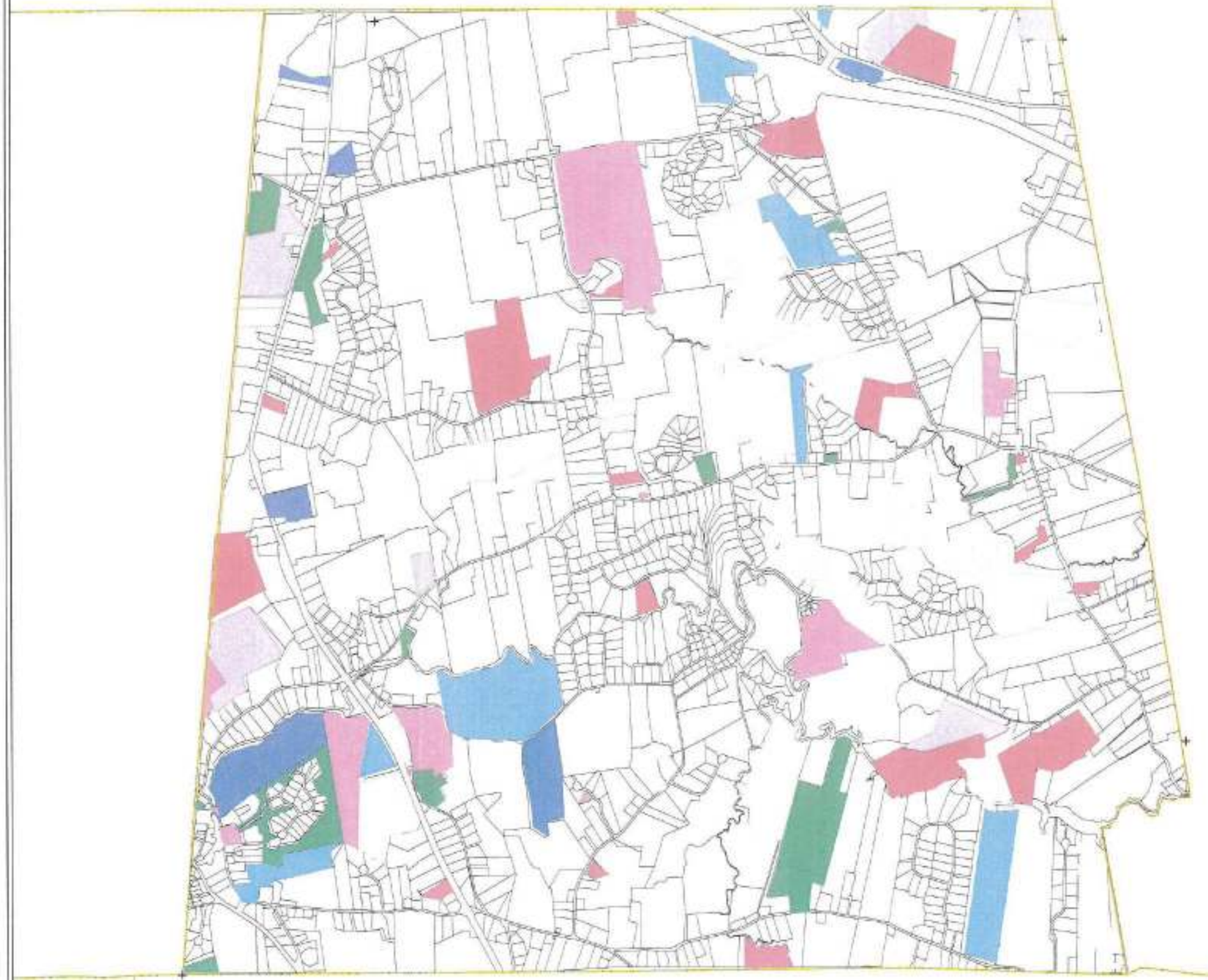
Base features (transportation, political and hydrographic) were automated from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the Study of Earth, Oceans and Space, University of New Hampshire, Durham, NH. The roads within the Rockingham Planning Region have been updated by Rockingham Planning Commission and by NH Dept. of Transportation through ongoing efforts.

Rockingham Planning Commission

0 0.5 1 Miles

0 0.5 1 Kilometers

1:14,000



Logged Parcels by Year
Brentwood Natural Resources Inventory

October, 2007

Legend

Year Logged

- Unspecified Year
- 1996
- 1997
- 1998
- 1999
- 2000
- 2001
- 2002

BASE FEATURES

RPC Regional Roads
- State Primary System
- State Secondary System
- Public Road, municipally maintained
- Public Road, not maintained
- Private Road
- Trail

- Town Boundary
- Surrounding Towns
- Railroads
- Power Transmission Lines

Surface Water Features
- Stream
- Intermittent Stream
- Marsh or Swamp Outline
- Bodies of Water

Locations of Logged Parcels were delineated on a composite tax map by Lise McNaughton of the Town of Brentwood Conservation Commission. RPC automated Logged Parcels from a digital image of the composite tax map, which was provided by the Town of Brentwood Conservation Commission in October 2002.

Base Features (planimetric, political, and hydrographic) were automated from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the study of Earth, Oceans and Space, University of New Hampshire, Durham, NH 03824-3525. This maps within the Rockingham Planning Region has been updated by Rockingham Planning Commission and its NH Department of Transportation through ongoing efforts.

Rockingham Planning Commission

0 0.5 1 Miles

0 1 2 Kilometers

Scenic Resources Map
Brentwood Natural Resources Inventory

October, 2007

LEGEND

Scenic Resource
(spelled with Site Identification Code
Refer to Town Scenic Resources Listing)

Town Designated Scenic Road

BASE FEATURES

RPC Regional Roads
- State Primary System
- State Secondary System
- Public Road, municipally maintained
- Public Road, not maintained
- Private Road
- Trail

Railroads

Political Boundaries
- Town Boundary
- Surrounding Towns

Surface Water Features
- Stream
- Intermittent Stream
- Marsh or Swamp Outline
- Bodies of Water

Locations of Scenic Resources in Brentwood were provided by Gail Lauermann of the Brentwood Conservation Commission. The information was subsequently digitized by RPC in August 2002.

Base Features (transportation, political and hydrographic) were automated from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the study of Earth, Oceans and Space, University of New Hampshire, Durham, NH, 1999/2000. The roads within the Rockingham Planning Region have been updated by Rockingham Planning Commission and by NH Department of Transportation through ongoing efforts.

Rockingham Planning Commission

EPPING
BRENTWOOD
FREMONT
EXETER
KINGSTON
EAST KINGSTON
Nh125
Nh27
Nh111a
Shannon Way
Hollywood Dr
William Sturtevant
Prescott Rd
Commercial Dr
Valley Dr
Cross Dr
Eleanor's Way
Lyford Ln
Scrabble Rd
Mink Run
Sherry Cir
Deer hill Rd
Industrial Dr
Gallant Dr
Pine Rd
Lyndon Dr
Parshley Ln
Lebreux St
Barnett Rd
Block Dr
Haigh St
Robinson St
Rowell Rd
Mohawk Ln
Pickpocket Rd
Michael Bennett Rd
Smith Rd
Dalton Rd
Northrup Dr
Old Gordon Rd
Fellows Rd
River Rd
Crawley Falls Rd
Brook Crossing
Skim milk Ln
Lake Rd
Dianne Moran Dr
South Rd
Ladd Rd
Haley Cir
Peabody Dr
Stevens Rd
Shore Rd
Apex Ln

Wildlife Map
Brentwood Natural Resources Inventory

October 2007

Legend

BASE FEATURES

RPC Regional Roads

- State Primary System
- State Secondary System
- Public Road, municipally maintained
- Public Road, not maintained
- Private Road
- Trail

- Town Boundary Surrounding Towns
- Railroads
- Power Transmission Lines

Surface Water Features

- Streams
- Intermittent Streams
- Marshes or Shrinking Ponds
- Bodies of Water

The following descriptions are from the NH Fish and Game Wildlife Action Plan. The RPC re-compiled the data from this plan to showcase the regionally important habitats. Data on this map reflects habitat that is in the top tier of such habitat for the RPC region. Tiers are set on the top standard deviation of the habitat.

Please note that these are just brief summaries; complete descriptions of critical habitats, their components, the justification for their conservation, and data sources and citations can be found in Appendix B of the Wildlife Action Plan.

Appalachian Oak-Pine Forests
Appalachian oak pine forests are found mostly below 900 ft. elevation in southern New Hampshire. These forests include oak, hickory, mountain laurel, and sugar maple, and are typically associated with warmer and drier climatic conditions. Appalachian oak-pine forests are fire-influenced landscapes with nutrient-poor, dry,sandy soils. They are home to hognose snakes, whip-poor-wills, silver-haired bats and other species of concern. Intense development has dramatically reduced the area of this forest type, which comprises some 10% of the state's total land area, in New Hampshire's southern tier.

Floodplain Forest
Floodplain forests occur in valleys adjacent to river channels and are prone to periodic flooding. Also referred to as riparian forests, they support diverse natural communities, protect and enhance water quality by filtering and sequestering pollution, and control erosion and sediment. Their rich soils have been used in agriculture for centuries, as many floodplains are no longer forested. wildlife habitat.

Grassland
Extensive grasslands are defined as areas greater than 10 hectares (~ 25 acres) that are dominated by grasses, wildflowers, and sedges with little shrub or tree cover. Some examples include hayfields, pastures, and cropland (cornfields and other row crops). Grasslands in NH must be mowed to prevent them from becoming shrublands or forests. Only 8% of NH grasslands are currently under conservation easements.

Hemlock-Hardwood-Pine Forests
Hemlock-hardwood-pine forests are transitional forests, occurring between hardwood conifer and oak-pine forests. This common forest type is comprised of dry, sandy soils with red oak and white pine. When hemlock-hardwood-pine forests have been burned regularly over time, they may be able to support a pitch-pine sand plains system.

Marsh and Shrub Wetlands
Emergent marsh and shrub swamp systems have a broad range of flood regimes, often controlled by the presence or departure of beavers. This system, which is an important food source for many species, is often grouped into three broad habitat categories: wet meadows, emergent marshes, and scrub-shrub wetlands. Marsh and wetlands filter pollutants, preventing them from getting into local streams, and help hold water to reduce flooding.

Base Features (transportation, political and hydrographic) were automated from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the study of Earth, Oceans and Space, University of New Hampshire, Durham, NH 1982/1988. The roads edit in the Rockingham Planning Region have been updated by Rockingham Planning Commission and by NH Department of Transportation through ongoing efforts.

Rockingham Planning Commission

SIGNIFICANT WILDLIFE HABITAT CO-OCCURRENCES
Brentwood Natural Resources Inventory

October, 2007



Legend

Class 6 Roads

Significant Wildlife Habitat Composite Overlay

# of Co-occurring

1 Land Resources Co-occur

2 Land Resources Co-occur

3 Land Resources Co-occur

BASE FEATURES

RPC Regional Roads

State Primary System

State Secondary System

Public Road, municipally maintained

Public Road, not maintained

Private Road

Trail

Town Boundary (surrounding Towns)

Railroads

Power Transmission Lines

Surface Water Features

Streams

Intermittent Streams

Marsh or Swamp Outline

Bodies of Water

SIGNIFICANT WILDLIFE HABITAT COMPOSITE

The composite uses derivatives of the following data layers:

Habitat of Rare Wildlife Species - The Exeter River was reselected from USGS 1:24000 Hydrography dataset. Floodplain Forest Terrestrial Habitat provided by the NH Natural Heritage Inventory.

Open Lands - interpreted and delineated by Jonathan Ellis of the Town of Brentwood Conservation Commission using a 1998 orthophoto map. Also used selection from The Coastal New Hampshire Land Cover and Land Use data set of Landsat Thematic Mapper (TM) imagery from a range of years from 1990 to 1996. Imagery processed and supplied by Complex System Research Center.

Riparian and Wetland Habitat generated from reselection of combined National Wetlands Inventory and Rockingham County Soils Survey (1994) wetland soils of greater than 20 acres. Riparian areas were generated by buffering perennial surface water bodies (USGS, 1:24,000) by 300 feet.

Unfragmented Lands - interpreted and delineated by Lise McNaughton of the Town of Brentwood Conservation Commission using a 1998 orthophoto map.

Base Features (transportation, political and hydrographic) were automated from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the Study of Earth, Oceans and Space, University of New Hampshire, Durham, NH, 1992/1999. The roads within the Rockingham Planning Region have been updated by Rockingham Planning Commission and by NH Department of Transportation through ongoing efforts.

Rockingham Planning Commission

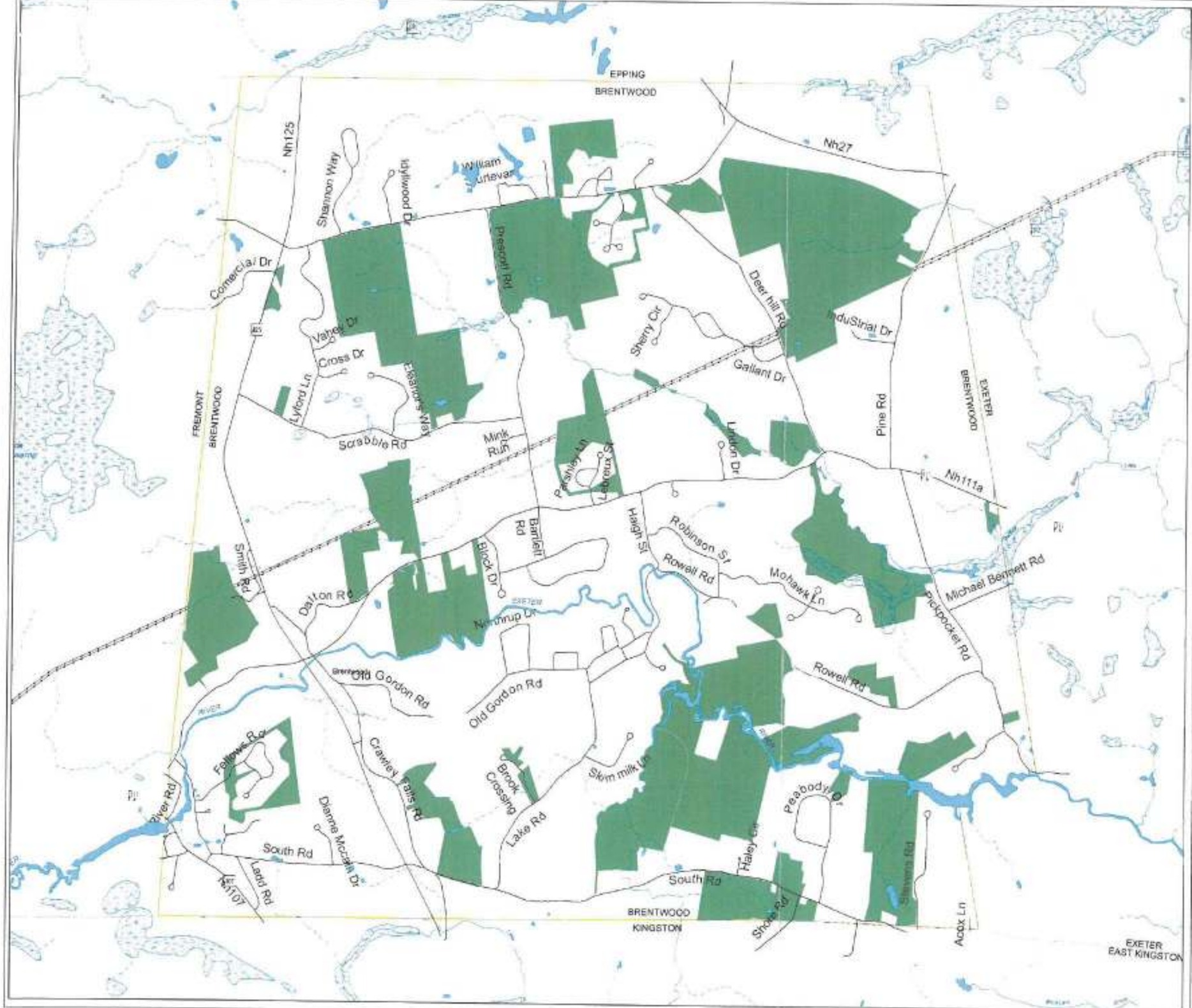
0 0.5 1 Miles

0 1 2 Kilometers

1:24,000

Open Space Lands Map
Brentwood Natural Resources Inventory

October 2007



Legend

Class VI Roads

Brentwood_ROU_Pass

Conservation Land

BASE FEATURES

RPC Regional Roads

State Primary System

State Secondary System

Public Road, municipally maintained

Public Road, not maintained

Private Road

Trail

Town Boundary
Surrounding Towns

Railroads

Power Transmission Lines

Surface Water Features

Stream

Intermittent Stream

Marsh or Swamp Or Bog

Bodies of Water

Locations of Open Space lands were interpreted and delineated by the Town of Brentwood Conservation Commission using a 2005 orthophoto map.

Base Features (transportation, political and hydrographic) were automated from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the study of Earth, Oceans and Space, University of New Hampshire, Durham, NH; 1992/1998. The roads within the Rockingham Planning Region have been updated by Rockingham Planning Commission and by NH Department of Transportation through ongoing efforts.

Rockingham Planning Commission

Trails and Recreation Lands Map
Brentwood Natural Resources Inventory

November 2007

Legend

Class 6 Roads

Brentwood_RDI_Final

Trails 2008

Name

- BRC Trails
- Big Rock Trail
- Kaufman-Goun Trail
- Marie Stevens Trail
- Merrill & Pratt Property Trail
- Pine Rd Fish and Game Trail
- School Trail

Brentwood Recreation Lands
(Town Owned Parcels for Recreational Purposes)

BASE FEATURES

RPC Regional Roads
- State Primary System
- State Secondary System
- Public Road, municipally maintained
- Public Road, not maintained
- Private Road
- Trail

Town Boundary
(surrounding Towns)

Railroads

Power Transmission Lines

Surface Water Features
- Stream
- Intermittent Stream
- Marsh or Swamp Outline
- Bodies of Water

Locations of Trails were provided by Lise McNaughton of the Town of Brentwood Conservation Commission. Automation of trails done by RPC - October 2002.

Locations of Brentwood Recreation Lands were provided by Lise McNaughton of the Town of Brentwood Conservation Commission in January 2003.

Base Features (transportation, political and hydrographic) were automated from the USGS Digital Line Graph data 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the study of Earth, Oceans and Space, University of New Hampshire, Durham, NH. 1992/1999. The roads within the Rockingham Planning Region have been updated by Rockingham Planning Commission and by NH Department of Transportation through ongoing efforts.

Rockingham Planning Commission

EPPING
BRENTWOOD
FREMONT
EXETER
KINGSTON
EAST KINGSTON
Nh125
Nh27
Nh111a
Shannon Way
Idylwood Dr
William Sturtevant
Prescott Rd
Hoyt Road
Pine Rd
Wetlands Reclamation
State of NH
Deer hill Rd
InduStrial Dr
Sherry Cir
Gallant Dr
Pine Rd
Commercial Dr
Valley Dr
Cross Dr
Lyford Ln
Eleanor's Way
Scrabble Rd
Mink Run
Parshley Ln
Lebreux St
Lindon Dr
Barbara Rd
Bartlett Rd
Block Dr
Haigh St
Robinson St
Rowell Rd
Mohawk Ln
Michael Bennett Rd
Pickpocket Rd
Smith Rd
Dalton Rd
Swasey School Trail
Northrup Dr
BRC - Trails
Old Gordon Rd
Old Gordon Rd Municipal Trail
Rowell Rd - Municipal Trail
Rowell Rd
Merrill and Pratt Property Trails
Fellows Rd
River Rd
Crawley Falls Rd
Brook Crossing
Kaufman-Gould Trail Easement
Skim milk Ln
Old Road Trail
Joseph Rd - Municipal Trail
Peabody Dr
Dianne Mccain Dr
South Rd
Ladd Rd
Nh107
Lake Rd
Marie Lane
Haley Cir
Stevens Rd
Shore Rd
Acox Ln



Trails Map
Brentwood Natural Resources Inventory

October 2007

Legend

Trails 2002

Name

- RPC Trails
- Big Rock Trail
- Kaufman-Gaun Trail
- Martin Stevens Trail
- Marsh & Pratt Property Trail
- Pine Rd Fish and Game Trail
- School Trail

Brentwood Recreation Lands
(Town Owned Parcels for Recreational Purposes)

BASE FEATURES

RPC Regional Roads

- Class Primary System
- State Secondary System
- Public Road, municipally maintained
- Public Road, not maintained
- Private Road
- Trail

- Town Boundary
- Surrounding Towns
- Railroads
- Power Transmission Lines

Surface Water Features

- Stream
- Intermittent Stream
- Marsh or Swamp Outline
- Bodies of Water

Locations of Trails were provided by Lisa McNaughton of the Town of Brentwood Conservation Commission. Automation of trails done by RPC - October 2002.

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Rockingham Planning Commission

Brentwood Master Plan:

Community Profile Chapter

This Master Plan Chapter was adopted to replace and update the existing Town of Brentwood Community Profile Chapter by vote of the Planning Board. This Master Plan Chapter was adopted in accordance with NHRSA 675:6, following a duly noticed Public Hearing on May 15, 2008.

Brentwood Planning Board

Bruce J. Stevens

John A. Kennedy

Louis B. Gilbert

Charles Corbett

Brentwood Town Clerk

Phyllis Thompson

Phyllis Thompson

7-24-08

Date

BRENTWOOD COMMUNITY PROFILE

In the context of the Master Plan, a statistical profile of the community is useful in two respects. First, it places or defines the community in relation to other communities in the region. This allows for comparisons and evaluations of the various social, economic and demographic topics covered. Second, it can be used to identify and examine important trends that have had, or may have, a significant effect on the growth and development of Brentwood in years to come.

Most of the information set forth below is presented either with regional comparisons or with comparisons over time. Unless otherwise noted, the region used below for comparative purposes is comprised of Brentwood and nine adjacent towns: East Kingston Exeter, Kensington, Newfields, and Stratham because they are the communities in the Exeter Region Cooperative School District and Kingston, Fremont, and Epping because these communities directly abut the Town.

The data presented in the tables below are derived from the U.S. Census, NH Office of Energy and Planning population reports and Town records. Two types of questionnaire were used to compile the U.S. Census data. The Short Form was sent to 83% of all households. It contained 14 basic population and housing questions. The Long Form, which was sent to 17% of all housing units, included the 14 questions that appear on the Short Form plus 45 other questions about each member of the household and the housing unit. STF1A data (also referred to as the 100-percent data) were prepared by tabulating responses to the 14 questions that appear on both the Short and Long forms. STF 3A data (also referred to as Sample data) is based on results from the Long Form. Sample data prepared from the long forms were statistically weighted or inflated to produce estimates of what a complete enumeration would have produced. There is usually a small amount of error present between the weighted figure, based on a sample, and the corresponding figure collected on a 100 percent basis. Therefore, certain counts in STF 3A data (e.g., Place of Birth) may have different totals than STF 1A counts (e.g., Total Population). The differences are negligible: Brentwood's STF 3A population is 3,197; STF 1A, 3,195. Unless otherwise noted, 1990 U.S. Census data are from STF 3A. For the census data presented in this chapter, STF 1A data were only available for the total population and age breakdown.

1. POPULATION AND GROWTH

Brentwood has exhibited a growth pattern common to many small New Hampshire towns. Throughout the 18th and 19th centuries, agriculture was the mainstay of the Town's economy. Brentwood's population fluctuated significantly in its early years being as high as 1,100 in 1775 and as low as 685 by 1920.

The last three decades have clearly seen the most rapid growth in the town's 240 year history, as indicated by Table 1 on the next page. The 1950's marked the beginning of an unprecedented rate of growth. Brentwood, once a small agricultural town, has evolved into a rural bedroom community, with a population increasing from 1,072 in 1960 to over 4,000 in 2006.

The idea that Brentwood has become a bedroom community is well illustrated by Table 2, page 3, which shows Place of Work according to the 2000 U.S. Census. The percentage of residents

who work out of state is 35% in Brentwood area towns and is 16% in Rockingham County. The percentage of Brentwood residents whose workplace is in another state is 19.6%. Table 3, Travel time to Work (also on page 3) also shows that Brentwood residents drive farther to work than their counterparts in the rest of the County and State. In the "under 15 minutes" category, Brentwood has a much smaller percentage of commuters, but in the 15 to 29, 30 to 44, and 45 to 59 categories a larger percentage. The Town's proximity to the Massachusetts border is a major factor in its rapid growth over the last few decades.

TABLE 1

POPULATION HISTORY

Year	Population
1767	1,064
1773	1,089
1775	1,100
1783	968
1790	976
1800	899
1810	905
1820	892
1830	878
1840	888
1850	923
1860	887
1870	895
1880	999
1890	967
1990	957
1910	759
1920	685
1930	725
1940	720
1950	819
1960	1,072
1970	1,468
1980	2,004
1990	2,590
2000	3,197
2004	4,000
2005	4,105
2006	4,129

Source for 18th & 19th Century population data is Population of New Hampshire Part One, NH State Planning and Development Commission, 1946

Source for 20th Century population data are the U.S. Census and 2006 Population Estimates, NH Office of Energy and Planning, September 2006

TABLE 2
PLACE OF WORK – BY STATE
BRENTWOOD AREA COMMUNITIES
Persons 16 and Older

	Total	By State			
Town of Residence	Total	NH Workplace	MA Workplace	ME Workplace	Other State
Brentwood	100%	80.5%	18.0%	1.6%	0.0%
East Kingston	100%	61.2%	37.4%	1.0%	0.4%
Epping	100%	82.6%	13.1%	1.2%	3.1%
Exeter	100%	83.0%	15.5%	0.8%	0.7%
Fremont	100%	67.2%	31.0%	1.3%	0.5%
Kensington	100%	60.2%	37.4%	0.9%	1.5%
Kingston	100%	64.9%	34.0%	0.3%	0.8%
Newfields	100%	85.3%	11.5%	2.8%	0.4%
Stratham	100%	82.4%	13.1%	3.1%	1.4%
Total, Rockingham County	**100%**	**84.4%**	**12.7%**	**0.9%**	**2.0%**

Source: nhetwork.nhdes.state.nh.us

TABLE 3

TRAVEL TIME FOR WORK COMMUTE

	Brentwood	Rockingham County	New Hampshire
Less than 5 minutes	4.5%	3.3%	4.1%
5 to 9 minutes	6.4%	10.0%	12.1%
10 to 14 minutes	12.4%	12.4%	15.8%
15 to 19 minutes	13.6%	12.2%	14.9%
20 to 29 minutes	19.0%	20.1%	19.5%
30 to 44 minutes	26.1%	21.1%	17.5%
45 or more	17.9%	20.9%	16.0%
Worked at home	6.5%	4.1%	4.0%

Source: 2000 Census website (www.ctpp.transportation.org/home/nh)

TABLE 4
PLACE OF WORK – BY COMMUNITY IN ROCKINGHAM COUNTY
BRENTWOOD AREA COMMUNITIES
Persons 16 and Older

	In Rockingham County					
Town of Residence	Exeter/Hampton/ Seabrook	Portsmouth/ Newington	Derry/ Londonderry	Salem/Windham	Other Rockingham County Communities	Rockingham County Total
Brentwood	358	71	46	18	476	969
East Kingston	124	59	8	15	304	510
Epping	341	272	98	62	1395	2168
Exeter	3073	769	108	178	1376	5504
Fremont	222	70	80	78	635	1085
Kensington	224	47	12	10	265	558
Kingston	386	111	58	115	1126	1796
Newfields	158	103	8	5	296	570
Stratham	568	730	64	33	885	2280

Source: 2000 Census

Tables 4 above and 5 below show journey to work data for Brentwood and the surrounding communities. Table 4 shows work destinations for Rockingham County. For Brentwood, nearly half of the commuters that work in Rockingham County work in the Exeter/Hampton, Seabrook area. Of those commuters that work outside of Rockingham County, 247 commune to three Massachusetts counties, 9 travel to York county in Maine and 143 work in either Strafford, Hillsborough or Merrimack counties in NH.

TABLE 5
PLACE OF WORK – BY COMMUNITY IN NEIGHBORING COUNTIES
BRENTWOOD AREA COMMUNITIES
Persons 16 and Older

		In Other Counties						
Town of Residence	Total Commuters	Strafford County	Merrimack County	Hillsborough County	York County, Maine	Suffolk County, MA	Middlesex County, MA	Essex County, MA
Brentwood	1,392	53	36	54	9	23	61	163
East Kingston	961	15	8	55	10	34	67	246
Epping	3,038	119	60	216	32	0	125	267
Exeter	7,322	298	53	193	39	137	303	636
Fremont	1,982	38	16	183	25	56	97	441
Kensington	1,013	22	8	20	8	38	99	230
Kingston	3,124	72	23	126	8	111	303	587
Newfields	804	54	17	41	20	15	28	47
Stratham	3,120	171	43	78	44	24	155	192

Source: 2000 Census

As stated earlier, Brentwood's history of being a small rural agricultural community has been challenged and changed in the last fifty years. The next several tables and figures show the degree to which the Town has grown and places this growth in the context of Brentwood's neighboring communities. Tables 6 and 7 outline the Town's population growth from 1950 through 2006 using US Census data and in the case of the 2006 date, estimates generated by the NH Office of Energy and Planning. In 1950 Brentwood was the fourth largest community in the area with a population of 819. By 1970 Brentwood's population was surpassed by Stratham and by 2000 the Town of Fremont also had a larger population than Brentwood.

Brentwood's population increase has happened at a fairly even pace over the fifty-six year period reviewed. As reflected on table 7 the town's average annual growth rates have remained above 2% over the five decades. In fact, only Brentwood and Stratham have sustained growth above 2% for each decade studied. Interestingly, Brentwood's population increase is one of the most stable across the decades with some communities experiencing radical increases during individual decades ranging between 4.5% to 7.1%. These extreme changes in population often place great stress upon a community to upgrade public facilities and increase municipal staffs. Brentwood has been fortunate to experience a less volatile but nonetheless significant growth trend. It is important to note that the Town's growth over the study period always exceeded the statewide growth rates but only exceeded the county-wide averages from 1990 onward. This is not news to anyone living in Town during this time period because the rapid increase in

residential development did place pressure upon the school district and specific municipal services.

TABLE 6
POPULATION HISTORY
BRENTWOOD AREA COMMUNITES

Town	1950	1960	1970	1980	1990	2000	2006
Brentwood	**819**	**1,072**	**1,468**	**2,004**	**2,590**	**3,197**	**4,129**
East Kingston	449	574	838	1,135	1,352	1,784	2,181
Epping	1,796	2,006	2,356	3,460	5,162	5,476	6,052
Exeter	5,664	7,234	8,892	11,024	12,581	14,058	14,535
Fremont	698	783	993	1,333	2,576	3,510	4,159
Kensington	542	708	1,044	1,319	1,631	1,893	2,089
Kingston	1,283	1,672	2,882	4,071	5,591	5,862	6,176
Newfields	469	737	843	817	888	1,551	1,634
Stratham	759	1,033	1,512	2,507	4,995	6,355	7,180
Brentwood & Adjacent Towns	**12,479**	**15,819**	**20,828**	**27,670**	**32,209**	**43,686**	**48,135**
Rockingham County	**70,059**	**99,029**	**138,951**	**190,345**	**248,845**	**277,359**	**296,565**
New Hampshire	**533,424**	**606,921**	**737,681**	**920,475**	**1,109,252**	**1,235,786**	**1,315,000**

Source: www.nh.gov/oep/programs/datacenter/library

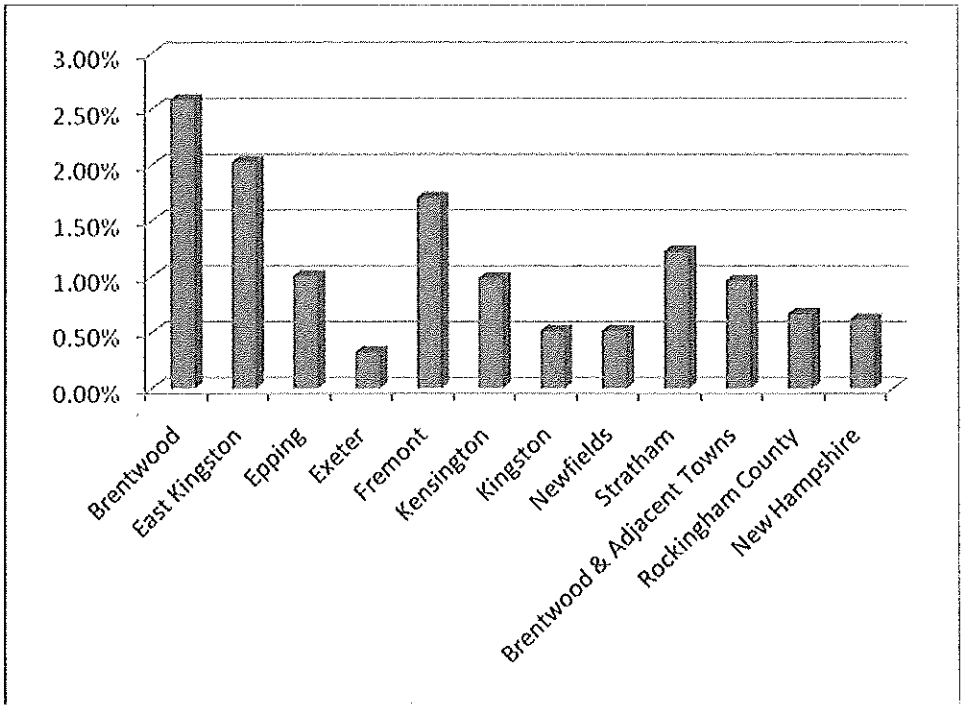
TABLE 7
AVERAGE ANNUAL GROWTH RATES
1950-2006

Town	1950-1960	1960-1970	1970-1980	1980-1990	1990-2000	1950-2006
Brentwood	**2.73%**	**3.19%**	**3.16%**	**2.60%**	**2.13%**	**2.59%**
East Kingston	2.49%	3.86%	3.08%	1.76%	2.81%	2.03%
Epping	1.11%	1.62%	3.92%	4.1%	0.6%	1.01%
Exeter	2.48%	2.09%	2.17%	1.33%	1.12%	0.33%
Fremont	1.16%	2.40%	2.99%	6.81%	3.14%	1.71%
Kensington	2.71%	3.96%	2.37%	2.15%	1.50%	0.99%
Kingston	2.68%	5.60%	3.51%	3.22%	0.47%	0.52%
Newfields	4.62%	1.35%	-0.31%	0.84%	5.74%	0.52%
Stratham	3.13%	3.88%	5.19%	7.14%	2.44%	4.35%
Brentwood & Adjacent Towns	**2.40%**	**2.79%**	**2.88%**	**1.53%**	**3.09%**	**0.97%**
Rockingham County	**3.52%**	**3.45%**	**3.20%**	**2.72%**	**1.09%**	**0.67%**
New Hampshire	**1.30%**	**1.97%**	**2.24%**	**1.88%**	**1.09%**	**0.62%**

Source: www.nh.gov/oep/programs/datacenter/library

Figure 1 on the following page shows graphically the average annual growth rates for Brentwood and the surrounding communities from 1950 to 2006. With the inclusion of the period of 2000-2006 Brentwood leads all communities for growth rate and easily surpasses both the County and the State of New Hampshire.

FIGURE 1
AVERAGE ANNUAL GROWTH RATES
BRENTWOOD AREA COMMUNITIES
1950-2000



Another indicator of a community's growth is the change in population density experienced in town. This particular indicator gives a flavor of the impact population change has on the physical landscape. In 1950, five communities had greater population density than Brentwood and those that had a lesser population density were only slightly less dense. Where Brentwood's density was 48 persons per square mile, the numbers for the less densely populated communities of East Kingston, Fremont and Kensington were 45, 40 and 45 persons per square mile respectively.

By 2006. Brentwood's population density had increased to 243 persons per square mile and five of the surrounding communities (East Kingston, Epping, Fremont, Kensington and Newfields) had less dense populations. For the most part population density in the region was spread evenly through out the surrounding communities with the exception of Stratham. The population density for this community increased nearly ten fold over the study period changing from 49 persons per square mile in 1950 (only one more person per square mile than Brentwood had at the time) to 475 persons per square mile in 2006.

TABLE 8

POPULATION DENSITY
1950, 2006

Town (square miles)	Persons per Square Mile-1950	Persons per Square Mile – 2006
Brentwood (17)	**48**	**243**
East Kingston (10)	45	220
Epping (26)	69	231
Exeter (20)	283	743
Fremont (17.5)	40	240
Kensington (12)	45	174
Kingston (21.2)	95	310
Newfields (7.2)	65	230
Stratham (15.5)	49	475

Table 9 provides a review of the births and deaths recorded for Brentwood as monitored by the Office of the Town Clerk for the years 1993 through 2007. The town with few exceptions sees nearly twice as many births as deaths each year, but clearly these figures display only a small portion of the overall growth occurring in Town. The bulk of the population increase results from in in-migration of families spurred by continued residential development.

TABLE 9

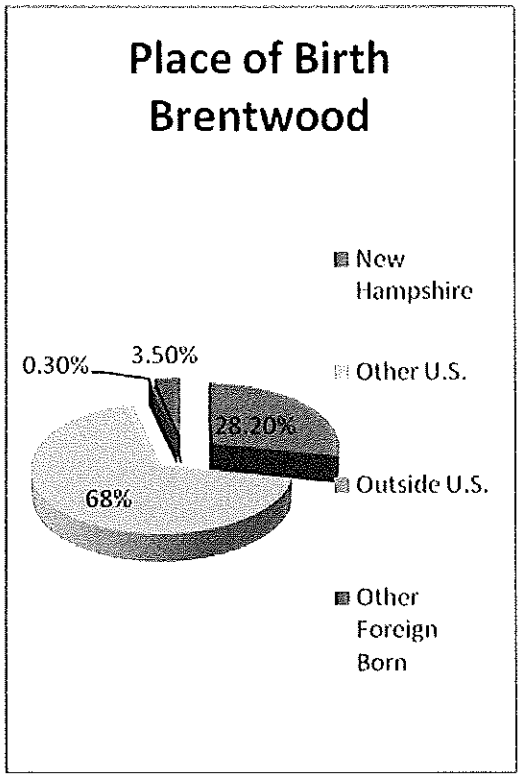
VITAL STATISTICS
TOWN OF BRENTWOOD
1993-2007

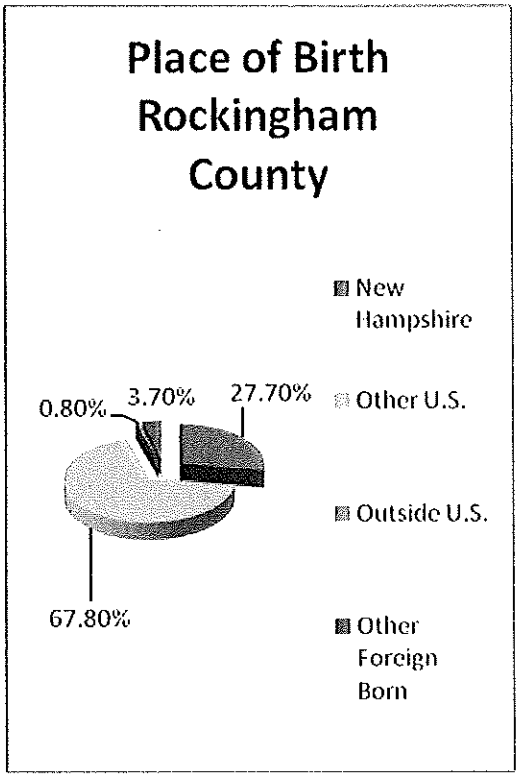
Year	Births	Deaths
1993	18	12
1994	15	10
1995	13	9
1996	14	5
1997	16	8
1998	23	11
1999	11	6
2000	29	7
2001	23	10
2002	18	9
2003	15	5
2004	16	9
2005	20	7
2006	27	10
2007	31	17
TOTAL	**289**	**135**
AVERAGE	**19.27**	**9.0**

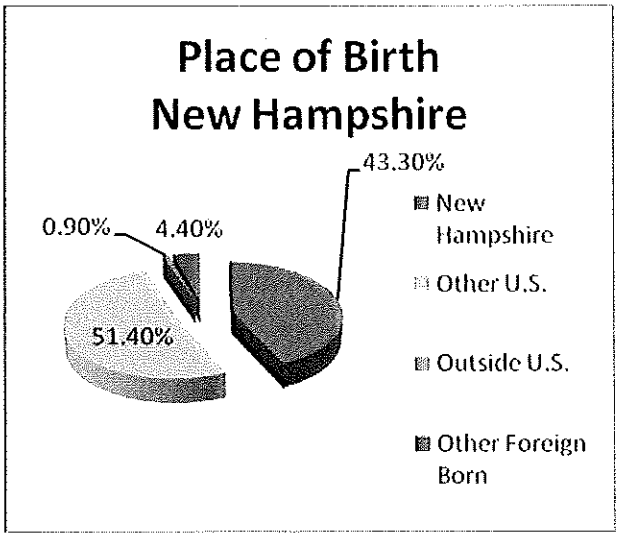
Figure 2 bears out the statement that Brentwood's population increases are a result of in-migration. Only 28.2 percent of those living in Brentwood were born in New Hampshire. This figure is very close to the native-born rate experienced throughout Rockingham County but is significantly less than that experienced State-wide (over 43%). A large majority of the residents of Brentwood and Rockingham County as a whole were born in other locations.

FIGURE 2

PLACE OF BIRTH
Residents of Brentwood, Rockingham County and State of New Hampshire







Tables 10 and 11 below offer population projections projections for the study area developed by the NH office of Energy and planning based upon past population trends. These projections play out fairly conservatively for Brentwood, but rely heavily upon past US Census Bureau information, and as stated several times above the population bump experienced by Brentwood after the 2000 census may significantly alter these projections once the 2010 US Census Bureau counts are taken.

TABLE 10

POPULATION PROJECTIONS
2010 -2030
Brentwood and Area Communities

TOWN/AREA	2010	2015	2020	2025	2030
Brentwood	**4,230**	**4,380**	**4,500**	**4,620**	**4,740**
East Kingston	2,200	2,230	2,360	2,480	2,580
Epping	6,150	6,350	6,520	6,690	6,850
Exeter	15,070	15,580	16,040	16,500	16,930
Fremont	4,220	4,430	4,600	4,780	4,950
Kensington	2,200	2,280	2,370	2,500	5,280
Kingston	6,410	6,690	6,910	7,140	7,350
Newfields	1,690	1,770	1,830	1,890	1,940
Stratham	7,390	7,730	8,020	8,310	8,580
Brentwood & Adjacent Towns	**49,560**	**51,440**	**53,150**	**54,910**	**59,200**
Rockingham Co.	**302,220**	**320,490**	**331,190**	**341,850**	**351,660**
New Hampshire	**1,365,140**	**1,420,000**	**1,470,010**	**1,520,310**	**1,565,040**

SOURCE: OEP Projections, 2010-2030

TABLE 11

PROJECTED GROWTH RATES
2010-2030
Brentwood and Area Communities

TOWN/AREA	2010-2015	2015-2020	2020-2025	2025-2030	2010-2030
Brentwood	**0.70%**	**0.54%**	**0.53%**	**0.51%**	**2.30%**
East Kingston	0.27%	1.14%	1.00%	0.79%	3.24%
Epping	0.64%	0.53%	0.52%	0.47%	2.18%
Exeter	0.67%	0.58%	0.57%	0.52%	2.35%
Fremont	0.98%	0.76%	0.77%	0.70%	3.24%
Kensington	0.72%	0.78%	1.07%	16.13%	19.14%
Kingston	0.86%	0.65%	0.66%	0.58%	2.77%
Newfields	0.93%	0.67%	0.65%	0.52%	2.80%
Stratham	0.90%	0.74%	0.71%	0.64%	3.03%
Brentwood & Adjacent Towns	**0.75%**	**0.66%**	**0.65%**	**1.52%**	**3.62%**
Rockingham Co.	**1.18%**	**0.66%**	**0.64%**	**0.57%**	**3.08%**
New Hampshire	**0.79%**	**0.69%**	**0.68%**	**0.58%**	**2.77%**

SOURCE: OEP Projections, 2010-2030

AGE DISTRIBUTION

An examination of Brentwood's age distribution is provided in Tables 12 and 13 below. Table 12 shows a detailed breakdown of Brentwood's population as illustrated in the 2000 U.S. Census (STF 1A). The primary use of the age distribution information is for examining future demands on school facilities. The Town has 657 school-age children (ages 5 to 19) which comprises 20.5% of its population. It is interesting to note that the 35-44 age-group contains the largest percentage of the Town's population at 19.6%. Table 13 puts the school age distribution in a regional context. Brentwood's percentage of school-age children is the lowest region wide for both 5-9 and 10-14 year old students. Interestingly, this completely reverses for the age group15-19 years old. For this group Brentwood's percentage exceeds all other surrounding communities. The under 5 years category is shown for kindergarten planning purposes. Brentwood's under 5 year population is in the mid-range for the six-town average, and is higher than both the County and State.

It must be noted that the 2000 census is particularly poor in reflecting the impact of residential growth recently experienced in Brentwood. Much of the Town's new single family development has occurred since 2000 and is therefore not reflected in this information.

TABLE 12

AGE DISTRIBUTION
TOWN OF BRENTWOOD, 2000

Age	Number of Persons	Percent of Population
Under 5	215	6.7
5 to 9	212	6.6
10 to 14	230	7.2
15 to 19	215	6.7
20 to 24	129	4.0
25 to 34	343	10.7
35 to 44	627	19.6
45 to 54	511	16
55 to 59	132	4.1
60 to 64	109	3.4
65 to 74	176	5.5
75 to 84	158	4.9
85 and over	140	4.4
TOTAL	**3,197**	**100**

Source: 2000 U.S. Census, DP-1

TABLE 13
SCHOOL AGE POPULATION
BRENTWOOD AREA COMMUNITIES

	Under 5 Years		5 to 9 Years		10 to 14 Years		15 to 19 Years	
	#	%	#	%	#	%	#	%
Brentwood	**215**	**6.7**	**212**	**6.6**	**230**	**7.2**	**215**	**6.7**
East Kingston	112	6.3	162	9.1	149	8.4	95	5.3
Epping	383	7.0	450	8.2	414	7.6	335	6.5
Exeter	771	5.5	941	6.7	1,070	7.6	897	6.4
Fremont	308	8.8	309	8.8	263	7.5	211	6.0
Kensington	144	7.6	173	9.1	140	7.4	102	5.4
Kingston	351	6.0	413	7.0	492	8.4	403	6.9
Newfields	146	9.4	157	10.1	118	7.6	95	6.1
Stratham	432	6.8	66	7.8	593	9.3	393	6.2
Brentwood & Adjacent Towns	**1,752**	**6.4**	**2,121**	**8.0**	**2,287**	**8.1**	**1,805**	**5.8**
Rockingham County	**18,100**	**6.5**	**21,398**	**7.7**	**22,001**	**7.9**	**17,610**	**6.3**
New Hampshire	**76,685**	**6.1**	**88,537**	**7.2**	**93,255**	**7.5**	**86,688**	**7.0**

Source: 2000 U.S. Census, DP-1

5. EDUCATIONAL BACKGROUND

Educational attainment for persons 18 years and older is shown in Table 14 and Figure 3, below and on the following page.

TABLE 14
EDUCATION ATTAINMENT
NUMBER OF YEARS COMPLETED
Person 25 and Older

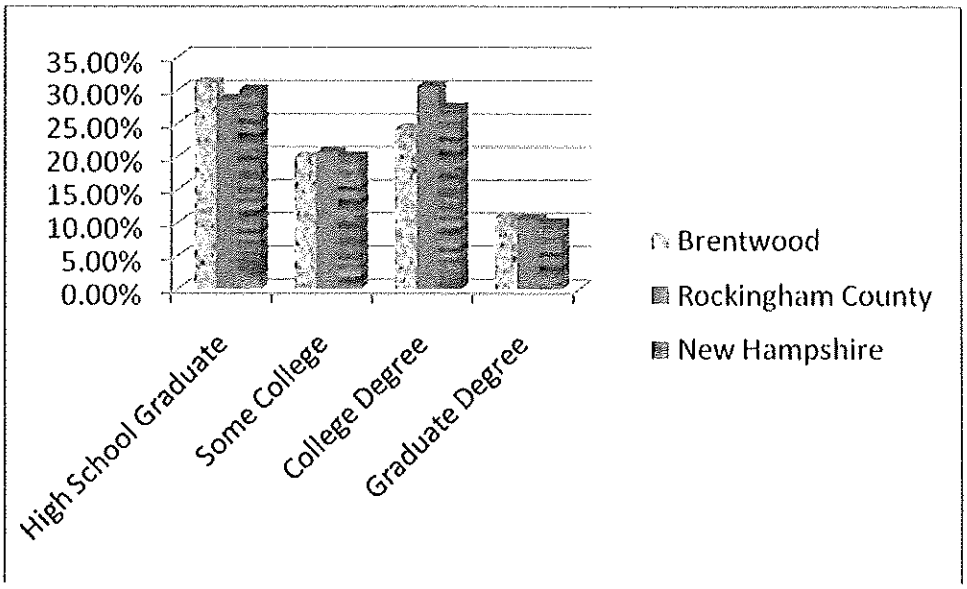
	Brentwood	Rockingham County	New Hampshire
High School Graduate	31.20%	28.60%	30.10%
Some College	20.00%	20.70%	20.00%
College Degree	24.20%	30.60%	27.40%
Graduate Degree	10.90%	10.60%	10.00%
% of Residents Over 25 Years	68.60%	67.30%	66.70%

Source: 2000 U.S. Census, DP-2

As reflected in these exhibits, Brentwood's population has a better high school graduation rate than that found at the County or state level. The Town is slightly lower than both the County and the State in percentage of college graduates but slightly higher than both the County and State in percentage of residents holding graduate level degrees.

FIGURE 3

EDUCATIONAL ATTAINMENT
(2000)



EMPLOYMENT CHARACTERISTICS

Table 15, below illustrates employment categories of persons 16 years and older. For the most part, Brentwood's employment categories correspond with regional and statewide trends. Only three area communities had higher average weekly wages than Brentwood residents in 2000, and in 2006 only two communities exceeded Brentwood's average weekly wages. In fact, Brentwood experienced the largest increase in average weekly wage between 2000 and 2006 among surrounding towns and outpaced both the County and the State in this timeframe.

TABLE 15

AVERAGE WEEKLY EMPLOYMENT AND WAGE

	2000		2006		# Change: 2000-2006	
	Average Annual Employment	Average Weekly Wage	Average Annual Employment	Average Weekly Wage	Average Annual Employment	Average Weekly Wage
Brentwood	**1,362**	**$637**	**1,819**	**$809**	**457**	**$172**
East Kingston	175	$465	201	$583	26	$118
Epping	1,114	$465	2133	$553	1,019	$88
Exeter	9,270	$836	9816	$863	546	$27
Fremont	421	$474	554	$548	133	$74
Kensington	251	$657	263	$735	12	$78
Kingston	1,588	$529	1,627	$593	39	$64
Newfields	946	$615	972	$683	26	$68
Stratham	2,965	$1,003	3,860	$1,067	895	$64
Rockingham County	**129,522**	**$688**	**138,063**	**$842**	**8,541**	**$154**
New Hampshire	**605,931**	**$668**	**627,301**	**$816**	**21,370**	**$148**

Source: NH Department of Employment Security – Economic and Labor Market Information Bureau: Local Area Unemployment Statistics (LAUS) (nhetwork.nhes.state.nh.us/nhetwork) (total, all industries/total, private plus government)

Unemployment data, both current and historic, are presented in Table 16. The Town of Brentwood has been on both sides of the unemployment spectrum in the last 16 years. In 1990, only Stratham had a lower unemployment rate than Brentwood in the region. By March of 2002 Brentwood began to have among the highest unemployment rates in the region and in 2006 the unemployment rate was the highest in the region and higher than both the County and the State.

TABLE 16

CURRENT AND HISTORIC UNEMPLOYMENT DATA, ROCKINGHAM COUNTY

Town	Unemployment Rate							
	March 1990*	March 2000*	March 2001*	March 2002*	March 2003*	March 2004*	March 2005*	March 2006*
Brentwood	**3.1%**	**2.4%**	**3.2%**	**4.8%**	**4.8%**	**4.8%**	**4.3%**	**4.4%**
East Kingston	14.0%	2.2%	2.7%	4.1%	4.7%	5.0%	4.0%	3.8%
Epping	6.1%	2.6%	3.3%	4.6%	4.2%	3.7%	3.7%	3.7%
Exeter	5.8%	2.4%	3.1%	4.5%	4.5%	4.4%	3.7%	3.4%
Fremont	5.7%	2.6%	3.8%	4.8%	5.6%	5.2%	4.3%	3.8%
Kensington	3.8%	2.9%	3.2%	4.1%	4.6%	4.4%	4.0%	3.9%
Kingston	3.9%	3.4%	4.5%	6.7%	5.7%	5.5%	5.1%	4.3%
Newfields	6.1%	2.0%	2.2%	3.3%	2.9%	2.8%	2.5%	2.9%
Stratham	2.7%	2.7%	3.3%	4.0%	3.9%	3.4%	3.1%	3.1%
Rockingham County	**6.2%**	**3.0%**	**4.0%**	**5.5%**	**5.4%**	**4.7%**	**4.2%**	**3.8%**
New Hampshire	**5.6%**	**2.7%**	**3.4%**	**4.5%**	**4.4%**	**3.9%**	**3.6%**	**3.4%**

* *Unemployment rates shown are not seasonally adjusted*

Source: NH Department of Employment Security – Economic and Labor Market Information Bureau: Local Area Unemployment Statistics (LAUS) (nhetwork.nhes.state.nh.us/nhetwork)

Although the previous table reflects disheartening news for Brentwood Table 17 details information about housing values for the region. and this information is positive for the Town of Brentwood. According to 2006 housing sales data, The average sales price for all homes in Brentwood was $429,900. This is the third highest average home value in the region (only Newfields and Kensington had higher averages) and far exceeded the averages for both the County and the State at $303,750 and $249,900 respectively.

When the cost of condominium units are removed from the equation the average home price in Brentwood increases to $437,500, again the third highest value in the region behind Newfields and Kensington. However, Brentwood's average condominium cost is $246,000, only slightly more than the Rockingham County average and less than the average for Kingston, Fremont and Stratham.

TABLE 17

HOME SALES DATA,
ROCKINGHAM COUNTY

(12 months of Sales data from January 2006-December 2006)

	All Home Sales		**Single Family (Non-Condominium)**		**Condominium**	
	Number of Sales	Average Sales Price	Number of Sales	Average Sales Price	Number of Sales	Average Sales Price
Brentwood	**44**	**$429,900**	**41**	**$437,500**	**3**	**$246,000**
East Kingston	22	$379,900	14	$393,500	8	$330,000
Epping	76	$287,900	62	$300,000	14	$212,000
Exeter	178	$385,000	90	$370,000	88	$188,000
Fremont	56	$292,000	36	$294,000	20	$250,050
Kensington	18	$450,000	18	$450,000	NA	NA
Kingston	53	$285,000	45	$300,000	8	$215,000
Newfields	15	$460,000	15	$460,000	NA	NA
Stratham	122	$378,000	66	$437,100	56	$250,000
Rockingham County	**3,223**	**$303,750**	**2,250**	**$335,000**	**973**	**$225,000**
New Hampshire	**14,899**	**$249,900**	**11,410**	**$365,000**	**3,489**	**$192,000**

Source: NH Housing Finance Authority www.nhhfa.org/demographics_housing

HOUSING

Housing in Brentwood: An Overview

The development mosaic in Brentwood can be best described as residential beyond the Route 125 corridor, with scattered commercial enterprises interspersed throughout the rest of Town. As a result of limited commercial and industrial developments throughout Town, Brentwood has become a predominantly bedroom community in recent years and its population and housing history confirm this trend. Brentwood's population has grown at a rate significantly higher than that of the region and the State of NH, with an average annual growth rate of population increase from 1990-2000 of 2.7% compared to 1.1% for the State, and 1.1% for the region. Only four communities, Danville, East Kingston, Fremont and Newfields experienced greater average annual population growth than Brentwood in the 27-community region of the Rockingham Planning Commission.

Table H-1 Population

Town	1980	1990	2000	Average Annual % Change 1980-1990	Average Annual % Change 1990-2000
Atkinson	4397	5188	6178	1.7%	1.8%
Brentwood	2004	2590	3197	2.6%	2.7%
Danville	1318	2534	4023	6.8%	4.7%
E. Kingston	1135	1352	1784	1.8%	2.8%
Epping	3460	5162	5476	4.1%	0.6%
Exeter	11024	12481	14058	1.2%	1.2%
Fremont	1333	2576	3510	6.8%	3.1%
Greenland	2129	2768	3208	2.7%	1.5%
Hampstead	3785	6732	8297	5.9%	2.1%
Hampton	10493	12278	14937	1.6%	2.0%
Hampton Falls	1372	1503	1880	0.9%	2.3%
Kensington	1322	1631	1893	2.1%	1.5%
Kingston	4111	5591	5862	3.1%	.5%
New Castle	936	840	1010	-1.1%	1.9%
Newfields	817	888	1551	0.8%	5.7%
Newington	716	990	775	3.3%	-2.4%
Newton	3068	3473	4289	1.2%	2.1%
N. Hampton	3425	3637	4259	0.6%	1.6%
Plaistow	5609	7316	7747	2.7%	0.6%
Portsmouth	26254	25925	20784	-0.1%	-2.2%
Rye	4508	4612	5182	0.2%	1.2%
S. Hampton	660	740	844	1.2%	1.3%
Salem	24124	25746	28112	0.7%	0.9%
Sandown	2057	4060	5143	7.0%	2.4%
Seabrook	5917	6503	7934	0.9%	2.0%
Stratham	2507	4955	6355	7.1%	2.5%
Windham	5664	9000	10709	4.7%	1.8%
REGION	124145	161071	178,997	2.6%	1.1%
STATE OF NH	920475	1109117	1235786	1.9%	1.1%

Source: U.S. Census

Brentwood's substantial population increase from 1990-2000 resulted in a corresponding increase in new housing units during the same period. From 1990-2000, 142 housing units were constructed in Brentwood, providing housing for the 607 new residents that came to Town during the decade. Table H-2 provides housing information for Brentwood and its surrounding communities for the same period.

Table H-2 Housing Units

Town	1980	1990	2000	Average Annual Growth Rate 1990-2000
Brentwood	**598**	**778**	**920**	**1.69**
Danville	439	960	1479	4.42
East Kingston	362	494	648	2.75
Epping	1,181	2,059	2,215	.70
Exeter	4406	5346	6107	1.34
Fremont	461	920	1201	2.7
Kingston	1518	2115	2265	.69
Kensington	450	585	672	1.4
Newfields	301	324	532	5.1
Stratham	844	1,917	2,371	2.1

Source: U.S. Census 1980-2000

Brentwood's place in the region in terms of providing housing should also be evaluated in light of interpretations provided by the Courts. The interpretation of NH Statutes by the State Courts suggest that towns are responsible for both accepting a fair share of population growth and housing, ***and*** providing opportunities for a variety of housing types to be built throughout Town. The Town's ability to provide housing for all of its residents can best be analyzed by examining the types of housing and the economic status of Brentwood's residents.

Housing Types:

While Brentwood's zoning ordinance provides for a range of housing types, single family residences compose the bulk of the housing stock. Table H-3 illustrates Brentwood's housing stock relative to the surrounding towns. The parenthetical entries indicate that housing types percentage of the total units found in Town. This information is provided to allow easier comparison between communities.

Table H-3 Area Housing Stock—2005

Town	Single Family Detached	Multi-Family	Mobile Home	Total
Brentwood	**1,069 (87.5%)**	**97 (8%)**	**55 (4.5%)**	**1,221**
Danville	1,212 (72.9%)	113 (7%)	337 (20%)	1,662
East Kingston	670 (84%)	61 (7.6%)	64 (8%)	795
Epping	1,586 (65%)	411 (17%)	442 (18%)	2,439
Exeter	2,886 (45%)	2,472 (38%)	1,062 (16%)	6,420
Fremont	1,146 (80%)	208 (14%)	76 (5%)	1,430
Kensington	676 (90.6%)	41 (5%)	29 (3.8%)	746
Kingston	1,902 (78%)	397 (16%)	140 (5.7%)	2,439
Newfields	503 (88%)	54 (9.5%)	11 (2%)	568
Stratham	1,962 (73%)	715 (26%)	15 (.5%)	2,692

Source: Current Estimates and Trends in New Hampshire's Housing Supply, 2004 Update—NH Office of Energy and Planning, November, 2005.

The table above reveals that Brentwood provides less diversity in housing opportunity than most of the communities in the immediate surrounding area. In fact only two communities, Kensington and Newfields have a greater percentage of single family detached units than Brentwood and both of these communities are significantly smaller in population than Brentwood. Correspondingly, in terms of multi-family structures and mobile homes Brentwood ranks in the lower third of the surrounding communities in providing these housing opportunities. This is not an unusual circumstance however. It is typical for the smaller communities to offer less diversity than larger communities. It should be noted however that Brentwood has a zoning district specifically for the creation of multi-family housing, so there is certainly the possibility of additional multi-family construction in the future. In addition, the Town has actively pursued the development of

a senior housing ordinance that would provide for age-restricted housing. After having the ordinance on record for two years there have been proposed developments that should result in senior housing units in Town. These units offer additional diversity of housing stock for residents in Town.

The Town has also recently amended its zoning ordinance to provided additional direction regarding the construction of accessory units. These apartment style units are located in existing single family structures and are intended to provide modest living units that do not alter the appearance of the structure as single-family. Through various design controls these units should create no visible conflicts in single-family residential areas and should go a long way in providing residents of Brentwood with a different kind of affordable rental unit in a way that is non-disruptive of the neighborhood environment.

Economic Status:

One test to evaluate whether Brentwood's current land use controls are actually increasing housing values is to examine the current housing values for owner-occupied housing and the rental costs of renter-occupied housing. There has been a moderate growth in median housing value in the decade between 1990 and 2000. The median value and rental costs for homes in the Cooperative school district within which Brentwood belongs are significantly higher than those of neighboring communities not with the cooperative school district.

TABLE H-4
Brentwood's Median Housing Values and Rents

	1990	2000
Median Household Value	$169,400	$182,900
Median Monthly Rental	$517	$654

1990 Census Data STF1.
2000 Census Data.

TABLE H-4.1
Housing, Ownership & Occupancy

Town	Total Housing Units	Occupied Housing Units	Vacant Housing Units	Owner-Occupied Housing Units	Renter-Occupied Housing Units	Household Size-Owner Occupied	Household Size-Renter Occupied
Brentwood	**920**	**911**	**9**	**849**	**62**	**3.0**	**2.5**
Danville	1,479	1,428	51	1,302	126	2.9	2.2
East Kingston	648	629	19	582	47	2.9	2.1
Epping	2,215	2,047	168	1,574	473	2.8	2.3
Exeter	6,107	5,898	209	3,980	1,918	2.5	1.9
Fremont	1201	1165	36	1,030	135	3.0	2.9
Kensington	672	657	15	597	60	3.0	2.2
Kingston	2,265	2,122	143	1,825	297	2.9	2.2
Newfiields	532	516	16	463	53	3.1	2.4
Stratham	2,371	2,306	65	2,057	249	2.8	2.3

Source: 2000 US Census

Table H-4.1 provides additional information about Brentwood and its surrounding communities regarding vacancies, the number of owner and renter occupied housing units, and the size of owner & renter occupied households. Brentwood falls within the group of communities with larger household sizes. This would seem to indicate families with children and may be another indicator of the impact of the school district upon

housing in Town. Household size for both renters (2.5) and owners (3.0) are at the top range when the Town is compared regionally.

Table H-5
Sales Information - 2005

Town	Number of Sales 2004	Sum of Sales 2004	Average of Sales 2004
ATKINSON	137	$47,077,190	$343,629
BRENTWOOD	66	$23,574,195	$357,185
DANVILLE	102	$23,915,358	$234,464
E. KINGSTON	55	$16,480,561	$299,647
EPPING	110	$22,716,657	$206,515
EXETER	361	$88,159,321	$244,209
FREMONT	67	$18,895,761	$282,026
GREENLAND	45	$19,586,316	$435,251
HAMPSTEAD	139	$39,912,939	$287,143
HAMPTON	480	$137,263,230	$285,965
HAMPTON FALLS	59	$22,884,431	$387,872
KENSINGTON	28	$11,919,865	$425,709
KINGSTON	136	$36,637,386	$269,393
NEW CASTLE	37	$23,024,400	$622,281
NEWFIELDS	20	$12,685,566	$634,278
NEWINGTON	20	$8,345,599	$417,280
NEWTON	78	$22,273,130	$285,553
N. HAMPTON	85	$35,078,294	$412,686
PLAISTOW	189	$46,455,285	$245,795
PORTSMOUTH	457	$137,574,638	$301,039
RYE	107	$61,956,431	$579,032
SALEM	389	$95,967,478	$246,703
SANDOWN	231	$56,272,985	$243,606
SEABROOK	116	$30,083,661	$259,342
S. HAMPTON	44	$11,892,599	$270,286
STRATHAM	203	$68,574,516	$337,805
WINDHAM	311	$113,968,090	$366,457
Grand Total	***4072***	***$1,233,175,882***	***$302,843***

Table H-5 provides data on home sales for each community in Rockingham County through December 31, 2004. This is the last year that this data was collected by the regional planning commission and is therefore the most recent data available for this chapter. Figure H-I and Figure H-2 on the following page display the results of this information graphically and are borrowed from a data gathering exercise completed by each planning commission around the state using funds supplied by the Community Development Finance Authority (CDFA).

As displayed in Table 5, Brentwood had average sales price for residential structures of $357,185. This figure placed Brentwood in the top third of the twenty-seven communities in the Rockingham Planning Commission region. Of interest to note,

Brentwood has the third highest average sales values of the 6 town cooperative school district. Only Newfields ($634,278) and Kensington ($425,709) had higher sales values of the six communities. It is probably not a coincidence that the three communities with the highest sales values are the same three communities with the highest percentage of single family structures in the smaller region of surrounding communities. It seems that lesser levels of housing diversity belies an increase in sales value.

The differences in sales cost between communities are more clearly displayed in Figure H-1. This figure shows community sales information by census tract with five distinct categories ranging from $100,000 to $723,930. As displayed, all communities directly abutting Brentwood have sales values between 200,000 and 300,000; while Brentwood falls in the next category of $300,000 to $400,000.

Figure H-2 on the following page displays the change in average sales prices by communities between 2003 and 2004. These sales figures show that Brentwood experienced the fourth highest change in sales value over the study period; a twenty-two percent increase in residential property sales between 2003 and 2004. In this time period the communities directly abutting Brentwood experienced a wide range of impacts upon average sales price from a 5% decrease in value to a thirty-eight percent increase.

Figure H-1

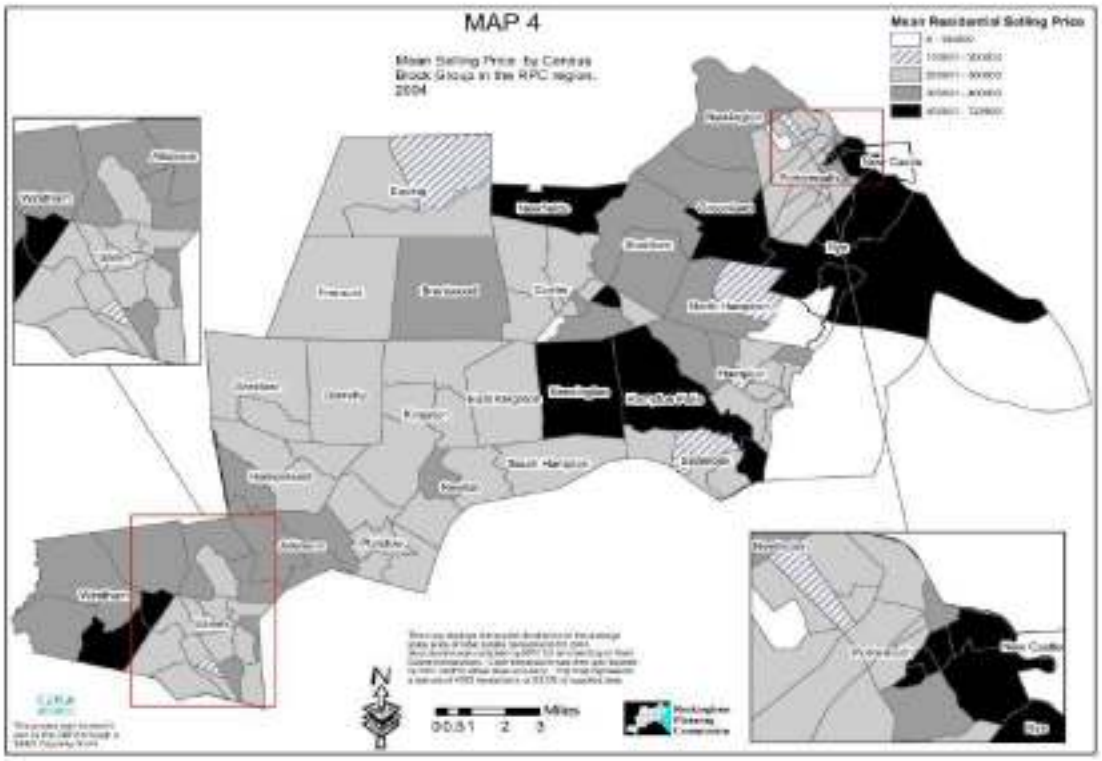
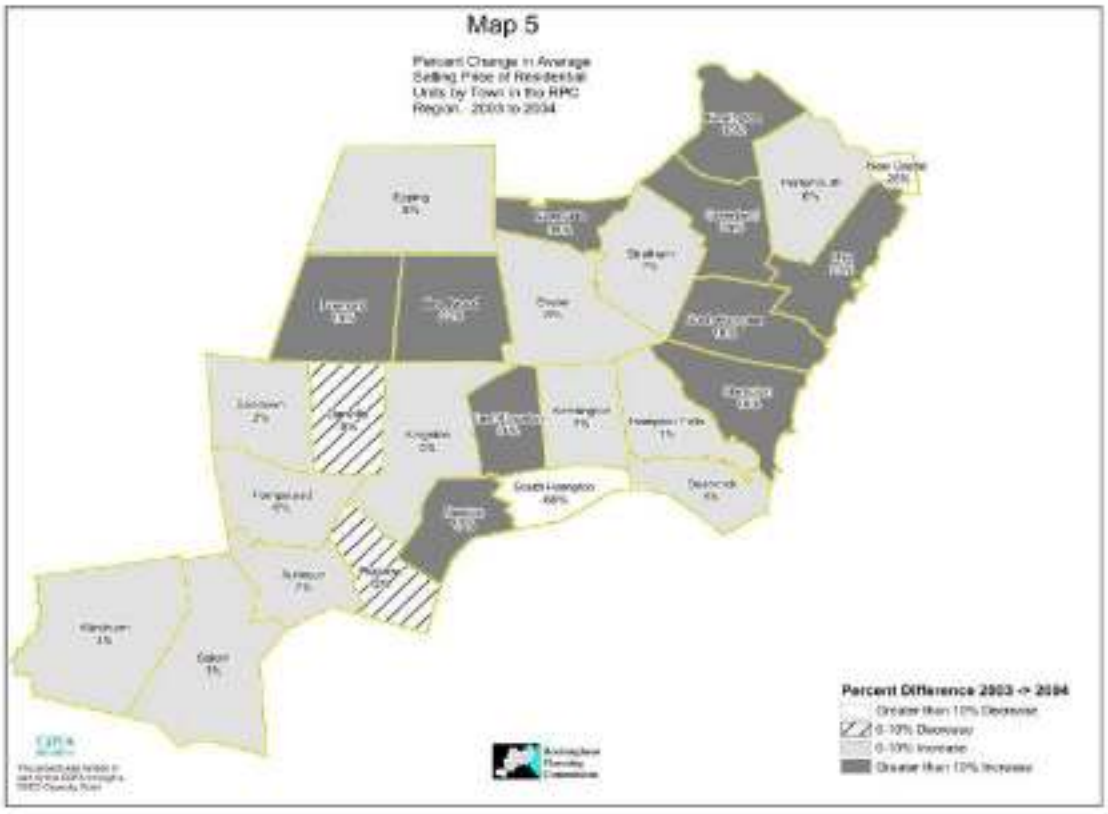


Figure H-2


Map 5
Percent Change in Average Selling Price of Residential Units by Town in the RPC Region: 2003 to 2004
Percent Difference 2003 -> 2004
Greater than 10% Decrease
0-10% Decrease
0-10% Increase
Greater than 10% Increase

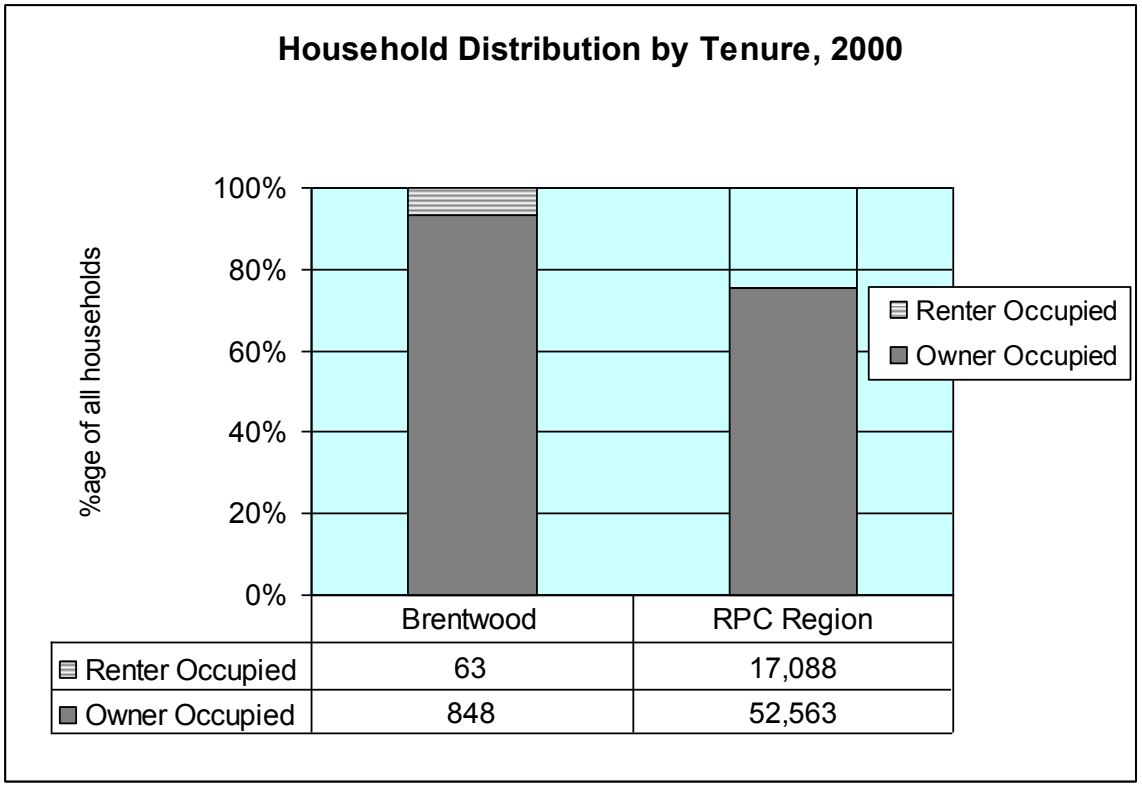
Affordable Housing Needs

NHRSA §674:2 requires that all municipal Master Plans include a discussion of affordable housing based on the regional housing needs assessment performed by the regional planning commission. The following section of this Master Plan satisfies the cited statutory requirement.

The Rockingham Planning Commission has prepared a regional housing needs assessment that has not been finalized as of June 2006 but information from the draft document has been included below in order to provide a regional perspective with regard to housing affordability.

Figure H-3 details the breakdown for both the RPC region and the Town of Brentwood with respect to tenancy. As shown the Town has a higher percentage of owner occupancy residences than renters when compared with the RPC region. This trend is not unusual at all for the smaller communities in the RPC region. Nearly all of the Town's with populations less than 10,000 have owner occupancy rates well over 80%.

Figure H-3



	Brentwood	RPC Region
Renter Occupied	63	17,088
Owner Occupied	848	52,563

Figure H-4

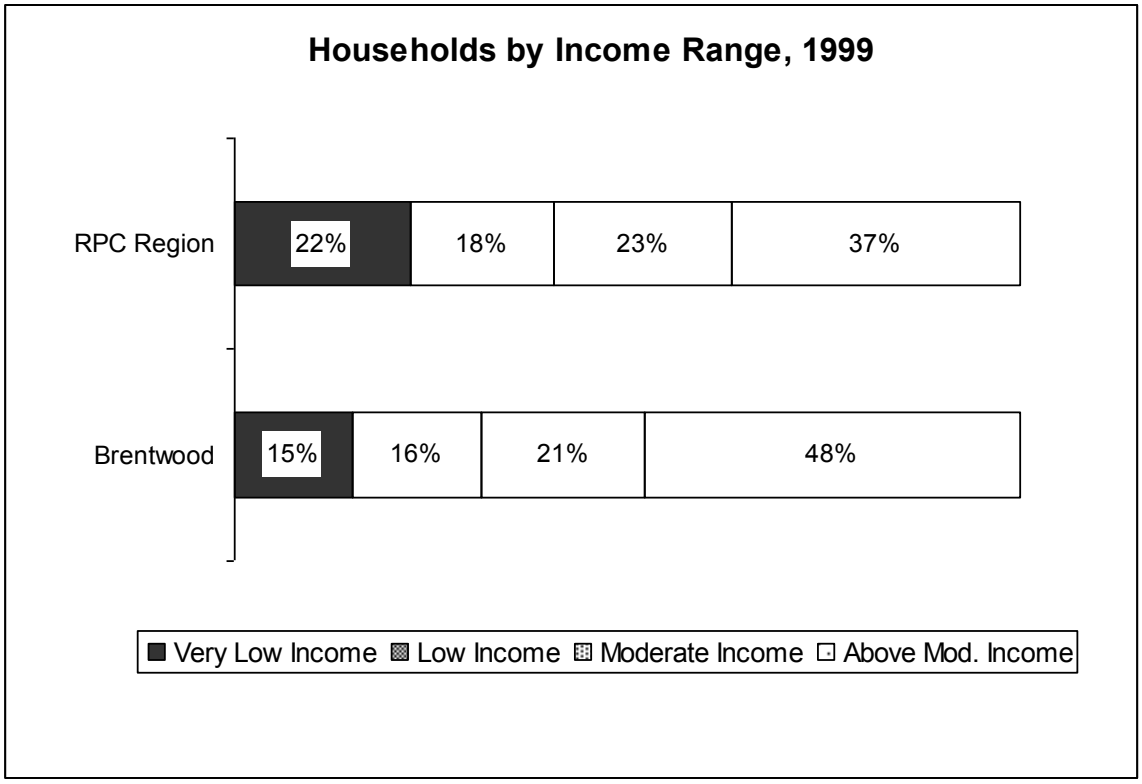
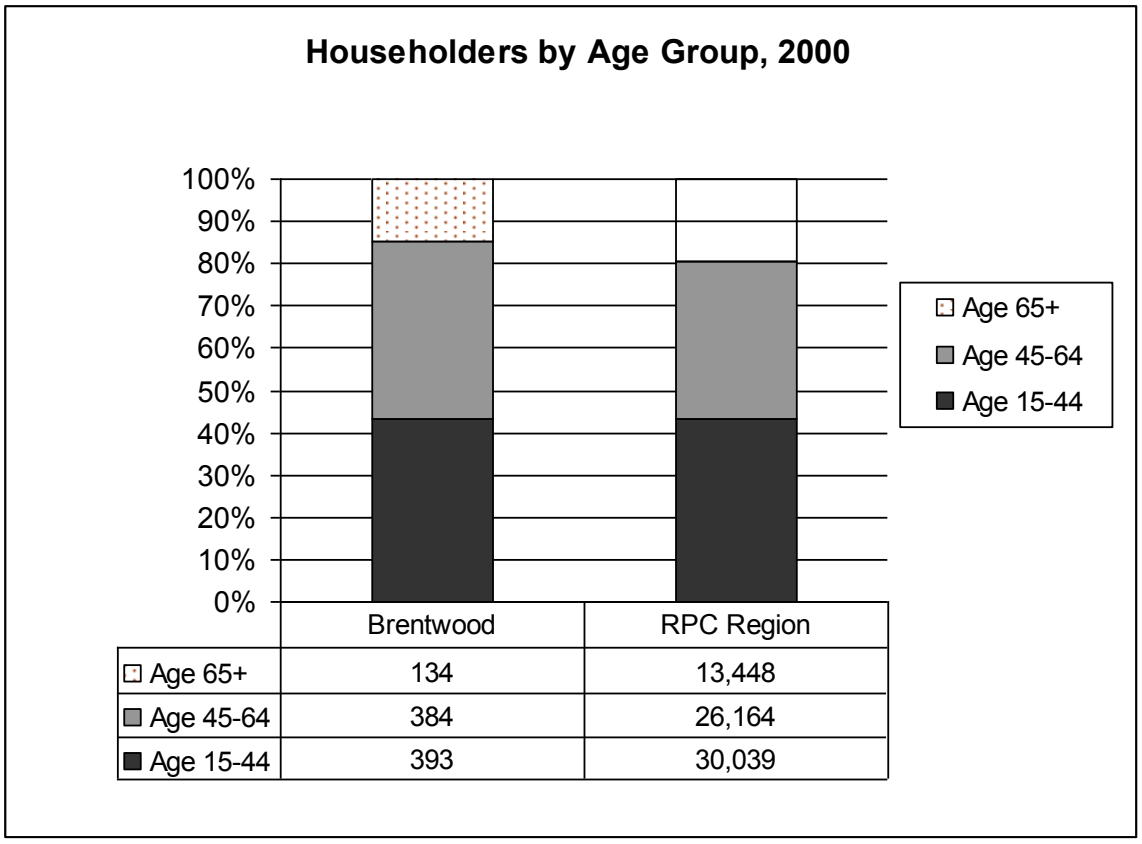


Figure H-4 shows the breakdown established by the RPC for income categories as defined by the Office of Energy and Planning. As detailed the town of Brentwood has an economic demographic that is slightly more affluent than that of the RPC region overall.

Figure H-5 below displays information about the age distribution in Brentwood as compared to the RPC region. The Figure shows that the population of residents aged 15 to 44 are nearly identical for Brentwood and the RPC region. However, Brentwood has approximately five per cent more residents of the ages 45 to 64 than the RPC region; correspondingly the Town has approximately five per cent fewer resident 65 and older than the RPC region. The Town of Brentwood has recently expanded the opportunity for age restricted housing by increasing the density allowed for age-restricted units. It is likely that these changes will result in the creation of additional housing opportunity for older residents. The Planning Board should track changes to the age distribution in Town so that they are aware of any imbalance that may occur as a result of these changes to community zoning.

Figure H-5

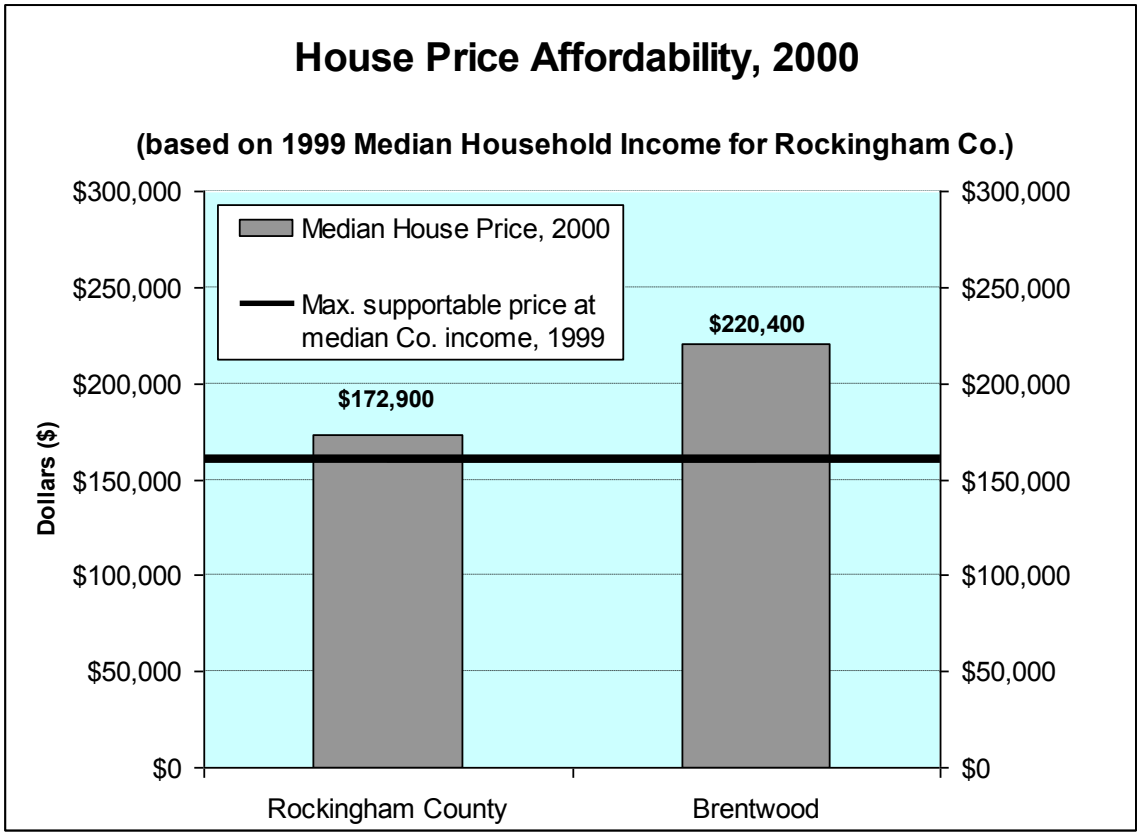


	Brentwood	RPC Region
Age 65+	134	13,448
Age 45-64	384	26,164
Age 15-44	393	30,039

Figure H-6 is the most telling figure with respect to the issue of affordability of housing in Brentwood. This figure indicates the maximum supportable price available for the median household income in Rockingham County. Under the assumptions used by the regional planning commission the maximum supportable price of a home available to an individual with the median household income for Rockingham County is $159,900 (represented by the dark black line on the figure. As can be seen this figure is lower than the median house price for either Rockingham County or the Town of Brentwood. From the perspective of the regional planning commission report the Town of Brentwood does has an issue with unmet demand with respect to affordable housing.

The larger picture however shows two factors that are important to note. First, the entire county has problems meeting the needs of moderate income individuals with respect to housing. Second, the town of Brentwood has shown an increasing trend away from affordability in the recent past. As detailed earlier Brentwood is in the top third of housing sales costs and this does not translate to the existence of affordable properties in Brentwood when comparisons are made to surrounding communities.

Figure H-6



Statewide Housing Programs

There are two programs that have been developed at the state-wide level that aim to provide direction for communities regarding two different policy areas. The first, Housing and Conservation Planning Program (HCPP) was developed to marry concepts of housing and conservation. The second program, Inclusionary Zoning Implementation Program (IZIP) strives to help New Hampshire communities develop and adopt housing policies and ordinances that encourage the construction of affordable dwelling units.

Housing and Conservation Planning Program

HCPP is a new and voluntary grant program offered to municipalities through the Office of Energy and Planning. Grant funds will enable municipalities to purchase technical assistance related to planning for future housing growth needs, including the need for affordable and workforce housing, while preserving quality of life, using land efficiently, and identifying key natural and historic areas to conserve.

The Program will award technical assistance grants to interested communities within four planning stages, each stage leading up to the implementation of a growth and

development strategy that addresses housing and conservation together in an interrelated manner. These include:

1. Study housing and natural resource values, locations, and economic impacts;
2. Develop and adopt a town-wide Growth and Development Strategy;
3. Amend the master plan to be consistent with that Strategy; and
4. Implement the strategy through audits of and revisions to zoning, subdivision and site plan regulations.

Inclusionary Zoning Implementation Program (IZIP)

In response to increasing requests for assistance by municipalities to address difficulties in creating and adopting local inclusionary zoning ordinances, New Hampshire Housing has recognized an immediate need and an opportunity to help them create regulatory environments that are favorable to the development of affordable housing.

The new Inclusionary Zoning Implementation Program (IZIP) provides direct grants of up to $9,000 to municipalities to help cities and towns develop and adopt inclusionary zoning ordinances. Local governments will apply for the funding on a competitive basis, with application review and determination of successful applicants being made by a team composed of staff from New Hampshire Housing as well as peer and partner organizations. In addition to the grant funds, New Hampshire Housing will also provide grant recipients with technical assistance in economic analysis of proposed inclusionary zoning ordinances and communications strategies to help the public understand the need for affordable workforce housing.

The municipal work will be conducted by professional planning consultants chosen by the municipalities from among a list of consultants that have been previously qualified and trained. The work product will be an ordinance ready for adoption and a campaign to educate the voters about the inclusionary zoning proposal. Ultimately, the goals of the program are to create a larger pool of professionals with experience in inclusionary zoning, and through its implementation in a variety of municipalities the program will provide a series of models. These benefits will be important to the success of future inclusionary zoning efforts statewide. (2008 New Hampshire Housing Finance Authority program brochure)

RECOMMENDATIONS:

The following recommendations are designed to further Brentwood's effort to provide needed housing, promoting community goals, improving local housing controls, and ensuring compliance with relevant state and federal legislation. Every effort should be made to ensure that Brentwood continues to provide a range of housing opportunities for its citizens.

H1. The Town shall review their land use policies, ordinances and procedures regarding housing in order to remove barriers to achieving a diverse, affordable housing stock in their community.

H2. The Rockingham Planning Commission is scheduled to develop a new Regional Housing Needs Assessment in 2008. This new assessment will be based upon a new methodology which, it is hoped, will more accurately and fairly evaluate individual communities need to provide affordable housing in a regional context. This Housing Chapter should be amended to incorporate the updated Regional Housing Needs Assessment upon completion.

H3. The Town could investigate options for providing affordable workforce housing for its residents. In light of recent trends toward less diversity and increased housing costs the Town could strive to close the affordability gap that exists throughout the region.

H4. The Town should consider the programs currently offered by the Office of Energy and Planning as well as the New Hampshire Housing Finance Authority with respect to expanding housing opportunities within the Town.

H5. The Town shall undertake educational programs to help the public become aware of the economic effects of local regulations.

H6. The Town shall consider areas of town suited to mixed use and incorporate land use ordinances and regulations that will allow this. The concepts included in these ordinances would include, allowances for higher densities, more diverse permitted uses, reduced setbacks, etc.

Brentwood Community Facilities

The Town of Brentwood offers its residents a wide selection of community services. This chapter is prepared in an effort to provide a snap shot of these facilities to better understand their present condition and aid in the planning for future provision of these services. An inventory of the municipally-owned facilities is offered below. Where it is warranted, the capital needs of the specific facility are discussed. This discussion of capital needs is based upon information included in the Town's most recent Capital Improvements Plan (CIP).

Highway Department

The Highway department is located very near the geographic center of town at 207 middle Road. The department is responsible for the care and maintenance of approximately 41.3 miles of Town-owned roadway. The shed facility was constructed in 1997 and includes one 40 X 80 foot building located on a town-owned parcel that is 5.94 acres in size. The existing steel, pitched-roof building has one office, one bathroom and one tool room. The building has the capacity of housing up to six vehicles

Present staffing levels at the Brentwood highway department include three full time and two part time employees. Three additional part time employees are added in the winter to facilitate snow removal.

Below is a current inventory of the equipment owned and operated by the highway department:

- 1998 CAT 416 C Back hoe
- 1993 4900 6-wheel dump truck in poor condition
- 2006 7400 6 wheel dump truck, good condition
- 2005 Ford 550 dump truck, good condition
- 1993 4900 6 wheel dump truck, fair condition
- 2007 Chevrolet 3500 truck, new
- 2003 John Deere loader, good condition
- 2001 4900 six wheel dump truck, good condition
- 2 warren sanders, fair condition
- 2 highway sanders, fair condition



Although the highway shed is a relatively new building, there are some known problems with the facility. Due to a high water table on the property, some limitation of the use of the full property for storage of equipment, sand and road salt results. In addition, the well water on-site is unfit for consumption.

Planned improvements:

The two most important improvements from the Highway Department' s perspective are to increase the size of the highway shed and the construction of a covered sand and salt shed. The goal of the building addition is to construct three additional bays providing better protection for department equipment. The plan for the sand and salt shed is to enclose an area of approximately 100 feet by 100 feet. The benefits of storing the materials beneath a roof include better management of the supply and protection of the surrounding environment from potential run-off degradation.

Municipal Administrative offices

The Brentwood Town Office building is located at 1 Dalton Road. The building is used for all administrative town functions including the offices of the following departments: town clerk / tax collector, recreation department, planning board, zoning board of adjustment, board of selectmen and their town administrator, building inspector, and town treasurer.



The building was originally constructed in 1978 and was enlarged to its present 9,200 square feet as the result of a major addition accomplished in 2001. The facility is located on a parcel of land 5.11 acres in size. In addition to housing the municipal administrative offices the Brentwood Police Department shares this facility. The police functions are detailed in a separate section later in the community facilities chapter.

There are seven administrative offices on the primary level of the Brentwood municipal office building, one walk-in security safe for public records, as well as two public meeting rooms. The Cross meeting room has a capacity rating of 53 people and the Sanborn Room has a capacity rating of 48 people. In 2009 the Town has 9 full time and 13 part time employees in the municipal offices. Major pieces of equipment include a Ricoh Aficio copier, fax machine, document shredder, and several Dell computer work stations spread throughout the administrative offices.

There is no immediate need for additional space for the administrative services in the Town. The present site does not allow for building expansion. Future expansion may best be accomplished by moving the police department to a separate facility.

Mary E. Bartlett Library

The Mary E. Bartlett Library is located at 22 Dalton Road and is a full service lending library for books, tapes and compact disks. Public meeting areas make the library a popular meeting place for groups such as homeowners associations, adult and children's programming, and NH Humanities programs. Computers are available for internet use by the public and wireless internet service is also available.

The library has over 40,000 holdings and its circulation volume was 58,276 to over 2,500 card holders in 2008. The original library structure was built in 1908 and major additions occurred in 1983 and 2003. The facility is located on a parcel of land 1.97 acres in size. There are two full time and four part time employees of the library. The library has a fire safety capacity rating of 100 people.

Major Pieces of Equipment are inventoried below:

- 4 gas furnaces that are 6 years old and in good condition;
- 1 gas furnace that is twenty years old and in fair condition;
- 4 split A/C systems that are six years old and in good condition;
- 1 gas wall heater that is six years old and in good condition;
- An alarm system that is six years old and in good condition.
- Six computers in fair to good condition, one of which is to be replaced.



The facility has been greatly upgraded in the recent past. The Library Trustees have completed an energy audit with the results of this audit providing an action plan for increasing the structures over-all energy efficiency. Steps toward greater energy efficiency include lighting replacements and a hot water tank upgrade. The facility is hindered by a lack of space for additional vehicle parking. The CIP includes a project that is underway to upgrade the library basement so that it is fully compliant with state and local fire codes and the Americans With Disabilities Act (ADA).

The Brentwood Police Department

The Brentwood Police Department is located on the lower level of the municipal office building on 1 Dalton Road. The police department occupies roughly 3200 square feet of the building's overall 9,200 square feet. The Department employs six people full time and 6 people on a part time basis. For security purposes there is no internal building access between the Police Department and the municipal administrative offices.

Major pieces of equipment operated by the police department are indicated below:

- 4 Ford Crown Victorias (2003, 2004, 2006, 2007)
- 1 2005 Yamaha 4 wheeler
- 1 2006 Ford expedition SUV

- 1 Hallmark Trailer

Major office Equipment

- 4 desk top computers, 4 laptop computers, 3 desktop printers , 1 copy machine, 5 custom signal radios

The police department anticipates the need for an additional full time officer within the next ten years. In addition, the department plans to become members of the Seacoast Area Emergency Response Team in the future. Police officers from 11 seacoast communities have formed a regional team whose members are on call 24 hours a day 365 days a year to respond to critical incidents such as hostage situations, armed barricaded suspects, high risk warrants, woodland searches or any other emergency situation that arises in the Seacoast area. The police department would also like to place mobile IMC capabilities in each cruiser. This system allows individual cruiser access to a nation-wide criminal information database.

Brentwood Police Department Response Information 2003-2008

YEAR	NUMBER OF CALLS	ARRESTS	INCIDENTS	MOTOR VEHICLE CRASHES
2003	9,307	140	N/A	63
2004	9,131	230	N/A	N/A
2005	9,337	269	N/A	N/A
2006	5661	200	227	N/A
2007	6755	187	268	133
2008	6415	203	N/A	N/A

SOURCE: Town of Brentwood Annual Reports

Brentwood Fire /Rescue Department



The Brentwood Fire Department is located in a building owned by the volunteer firemen's Association located at 148 Crawley Falls Road. The building was constructed in 1949 and has been expanded twice, once in 1960 and again in 1980. These two expansions added five additional bays to the original structure. The original structure and the additions were all accomplished at no expense to the Town of Brentwood. For many years the Town elections were held in the Gordon Block Memorial Hall on the top floor of the fire station. The station

is 45 X 120 feet long and is located on a parcel of land 2.3 acres in size. The station is the emergency operations center for the community, housing all of the Town's fire fighting apparatus as well as its ambulances.

Brentwood Fire and Rescue has 2 full time and 25 part time employees.

The station is in need of structural repair and is also in need of a contemporary exhaust system. The station Chief in cooperation with the Town is attempting to settle an on-going property dispute regarding the ownership of land abutting the Exeter River. The site is constrained in terms of future use due to its proximity to the Exeter River where shoreland setbacks limit development potential. In addition to the impact from the Exeter River the lot is constrained by its location between New Hampshire Route 125 and Crawley Falls Road.

Below is an inventory of major Equipment operated by Brentwood Fire / Rescue:

- Engine 3 – 1979 Mack
- F1 – 1953 Dodge
- Engine 4 – 1986 Hahn
- F2 – 1992 F 350
- Rescue 2 – 1987 International
- Ambulance 1 – 1994 Road Rescue
- Ambulance 2 2006 Road Rescue

Brentwood Fire / Rescue Response History

YEAR	FIRE EMERGENCIES	MEDICAL EMERGENCIES	SERVICE CALLS *	TOTAL RESPONSES
2003	209	181	207	597
2004	225	214	323	762
2005	306	242	359	907
2006	276	228	272	776
2007	265	238	185	688
2008	269	242	437	948

SOURCE: Town of Brentwood Annual Reports 2003-07

*Service calls are non-emergency responses i.e. public assist, inspections, fire drills.

Brentwood Fire and Rescue have attempted for three years to develop plans for a replacement fire station. The Town has selected a site on the western side of NH Route 125 approximately a quarter mile away from the present station. As presently designed the new fire station would have nine bays with the ability to drive through the

facility. Office, training and living areas are also provided. Although the design is subject to change a new facility will likely look something like the proposal offered in 2009 and shown below.



Recreation Department and Commission

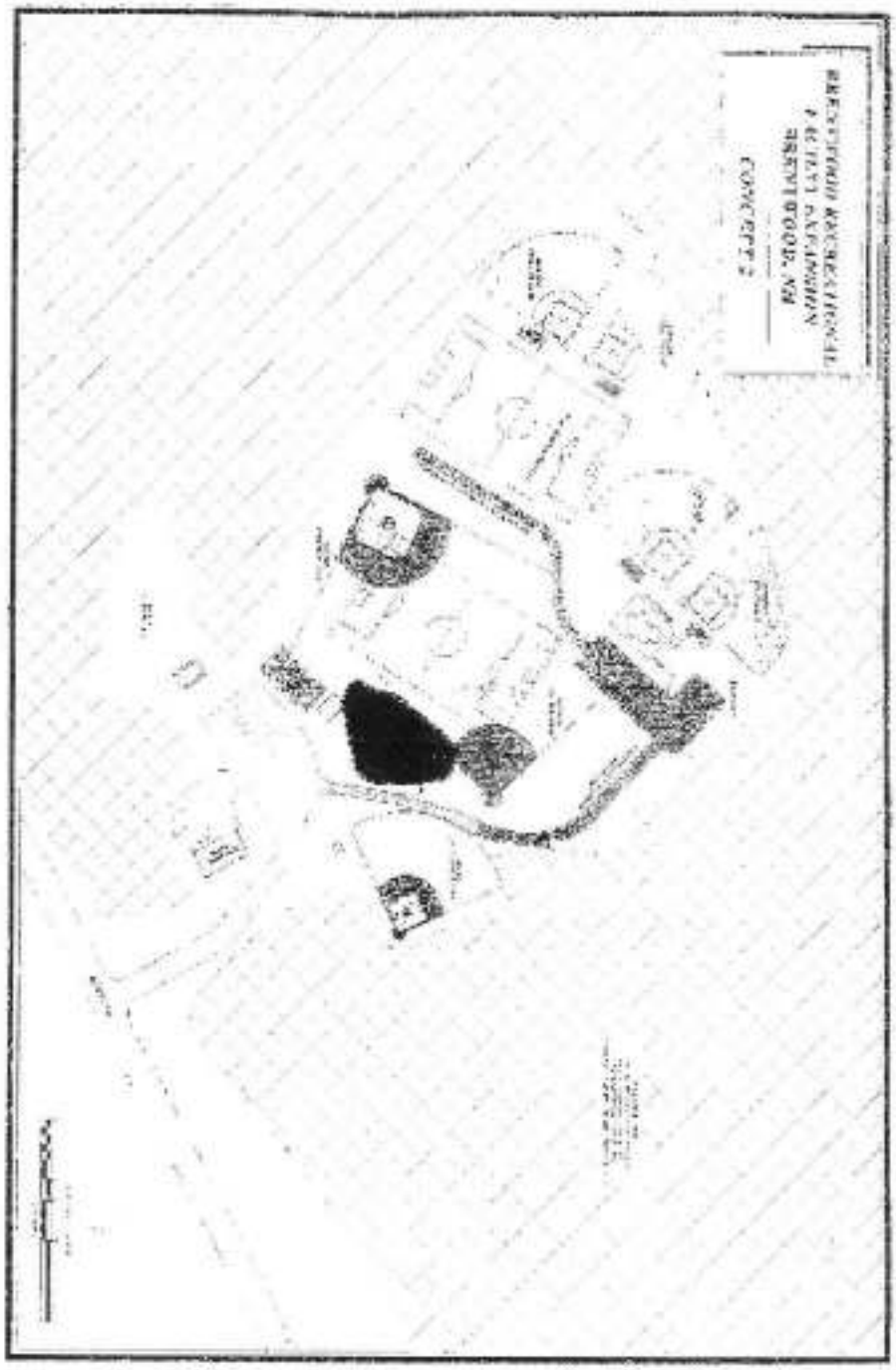
The Brentwood Community Center and recreation area is located at 190 New Hampshire Route 125. The facility is located on a parcel of land 8.2 acres in size. The department employs one part time recreation director and utilizes many volunteer coaches and assistant coaches. The primary structure on the site is the Brentwood Community Center. Originally built 38 years ago a major renovation was completed in 2006. The community center has approximately 3,300 square feet on two floors. The main floor has full kitchen facilities. The center has been safety rated for 129 people on each floor for function events and 278 people for each floor for general assembly events. The center is used for wedding receptions, parties, community organization meetings, and town events such as voting.

Apart from the community center the recreation area has ball fields, a multi-purpose field and a playground in support of the Town's recreation programs for T-ball, baseball, and soccer. The Castonguay Pavilion offers ten picnic tables, has electrical outlets for use, and grills are located nearby. This spot is popular for family and company cookouts in the warmer months and is used regularly throughout the year by the local blacksmiths association and bow hunters association (you'll notice their targets set up in the adjoining field). The Recreation Department also offers a winter basket ball league. Other programs at the community center include Easter and Halloween parties, CPR classes and trips to Foxwoods Casino.

There are no known deficiencies with the facility.

Future improvements include the construction of a toddler area and pavilion planned for the playground area. Completing the irrigation system for the ball fields is anticipated in the near future. There has been great interest in the possibility of a skate board park at the facility but no designs have yet been completed for this element.

On the following page a design concept for additional playing fields was prepared by students from the University of New Hampshire. Although not cast in stone, the concept shows a likely arrangement for additional playing fields beyond the existing three ball fields and multi-purpose field. The grassed meadow currently exists for this potential expansion.



Brentwood Educational Facilities

Residents of Brentwood are members of both the Brentwood School District for their children in grades kindergarten through fifth and are part of the Exeter Region Cooperative School District for grades six through twelve. Elementary-aged students are educated at the Swasey Central School located on Middle Road in Brentwood. The facility was built in 1950 with additions added in 1967, 1975, 1988 and 2004. Staff currently includes a principal, vice principal and 20 teachers. The staff also includes a number of instructional aides, a physical therapist, occupational therapist, speech and language pathologist, several special education teachers, and a number of other specialized positions. In total there are 75 members on staff at the school. The student to teacher ratio is approximately 21: 1.

The physical plant is in good condition as a result of the major addition to the school that occurred in 2004. Major capital outlays in the recent past have been to make the school more energy efficient and to increase security at the school. As shown below the enrollment figures have wavered between a low of 366 students in 2004 to a high figure of 413 in 2007.

Swasey Central School

	September 2004	September 2005	September 2006	September 2007	September 2008	September 2009
PRESCHOOL		9	10	11	18	7
Grade K	44	59	59	54	58	41
Grade 1	72	52	71	78	66	63
Grade 2	71	75	54	66	75	65
Grade 3	58	71	74	52	75	80
Grade 4	57	60	76	74	53	72
Grade 5	64	65	59	78	76	57
Total	366	391	403	413	411	385

SOURCE: 2008 Brentwood Town Report

Cooperative Middle School

Brentwood students in 6th through 8th grade attend the Cooperative Middle School (CMS) located in Stratham, NH. This facility, located at 100 Academic Way, was completed in 1997. The enrollment projects provided by the Exeter Region Cooperative School District and displayed below show a fairly stable student population through 2019. The high enrollment figure is for 2013-14 at 1399 students and the lowest enrollment of 1348 is projected for the school year 2017-18. Over the ten year period that is a fluctuation of 51 students between three grade levels.

COOPERATIVE MIDDLE SCHOOL ENROLLMENT PROJECTIONS

	6th Grade	7th Grade	8th Grade	Total
2009-10	467	455	453	1375
2010-11	422	472	458	1352
2011-12	476	426	475	1377
2012-13	463	481	429	1373
2013-14	447	468	484	1399
2014-15	466	451	471	1388
2015-16	428	471	454	1353
2016-17	460	432	474	1366
2017-18	448	465	435	1348
2018-19	449	452	468	1369

Exeter High School

The cooperative high school facility was opened in September of 2006. Located west of the northeast corner of Brentwood on NH Route 27 in Exeter, this facility is still just being broken in. The first group of students to be entirely educated at this new school will graduate in 2010. There is slightly more variance in enrollment at Exeter High School than at CMS. The low projection occurs in the 2010-11 academic year with 1621 students and the high projection occurs with 1722 students in the 2017-18 school year, displaying a difference of 101 students over four grade levels.

EXETER HIGH SCHOOL ENROLLMENT PROJECTIONS

	9th Grade	10th Grade	11th Grade	12th Grade	Total
2009-10	455	406	367	420	1648
2010-11	444	426	397	354	1621
2011-12	449	416	417	383	1665
2012-13	466	420	407	402	1695
2013-14	420	436	411	392	1659
2014-15	474	393	426	396	1689
2015-16	462	444	384	411	1701
2016-17	445	432	434	370	1681
2017-18	465	417	422	418	1722
2018-19	426	435	408	407	1676



TOWN OF Brentwood
Buildout Analysis

July 2009
Revised 2010

ROCKINGHAM PLANNING COMMISSION

Prepared by:
Robert Pruyne Jr., GISP
Rockingham Planning Commission
156 Water St.
Exeter, NH 03833

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Introduction

This report is part of the final product of the buildout analysis project for the Town of Brentwood, NH. This buildout is at the request of the Brentwood Planning Board to help them with future landuse planning. This project was paid for in part by a Targeted Block Grant from NH Office of Energy and Planning along with a match of funds from the town of Brentwood.

What is a Buildout?

A buildout is a process of analyzing spatial data along with current landuse regulations. The buildout process is a tool to be used to show potential future landuse scenarios. The town planners should use the results of this buildout to evaluate if the enacted zoning will accomplish the goals set forth by the town's masterplan. The planning board should leverage this analysis to determine if the desired balance of open space and development; residential and commercial will be achieved given the current regulations.

A common misconception of the buildout process is that it is a prediction tool. A buildout is not trying to predict where a new housing unit will be developed, it is really attempting to show potential for development in a spatial manner. When looking at the results of the buildout analysis it is important to not zoom in on one parcel, but to look at the aggregate effect of the analysis.

Methods

Tools and Data

Buildouts were conducted using Geographic Information systems (GIS) software. ArcMap and CommunityViz are the core programs used in the analysis. The application used for this project was ArcGIS 9.3 developed by the mapping software company ESRI. CommunityViz is an extension for ArcGIS that was created by the Orton Family Foundation. CommunityViz helps with visualization of data. In this instance the software was used in an effort to simplify the model. GIS Staff used Python IDLE 2.5 to write some scripts that helped the automation of some of the buildout processes.

The GIS data used in this study originates from several sources. GRANIT is the GIS clearinghouse for the state of New Hampshire, as such they supplied much of the base data used in this analysis. Cartographic Associates Inc. (CAI) is the towns mapping company. CAI updates the parcels and several other layers for the town on a regular basis. The most current update was in January of 2009, this is the data that was used in this buildout analysis. The RPC houses and maintains many datasets for the town, some of these were used to create base data and cartographic data used in this buildout.

It should be noted for the purpose of this buildout there are three types of constraints, absolute constraints, partial constraints and zoning (density) constraints. These all create the constraint layer.

Furthermore, there are constrained parcels, these are constrained based on their current development status. An absolute constraint means that area is completely removed from the buildable landmass, a partial constraint allows for the land area of the constraint to be used in density calculations but development cannot take place on that specific area. A density constraint does nothing more than to lower the allowable developed density of that parcel.

1. Aquifer Data – Stratified Drift Aquifers are defined in the zoning ordinance as a partial constraint to building. There is an aquifer overlay district that decreases the allowed density of buildings.

   8.3.1 Pursuant to RSA 674:16-21, the Town of Brentwood hereby adopts an Aquifer Protection District and accompanying regulations in order to protect, preserve and maintain potential groundwater supplies and related groundwater recharge areas within a known aquifer identified by the United States Geological Survey.

   The aquifer data was created by USGS and NH Dept. of Environmental Service, and was digitally automated and distributed by GRANIT. There are 3521.17 acres of land that are in the aquifer zone. This aquifer data was not used as a spatial constraint, but only as a density constraint.
2. Existing Buildings Layer – The existing buildings data was created by CAI. This data is digitized building footprints complete with a GPS corner point. This data was converted to a building centroid located inside the building footprint by the RPC. Existing buildings and their corresponding landuse were excluded from the buildable areas during the buildout process.
3. Conservation Land – This layer was created during an application for a CELCP grant in 2006. This layer was created by Dea Brickner-Wood, the Town of Brentwood CC and the RPC. This data was subsequently updated by the RPC and Brentwood in 2007. There are ~2876.46 Acres of Conservation land in this layer. Conservation land was considered an absolute constraint.
4. Hydric Soils- This hydric soils layer came from the NRCS soils data layer, which was digitized and distributed by GRANIT. There are two types of hydric soils Hydric A, and Hydric B. There is a total land mass of 1007 acres in Brentwood that is considered hydric A. The Brentwood zoning ordinance considers hydric A soil as an absolute constraint. There are 3597.26 acres of hydric B soil in Brentwood. hydric B soil is considered only a partial constraint.
5. National Wetlands Inventory (NWI) - In some cases the hydric soils layers are too coarse for town scale analysis, to help to make this buildout more accurate the National Wetland Inventory was used to supplement the hydric soils data. In most cases the NWI co-occurs with the hydric soils, but in some cases it does not. Brentwood has 1352.85 acres of NWI land, this was all considered an absolute constraint.

6. Prime Wetlands- In 2008 Mark West from West Environmental helped the town to designate several of the more important wetlands in town as Prime Wetlands as allowed by RSA 482-A:15. Prime wetlands were mapped at a higher resolution than the NWI or the Hydric Soils. These were used as an absolute constraint. There are 701.91 acres of prime wetlands in the Town of Brentwood.
7. Parcels and Assessing data- The Parcel data used was from CAI in January of 2009. This represented the most current at the start of the buildout process. The assessing data was obtained from the town planner through the town assessor in January of 2009 as well. The assessing data was joined to the spatial parcel data in the GIS. It should be noted there are some issues with a handful of parcels that the calculated acreage is significantly different than the assessed size of the parcel, this is not part of this buildout and was not looked into any further. The assessing data did not include frontage as an attribute, so the RPC wrote a script to calculate it. Frontage would be good to include in future iterations of the assessing data. There were 1612 parcels in the town of Brentwood. Parcels were divided into 3 categories based on existing landuse: Fully constrained, partially constrained, Not Constrained. The way the parcels were categorized was based on whether existing buildings on each parcel fully used the parcel's land mass or not given the existing zoning on that parcel. For example a 1.8 Acre lot in the R/A, which requires 2 acre minimum lots size, there is 1 existing house, this would be 'fully constrained' and thus nonbuildable. A 4 acre lot in the same zoning district with only one housing unit would still allow for another unit to be build and thus it would be considered 'partially constrained'.

Existing Unit Constraint Type	Acres	Lots
Totally Constrained	2648.0	1146
Partially Constrained	4610.0	256
Un-constrained	3605.0	210
Total	10863.0	1612

8. Steep Slopes - Slopes larger than 15% were considered steep slopes. Steep slopes for this purpose were considered a partial constraint. The Steep slopes data come from the NRCS soils data. There are 267.58 acres of steep sloped areas in the Town of Brentwood.

9. Zoning – The basis upon which this whole analysis is predicated is the zoning layer. In essence this is the layer that the buildout process is testing, and that should be changed to address issues the town find when they look at the buildout results. The zoning layer is created by CAI.

Zoning Dist.	Acres
C/I	1672.1
MF/P	622.3
MF/P/C/I	448.1
R/A	7976.1
TC	145.0
Grand Total	10863.6

	C/I	MF	PO	TC	R/A
Residential Development	X	P	P	P	P
Non-Res Development	P	P	P	P	X
Min Lot Size (Sq Ft)	120,000	871200	130680	87120	87120
Frontage (feet)	300	100			200
Front Setback (feet from centerline)	125	40	75	75	75
Side Setback (feet)	25	30	40	25	25
Max Coverage		25%	40%		

Procedures

Staff from the RPC met with the Brentwood planning board to discuss the buildout process. The first step in the buildout is to obtain and clean the existing parcel data. In this buildout that process was much less difficult than usual because of the quality of parcels supplied by Cartographic Associates to the town. Once the parcels are clean the next step is to obtain and clean the assessing data for the town. In some cases the assessing data is tailor made to join to the parcel database. For the town of Brentwood the assessing data was joined to the parcels data with relative ease and accuracy. Once the parcels and the assessing were joined together it was noticed that the assessing data did not contain parcel frontage. Frontage is part of the zoning requirements for the build out, therefore the RPC needed to calculate new frontage values for each parcel. By writing a custom script in the Python language, the RPC was able to recalculate frontage. Next the parcels were looked at and assigned whether they were built-out, partially built-out or not built-out at all. Where parcels were determined to be partially built-out, the RPC calculated what percentage of the parcel was built-out. Next all of the physical constraints were combined into one 'constraints layer'. In many cases the constraints were coincident; this explains why there is more acreage in constraints than the total size of the town. The constraints layer and the constrained (built-out) parcels are removed from the parcel fabric. This leaves the buildable landuse layer. The buildable landuse layer then has the zoning applied to it. The buildable landuse layer with zoning applied leaves a layer of buildable land. Buildable land is divided up per the zoning to place new units. These new units are place randomly within the parcel area while still abiding by setback requirements.

Assumptions

Mixed Use and Multi-Family – This buildout assumes single family or single unit non-residential units. While it is likely that in some cases new units will be multi-unit, there is not a good way to model this behavior.

Assignment of Residential vs. Non-Residential – While this buildout does assign new units as residential and non-residential, it does not have an economic analysis to base this predictive model on. Units are assigned as residential or non-residential based on a straight line projection of current landuse percentages by zone. Once the number of new units that are to be assigned as non-residential is determined, the units were placed in locations that are most likely to be non-residential.

Combination of lots- There is an assumption in this buildout that there is no combination of lots. Lots will not be combined for the purposes of this buildout. Therefore in some cases where there is a partial lot left over, it will not be combined with other leftover partial lots to create additional building lots. This should be offset by inefficient use in other places.

Overlay Districts – Cluster housing and Senior housing allow for greater densities. It is understood these types of developments will happen, however if they were modeled into the buildout the model would develop the entire town using these greater densities. Since such densities are not a reality, these zones were neglected.

Efficiency Factor – Past buildouts have shown that very few developments are built at maximum efficiency due to things such as parking requirements, roads, driveways, and lot open space requirements. The maximum efficiency allowed in this model was 85%.

Results

The results of the buildout are buildable land mass and new units at buildout. It should be noted these result are not predictive, but are the results of what the current zoning allows. These results will change with changes in the current zoning. These results are also a 'worst case' scenario, meaning that every last bit of land mass is used. It should be noted however, these results do not have a timescale attached to them. We could see these build-out conditions happen in any timeframe.

The following tables show the new units at buildout and the buildable area, both by zoning district. This buildout result in a 94% growth in units (both residential and non-residential) in the town. While this is not likely to actually happen, it is possible with current zoning practices.

Zone	Existing Units	New Buildout Units	Total Unit @ Buildout
C/I	222	198	420
MF/P	72	49	121
MF/P/C/I	35	30	65
R/A	1138	1143	2281
TC	28	0	28
Totals	**1495**	**1420**	**2915**

	New Units @ Buildout	
Zone	**Res Units**	**Non Res Units**
C/I	101	97
MF/P	43	6
MF/P/C/I	11	19
R/A	1143	0
TC	0	0
Totals	**1298**	**122**

Zone	Total Acres	Remaining Buildable Acres	Pct Buildable
C/I	1672.1	1281.9	76.66%
MF/P	622.3	484.5	77.86%
MF/P/C/I	448.1	335.9	74.96%
R/A	7976.1	4801.6	60.20%
TC	145	42.9	29.59%
Total	**10863.6**	**6946.8**	**63.95%**
Aquifer	**3521.2**	**2780.1**	**78.95%**

New Units in Aquifer = 531

Brentwood Buildout Analysis

Map 1 - Existing Conditions

Parcels by Zone

Zone

- Residential / Agricultural
- Multi-family / Professional Office
- Multi-family / Professional Office, Commercial / Industrial
- Commercial / Industrial
- Town Center
- Roads
- Water
- Brentwood Political Boundary

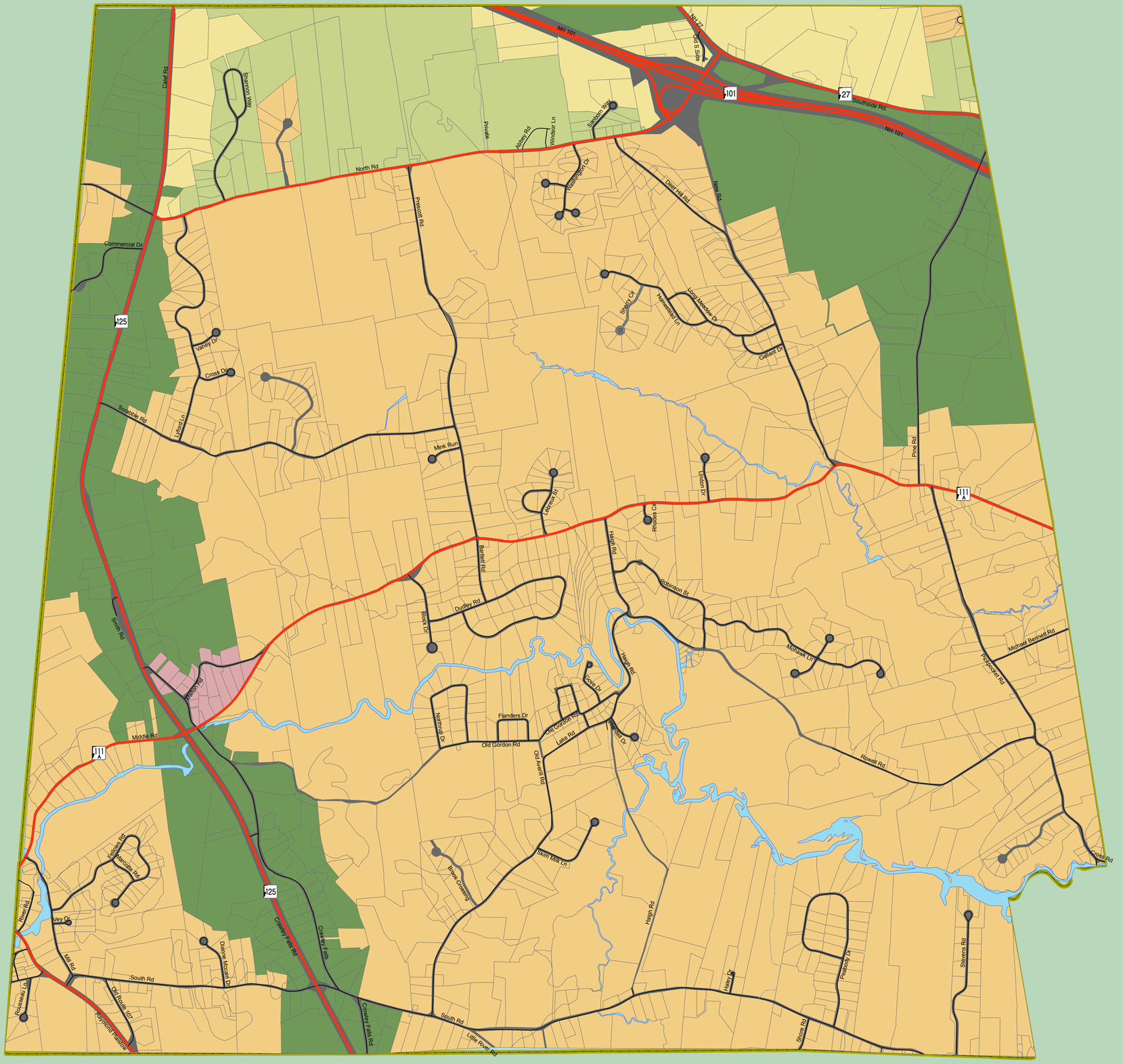
Roads

- State
- Local
- Private
- Not Maintained

Brentwood Tax Parcels
These parcels were created by Cartographic Associates Inc. in 2005. The parcels were updated in 2008 and released in January of 2009.

Brentwood Zoning Layer
As part of the parcel updates, the zoning layer is updated by Cartographic Assoc. Inc. The zoning on this map was updated in 2009. It should be noted that this layer is an interpreted zoning layer. There

NH DOT Roads Layer
The roads shown on this map are from the 2008 revision of the NH DOT roads database. These roads were created from digitizing from aerial photos and GPS of roads. These roads have a horizontal accuracy or +/- 13'



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Brentwood Buildout Analysis

Map 2 - Constrained Parcels by Existing Building

Type of Constraint

- Completely Constrained
- Unconstrained
- Partially Constrained
- Existing Buildings
- Brentwood Political Boundary

Roads

- State
- Local
- Private
- Not Maintained

Existing Buildings Layer
The existing buildings data was created by CAI. This data is digitized building footprints complete with a GPS corner point. This data was converted to a building centroid located inside the building footprint by the RPC. Existing buildings and their corresponding landuse were excluded from the buildable areas.

Constrained Parcels
Parcels were divided into 3 categories based on existing landuse: Fully constrained, partially constrained, Not Constrained. The way the parcels were categorized was based on whether existing buildings on each parcel fully used the land mass or not given the existing zoning on that parcel. For example a 1.8 Acre lot in the R/A, which requires 2 acre minimum lots size, there is 1 existing house, this would be 'fully constrained' and thus nonbuildable. A 4 acre lot in the same zoning district with only one housing unit would still allow for another unit to be build and thus it would be considered 'partially constrained'.

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N

0 0.25 0.5 1 1.5 Miles

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Brentwood Buildout Analysis

Map 3 - Constraints

- Existing Buildings
- Constrained Areas

Roads

- State
- Local
- Private
- Not Maintained
- Brentwood Political Boundary

Constrained Areas
These constrained areas are created by taking all of the development constraints and combining them. There are many overlaps between these datasets

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N

0 0.25 0.5 1 1.5 Miles

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Brentwood Buildout Analysis

Map 4 - New Units and Buildable Area

Buildings

Building Use

- Single Family Residential
- Non-Residential Units

Buildable Area

Zoning Designation

- Commercial / Industrial
- Multi-family /Professional Office
- Multi-family / Professional Office, Commercial / Industrial
- Residential / Agricultural
- Town Center
- Roads
- Water

Roads

- State
- Local
- Private
- Not Maintained
- Unconstrained
- Brentwood Political Boundary

Constrained Areas
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N

0 0.25 0.5 1 1.5 Miles

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Town of Brentwood
Open Space Chapter

Brentwood Planning Board

Prepared for the Brentwood Planning Board
by the Rockingham Planning Commission

January 2013



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Section 1 Introduction

A. Purpose Statement

The purpose of the Brentwood Open Space Chapter was to identify critical resources, and agricultural, open and undeveloped land in Brentwood, and to select and prioritize those lands that should be excluded from residential, commercial and industrial growth. In doing so, the Town will sustain the ecosystem services provided by its resource base and maintain the rural character envisioned in the Brentwood's Natural Resources Inventory and Master Plan.

This report will serve as a guide for future open space planning and land protection in the town. The products developed during the planning process identify where protection is deemed most appropriate, and identify where and how to implement various modes of protection.

This report can be used by the town and various boards and commissions for the following purposes:

- Amendments to zoning districts and ordinances, and other land use regulations
- Long range planning activities (natural resource protection, growth and development, transportation)
- Capital Improvement Plan and municipal budget development
- Review of Open Space Preservation subdivision applications
- Supplemental information to grant applications
- Outreach and education of property owners and the public

B. What is Open Space?

For the purpose of this report, open space is defined as any lands that remain in a natural and undeveloped condition that contribute ecological, scenic or recreational value. The definition of open space may be expanded to include working lands (forests, agriculture, field corners, fence rows and abandoned pastures) and managed green space such as golf ranges, parks, and recreation areas. The terms 'natural environment' and 'natural resources' are used to broadly describe Brentwood's air, water, and land resources including, but not limited to, the town's scenery, air quality, aquifers, streams, soils, plants and animals. These features form an integrated natural network or "green infrastructure" in which the town's built environment and its key cultural and historic resources are embedded. This matrix provides the ecosystem services required to sustain a vibrant and healthy community.

C. Benefits of Preserving Open Space

Open space preservation serves multiple goals within a community. The benefits of preserving open space include:

- Attract investment by residents and businesses seeking high quality of life
- Revitalize town and village centers
- Support of resource based tourism economy
- Prevent flooding and flood related damage
- Protect farms and agricultural lands
- Promote sustainable development patterns
- Protect environmental resources (water, aquifers, air, forests)

- Provide recreational and educational opportunities

Studies from across the nation have demonstrated that farmland open space preservation can provide more revenue to a community than is incurred in expenditures, resulting in a net fiscal benefit. In many instances, the costs associated with support of residential and commercial development often exceed the costs to support farmland and open space. Tax benefits are maximized when a conservation easement is placed on land already enrolled in current use. A study conducted by the Trust for Public Land (*Managing Growth: The Impact of Conservation and Development on Property Taxes in New Hampshire, 2005*) concluded that towns that have the most permanently protected land have slightly lower tax bills on average. It is likely that land conservation alone is responsible for these tax benefits. However, land conservation is a tool that: helps maintain the rural character of a community; creates more centralized, dense development patterns; creates more efficient municipal service areas; and provides multiple environmental and aesthetic benefits. The resulting landscape is a direct result and reflection of the community's support of open space preservation.

Managing Growth :
The Impact of Conservation and Development on Property Taxes in New Hampshire
(Trust for Public Land, 2005)

TPL found that in the short term, land protection, by fully or partially exempting land from taxation, often reduces the tax base and results in a tax increase for a finite period. In the long term, contrary to the common perception that development will bring lower taxes, property tax bills are generally higher in more developed towns than in rural, less developed towns. Further, findings also indicate that tax bills are not higher in the towns that have the most permanently protected land regardless of the method and ownership used to conserve the land.

The study suggests that patterns of growth have an effect on both the livability and affordability of a town. Land conservation can be used as a tool in both protecting resources that contribute to quality of life (from drinking water protection to scenic beauty and recreation), as well as to help guide the path and location of municipal growth to those areas that are most appropriate and that are most cost-effective for towns to service.

In general, it is true that land increases in value when it is developed —thereby adding taxable value to the town's tax base. However, development usually requires town services—thereby increasing the budget. The tax bill on the typical house is, on average, higher in towns where:

- There are more residents, and/or
- There are more buildings.

***In the long term*,** contrary to the common perception that development will bring lower taxes, property tax bills are generally higher in more developed towns than in rural towns, and towns with more development have higher tax bills.

D. Local Support for Open Space Preservation

Funding and Regulatory
The citizens of Brentwood have continuously voiced a strong vision to maintain Brentwood's rural character, maintain the open space and forested areas for public use and enjoyment, protect historic resources, and preserve natural resources. In addition, the citizens of Brentwood have voted consistently at various Town meetings to protect these lands and resources.

The Town currently has a total of 2,922 acres of conservation lands that have varying types of protections. The Town of Brentwood has 10, 863 acres of land. This means that approximately 27% of the land in the Town is protected in some way from future development.

Land Use Change Tax
In the past, Brentwood had dedicated fifty percent (50%) of the remainder of the total Land Use Change Tax collected each year, toward land conservation efforts. Since the passage of the open space bond and the subsequent land and easement purchases this policy has changed. Now the land use change tax is returned to the general fund each year and a balance of $75,000 is maintained for land conservation activities.

Master Plan
Brentwood's Natural Resource Inventory (2007) and Master Plan specifically support the town's vision described above by encouraging: the establishment of conservation areas; the protection of open space and natural resources (ponds, wetlands, woodlands, prime agricultural land and unique and fragile areas); protection of rural residential character; and protection of historic resources.

Brentwood Open Space Committee
The Brentwood Open Space Committee was formed in 2003 to advise the Brentwood Conservation Commission on the best and most prudent ways to preserve natural spaces in Brentwood. The Committee's mission is to initiate, support and maintain the rural character of the town while balancing the financial and environmental wishes of the townspeople. The reasons for this goal are to preserve the character of our community, protect our water supply, and maintain our existing wildlife habitat.

The primary purpose of the Brentwood Open Space Committee is to provide information to the residents of Brentwood about the benefits of preserving natural spaces. The Committee identifies and prioritizes land in Brentwood for possible protection, it acts as an advisor to landowners who are considering maintaining their land as open space and works with landowners who wish to transfer their development rights as part of a conservation easement or sell their land in order to permanently protect it. These functions and responsibilities have now been assumed by the Brentwood Conservation Commission whose open space protection efforts include working to raise funds by both proposing bond initiatives for the town budget and by writing grant proposals in an effort to receive funds from public or private third parties.

Section 2 Open Space Planning

Note: It is extremely important to recognize that landowners whose land falls within the green infrastructure or identified as an open space protection area are free to dispose of their land as they choose, consistent with applicable federal, state and local laws and regulations. Inclusion of land within the green infrastructure or identified as an open space protection area is NOT an indication that the Town of Brentwood has any legal interest in the land or has any intention of taking the land for a public purpose.

Step 1: Identification of High Value Natural Resources

Process. Step 1 in the open space planning process was the identification of high value natural resources that will be used to define open space lands within the town. The natural resources were grouped into four broad categories (shown in green highlight) based on their resource function or type.

TABLE1. Description of Natural Resources Evaluated for Open Space Protection

Natural Resources	***Description***
Soil Types	
Important Forest Soils	*Groups 1A and 1B that support diverse high-quality hardwood species*
Agricultural Soils	*Includes prime soils, and soils of statewide and local importance*
Open Space Continuity	
Unfragmented Areas 50 acres or greater	*Lands of any type including forest, agricultural land, wetlands and surface waters*
Unfragmented Areas 100 acres or greater	
Unfragmented Areas 500 acres or greater	
NH Wildlife Action Plan highest ranked habitats	*Habitat types of exemplary quality and rare habits in the region or statewide*
Water Quality	
Stratified Drift Aquifer	*Drinking water source areas*
Special Flood Hazard Zones	*As identified on FEMA maps; areas subject to inundation and erosion*
Wetlands, perennial streams, lakes, ponds (including a 250' buffer from them)	*Surface water resources important for maintaining water quality*
Prime wetlands plus 100' buffer	*High value wetlands and habitats*
Views/Quality of Life	
Scenic Views/Ridgelines & Hilltops	*Quality of life, aesthetics and land value*
Forested (general)	*All forested areas; timber resource and unfragmented lands*
Forested (Hemlock/Pine)	*Two specific forest types prevalent in certain*

Forested (Appalachian Oak/Pine)	*parts of the state*

The Town of Brentwood is fortunate to have an abundance of all of these natural resources. As identified in the Natural Resources inventory completed in 2009 areas of town exhibit each of these resources in substantial quantities.

Important farmland soils exist throughout Town with substantial farming activity having been found on North Road, Middle Road and South Road. This resource is one of the most stressed statewide due in large measure to residential conversion. Brentwood has experienced the loss of historic farms to residential development several times in the past few decades and preservation of the remaining farms and agriculturally significant lands is a priority for the Town.

Water resources and water quality are priority areas for the community and preservation of these resources were given great importance by the community profile process undertaken by the Town in 2003. The town has several rivers and streams of significance including a large stretch of the Exeter River. In addition the Town is fortunate to have some of the highest yield aquifers in Rockingham County. Those found in the Industrial Commercial zone along Pine Road have been evaluated by The US Geologic Survey 9USGS, 1991) as being some of the highest yield aquifers in southeastern NH.

Unfragmented lands are some of the most valuable natural resources remaining in Rockingham County. As explained in the Brentwood Natural Resources Inventory these lands:

- Provide essential forest interior habitat for species such as some songbirds that need to be distanced from human activity, pets, and the forest edge in order to survive;
- Provide habitat for mammals that have large home ranges and prefer to avoid human contact, such as bobcat, otter, and moose;
- Enable owners of large parcels of forestland to conduct timber harvests that are economically viable;
- Minimize conflicts that can arise when managed forests and farms are surrounded and interspersed with development;
- Offer opportunities for remote recreation, including hunting, hiking and snowmobiling, where landowners allow.

There are few tracts of land remaining in Brentwood that are unfragmented and in excess of five hundred acres in size but efforts to protect these would have a significant positive impact on the natural environment of Town. Unfragmented lands of either fifty or one hundred acres in size still exist in Brentwood but their numbers are limited and are of the highest priority for future protection. These privately owned parcels are mostly found in the interior areas of town, north of Middle Road and east of Crawley Falls Road.

Step 2: Definition of the Green Infrastructure

Step 2 in the open space planning process involves defining the "Green Infrastructure" meaning the contiguous resource network and natural areas across town. The green infrastructure is the area that, if protected from development or degradation, should ensure that the services provided by the natural environment to Brentwood's residents could be sustained. These natural services include:

- Maintaining the quality of groundwater and surface water;
- Protecting the health of rivers and streams;
- Improving air quality;
- Providing sufficient habitat for plants and animals;
- Providing an opportunity for outdoor recreation for residents at a reasonable distance from their homes;
- Creating a pleasant and scenic environment in which to live;
- Preserving existing trails networks: and
- Preserving interconnected green spaces that allow for trails connecting the various parts of town and allowing for the movement of wildlife.

Process. To develop *Green Infrastructure* the general guidelines include selecting priority areas that include the resources describes in the section above that incorporate the following:

- Include areas of exceptionally high resource value for a particular category
- Include areas where multiple resource values occur in the same place
- Give added consideration to lands near existing conservation lands
- Give added consideration to lands that allow residents reasonable access to open space
- Avoid areas slated for industrial or commercial development, unless they contain exceptionally high quality resources
- Include at least 25 percent of the Town's land area to ensure the sustainability of natural processes

Step 3: Determine areas of Priority Protection Areas

Step 3 in the open space planning process, is to find the areas of land in Town with the priority resource detailed above. Where a number of these priority resources overlap the benefits of future protection is increased.

When looking at a map of the town these areas become obvious. The Exeter River Corridor is a high priority area with many large unfragmented parcels, agricultural and forested resources present. This river corridor is home to some of the most significant land preservation activity in our region of the state. For over twenty years, land specialists have been working with land owners to preserve substantial acreages located on both sides of the Exeter River. Efforts should continue to protect as much land along the Exeter River as possible to insure its natural integrity into the future.

The area of town ringed by Deer Hill Road North Road, Prescott Road and Middle Road has several large parcels of undeveloped lands, encompasses a large portion of the Dudley Brook watershed and has significant agricultural soils as well.

In the south west section of Town between Crawley Falls Road and Lake Road there is a large area of undeveloped lots with high value forested resources, proximity to co-occurring wildlife habitats (as detailed in the Brentwood Natural Resources Inventory) and groundwater resources identified by USGS aquifer studies.

Two other areas in town have high value for future open space preservation. The first is located in the area of town surrounded by Prescott Road, North Road, Scrabble Road and Lyford Lane. This area has a few large, unfragmented parcels that are directly abutting already preserved lands. Their protection could expand the wildlife benefits already existing with the protected lands present. In addition these lands have agricultural soils and forested resources of high value. The second area is found north of North Road and encompasses some large lots with significant stream networks and forested resources. A significant amount of this land is owned by Rockingham County but future protection would result in substantial benefits to the natural environment.

A natural extension of open space preservation is the creation or revitalization of trails networks on conserved lands. Efforts to connect existing or new trails to abutting conserved land, neighborhoods and secondary roads can improve the quality of life and health for residents while preserving rural character. Protection of existing trails and new trail creation should be more actively pursued by the community.

Section 3 Conservation and Protection Strategies

A. Land Conservation and Protection Strategies

Land conservation and protection strategies include land ownership, voluntary and regulatory and management actions that serve to preserve the green infrastructure by protecting open space and natural resources. These strategies and their associated benefits are listed below.

Protection Strategy	***Benefit***	***Cost***
Land Acquisition	Purchase of land at fair market value or as a bargain sale where the difference between fair market value and sale price becomes a tax-deductible donation; Public access, leverage for securing funding	High
Purchase of Easements/ Development Rights	Growth management tool; retain development density and tax base if rights transferred to growth areas	High
Regulatory Protection	Preservation of public resources and their functions and values to the community; federal, state and local implementation	Low/No
Land Use Regulations	Adoption of an incentive based Conservation Subdivision ordinance can provide large tracts of open space lands as part of development approval	Low/No

Voluntary Protection/Easements	Voluntary conservation easements involving donation of development rights; Private stewardship and management; public access permitted in some cases	Low/No
Land and Resource Management	Fosters public participation and stewardship	Low/No
Transfer of Development Rights	Voluntary transfer of development rights from designated open space areas to designated growth areas that allow greater development density	Low/No

Section 4 Financial Planning for Land Conservation

A. Existing Conditions

Currently, Brentwood has 1,350 housing units (from NHOEP Housing Unit Survey, 2012) and 6,946 acres of buildable land (from 2009 Buildout Analysis). Given the population growth trends from 1990 to 2010 Brentwood is likely to experience more growth than previously anticipated. Land consumption will likely increase proportionately in response to population growth.

Brentwood Population Statistics, 1990 to 2010

1990 Census	2000 Census	2012
2590	3197	4486

B. Buildout and Growth Projections

For the purposes of budgeting and assigning land protection strategies, the time horizon of this plan is indefinite: it looks forward to the day when opportunities for both "land preservation" and "build out" in Brentwood have been maximized. In reality, given the pace of development in southern New Hampshire, it appears that "build out" is roughly 10 to 40 years in the future. This indefinite timeframe has limited use in computing the total cost of implementing open space preservation for two reasons:

1) there is wide variability within the estimated range for when build out may occur; and
2) the predicted rate of inflation, much less fluctuations in real estate values even 10 years into the future, is highly speculative.

C. Previous Funding for Land Protection

Historically the town has succeeded in leveraging its own resources with federal, state and private dollars. The Open Space Plan assumes that funding rates can be sustained, at least in the

near term. Brentwood voters authorized $2,000,000 through a bond measure in 2003 to be applied to land acquisition and conservation. These funds have been utilized to purchase land and conservation easements over the last nine years. The Town should continue to apply for matching grant funds to support land acquisition and protection, including the NH wetlands mitigation fund, water and watershed grants, habitat protection grants, and federal transportation funding.

It is important to recognize that open space preservation can serve multiple community objectives, and funding is often specific to certain needs, from planning and community process, to land acquisition and development, to maintenance of infrastructure. For example, purchasing an open space corridor could serve to provide stormwater retention, improve water quality, provide aquifer recharge, provide recreational opportunities, and establish bicycle and pedestrian connections within the community. Furthermore, funds for purchasing the open space corridor could be shared among several departments and other sources within the capital budget.

D. Adaptive Approach to Land Protection

Alternatively, the Open Space Plan recommends the town should take an adaptive approach to financial planning, recognizing that the recommendations of this plan represent a "best guess" as to what needs to be done in the near term to execute open space preservation as recommended in this report. However, since the ability to predict land values is beyond the near term is very limited, the Open Space Plan recommends reviewing the open space financial plan on an annual basis, in conjunction with the annual budget and Capital Improvement Plan process, as well as the availability of outside funding sources.

In the foreseeable future, the Open Space Plan assumed an equal level of funding for open space protection. Since, as discussed above, it is not possible to predict how much time is left before the town is essentially built out, the question of how much funding to dedicate on an annual basis is largely a question of risk. The risk is that the point of build out will be reached before the open space protection acquisitions are complete. At too low a level of annual funding, the town may not be able to preserve the parcels recommended for protection in this report, because they will be developed before the town has raised sufficient funds to protect them. At too high a level of annual funding, taxpayers may feel they simply cannot afford to support open space acquisition, even though they support the concept of open space protection. Current funding levels should allow continued open space planning and preservation.

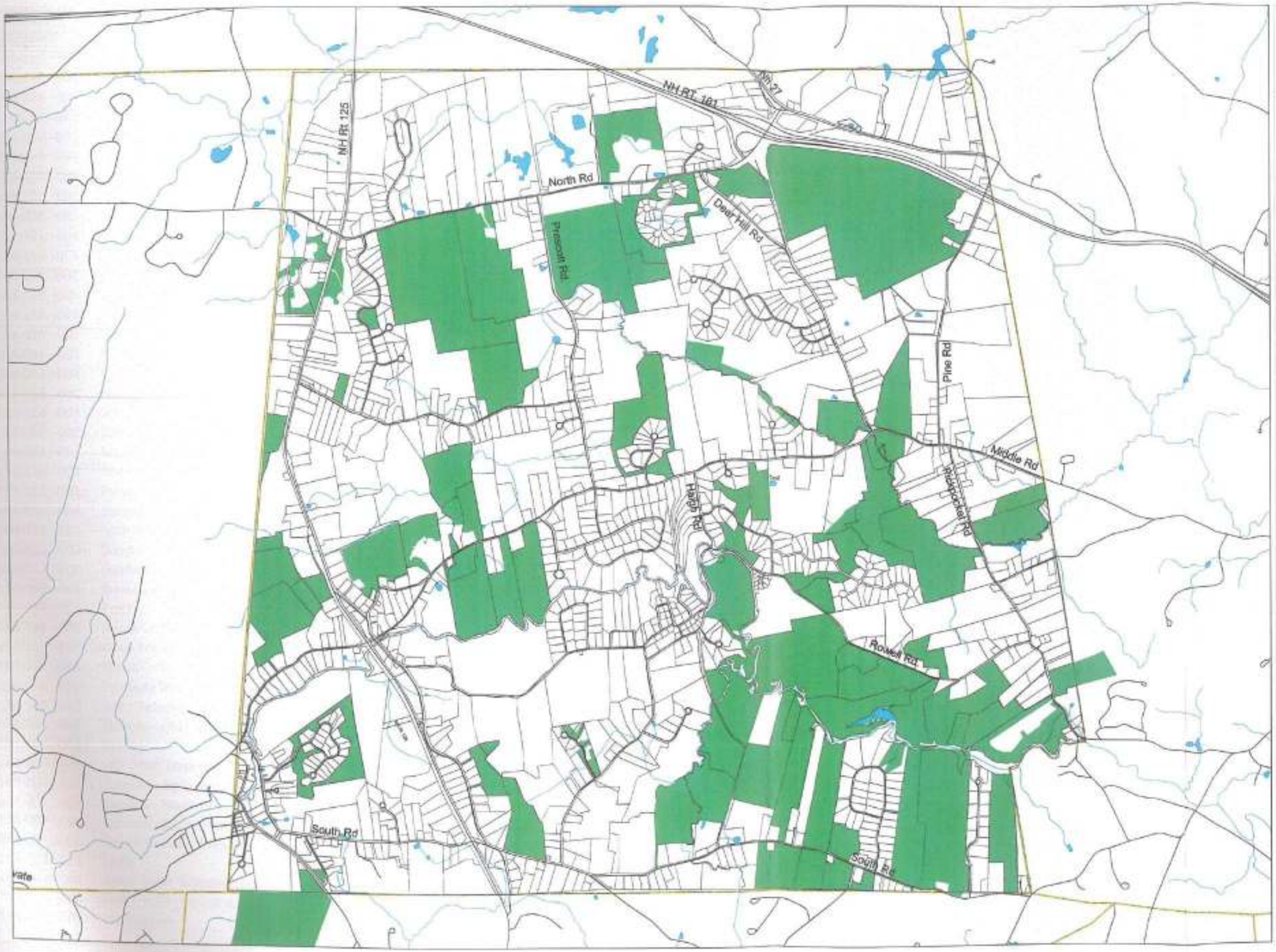
E. Future Funding Strategy for Land Protection

The challenge when evaluating options is to strike a balance between what improves the community in the long term, what taxpayers can afford, and what other interests need to be served. An option to address the funding dilemma is to follow the adaptive financial management approach discussed above. The Towns current level of maintaining $75,000 for use in open space planning and protection seems appropriate. The community has approximately 2900 acres of land in various forms of protection. This represents 27% of the total acres (10,863) existing in Town. Although not a statistic easily corroborated, it is likely that Brentwood has one of the highest percentages of protected lands in Rockingham County.

F. Future Growth Projections

The Brentwood Planning Board engaged the Rockingham Panning Commission to complete a residential build out analysis in 2009. The results of this analysis were that under present zoning conditions the number of housing units in Town could double before the town was completely built out. Although this scenario is unlikely because zoning standards are fluid and can be changed over time, the buildout exercise demonstrated that open space preservation is an important element in guiding the future land use trends for the town.

The following map displays the current parcel based protected land areas in Brentwood and the spreadsheet details the owner, tax map number, protective measure and parcel size of each of these protected areas.



Town Of Brentwood
Conservation Lands

Dec. 2012

Conservation Land

Conservation Properties

Roads
Rivers
Water
Town Boundaries
Parcels

Note: Protected parcels often have unprotected exclusion areas around homes and outbuildings (not shown on maps)

0 0.5 1 Miles

ROCKINGHAM PLANNING COMMISSION

N

Tax Map and Lot Number	NAME		Size	Book and Page	Date
184-135 -003	The Meadows	CE	19.10	15/4478/1353	20090305
184-135 -002	The Meadows	CE	10.47	15/4478/1353	20090305
184-135 -004	The Meadows	FO	12.55	15/3520/2162	20090305
184-013 -000	Sudduth	CE	9.16	15/2990/2059	
184-088 -001	Brown, R&B II	CE	56.60	15/3355/2755	20030603
184-088 -002	Brown, R&B II	CE	1.21	15/3355/2755	20030603
184-037 -001	Town Hall Town Forest	FO	30.74		
184-102 -001	Nekton Easement	PE	37.05	15/4125/219	20031118
184-096 -001	Mills Falls Open Space	SA	41.73		20031118
184-147 -001	Shipley I (Wildlife)	CE	23.28	15/4749/1783	20090305
184-148 -001	Shipley II (Farmland)	CE	26.63	15/4749/1752	20090305
168-035 -001	Condo Association	CE	38.71	15/3463/302	20031113
184-119 -001	Brentwood, Town of	CE	79.68	15/4451/0412	20060302
184-118 -001	Austin	CE	88.63	15/4624/2737	20060324
184-095 -001	Mink Run	SA	58.45		20031118
184-094 -001	Dudley Brook Open Space	SA	11.74		20031118
184-081 -001	Schmalzer	CE	52.42	15/3447/072	20020312
184-103 -001	Hull Easement	CE	7.15		20031118
184-114 -001	Schmalzer #2	CE	45.36	15/4125/159	20051114
184-081 -002	Schmalzer	CE	11.57	15/3447/072	20020312
184-082 -001	Rowell Road Reservation	FO	12.41	15/3646/2335	20030428
184-135 -001	The Meadows	CE	11.28	15/4478/1367	20090305
184-132 -001	Parks	CE	18.41	15/4366/0881	20090305
184-133 -001	Crosby	CE	24.90	15/4428/0776	20090305
184-014 -001	Merrill Heirs	CE	95.25	15/2990/2068	
184-013 -000	Sudduth	CE	3.06	15/2990/2059	
184-013 -000	Sudduth	CE	0.70	15/2990/2059	
184-099 -001	Dow Easement	CE	63.60	15/3170/1383	20031118
184-080 -001	Pratt	CE	44.85	15/3451/1759	20010713
184-101 -002	Brook Crossing Open Space	SA	3.93		20031118
184-115 -001	Gove Tract	FO	46.52		20060302
184-101 -001	Brook Crossing Open Space	SA	7.21		20031118
184-098 -001	Peabody Drive River Access	FO	5.82	15/3080/1734	20031118
184-083 -001	Burtt Easement	CE	112.61	15/2136/121	20030428
184-091 -001	Stevens - Old Haigh Road	CE	34.47	15/3894/628	20030611
184-100 -001	Martin	FO	39.77	15/3672/2517	20031118
184-006 -001	287 Gove Tract and Lancelot Farmer Tract	FO	36.33		
184-007 -000	Stevens - Agric. Pres. Rest.	AR	17.43		
184-091 -002	Stevens - South Road	CE	31.55	15/3894/615	20030611
184-007 -000	Stevens - Agric. Pres. Rest.	AR	22.25		
184-007 -000	Stevens - Agric. Pres. Rest.	AR	7.55		
184-079 -001	Ladd	CE	18.60	15/3355/2745	20010713
184-145 -003	NRCS_WRP_Meadowsend	CE	128.93	15/5130/2760	20111128
184-145 -004	NRCS_WRP_Meadowsend	CE	1.71	15/5130/2760	20111128
184-123 -001	MacMullen	PE	22.90	15/4125/200	20080305

Tax Map and Lot Number	NAME		Size	Book and Page	Date
184-093 -001	Robinson	CE	59.76	15/3443/0337	20030612
184-092 -001	Rockingham Land Trust ("Gove")	CE	7.58	15/3528/0014	20030612
184-092 -002	Rockingham Land Trust ("Gove")	CE	0.48	15/3528/0014	20030612
168-036 -002	Stratham Tire - Labonte	CE	4.63		20031113
168-036 -001	Stratham Tire - Labonte	CE	6.58		20031113
184-142 -001	Powers	CE	39.51	15/4865/2595	20090305
184-131 -002	Town of Brentwood Land	FO	8.78		20090305
184-131 -003	Town of Brentwood Land	FO	8.25		20090305
184-131 -004	Town of Brentwood Land	FO	19.88		20090305
184-131 -001	Town of Brentwood Land	FO	52.06		20090305
184-136 -001	Kerby Gove	CE	16.16	15/4681/2045	20090305
184-137 -001	Charles and Joan Pratt	CE	39.52	15/4337/1493	20090305
168-065 -001	Brentwood97-1766	CE	8.86	15/3404/2220	20070301
168-065 -002	Brentwood97-1766	CE	4.00	15/3404/2220	20070301
168-066 -004	Brentwood01-1882	CE	4.50	15/3995/1402	20070301
168-066 -003	Brentwood01-1882	CE	2.89	15/3995/1402	20070301
168-066 -001	Brentwood01-1882	CE	1.10	15/3995/1402	20070301
168-066 -002	Brentwood01-1882	CE	12.12	15/3995/1402	20070301
168-067 -001	Pine Road Site	FO	332.76		20090305
168-034 -001	Windy Brook	CE	58.59	15/3744/2599	20031113
168-068 -001	Rockingham County Farm	FO	140.14		20090305
168-069 -001	Ladd Farm	FO	141.57		20090305
184-139 -001	Pimentel	CE	49.39	15/4439/0805	20090305
184-138 -001	Van Buskirk	CE	23.23	15/4439/0839	20090305
184-141 -001	Jane Storm	CE	7.07	15/4439/0822	20090305
184-140 -001	Debco Realty Trust	CE	28.76		20090305
184-143 -001	Poesse-Bertram	CE	50.33	15/221/016	20090305
184-087 -001	Brown, R&B I	CE	13.83	15/3263/2682	20030602
184-089 -001	Deerhill Farm Mitigation Area	CE	16.47	15/3770/2327	20030611
184-078 -001	Greer	CE	34.03	15/3984/2180	20030611
184-085 -001	Swasey Trust, N	CE	30.56	15/3817/1137	20030429
184-090 -001	Swasey, J&N	CE	23.33	15/3339/2427	20030611
184-151 -001	Pratt II	CE	14.88	15/5274/2675	20120309
184-153 -001	NRCS_WRP_Gallant	CE	49.60		20120321
184-156 -001	NRCS_WRP_Swasey	CE	48.64		20120322
168-100 -001	NRCS_WRP_Vahey	CE	88.21		20120323
	Total Acres Protected		2922.31		

CE = Conservation Easement

FO= Fee Ownership

AR=Agricultural Preservation Restriction

SA= Development Set Aside (Open Space or Cluster Developments)

Section 5 Recommendations

The Brentwood Open Space Plan recommends the following to implement open space preservation in the town:

1. The green infrastructure identified in this report should be adopted as part of the town's "blueprint" for open space preservation.

2. The Town should consider continued outreach efforts to the property owners of land located in the green infrastructure areas discussed in this plan to encourage continued preservation of open space areas.

3. The town should continue to work expeditiously and cooperatively with owners of developed parcels and those parcels proposed for development within the recommended green infrastructure to ensure that open space is preserved or managed to the extent possible.

4. The town should re-examine the recommendations of this report at no more than three year intervals, and review the open space financing plan annually as part of the Capital Improvement Plan process.

5. The town's Capital Improvement Plan should include an annual open space investment consistent with land conservation priorities and other capital needs.

6. The Planning Board should consider existing open spaces in proximity to new development proposals when the possibility exists to build upon existing open areas.

7. The open space planning efforts that have taken place in Town have protected more than 27% of the total acres town-wide. This plan recommends continuing preservation efforts in order to offset future growth.

8. Planning for trails should be considered in Planning Board submittals and considered when pursuing easements and land acquisitions.

Appendix A Grant Sources

LIST OF GRANT FOR LAND CONSERVATION and OPEN SPACE PROGRAMS

Tip: *If you are uncertain of the funding program to fit your need, contact the Center for Land Conservation at the Society of NH Forests at(603) 224-9945or www.forestsociety.org or www.clca.forestsociety.org or.*

Grant Program: NH Land and Community Heritage Investment Program (LCHIP)

Brief explanation: Funds to acquire conservation land, historic buildings, sites

- Name of grantor agency: NH Land and Community Heritage Investment Program (LCHIP)
- Key contact person(s): Deborah Turcott, Executive Director
- Amount of funding available: $Varies according to Legislative allocations
- Key criteria for applications: Significant natural resource area; significant historic buildings and sites
- Funding cycle and deadlines: undetermined
- Website address: www.lchip.org

Grant Program: Land and Water Conservation Fund

Brief explanation: Municipalities can apply for assistance for local parks and recreation programs.

- Name of grantor agency: Division of Parks and Recreation, NH DRED
- Key contact person(s): Shari Colby, Community Outreach Specialist
- Amount of funding available: $20,000 per project; 50/50 match
- Key criteria for applications: Outdoor recreation proposals; see Project Evaluation criteria
- Funding cycle and deadlines: Late January
- Website address: http://www.nhparks.state.nh.us/community-programs/land-and-water-conservation-fund/

Grant Program: Farm and Ranchland Protection Program

Brief explanation: Farm and Ranch Land Protection Program (FRPP) provides matching funds to help purchase development rights to keep productive farm and ranchland in agricultural uses. USDA provides up to 50 percent of the fair market easement value of the conservation easement.

- Name of grantor agency: US Natural Resources Conservation Service
- Key contact person(s): Jody Walker, Assistant State Conservationist
- Amount of funding available: Varies based on Congressional appropriation
- Key criteria for applications: See website below
- Funding cycle and deadlines: Open; on-going acceptance
- Website address: http://www.nrcs.usda.gov/programs/frpp/

Grant Program: National Fish and Wildlife Foundation

Brief explanation: The National Fish and Wildlife Foundation provides funding on a competitive basis to projects that sustain, restore and enhance the Nation's fish, wildlife, plants and their habitats through our *Keystone Initiative Grants* and other *Special Grant Programs*.

- Name of grantor agency: National Fish and Wildlife Foundation
- Key contact person(s): Mike Slattery
- Amount of funding available: Keystone $50 to $300k; special – varies
- Key criteria for applications: Specific to program
- Funding cycle and deadlines: June and November; Pre-proposal-April 1st; Full June 1st
- Website address: http://www.nfwf.org/AM/Template.cfm?Section=Grants

Grant Program: Forest Legacy Program

Brief explanation: The Forest Legacy Program is a partnership between states and the USDA Forest Service to identify and help conserve environmentally important forests from conversion to nonforest uses. The main tool used for protecting these important forests is conservation easements. The Federal government may fund up to 75% of program costs, with at least 25% coming from private, state or local sources

- Name of grantor agency: Division of Forest and Lands, NH DRED
- Key contact person(s): Susan Francher, Forester
- Amount of funding available: Varies annually; based on national competition
- Key criteria for applications: Project identified in a Forest Legacy Area (FLA) and meet continuation of traditional forest uses including forest
- Funding cycle and deadlines: July 15th annually
- Website address: http://na.fs.fed.us/legacy/index.shtm

Grant Program: Transportation Enhancement (TE)

Brief explanation: The intent of the TE program is to afford an opportunity to develop "livable communities" by selecting projects that preserve the historic culture of the transportation system and/or enhance the operation of the system for its users. Projects with a water quality component associated with transportation facilities are eligible. 80/20 funding.

- Name of grantor agency: Bureau of Planning and Community Assistance, NH DOT
- Key contact person(s): Thomas Jameson, PM, (603) 271-3462
- Amount of funding available: $3.8 M for TE
- Key criteria for applications: TE: encourage non-motorized transportation, pedestrian
- Funding cycle and deadlines: Summer of odd years and submit to the RPC; TE Advisory Committee recommends projects
- Website address: http://www.nh.gov/dot/municipalhighways/tecmaq/details.htm

Grant Program: Grassland Reserve Program

Brief explanation: The Grassland Reserve Program (GRP) is a voluntary program offering landowners the opportunity to protect, restore, and enhance grasslands on their property. The program helps landowners restore and protect grassland, rangeland, pastureland, shrubland and certain other lands.

- Name of grantor agency: US Natural Resources Conservation Service
- Key contact person(s): Jody Walker, Assistant State Conservationist
- Amount of funding available: Varies based on Congressional appropriation
- Key criteria for applications: See website below
- Funding cycle and deadlines: Open; on-going acceptance
- Website address: http://www.nrcs.usda.gov/programs/GRP/

Grant Program: Water Supply Land Protection Grant Program

Brief explanation: Also known as the Source Water Protection Program, NH DES can make 25 percent matching grants to municipal water suppliers for the purchase of land or conservation easements critical to their water quality. These water supply lands must be currently unprotected and within the wellhead protection area for a groundwater source or within the source water protection area and within five miles of the intake of a surface water source. These match sources can include donated land or easements that are also within the source water protection area, public funds, transaction expenses, or private funds. Also, there is a low interest loan fund available from DES that may be used to finance the match.

- Name of grantor agency: NH DES
- Key contact person(s): Holly Green
- Amount of funding available: Uncertain, but DES is soliciting applications; 25/75
- Key criteria for applications: Unprotected water supply land
- Funding cycle and deadlines: November
- Website address: http://des.nh.gov/organization/divisions/water/dwgb/dwspp/land_acqui/ws_landgrant.htm

For special purpose land conservation projects, the following may be of interest:

Ecologically Important Land

- Sweet Water Trust http://www.sweetwatertrust.org/
- Wildlife Heritage Foundation of New Hampshire provides funds for NH Fish and Game projects. Contact: Chuck Miner at (603) 271-3511 http://www.wildlife.state.nh.us/foundation.
- Endangered Species Fund is a federal fund available to states for the conservation of T & E species. http://www.fws.gov/endangered/ESA/sec6.html
- The Neo-tropical Migratory Bird Conservation Fund establishes a matching grants program to fund projects that promote the conservation of these birds. http://www.fws.gov/birdhabitat/Grants/index.shtm

Wetlands, Waterfowl, Fisheries Habitat

- The North American Wetlands Conservation Act provides matching grants to organizations and individuals who have developed partnerships to carry out wetlands conservation projects for the benefit of wetlands-associated migratory birds and other wildlife. Administered through the federal

Fish and Wildlife Service. Contact Atlantic Coast Joint Venture Coordinator Andrew Milliken at andrew_milliken@fws.gov. http://www.fws.gov/birdhabitat/Grants/index.shtm and http://birdhabitat.fws.gov/NAWCA/USstandgrants.html

- NH Fish and Game Department has a Small Grants Program to help landowners with a minimum of 25 acres restore or enhance habitat for wildlife. For more information, contact the Wildlife Division at (603) 271-2461, http://www.wildlife.state.nh.us/Wildlife/wildlife.htm
  For the Fisheries Habitat Conservation Program contact John Magee
  Fish Habitat Biologist john.a.magee@wildlife.nh.gov
- The Moose Plate program: http://www.mooseplate.com/overview.html
- Wetlands mitigation funds. Funds which permitting authorities (NH Dept. of Environmental Services, US Army Corps of Engineers) may require developers to provide for land conservation as mitigation for loss of wetland values resulting from proposed development. Contact municipal planning officials or the developer for details about specific projects.
- NH Department of Environmental Services established the Aquatic Resource Mitigation Fund to compensate for loss of wetlands. Contact: Lori Summer at (603) 271-4059 or lori.sommer@des.nh.gov
  http://des.nh.gov/organization/commissioner/pip/factsheets/wet/documents/wb-17.pdf
- Ducks Unlimited. http://www.ducks.org/ State contact: Ed Robinson, NH Fish & Game Department, (603) 271-2462.
- Trout Unlimited Contact: Elizabeth Maclin, Vice President for Eastern Conservation Programs: emaclin@tu.org. For local projects involving a component of stream habitat restoration or improvement, there is the Embrace-A-Stream grant program that is available through state councils and local chapters of TU. The TU council or chapter must be the applicant for the funds. For more information about the EAS program go to:
  http://www.tu.org/site/c.kkLRJ7MSKtH/b.3198137/k.9DD6/EmbraceAStream.htm
- Watershed Action Grants. The Conservation Fund, Contact: Nancy Bell, Vermont Representative
  http://www.conservationfund.org/

PARKS

Grant Program: Recreational Trail Program (RTP)

Brief explanation: RTP funds may be used for maintenance and restoration of existing trails, purchase and lease of trail construction and maintenance equipment, construction of new trails, development and rehabilitation of trailside and trailhead facilities, trail linkages, and acquisition of easements or property for trails.

Name of grantor agency: Bureau of Trails, NH DRED

Key contact person(s): Chris Gamache, Program Coordinator

Amount of funding available: $25,000 maximum;

Key criteria for applications: 80/20 match

Funding cycle and deadlines: January

Website address: http://www.nhtrails.org/grants-and-programs/recreational-trails-program/
http://www.fhwa.dot.gov/environment/rectrails

Grant Program: Land and Water Conservation Fund (LWCF)

Brief explanation: LWCF funds may be used for acquisition, development and restoration of existing or proposed parks.

Name of grantor agency: Division of Parks, NH DRED

Key contact person(s): Shari Colby, Outreach Coordinator

Amount of funding available: $20,000 cap per project

Key criteria for applications: Applications must be submitted by a municipality, school district, county or state agency / department for government owned property. 50/50 match required.

Funding cycle and deadlines: January

Website address: http://www.nhstateparks.org/community-programs/land-and-water-conservation-fund/grant-round-information-and-application-packet/

Other Grant Sources

Farm Bill

For information on the 2008 Farm Bill, visit http://www.ers.usda.gov/FarmBill/2008/

Piscataqua Regional Estuaries Program (Coastal CTAP)

This program is of interest to the I-93 CTAP Towns of Candia, Chester Danville, Deerfield, Brentwood and Raymond as they are located in the Coastal Zone watershed area. See: http://www.nhep.unh.edu/programs/community-assistance.htm

Moose Plate Grants

The state's Moose Plate program provides funding for cultural heritage, conservation and environmental programs. For details, see: http:/www.mooseplate.com/grants.html.

Source: Grant Resources Guide: Grant Opportunities for CTAP Communities (prepared for the Rockingham Planning Commission by TF Moran, Inc. 2010)

EXISTING LAND USE

1.0 INTRODUCTION

The intent of the Existing Land Use chapter is to describe the present status of land uses in the community. This evaluation serves to establish a base line for the conditions found in Town at a specific point in time. This review includes evaluation of existing zoning requirements, natural features of the land takes into account many factors, including community goals, the ability of the land to support development, existing land use patterns and zoning, expectations of property owners and local land use laws and regulations.

This chapter is both general and specific. As a policy document, the Master Plan establishes general policies and goals with which to guide development of the built and natural environs of the town. As a Plan, it goes further to specify the types of uses appropriate for various areas of town, as well as the specific measures that will help bring about desired future development. These measures may include changes in zoning and site development regulations, new initiatives in land protection or changes in town policy.

The future land use map found in this chapter is a representation of the desired direction of future development in town. While it is a useful tool for visualizing the recommended development pattern, the map is not intended to be a formal zoning map. The boundaries are general guidelines that will be revised as zoning amendments are refined by the Planning Board and adopted by the townspeople.

The Future Land Use chapter provides guidance to private and public entities in their land use decisions. Both town government and private developers should reflect upon the needs, values and goals outlined in this chapter in making their land use decisions.

2.0 EXISTING NATURAL CONDITIONS

Development Constraints

Land not suited for development includes wetlands, buffer areas around wetlands and shoreland buffer areas. The significance of these areas and the town's zoning requirements are described below:

- Wetlands. The importance of preserving and protecting wetlands is well established in other sections of this plan. They perform vital ecological functions, as well as their value for open space, wildlife and passive recreation all of which contribute to the town's rural character. Future development should be directed away from wetland areas to the greatest extent possible. It is equally important to prevent building in such areas because of the potential negative impact on water quality, public health. In addition, building too closely to wetlands can detract from their natural ability to assist in handling excess water during flood

events. The town's existing Wetlands Ordinance will continue to regulate future development with regard to wetlands.

- Buffer areas around wetlands. A wetlands ordinance that prohibits development in wetlands does not necessarily protect wetlands from harmful uses occurring immediately adjacent to them. For those uses permitted within close proximity to wetlands, adequate buffers are necessary in order to insure the protection of the wetland. The town's Zoning Ordinance establishes a 100' or 50' buffer around wetlands (dependent upon the classification of wetland); prohibited uses include structures and associated construction activity. A Conditional Use Permit process exists to allow, in appropriate circumstances, the construction of access ways through wetlands in order to allow upland development. Natural vegetation should be protected or restored in this area as much as possible to control erosion and sediment from contaminating wetlands, and to provide cover for wildlife.
- Buffers along river corridors. Protecting river shorelines helps preserve wetlands, reduces flooding damage, serves to maintain important wildlife travel corridors and preserves the scenic beauty and recreation value of the river. The town has a local shoreland protection district that regulates building activities within a 300 foot buffer of its five rivers and streams.

Land with limited suitability for development includes 100-year flood hazard zones and aquifer recharge zones,. The town currently regulates development within both areas. There are currently no public water supply sources in Brentwood.

- 100-Year Flood Hazard Zones. Floodplains are undesirable locations for development because of the associated risks to life and property. In addition, construction in the floodplains worsens flood hazards downstream and the inundation of subsurface sewage disposal systems can cause water pollution and a public health hazard. As part of its Zoning Ordinance, the town of Brentwood has adopted specific regulations for development in special flood hazard areas as prescribed by the Federal Emergency Management Agency (FEMA). Development within these flood hazard areas should continue to be limited to those land uses compatible with areas prone to flooding and should be in conformity to FEMA regulations.
- Aquifer recharge zones. Maps prepared by the US Geological Survey (1991) identify the stratified drift aquifers in Brentwood. These aquifers are recharged from precipitation and run-off that infiltrates from land directly above the aquifer. As such, aquifer recharge zones are not suited for any type of development that carries a high risk of contamination. Once contaminants leak into the ground, they can spread rapidly through an aquifer and destroy it as a water supply. While there are currently no public water supplies within Brentwood's aquifer recharge zones, thousands of private wells in town depend on these aquifers. The land over Brentwood's aquifer recharge zones is currently zoned variously for commercial/industrial and residential development; the Zoning Ordinance includes a chapter with specific guidelines for developing above these delineated areas.

3.0 EXISTING LAND USE

In this section, existing conditions and findings are presented for major categories of land uses found in Brentwood. These include: Residential/Agricultural; Commercial /Industrial; Multi-Family/Professional Office; Town Center District 1. There is also a description of efforts to retain open space town-wide.

3.1 Residential Agricultural District

3.1.1 Findings

The majority of Brentwood is zoned for residential/agricultural uses. This district requires a minimum lot size of two acres. As listed in the Zoning Ordinance, permitted uses in this district include:

- Single-family homes
- Manufactured housing, mobile homes and trailers
- Accessory housing units
- Home occupations of persons residing in buildings in which offices are located
- Public buildings, schools, parks and recreation areas
- Family day care
- Churches and other places of worship by special exception granted by the Zoning Board of Adjustment
- Agricultural operations
- The boarding of horses

Home occupations are allowed in the agricultural/residential district, provided they meet the standards outlined in the Zoning Ordinance. While the Planning Board does not currently regulate the approval/permitting of this activity, it is likely that the number of home occupations in Town is increasing, due in part to technological advances in computers, the internet and telecommunications that make working at home more and more feasible and commonplace.

The residential/agricultural district constitutes roughly 80% of the land area in town. Brentwood has experienced significant residential growth in the last ten years making it one of the fastest growing communities on the seacoast. Although the overwhelming majority of this growth has been in the form of single family detached structures on two acre lots, the town has a history of trying innovative measures for the provision of housing. The town zoning ordinance allows multi-family residential housing, cluster residential development of both single family and multi-family units.

Brentwood Historical Land Use (Acres)								
Landuse Type	1962	1974	1998	2005	2010	2015	2010 to 2015 Total Change	2010 to 2015 Percent Change
Active Agricultural	1,793.5	1,375.9	1,019.5	831.6	822.2	828.9	6.7	0.8%
Aux Transportation				61.5	62.5	63.6	1.1	1.8%
Farmsteads	50.7	41.5	15.8	138.9	145.7	137.5	-8.2	-5.6%
Forested	7,962.5	7,893.7	7,142.6	5,493.7	5,431.6	5,237.8	-193.8	-3.6%
Industrial/Commercial	73.4	103.5	327.4	369.8	417.1	460.1	43.0	10.3%
Mixed Urban		1.7	47.8	36.0	36.0	36.0	0.0	0.0%
Open Wetlands	201.3	183.4	206.1	1,252.3	1,247.6	1,247.3	-0.3	0.0%
Other/Idle	334.9	519.3	537.7	816.5	772.9	797.1	24.2	3.1%
Playing fields/Recreation				28.9	28.9	37.3	8.4	29.1%
Railroad								
Residential	322.2	585.0	1,303.6	1,386.3	1,439.6	1,504.9	65.3	4.5%
Transportation	90.4	104.1	133.4	208.5	212.8	267.0	54.2	25.5%
Utilities				57.6	64.4	64.8	0.4	0.6%
Water	34.2	54.9	128.9	181.4	181.8	180.7	-1.1	-0.6%
Grand Total						**10,863.0**		
** Note: Years 1962,1974 and 1998 were compiled with a slightly different methodology than 2005, 2010, and 2015. Aux Transportation, Playing Fields and Utilities are categories only broken out in 2005, 2010, and 2015. Classification of wetlands was improved between 1998 and 2005. Due to lesser quality aerial photos many wetlands were classified as 'Forested' before 2005. Many Playing Fields were changed in 2015 to ensure that those in proximity to a school were classified as Education (Industrial/Commercial).								

Historically the residential – agricultural district has been a mix of these two uses. Agricultural endeavors such as farming and the raising of horses and other livestock have occurred throughout the town. In a study prepared by Complex Systems at the University of New Hampshire, review of aerial photographs of the town in the years 1962, 1974 and 1998 200, 2010 and 2015 reveals a continuous decline in agricultural enterprises over the last 55 years. As one might expect, this decline in agricultural activity has been accompanied by a significant increase in the residential category over the same time frame. Of interest to note there has been a leveling off of agricultural decline since 2005 with a very slight increase actually indicated from 2010 to 2015. The profile of farming has been dramatically improved as well. The former Creamery Brooke Farm on Middle Road had for many years been inactive but in 2012 the property changed hands and the new Stout Oak Farm is an active

agricultural activity complete with an on-site produce store. In addition a community garden has been established on Middle Road just east of the Swasey Elementary School with four acres being actively farmed each year by residents in Town. The Town should continue to encourage agricultural activity throughout the municipality.

3. 2 Business

3.2.A – Commercial Industrial Zone

The town has three business Districts. The largest of these districts is the Commercial /Industrial Zone. This zone is located along the corridors of New Hampshire Routes 125 and 27 as well as along the northern three quarters of Pine Road and part of Crawley falls Road. As listed in the Zoning Ordinance the following uses are permitted in the Commercial/Industrial Zone:

- Shops restaurants and other retail businesses
- Medical and other professional offices
- Garages and filling stations
- Places of worship
- Public educational use
- Hospitals and nursing homes
- Manufacturing and warehousing
- Food service industry

This zone has been an active area for a multitude of commercial and industrial uses over the years. The area along Pine Road has developed into a concentrated heavy industry location. Although its location along the western edge of town has minimized most negative impacts to townspeople that can arise from this type of use, the single greatest concern in the area is water quality. The town's most significant groundwater resources are located beneath these industrial uses so care must continue to be taken in the siting and expansion of activity in this area to prevent groundwater contamination.

Perhaps the most pressing issue before the Town with respect to economic development is the impact likely to occur from the large-scale retail development recently established in Epping. In the last decade the southern section of the NH Route 125 corridor in Epping has seen dramatic commercial development surrounding the NH Route 101 interchange. Walmart, Lowes, Market Basket and an O'Neill Cinema have made this a regional shopping destination. Historically, these retail facilities spur additional franchise retail establishments that thrive on the increased traffic. It is reasonable to anticipate that the NH Route 125 corridor in the northern half of town will experience increased retail activity as these new retailers solidify their positions in the region.

Although the town has not seriously planned to install a municipal sewer system or a wastewater treatment facility within the planning horizon of this Master Plan, Brentwood has had very preliminary advances from the town of Epping with regard to the possibility of expanding Epping's water service southward along the NH Route 125 corridor. To do so would require a great deal of forethought by the town. Such an endeavor could

allow increased development density within the commercial zone, which could prove beneficial economically. However, before such density could occur the town would need to evaluate its current development regulations. The town is rightfully concerned about the type of development that occurs within its boundaries and time should be spent working toward attracting the highest quality development possible – development with the greatest tax contribution and the least impact on the rural character of the town.

3.2.B – Town Center District 1

As discussed above, the Commercial / Industrial Zone has served as the only business district in Brentwood for many years. As in many New Hampshire communities, development patterns in Brentwood segregate residential, commercial and industrial uses. This is different from the historical development pattern of New Hampshire communities, which were typically developed with a more dense, mixed-use town center surrounded by increasingly less dense residential development and large tracts of agricultural lands and open space. In 2002 a group of citizens and town officials worked together to create a new business area in the center of town. This district, the Town Center District 1 was created to allow an area of mixed commercial and residential use. This district placed near the major town services (municipal offices, fire station, school, and library) was intended to create a centralized location of service businesses for the local population that more closely mirrored traditional New England development patterns. This zone was envisioned in the 1988 Community Master Plan as a neighborhood commercial area that could possibly establish a viable town center for Brentwood.

The uses allowed within this district are permitted either by right or by special exception. These are separated below by paragraph

Those uses allowed by right in the zone are as follows:

- Residential use whether single-family or manufactured housing; bed and breakfast inns; cluster residential development
- Outdoor recreational uses including forestry, public parks and historic areas open to the public;
- Agricultural uses such as tree farming, commercial timbering and non commercial harvesting of forest products;
- Institutional uses such as day care facilities, senior citizen centers, funeral homes and governmental buildings;
- Commercial uses such as retail/service operations, business or professional offices, banks and restaurants.
- Residential accessory apartments;

Those uses allowed by special exception are as follows:

- Agricultural and forestry uses such as landscaping operations;
- Institutional uses such as private schools, non-profit lodges; hospitals and clinics; places of worship, cemeteries and public utility facilities.

3.2.C – Professional Office Multi-Family District

This district, located between North Road and NH Route 27 was established in the late 1980's as a Planning Board response to two separate manifestations of land use needs. On the one hand the New Hampshire State legislature passed a law (RSA 672:1,III-d) that required towns to provide "a balanced supply of housing which is affordable to persons and families of low and moderate income". At the same time, the town was aware that the county was studying the feasibility of relocating the County Courthouse from Exeter to the complex of land in north Brentwood. It seemed that if the new courthouse were to be located in this part of town professionals such as lawyers, surveyors, title researchers and others with close ties to such a facility should be able to locate offices in this area. The Planning Board also felt that many of the residential structures in this area would lend themselves nicely to professional office redevelopment. As a result of these two occurrences, the multi-family / professional office district was developed. The uses in this zone are as follows:

- Multi-family dwellings, including condominiums;
- Professional office facilities developed in a manner consistent with existing residential and agricultural uses.

The district has had both success and failure during its existence. The town's first multi family development has been constructed in the district. A development of sixty, six-unit town houses has succeeded in diversifying the town's housing stock. The quickness with which the units sold in this development was an indication that such housing types are in demand in Rockingham County.

From the professional office development side of the equation there has been less success. Shortly after the town adopted the new district in 1991, the County Commissioners decided to purchase additional land on NH Route 125 in South Brentwood for the new courthouse facility instead of siting the structure on their land on North Road. This decision effectively negated the primary reason professional office development was earmarked for this area of town. Consequently, there has been no movement by the private development sector to locate such facilities to this area of town.

3.2.D – Senior Housing

In 2003 the town passed an elderly housing ordinance aimed at giving senior citizens expanded opportunity to remain within the community when their lifestyle no longer requires a large single-family detached unit. One of the town's responses to the high level of residential growth experienced in the last half decade was to return to a two-acre minimum lot size requirement. When this two-acre requirement was the density standard for senior housing no developments were proposed. In 2006 the density calculation for senior housing was changed to double the number of bedrooms allowed in such developments. As a result, three senior housing projects totaling 62 units have been constructed in Town. In 2017 the town further refined the senior density standards, decreasing the allowed unit density from four bedrooms per buildable acre to three bedrooms per buildable acre. This was done in an effort to insure such developments do not appear too crowded.

3.2.E Workforce Housing

The Town adopted a workforce housing ordinance in 2010 as a response to State law requiring all communities to provide the opportunity for the development of such housing in most residentially zoned areas. The Town created an overlay district applicable to any residentially zoned areas of Town that allows for the provision of workforce housing. There have been two such developmens constructed in Town on South Road. The recession of 2008 through 2014 created a real estate downturn that essentially drove housing prices in Brentwood to levels meeting the affordable threshold limits outlined by the Department of Housing and Urban Development for Brentwood's housing market. As a result, the Town voted to remove the Workforce Housing Ordinance in 2013. If the housing market becomes as heated as it was in the early 2000's the lack of such an ordinance could put the municipality at risk of being out of compliance with State housing law.

3.3 Tax Assessment per Zoning District

Brentwood has five primary zoning districts; the commercial/industrial zone, the residential/agricultural zone (R/A); the town center zone (TC), the multi-family professional office zone (MF/P) and the multi-family professional office commercial zone (CP). The table below summarizes the assessed valuation of the properties in each of the zones to offer insight as to the breakdown of property tax assessments throughout the community.

Zoning District	Square footage in Zone	Parcel Count	Assessed Valuation
Residential/Agricultural	6,160,292	1,455	$451,894,241
Commercial/Industrial	1,512,717	229	$115,953,134
Multi-family/Professional Office	833,980	212	$71,530,201
Multi-family/Professional Office/Commercial	155,743	37	$11,902,590
Town Center	115,263	27	$8,487,853
Totals	8,777,995	1,960	$659,768,019

As detailed in the table above the town is primarily reliant upon residential land use for tax revenue. With the exception of the Commercial/Industrial zone each of the other districts (MF/P, TC and are still primarily residential in character and in use.

4. Non- Zoning Related Actions Regarding Existing Land Use

The Town of Brentwood has taken aggressive steps to preserve the rural character of the town in light of the remarkably sustained growth in residential development experienced since the mid-2000's. As discussed in detail in the master plan growth management chapter the town of Brentwood has experienced some of the most sustained residential expansion in the region and the state in the past twenty-five years. As a result, a grass

roots effort to protect the un-built environment of the town has resulted in several actions aimed at slowing the rate of conversion of undeveloped open areas to residential use.

4.1 The Brentwood Open Space Committee

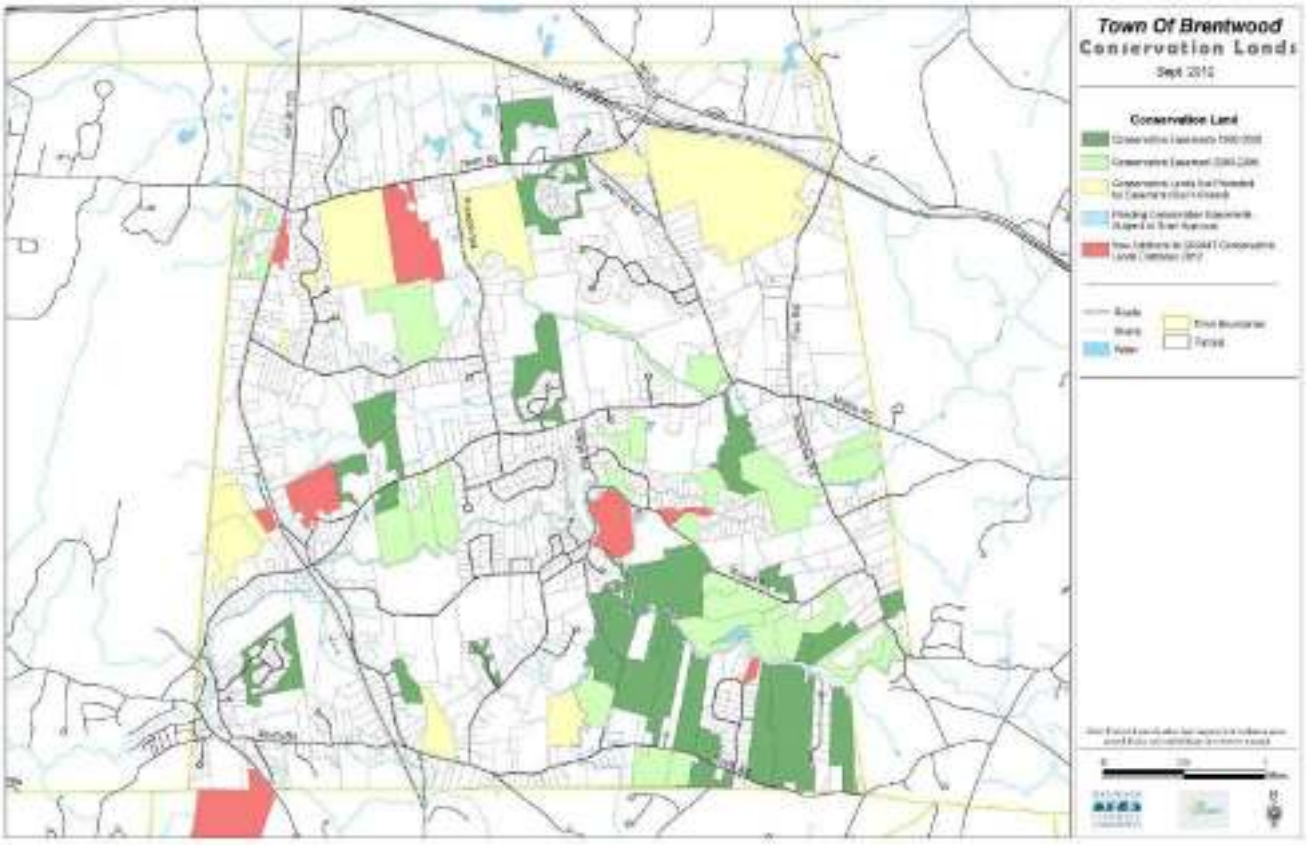
The town has taken a systematic approach to protection of open space. In the 1990's the Conservation Commission along with regional partners like the Southeast Land Trust and the Rockingham County Conservation District, began concerted efforts to protect land along the Exeter River as well as other areas in town. Through their diligent efforts approximately 1,700 acres were protected through conservation easements along the river and throughout town. In 2003 the town authorized an open space bond measure at Town Meeting that appropriated two million dollars to be used to purchase land or the development rights of land to prevent these properties from being converted to residential developments in the future. A committee was established to develop a process of ranking parcels for protection and prioritizing these parcels according to site specific criteria. Countless hours were invested by volunteers in contacting property owners, holding site walks, coordinating the involvement of land development specialists, all in an effort to utilize these public monies to their greatest potential**.** Because of these efforts an additional 1000 acres were protected throughout town. The map on the following page is from the Brentwood Open Space Plan (2013) and shows the many protected parcels of land in Town.

4.2 Class VI Roads and Municipal Trails

Subdivision Regulations in Brentwood do not allow subdivision of property on Class VI roads, although a single building permit is allowed under certain conditions. By Town Meeting vote in 2001, portions of several Class VI roads (Ole Gordon Road, Rowell Road and Haigh Road) were re-designated as municipal trails. At the same time, several roads in town were declared Scenic Roads, and a Trails Committee began to develop a network of voluntary trails on private and public land. The re-designation at Town Meeting of a Class VI road to a Municipal Trail is irreversible except by Town vote. All these actions were designed to recognize the value of open space and to preserve the scenic beauty, wildlife habitat and rural character of the town.

4.3 Water Quality Monitoring

The Town of Brentwood is located in the upper reaches of the Great Bay watershed. The Great Bay has been determined to be impaired by excessive nitrogen levels. As this impairment is studied, solutions will be developed to reduce nitrogen levels and these solutions may include requiring communities up stream of Great Bay to remediate non-point pollution sources. The Town of Brentwood determined it would be prudent to investigate the quality of the surface water entering the Town from the west and leaving the Town to the east toward Great Bay. A multi-year surface water monitoring program performed by a private consulting firm specializing in surface water quality was started in 2015 to sample surface water at a dozen locations, four times a year. Results of this monitoring show that water both entering the Town and leaving the Town have no evidence of raised nitrogen levels. The Town has committed to continuing this monitoring program into the future.


Town Of Brentwood
Conservation Lands
Sept 2012
Conservation Land

Future Land Use

5.1 Future Zoning

The Town is comfortable with its present array of zoning ordinances and development regulations. The community is primarily residential and will remain so into the foreseeable future. This should not be surprising because with the exception of a short segment of the Commercial/Industrial zone on Pine Road each district allows for the creation of new residences. With traffic volumes of 16,000 vehicles a day on NH Route 125 the Planning Board may want to consider whether new single family residential construction is appropriate on this road. There have been no new residential homes constructed on NH Route 125 in the past decade. Removing the allowance for such construction should be studied.

5.2 Housing

Housing construction serves as the single greatest point of contention from a planning perspective for several different reasons. As addressed in the existing land use section, for several years the Town had a workforce housing ordinance that was in compliance with the requirements for such housing at the State level. After the construction of a subdivision with workforce units was completed the regional housing market substantially declined and left the Town in the awkward position of residents purchasing homes with workforce housing restrictions applied at the same cost as homes that had no such restrictions. In this environment, the community repealed the workforce housing ordinance feeling it was unnecessary. The end result is that as long as the housing market remains somewhat depressed, home prices will remain at a level meeting affordability thresholds established by the Federal Department of Housing and Urban Development for the housing market within which Brentwood is found. If the regional housing market rebounds and housing costs mirror what was found in the mid-2000's than the Town will find itself at odds with the requirements of the NH State Workforce Housing statute. The Town should watch this issue closely.

A second point of contention stems from the arguments for and against age restricted housing. Some feel that the community has constructed enough age restricted units and that additional units may result in too large a senior population in Town. The problems this may cause include burdening the local ambulance service with a larger population of residents needing home service calls, the possibility that an aging population will be less inclined to vote for school-related funding initiatives which could hinder the quality of the Town's educational system. Another popular belief is that because these developments are granted increased density when the single generation age-restriction is removed the Town will have pockets of high density housing where new school-aged will gravitate. On the opposing side of this argument, age restricted housing is generally high-quality, well-taxed property with very little possibility of increasing school populations. In this way, they are a fiscal positive for the Town. As a compromise, the Town voted in 2017 to reduce the density bonus given for the construction of age-restricted housing in an effort to lessen the potential drawbacks of such development.

Finally, the Town has never allowed the construction of apartment complexes. In the mid-eighties a development group proposed a plan for two apartment buildings near the new NH Route 101 corridor in north Brentwood. The developers sued the Town upon denial but the housing recession in the 1988-92 timeframe ended the applicants interest. In that same time frame the Town developed the Multi-Family/Professional Office to allow the construction of multi-family structures of a very limited nature. Although this use has been allowed for over twenty years no developers have shown any interest in developing this low density multi-family use. The Town could consider increasing the density for multi-family structures to broaden the housing opportunities available to Town residents. These apartments would be appropriate in the existing multi-family zone.

5.3 Commercial Development

5.3.1 Water Service

The Town of Brentwood has had intermittent discussions with the Town of Epping in the past regarding extension of water service along the NH Route 125 corridor. This activity could have positive effects for the community by allowing more density in development in the Commercial/Industrial zone on the northern reach of NH Route 125. The land along north NH Route 125 is limited by wetlands on both sides of the corridor. Having municipal water would free up land made unbuildable by wells and septic systems sharing the same building envelope. The Town should consider restarting this conversation with Epping.

5.3.2 Tax Increment Financing Districts (TIF)

The Town could consider establishing a Tax Increment Financing (TIF) District to encourage non-residential development. Such districts are established to create or improve existing economic development areas in Towns. The premise behind such districts is that with increased economic development further growth occurs. The new taxes generated by this economic expansion is used to benefit the district further.

5.4 Natural Resources

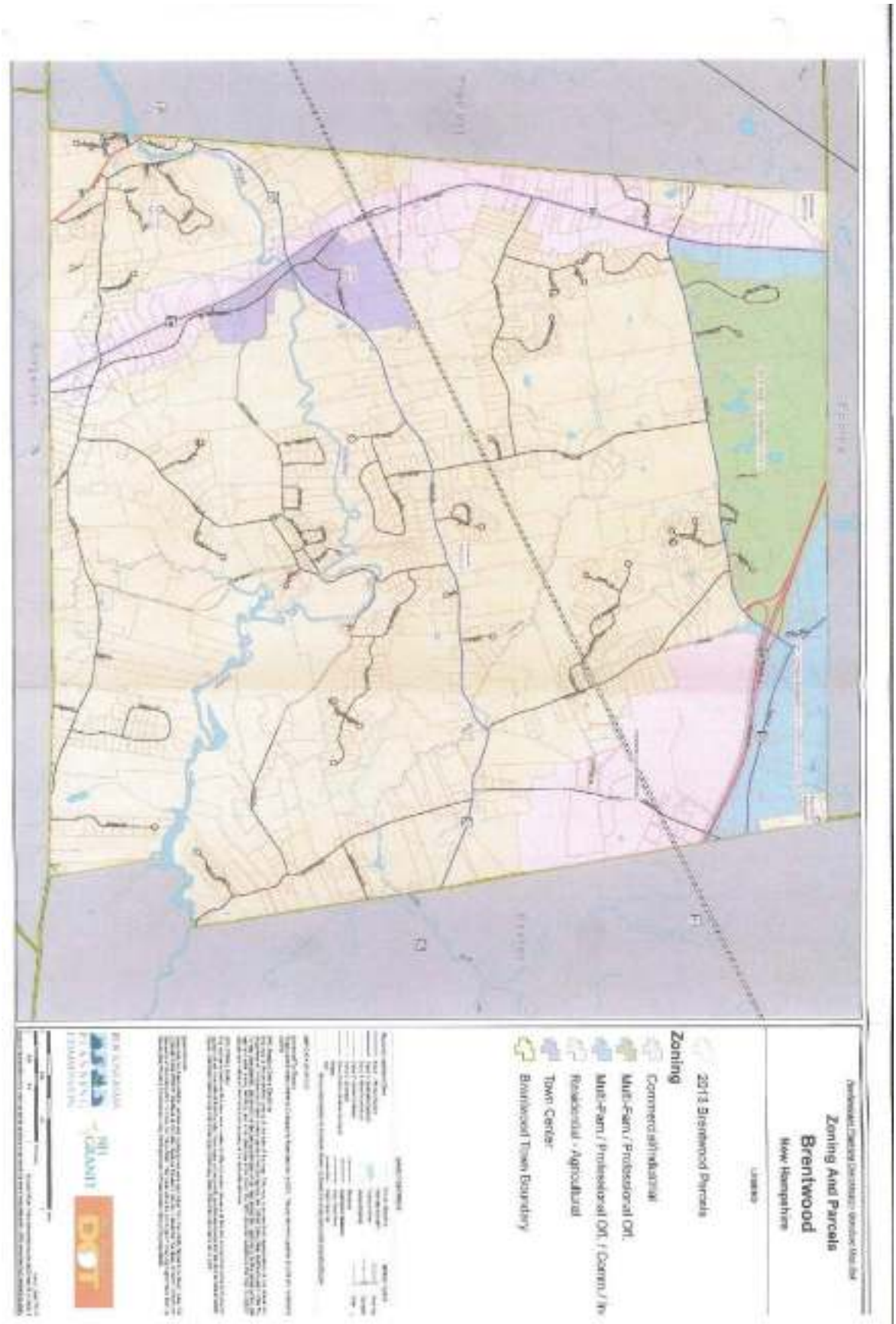
5.4.1 Water Quality Monitoring

The Town should continue to monitor the surface water resources for the community to ensure that degradation to the surface waters is not being caused by land use activities in close proximity. Continuing this monitoring schedule will insure that the surface water resource will not be degraded below the baseline established by the first year of investigation. This means that if surface water quality concerns are discovered the Town needs to take steps pro-actively to address such concerns. This would likely require close coordination between the Planning Board and the Board of Selectmen.

5.4.2 Open Space

The Town should continue to protect open space. When undeveloped properties with natural or cultural significance are available for protection the Town should consider appropriate actions to provide for their protection. Following the recommendations in the Town's Open Space Plan can provide guidance for such protection efforts. The Conservation Commission should work closely with the Southeast Land Trust (SELT) to assist land owners interested in preserving open space lands in Town.

The existing zoning map displayed on the following page serves as the Town's future land use map as well. Of all of the topics addressed above as future activities for the Town to possibly pursue, there are no new land uses proposed in areas that present zoning would disallow. These uses can easily be assimilated into the current zoning framework.


Zoning And Parcels
Brentwood
New Hampshire
2018 Brentwood Parcels
Zoning
Commercial/Industrial
Multi-Fam / Professional Off.
Multi-Fam / Professional Off. / Comm. / In
Residential - Agricultural
Town Center
Brentwood Town Boundary

Notes:

1.0 INTRODUCTION

This section of the Brentwood Master Plan describes the current recreation opportunities in Town. These opportunities are discussed within the frame work of those recreation opportunities provided through the Town's Recreation Department and those recreation opportunities available through the efforts of the Brentwood Trails Committee.

The history of the Brentwood Recreation Center is offered first to provide the context within which town-wide recreation was established. Following are descriptions of the existing recreation facilities and programs offered. Finally, the section offers a set of recommendations addressing the future for recreation opportunity in the next five to ten years.

The section on the Brentwood Trails Committee provides descriptions of the mission and vision of the Committee as well as maps for all the primary trails found in town.

2.0 HISTORY OF BRENTWOOD RECREATION

2.1 Brentwood Recreation Timeline of Important events in the History of the Brentwood Recreation Center

January 1965 – Summer of 1967 - Twelve parents meet to discuss recreation in the Swasey Elementary School. Improvement of the school playground was first Brentwood Youth Center project. Constructed baseball and softball area; asphalt pavement basketball and tennis court and playground equipment.

1965 - Ken Cowan elected first president of the Brentwood Youth Organization/Brentwood Youth Center (BYC/BYO).

March 1970 – BYO/BYC votes to accept 7.5 acres of land gifted by Mr. Norman Smith. Land is to always be used primarily for the youth of Brentwood and if the BYO ceased to exist the land would revert to the Town.

1971-1972 – site work completed including land clearing, installation of septic system and drainage pipes and construction of cellar structure.

1971 – Five-member Recreation Committee established.

1975-1976 – The building was the site of Friday night teen drop-in events with adult chaperones.

1977-1981 - The building was improved with a new roof, new furnace, finished bathrooms new kitchen counters and cabinets and new hot water heater and piping installed.

1979 and 1980 - Construction of new baseball field dedicated to Jon Olson, Jr.

1981-1985 – BRC re chartered with the State of New Hampshire; gains favorable Internal Revenue Service status as a 501 © 93) charitable organization.

First formal Recreation Commission established at the 1983 Town Meeting.

The Town completes a land swap with George Demerritt and 8.8 acres of land are added to the existing 7.75 acres. March 1984

January 1985 – fundraising auction on behalf of the Brentwood Recreation Center raises $6,500.

May 1985 - 20th anniversary of the BYO/BRC. Plans revealed for new multi-purpose playing field; a large new parking area; construction of a solid base for future tennis court/basketball court; construction of an access road lining the parcels.

July 1987 – fundraising concert with Willie Nelson was attended by 8,700 concert goers and netted the BRC more than $12,000. All proceeds to be used for the expansion of the BRC building.

July 1988 - Castonguay Pavilion, a picnic pavilion measuring 20 x 40 feet was dedicated.

2005 – The Brentwood Recreation Center donates the parcel to the Town of Brentwood and sells abutting land to public Service Company of NH. This sale allows the construction of the existing two-story Brentwood Community Center.

November 2008 The Estate of Martin and Violet Lindon donate the land known as the Lindon Ballfield to the Town. Now used for field hockey clinics the property is located behind the Mary E. Bartlett Library on Dalton Road.

2010 – Construction of the Brentwood Community Center.



Recreation has been very important to the residents of the Town as detailed in the timeline above describing the evolution of today's Recreation Department. From a group of twelve concerned parents in 1965 to a department that serves hundreds of residents of all ages the Town of Brentwood is serious about play. The Recreation Department has adopted the following mission and vision statements:

Brentwood Recreation Department is dedicated to providing our community with a variety of opportunities for safe, memorable, and quality activities; for all ages, interests, and abilities, that will generate a healthy and local community.

Our vision is to enhance the quality of life and well-being for our residents, our environment, and our community.

Core Values:

Health & Wellness

Community

Conservation

The Brentwood Recreation Commission is a group of 5 volunteer residents, who are approved and appointed to the commission by the town selectmen, for a specific term. The commissioner's duties include designating programs as well as planning their implementation. It is their intention to include programs for all ages at some point during the year. It is also their duty to oversee the town property that was designated for recreational use by a vote in the 1984 town meeting.

The Brentwood Recreation Complex includes the 17-acre piece of property with the large 5,640 square foot building at 190 NH Route 125 (constructed in 2010), along with its fenced in Little League field, parking lots and picnic/pavilion area, archery range, walking trails, basketball court. Gaga Ball court, ice rink, playground, batting cage, snack shack, garage, two sheds, The BRC, Inc. also has built and maintained the "Library field", a fenced in Little League field on Town property previously owned by Martin and Vi Lindon that sits on 1.5 acres, the large Babe Ruth hardball field and girls' softball field on the adjoining town property behind the BRC property, that also doubles for soccer fields each fall. The BRC also helps mow and maintain the school property playing fields, which now includes a small baseball field and large field for recess's and pickup sports games.

The Recreation Commission has worked with the school board to create sport and activity times for the youth and adult recreation programs on week nights and weekends utilizing the gymnasium in the school. However, the gymnasium does not have standard size basketball courts and the flooring is not rated for athletic use.

3.0 Inventory of Recreation Properties and other Assets

Equipment and Assets
40' x 80' building, with storage basement, two levels of meeting/activity space, kitchen, and utilities
20' x 40' picnic pavilion with 10 picnic tables
10' X 20' multi-purpose pavilion.
10' x 10' storage building
2001 Ford 1510 diesel tractor w/60"' bucket loader & 60" Rear Mower
60" Rear Tractor Scrapper Blade
Misc. Hand tools & sports associated equipment
1 Batting Cage w/Pitching Machine
13 Baseball/Softball Teams uniforms and equipment
12 Teams of Basketball equipment
18 Teams of Soccer equipment w/Goals
Fenced Little League Park
Fenced Little League Park (Dalton Road)
Fenced Softball Field
Babe Ruth Baseball field
T-Ball Fields; one located at the Swasey School Property and one located at the lower fields at the BRC property.

Various Summer Camp Supplies
Ice rink liner & boards
Snow blower
17' Diameter GaGa Ball court
Wii Game Console
4 sit-in kayaks with paddles and life preservers
2 sit-on (Sea) kayaks with paddles and life preservers
5 (3-4 person) canoes with paddles and life preservers
Playgrounds; one located at the Swasey School and one located at the BRC
Ball field irrigation system located at the BRC



Recommended future Physical Plant Needs

Short-Term
1. Secure & Provide additional playing fields
2. Create outdoor tennis/basketball courts at BRC property

Long-Term
1. Purchase 20-person van for program transportation
2. Purchase a recreational water feature for the BRC site.
3. Work in conjunction with the Brentwood Trails Committee in the development of the Town's hiking and nature trail system



Staffing Requirements

A full-time recreation director was approved at Town Meeting in 2017, marking the first time that Brentwood has a fully paid position to organize all the recreational programs offered in Town. Other paid staff positions include summer camp counselors, sporting officials, and snack shack employee. Coaches for the established sport team offerings by the Recreation Department (ie., baseball, soccer) are volunteers. Approximately 40-50 such volunteers support recreation programs each year.

RECREATION AREAS -

Description	Location	Size	Activities	Features	Remarks
Recreation Center	NH Route 125, 1/4m. North of NH Route 111A, on west side of highway	7.5 acres	Baseball, Picnic, Soccer, skiing	Ballfield, picnic area 2 story 40'x80' building w/parking	access to town properties
Town Land	NH Route 125, 1/4m. North of NH Route 111A, on west side of highway	8.5 acres	Baseball, Softball Soccer, X-Country Skiing, playground	Large multi-purpose open field, picnic pavilions, archery range, basketball court, and wooded trails	access to other town properties
Town Land	NH Route 125, 1/4m. North of NH Route 111A, on west side of highway	60 acres	Open wilderness	Wooded, partial wet	open terrain power lines
Swasey School	NH Route 111A, ½m. East of NH Route 125	5+ acres	School buildings Gymnasium	Ballfields, playground, Gymnasium	adjoins other town properties
Town Land	NH Route 111A, ½m. East of NH Route 125	6 acres	Open play area	Fields & Woods	partial wet
Lindon Field	Dalton Road	1 acre	Baseball field	Fenced park	behind library

4.0 Program Inventory

The Brentwood Recreation Department provides a number of programs annually to the residents of town. These programs are popular and provide recreational opportunity over the full calendar year.

4.1 Baseball/Softball/T-ball

The Brentwood Recreation Department organizes a two-and-a-half-month inter-league program running from April through June for participants ranging in age 4 to 13. Annually, approximately 100 young people participate in this program. Fields at the BRC complex are used. The recreation Department has softballs Baseballs, a line machine, softball and baseball bats, helmets pants catcher's equipment, hitting equipment umpire equipment field drags and rakes.

4.2 Soccer

Eight-week program running from September through the end of October. Participants range in age from four to eleven and annually approximately 135 children participate. The Recreation Department supplies nets, balls and cones.

4.3 Basketball

Ten-week program running from December to February for participants ages five to fourteen. Approximately 130 young people participate. Kindergarten through second grade basketball takes place at the Swasey Elementary school, 3-6th graders play in the Seacoast League with home games played at the Cooperative Middle School in Stratham and away games rotating throughout eastern Rockingham County. Seventh and eighth graders play in the Lamprey River League with home games played in the Talbot Gym in Exeter and away games played at different gyms in Raymond, Nottingham, Kingston, Chester and Candia.

4.4 Summer Camp

Seven-week program for participants ranging in age from 6 to 14. The program is new and had 32 children in 2017. Recreation Department equipment includes televisions, sporting equipment and arts and crafts supplies. 5 days per week.

4.5 Ice Rink

An ice rink is constructed at the recreation complex on NH Route 125 and is in place for eight to ten weeks depending upon the weather. The are no age limitations and there are no participant estimates available. The rink has been in operation for the past two years.

4.6 Ski Club

The ski club is an eight-week program for participants aged 5 to 65. Participation rates are usually between 15-20 people.

4.7 Sip and Sign

This activity occurs four times a year with from 20 to 40 participants aged 30 to 60. The Community Center is used and tables and chairs are provided.

4.8 Field Hockey

Youth co-ed field hockey is a program that last six to seven weeks for 30 to 40 participants between the ages of 7 and 14. The Recreation Department supplies field hockey sticks, balls nets and playing field.

4.9 Adult Softball

The adult softball program lasts eight to nine weeks during the summer for approximately 170 participants aged 30 and up. The Recreation Department supplies softballs, umpire gear, a line machine, portable fence and a portable adjustable pitcher's mound.

4.10 Other Recreation Programs

In addition to the scheduled programs detailed above, the Recreation Department provides a number of recreation opportunities for residents of Town. These activities are described below.

- The Bunny Breakfast

  This is a one-day celebration held in early spring. It is geared to families with children between the ages of 3 to 13 and includes a pancake breakfast and community egg hunt. There is a visit each year from a very friendly White Rabbit who keeps everyone engaged in the festivities. Annual participation at this event is between 110 and 120 residents.

- The Boo Bash

  This Halloween themed event happens each October and is a celebration of games, decorations and costumes. 50 to 60 children participate each year ranging in age from 3 to 13.

- Adult Zumba

  Ongoing adult fitness program offered at the community center. Class is led by a certified fitness instructor who has been taking Zumba for 5 years. She currently teaches Zumba at Seacoast Sports Club and Cardio Dance at YMCA of the Seacoast. She is an AFAA-certified group exercise instructor and personal trainer specializing in community-based plus size fitness!

- Wicked Cool for Kids STEAM Camps

  These camps are offered at the community center during the summer months for children in grades K-5. They are STEAM (Science, Technology, Engineering, Arts, Mathematics) based and have different themes from year to year.
- 4th of July Parade

  The Recreation Department is in charge of organizing, planning, and facilitating the annual 4th of July Parade, which starts and ends at Swasey Elementary school.
- Red Sox Trips

  The Recreation Department organizes annual Boston Red Sox trips. The Rec. Dept. hires a bus company to transport participants from the community center to Fenway Park to enjoy discounted tickets and a professional baseball game experience.
- Adult Pickleball

  Ongoing adult program that runs at Swasey gymnasium. Pickleball is a combination of tennis, badminton, and racquet ball. Free program and all of the equipment is provided by the Rec. Dept.
- Chair Yoga

  Chair Yoga is an ongoing program, at no charge, for yogis who prefer to use a chair for additional stability. Chair Yoga is a great program for senior citizens. This program emphasis balance, flexibility, muscle growth, and also a social experience.
- Adult Yoga

  Adult Yoga is for more experienced yogis. The class is designed to strengthen and stretch the body, improve balance, flexibility, and focus. Each week you will learn breathing and relaxation techniques to use throughout your daily activities. The breathing gets the body ready to move, the movement prepares the body to relax and the relaxation allows the mind to focus on meditation. The relaxation at the end of class is followed by a head and neck massage. You will feel rejuvenated, strong, and refreshed. All levels of ability are welcome and prior yoga experience is not necessary. Both Chair and Adult yoga are led by a certified instructor.
- Tang Soo Do

  Tang Soo Do is a Korean Martial Art comprised of both hard and soft techniques. It emphasizes whole body physical training. It's beneficial for self-discipline, self-defense and health.

  Classes are available Monday and Friday at the Brentwood Community Center.

  Classes are taught by Retired Law Enforcement officer Bob Meegan. He is currently a 4th degree Black Belt with the World Tang Soo Do Association and recently recognized by the association for his 35 years as an instructor.

- Outdoor Family Movie Night

  Annual event held at the BRC at the start of summer when kids are out of school. Bounce houses, cookout, raffle, games, and a movie under the stars on a giant inflatable movie screen.

- Soccer Camp

  British Sports Challenger Soccer Camp is offered in the summer and is run by Challenger's Sports. They have certified instructors, mostly from Europe, who teach children ages 3-14 soccer skills.

- LEGO Camp

  Each summer, the Rec. Dept. offers two, 1-week long, summer camps for children ages 5-12 to explore the fundamentals of physics with the use of LEGOs. Specially trained instructors inspire children to build elaborate objects, structures and vehicles, they explore fundamental principles of engineering and physics. They also learn to collaborate and create without fear of mistakes. The experience is joyful, the impact long lasting.

- Adult Ceramics Class

  "The World's Most Fascinating Hobby". It consists of applying painting techniques to cast (molded) pieces made from clay that are or will be fired in a kiln. This ongoing class is led by a Certified Ceramic Teacher, Certified Elementary School Teacher and School Librarian.

- Tiny Sanctuaries Plant Party

  Primarily an art-based program, participants get to design their own Plant Sanctuary (plant terrarium).

- Community Hikes

  Led by a long-time teacher at Swasey Elementary, these hikes are designed to offer families a chance to explore state parks, primarily Pawtuckaway State Park. 1-2 hikes are held in the summer.

- Youth Flag Football

  This program is intended to introduce the game of football while working on skill development, sportsmanship, conditioning, and team play. Youth Flag Football is for children in grades 1-5 and is offered in the Fall.

- Foxwoods Casino Trips

  Bi-annual trips to Foxwoods or Mohegan Sun provide adults a chance to ride down in a luxury coach bus and visit some of New England's casino attractions. Participants get to enjoy a movie, coffee and donuts on the ride down to their destination, where they receive a buffet and game voucher for registering. On the ride back, participants enjoy a movie with snacks.

- Calls from the North Pole

  Each year around Christmas time, the Rec. Dept. organizes, Calls from the North Pole. Each year, a designated, "Mr. Claus" will call children who have been registered by their parent/guardian and talk to them about their wish list.

- Men's Basketball

  4-5-month program that offers men a chance to play some indoor pick-up basketball.

- Youth Volleyball

  Winter program designed for 4th and 5th grade girls to learn and participate in indoor volleyball.

- West Coast Swing

  Ongoing Adult dance classes that are offered at the community center. Designed to teach beginners and experienced Swing Dancers the fundamentals of Swing, and improve on their learned techniques.

- Senior Luncheons

  Monthly luncheons for the Brentwood Seniors are organized by the Rec. Dept. to include entertainment and/or an informative speaker, a themed luncheon (based on the time of year), and facilitate their monthly meeting.

5.0 Brentwood Trails Committee and Trails Network

The Brentwood Trails Committee is a volunteer board in Town. It is tasked with developing the trails network in the community. Like the Recreation Commission the Trails Committee has adopted both a mission and vision statement as detailed below:

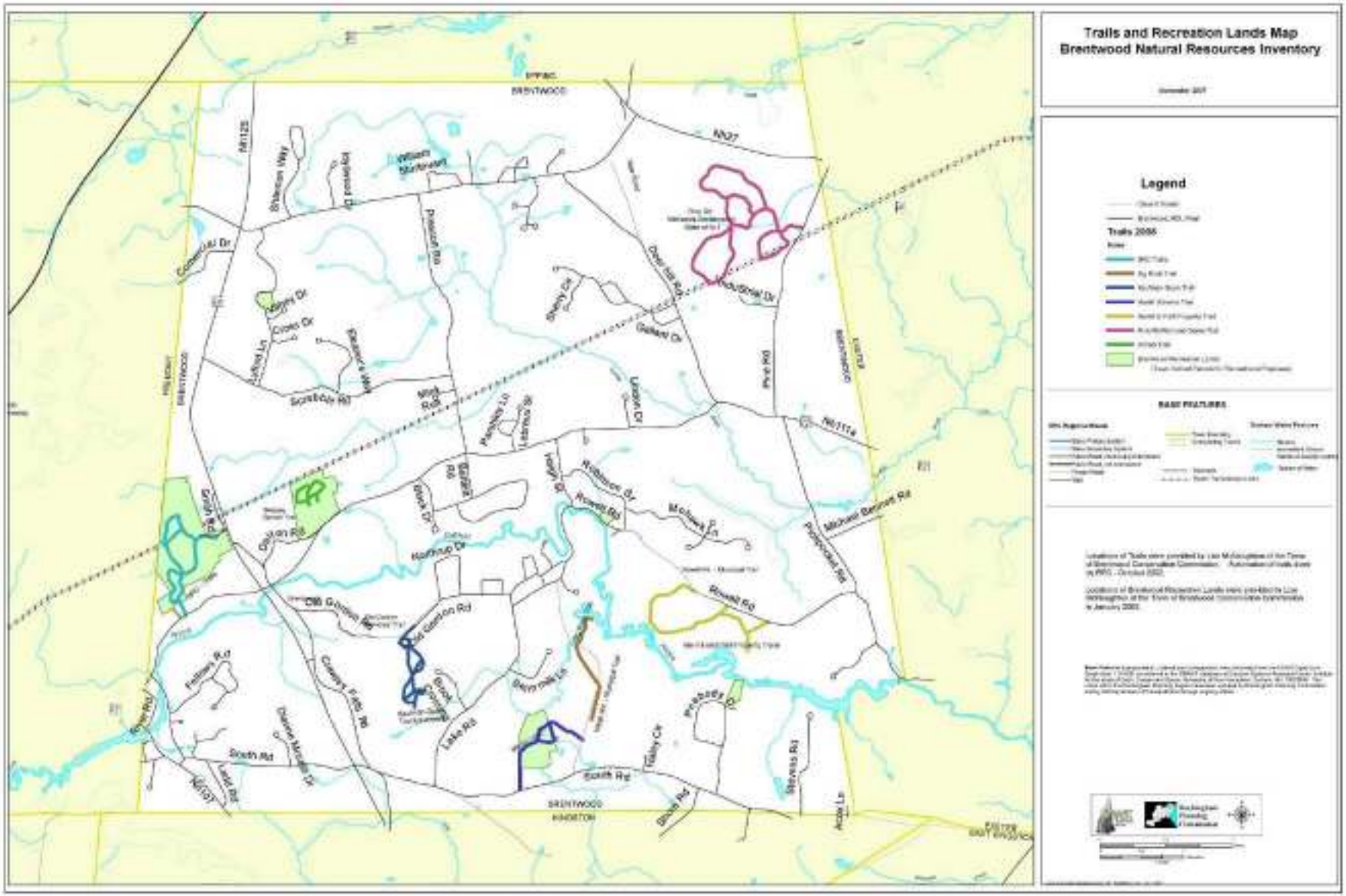
Mission:
To have volunteers willing……
To work as a committee or as individuals under the Recreation Commission or Conservation Commission.
To work closely with both Commissions.
To assist landowners who allow public use on their trails with trail maintenance, development of trails, education of trail use and laws, and monitoring.

The Brentwood Trails System has been open to all non-motorized users unless a landowner has specified against a user. The Trails Committee has advocated for all the traditional non-motorized uses.
We have prided ourselves in multiuse trails, traditional use includes horseback riding, skiing, snowshoeing, hiking and bicycling. Motorized use is allowed per landowner permission. Dogs allowed if leashed or under control of owner. Dogs and Horses are not allowed on playing fields unless on designated paths.

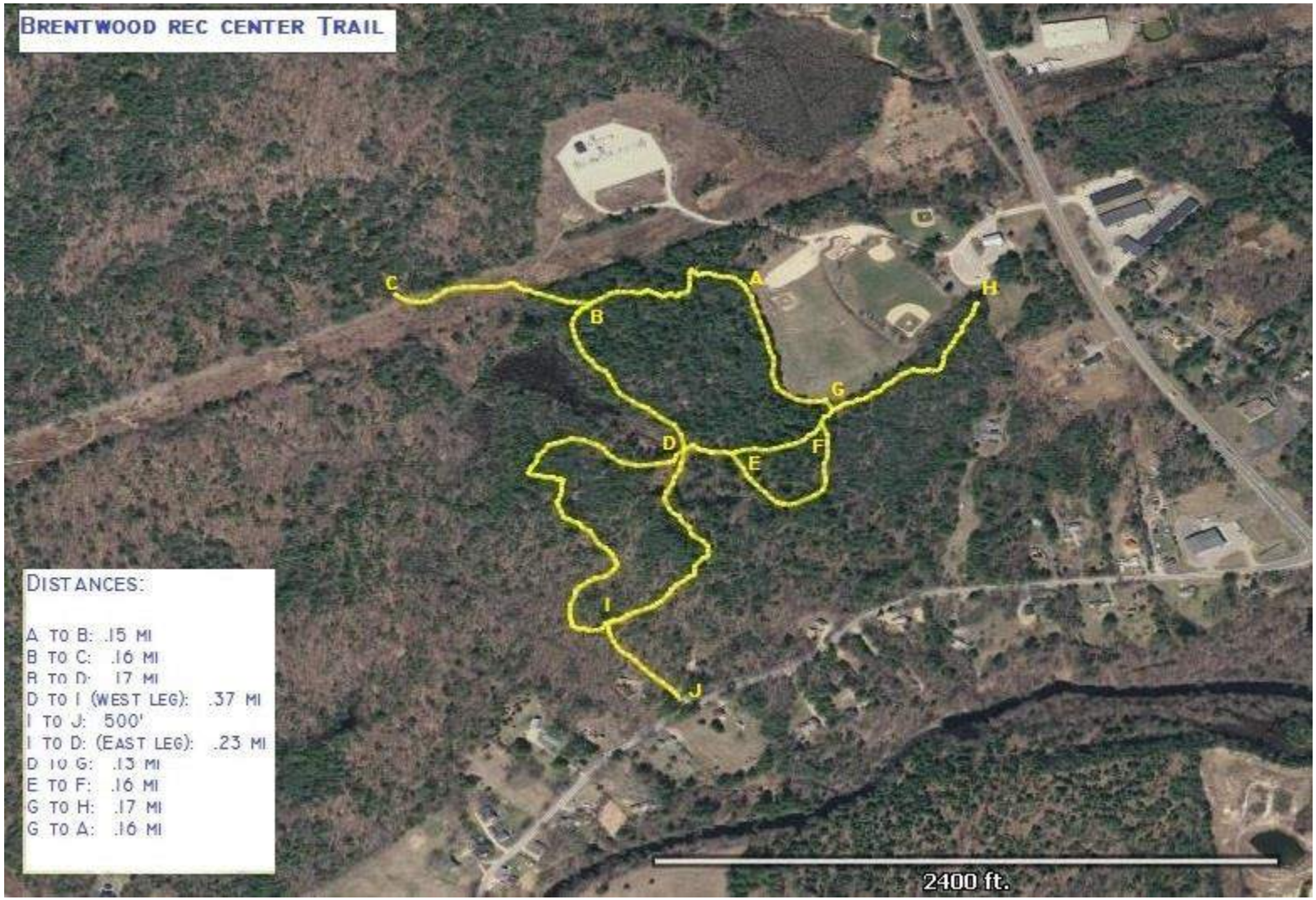
Vision:
To have a town wide trail system where pockets of open land with trails could be connected together avoiding the use of town roads, whenever possible.
To provide natural areas to the public where healthful activities for all ages and disciplines can be done with little expense to individuals and provide a safe area away from busy roads.
To support and educate the importance on conservation and natural areas for both humans and wildlife by interacting with the natural environment.

The vision and mission of the trails committee is to improve the quality of life in our community.

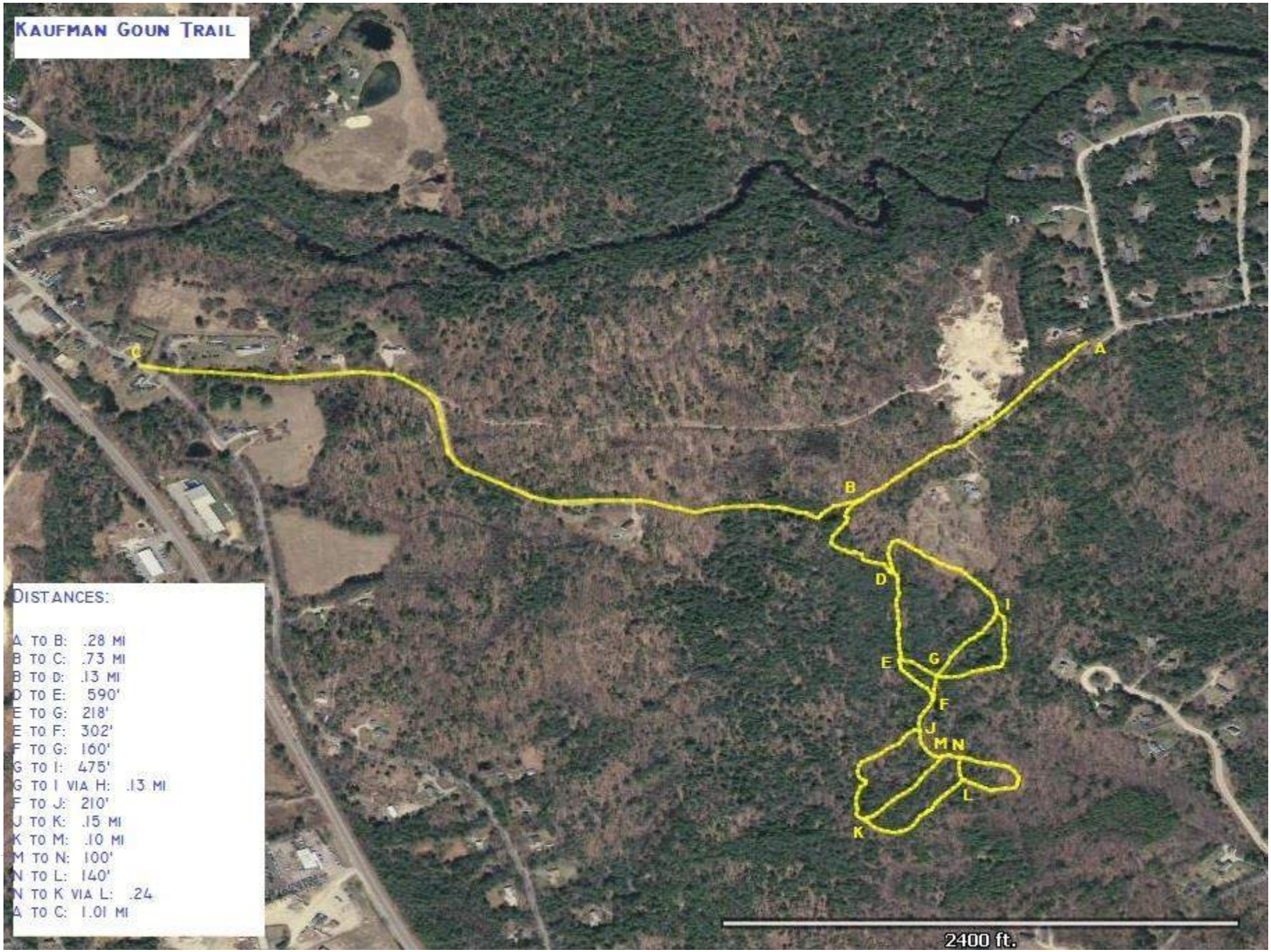
Brentwood has an extensive trails network located throughout town that encompasses approximately 15.5 miles at eight different locations. The Brentwood Trails Committee has worked diligently to map these resources and their efforts are offered below. The trail network is displayed first on the community-wide trails map on the following page so that one can see that the trails are distributed well throughout Town. Following this map is an aerial photograph of each trail with length measurements provided. This way a hiker can know how long each of the trails will take to complete.


Trails and Recreation Lands Map
Brentwood Natural Resources Inventory
Legend
Trails 2005
BASE FEATURES
NH27
NH125
NH111A
Dalton Rd
Pine Rd
Prospect Rd
Old Garton Rd
Route 108
Michael Barrows Rd
Rowell Rd
Robinson Dr
Crawley Falls Rd
Lake Rd
South Rd
Tibbetts Rd
Acorn Ln
BRENTWOOD
KINGSTON
EAST KINGSTON

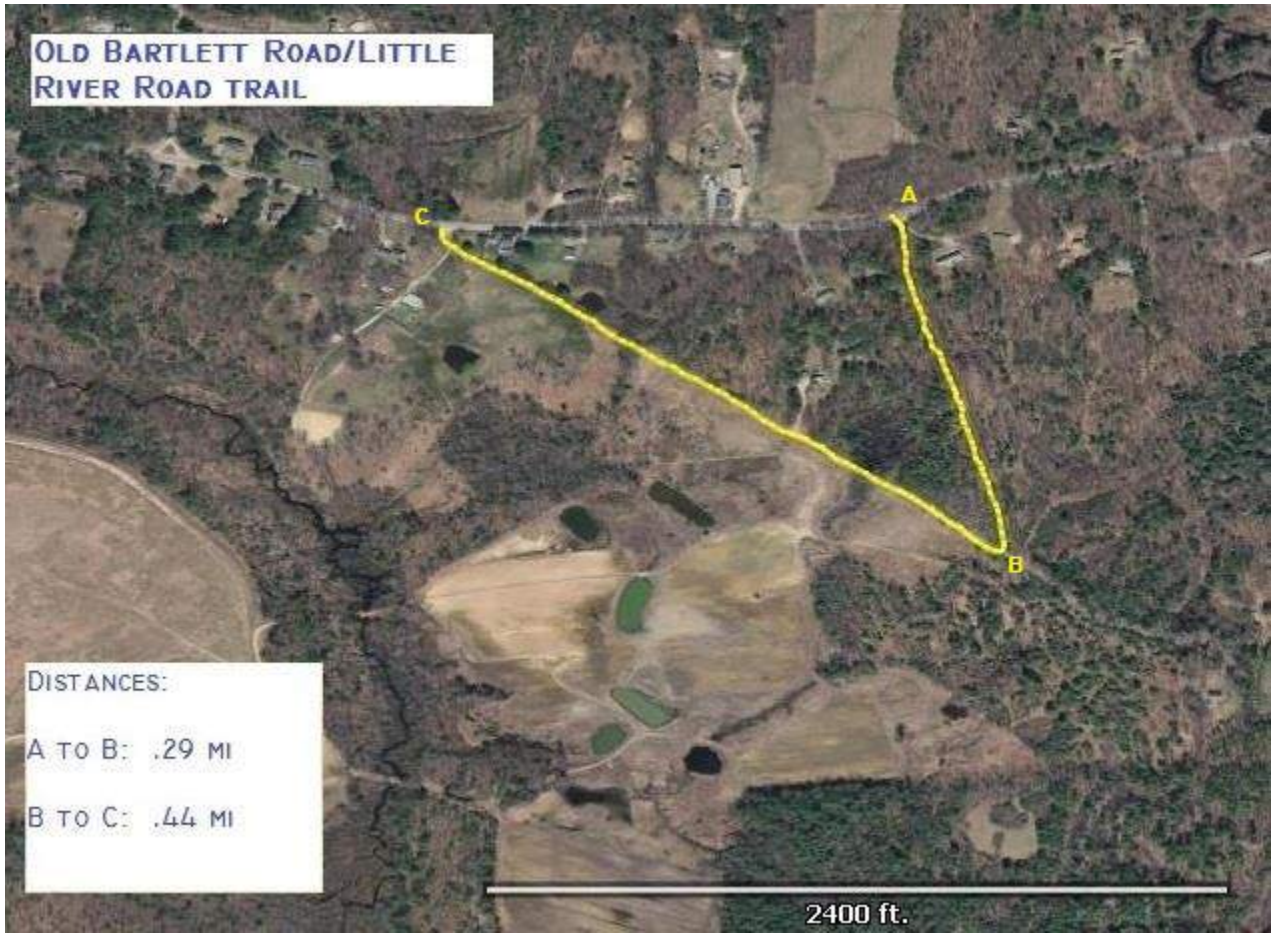

BRENTWOOD GAME FARM:
WILDLIFE MANAGEMENT
AREA
D
X
C
B
A
DISTANCES:
A TO B: 0.16 MI
B TO C VIA X: 0.15 MI
C TO D: 105"
C TO B: 0.15
2400 ft.

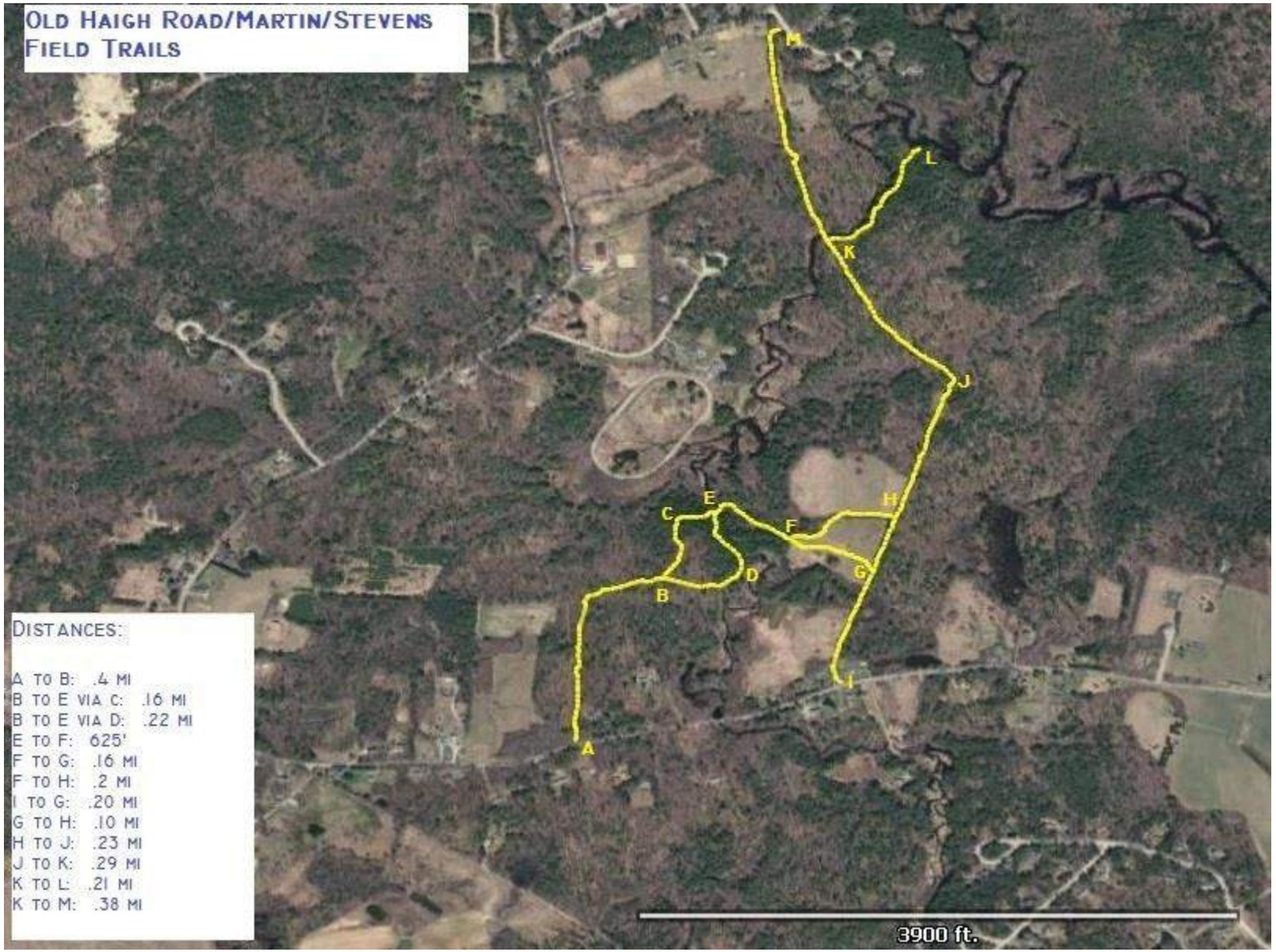

BRENTWOOD REC CENTER TRAIL
A
B
C
D
E
F
G
H
I
J
DISTANCES:
A TO B: .15 MI
B TO C: .16 MI
B TO D: .17 MI
D TO I (WEST LEG): .37 MI
I TO J: 500'
I TO D: (EAST LEG): .23 MI
D TO G: .13 MI
E TO F: .16 MI
G TO H: .17 MI
G TO A: .16 MI
2400 ft.


DEER HILL WILDLIFE
MANAGEMENT AREA
DISTANCES:
A TO B: .16 MI
B TO D (LOOP): .53 MI
B TO C: .16 MI
C TO D: .77 MI
D TO E: .24 MI
E TO C: .09 MI
E TO F: .20 MI
D TO F: .17
F TO G: 160'
G TO G (LOOP): .9 MI
2400 ft


KAUFMAN GOUN TRAIL
DISTANCES:
A TO B: .28 MI
B TO C: .73 MI
B TO D: .13 MI
D TO E: 590'
E TO G: 218'
E TO F: 302'
F TO G: 160'
G TO I: 475'
G TO I VIA H: .13 MI
F TO J: 210'
J TO K: .15 MI
K TO M: .10 MI
M TO N: 100'
N TO L: 140'
N TO K VIA L: .24
A TO C: 1.01 MI
A
B
C
D
E
F
G
H
I
J
K
L
M
N
2400 ft.


MERRILL/APPLE ANNIE TRAIL
DISTANCES:
2400 FT


OLD BARTLETT ROAD/LITTLE RIVER ROAD TRAIL
A
B
C
DISTANCES:
A TO B: .29 MI
B TO C: .44 MI
2400 ft.


OLD HAIGH ROAD/MARTIN/STEVENS
FIELD TRAILS
M
L
K
J
H
E
C
F
G
D
B
A
I
DISTANCES:
A TO B: .4 MI
B TO E VIA C: .16 MI
B TO E VIA D: .22 MI
E TO F: 625'
F TO G: .16 MI
F TO H: .2 MI
I TO G: .20 MI
G TO H: .10 MI
H TO J: .23 MI
J TO K: .29 MI
K TO L: .21 MI
K TO M: .38 MI
3900 ft.


SWASEY SCHOOL TRAILS
MIDDLE ROAD
A
B
C
D
E
F
DISTANCES:
A To B: 106'
B to C: 1,481'
C To E: 395'
C To D: 995'
D To E: 291'
E To B: 104'
D To F: 325'
WEST LOOP (BHCEHB): 0.4 MI
East Loop (FDCEDF): 0.38 MI