

Town of Brookline 1997 Master Plan Update

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CHAPTER I.

EXECUTIVE SUMMARY

CHAPTER I

EXECUTIVE SUMMARY

Municipalities derive their authority from state statute in New Hampshire. The Brookline Planning Board was established under the authority granted by RSA 673:1, Establishment of Local Land Use Boards. One of the planning boards duties is stated under RSA 674:1, Duties of the Planning Board. In part, this statute states; "1. It shall be the duty of every planning board established under RSA 673:1 to prepare and amend from time to time a master plan to guide the development of the municipality."

It has been proven in business that companies with "Vision Statements" are more likely to be successful and prosper. The same is true for towns and cities. To understand strengths, limitations and goals of a community, aid in the development of a sound guide or "vision statement". The master plan guides logical and thoughtful growth with respect for the past while providing vision for the future. As a municipality evolves, so does this guide.

The Brookline Planning Board is committed to sound planning. As part of that commitment, we present to you this most recent update of the Town of Brookline Master Plan.

We would like to extend our appreciation to the 1997 Master Plan Update Committee that consisted of a diverse group of over a dozen citizens who contributed to this document. Our appreciation also goes out to the Nashua Regional Planning Commission who helped guide them. In addition, our thanks to the organizers, Nashua Regional Planning Commission and New Hampshire Cooperative Extension Service, and the over 125 participants of the two day Community Profile conducted in the beginning of 1997. We value the citizen's opinions on the future development of Brookline. Finally, we give our thanks to the drafters of the 1985 and 1990 Master Plans. We build upon your vision.

It is appropriate at this time to review some of the 1990 Master Plan recommendations and goals achieved to date.

- Establish an official policy as to when high intensity soils survey will be required by developers.
- Gain better control of environmentally important areas, through conservation easements, deed restrictions and purchase of development rights of land.
- Re-examine the wetlands ordinance every few years to determine effectiveness and make improvements if necessary.
- The aquifer Protection Ordinance should be reviewed every few years to determine its effectiveness and make improvements, if necessary.

- Continue the practice of naming new roads with names of Brookline historical significance (such as Conneck, McIntosh, Captain Sever, Captain Douglass, Shattuck, Parker, etc.) as advocated by the Brookline Historical Society.
- The Town of Brookline should implement a pavement management system for targeting roads for maintenance, resurfacing and reconstruction.
- The town should establish a sign ordinance to control the size, type, height and location of signs to be put up in the future.
- Each town department should develop long-term equipment needs and include these in the Capital Improvements Plan.
- Each town department should recruit and train staff and reward them with public recognition and adequate protection equipment.
- Cable TV should be hooked up in the gym to provide better access to such large events as town meetings.
- Continue the sidewalk program to link the Elementary School to the nearby area.
- Plan, develop, and geographically distribute playgrounds, tennis courts, and picnic areas to add to the town's existing recreation facilities.
- The Town's Zoning Ordinance should be changed to:
 - a Clarify with regard to manufactured housing.
 - b To accommodate innovative land use that will allow all types of housing while not increasing the housing density of 1 unit per 80,000 square feet.
- Brookline should amend the Town's existing zoning ordinance to achieve the following:
 - a Not allow new residential uses in Commercial-Industrial zones.
 - b Allow accessory units and cluster developments as a way of increasing housing diversity. These may also fit appropriately in the town center area.
 - c Eliminate zoning that splits lots, and zone along lot lines and visible features such as rivers and roads as much as possible. This will reduce confusion and the workload of the Zoning Board of Adjustment.

Major recommendations (also listed at the end of each chapter), found in this Master Plan Update include:

NATURAL & CULTURAL RESOURCES (Chapter IV)

General Recommendations

Slopes

The Town should:

- Establish a policy to acquire scenic vista property, or an access easement thereto, as those lands become available.

The Planning Board should:

- Seek to ensure where possible the preservation of access to scenic vistas in new subdivisions.
- Ensure that proper safeguards are applied to steep sloped sites to minimize hazards to downslope properties, and these safeguards usually mean costly engineering and landscaping solutions. For these reasons, active use of steep slope sites should be avoided wherever possible, or approached with extreme caution and subjected to a thorough review of the safeguards to be employed. If possible, the Planning Board and Town should consider preserving such areas as open space.
- Amend the subdivision regulations by including soil erosion and sedimentation control provisions as has already been done in the non-residential site plan review regulations and the excavation site plan review regulations.

Soils

The Planning Board should:

- Replace the requirement for a High Intensity Soil Survey with Site Specific Soils Mapping Standards Society of Soil Scientists of Northern New England.

Wetlands

The Town should:

- Encourage the development of school and public environmental education programs that utilize the outdoors as natural classrooms, especially at the elementary school currently being planned.
- Gain better control of environmentally important areas, through conservation easements, deed restrictions and purchase of development rights of land.
- The Conservation Commission should:
- Re-examine the wetlands ordinance every few years to determine its effectiveness and make improvements, if necessary.

Floodplains

- Brookline should attempt to use floodplains as recreational land/open space.

Aquifers

The Conservation Commission should:

- Review the Aquifer Protection Ordinance every few years to determine its effectiveness and make improvements, if necessary.

The Town should:

- Continue exploring methods to reduce salt on Town roads, especially near watersheds.

Open space/Easements

The Conservation Commission should:

- Develop maps showing the location of its acquired open space and easement throughout town and publicize its availability. This map should also show future sites which will be targeted for acquisition or easement.
- Seek to connect greenways and wildlife corridors where possible.

Conservation and Preservation

The Town, Planning Board, and Conservation Commission should:

- Continue to monitor changes to the N.H. Shoreland Protection Act to ensure the continued protection of its two major lakes--Lake Potanipo and Melendy Pond.
- Identify and sell small town-owned parcels of land, which offer marginal public benefit and use the revenue to purchase land that will meet a top-priority need of the Town and its residents.

The Conservation Commission should:

- Prepare a Conservation Plan as allowed under RSA 36-A.
- Consider hosting a public forum such as the Community Profile sponsored by the University of New Hampshire Cooperative Extension to seek public input on and assistance with conservation planning and implementation.

Historic Resources

The Historical Society should:

- Prepare a historic resources inventory of Brookline.

- Encourage owners of eligible structures to seek National Register listing.

The Town Boards should:

- Promote the upgrading, preservation, and protection of the Town cemeteries, and other historical resources.
- Encourage the establishment of additional scenic roads.

The Planning Board should:

- Continue the practice of naming new roads with names of significant local natural features or historical significance (such as Conneck, McIntosh, Captain Seaver, Captain Douglass, Shattuck, and Parker) with the help of the Historical Society.
- Include historic resource preservation as a priority when possible in ordinance and regulation.

RESIDENT DEMOGRAPHICS & ECONOMIC PROFILE (Chapter V)

Growth Management Recommendations

- Actions need to be taken in order to accommodate the growth while minimizing the impact on the tax rate. One of these actions must include an updated CIP, which programs the costs of capital projects as evenly as possible.
- Another part of the solution is to time the growth so that the improvements can come further along in the future, allowing the Town more time to accommodate the growth. By limiting the number of building permits, which can be issued annually, the Planning Board can help moderate the growth in school enrollments.
- Phasing plans should be required for all major subdivisions. This would ensure slow, steady growth. This would allow both the Planning Board and School Board to anticipate the growth in Town.
- The Planning Board should begin to look beyond the lifetime of the Growth Management Ordinance and consider other alternatives for managing growth.

TRANSPORTATION (Chapter VI)

General Recommendations

- Frontage roads parallel with NH Route 13 within the subdivision(s) should be encouraged in order to limit the number of curb cuts on NH Route 13.
- Access drives to developments on either side of NH Route 13 should be aligned to form a four-way intersection.
- Encourage land use patterns, which will facilitate the use of a variety of transportation modes, especially walking and bicycling, for residents of all ages.

- As a long-term strategy, the town should explore the feasibility of establishing a transit feeder route to Milford and/or Nashua to serve residents and workers.
- The Town should assess the impact of traffic on the Town's road network, which may occur as a result of the Manchester Airport expansion.
- The Town should contact the New Hampshire Department of Transportation to investigate the possibility of no salt or reduced salt zones on all state roads that drain towards Brookline aquifers or wetlands. For example, South Main Street at the Nissitissit River, Route 13 from the state line to a point north of Lake Potanipo and Melendy Pond to a point north of marsh land on Route 13.

COMMUNITY FACILITIES (Chapter VII)

Recommendations

General

- The emergency services departments should explore coordinating their activities to ensure maximum efficiency in service to the public. An annual meeting between the departments, the Selectmen, and the Planning Board is recommended.
- Provide for handicapped access to community facilities.
- Each Town Department should develop long-term plans for capital equipment needs and include those in the Capital Improvements Program (CIP).
- Each Town Department should recruit and train staff and reward them with public recognition and adequate resources to perform their duties.
- All Town Departments should explore leasing equipment instead of purchasing.

Cemeteries

- The Selectmen should explore the long-term goal of constructing a public mausoleum to house resident remains.
- The Selectmen should explore the need to re-landscape cemeteries, which are suffering from natural deterioration.

Fire Protection

- The Fire Department should continue to actively participate with the Planning Board and Building Inspector to review subdivision, site, and building plans to ensure adequate fire department access and fire protection for all new and existing developments.
- The Fire Department should consider developing a policy to address false alarms by automated systems.

- The Fire Department should explore the feasibility of sharing space with the Police department in a separate building.

Police Protection

- The Police Department should explore the feasibility of sharing space with the Fire department in a separate building.
- The Selectmen and Police Department should explore the need for establishing an independent dispatch and detective service.
- The Selectmen and Police Department should explore the need to expand staffing levels based on current and anticipated activity.

Public Library

- The Selectmen and Library Trustees should consider providing additional parking at the library.
- The Selectmen and Library Trustees should explore the need to expand staffing levels based on current and anticipated activity.

Public Schools

- Based on currently capacity constraints, the School Board should work towards constructing new school facilities within Town, which will comfortably accommodate Brookline's anticipated future growth.
- Continue the sidewalk program to link all schools to the nearby area. Sidewalks should be provided within the radius around a school in which students are required to walk.
- As the Town grows, the Selectmen and School Board should consider providing for the schooling needs of all Brookline school-age children.
- The School Board should continue to utilize school facilities as a "town center" focal point for youth activities, especially in the summer.

Recreation and Conservation Facilities

- The Recreation Commission should develop a coordinated, long-range recreation plan that will provide for the support, expansion, and improvement of park and recreational facilities within each neighborhood in Brookline.
- The Conservation Commission should coordinate and publicize the Town's open space and easements throughout the Town.
- The Town should establish a land acquisition policy so that a coordinated effort can be made to acquire land when it becomes available.

- Town officials and the Melendy Pond Authority should work together to evaluate the present status of Melendy Pond property and to develop long-range plans for its future use to maximize benefit to the Town.
- The Conservation Commission should establish a Town-wide recreational trail system for community use.

Solid Waste

- The Town should continue to develop a long-term cost-effective form of waste disposal that will meet local, state and federal requirements.
- The Planning Board should amend the Zoning Ordinance to allow greater flexibility in the design, construction, and usage of community septic systems and wells.
- The Selectmen should assess the economic implications of the current method of recycling and assess the need to expand this program.
- The Selectmen should consider making containment and roofing improvements to the battery and waste oil area at the Brookline transfer station.

Town Facilities

- The Selectmen should continue to evaluate the need for an expansion and/or improvements to Town facilities.
- The Planning Board and Selectmen should identify and sell small town-owned parcels of land which offer marginal public benefit and use the revenue to purchase a tract of land that will meet a top-priority need of the Town and its residents.

HOUSING (Chapter VIII)

General Recommendations

- The Planning Board should consider amending the current zoning ordinance to allow for accessory units. The creation of a small unit within the structure of existing homes in certain locations should be considered. This option would allow new units to be built while still maintaining the rural residential character of the Town.
- The Planning Board should develop a process to assess the impact of the Town's zoning ordinance and subdivision regulations on housing to ensure that reasonable opportunities for affordable housing exist within Brookline and to promote quality, economical development.
- The Planning Board should consider amending the current zoning ordinance to allow for multi-family housing of three or more units. This will increase the amount of rental housing within town, and if sited properly by interspersing

throughout all neighborhoods, can fit in with Brookline's rural New England character. In the 1989 Master Plan survey, nearly one-third of respondents felt that allowing multi-family housing in certain area(s) of town would help provide more affordable housing--the highest response of any option.

- The Planning Board, or an appointed committee, should study the elderly housing needs within Town and develop a strategy to meet those needs, such as the creation of an elderly housing district. Issues such as access to Town facilities, transportation, unit design standards, and the requirements of the 1991 Americans with Disabilities Act, as amended, should be considered. Representatives from the senior community and the development community should be involved in this effort to ensure an effective outcome.
- The Town should encourage the conversion and/or renovation of large houses into several units. While in many cases it is both practical and desirable to convert these homes into multi-family dwellings, the issues of parking, sewage disposal, structural and landscaping alterations, density, and compatibility with adjacent land uses should be reviewed by the Planning Board.
- The Town and Planning Board should attempt to increase the availability and affordability of manufactured housing. The cost of manufactured housing units should be compared to conventional single-family homes to determine if the current ordinance provides a lower-cost housing option. If it does not, consideration should be given to increasing the allowable density or designating certain areas of Town as manufactured housing districts to ensure affordability.
- The Planning Board should amend the Open Space Development Ordinance to encourage or require a variety of household types for all income categories and for special needs groups.
- The Planning Board should continue to explore innovative land use that will allow all housing types, while not increasing the housing density of 1 unit per 80,000 square feet; such inclusionary housing strategies would provide incentives for private developers to provide a variety of housing options for lower-income and special needs groups.
- The Town should utilize the expertise and assistance of citizen groups, municipal staff, non-profit housing groups, state agencies and the Nashua Regional Planning Commission in addressing current and future housing needs within Brookline.

LAND USE (Chapter IX)

Recommendations for New Commercial and/or Industrial Districts

In 1997 the Planning Board identified a need to address the lack of available commercial land within Town and the difficulty of expanding the district, as evidenced earlier in this chapter. The Master Plan Update Committee considered the opinions expressed at the Community Profile and explored a number of strategies used by neighboring communities to encourage economic development, and has come up with the following recommendations to facilitate proper economic growth within Town:

- **Brookline economic development strategy:** Facilitate the expansion of existing businesses while encouraging the growth of new small businesses which preserve and enhance the Town's rural character, provide for resident shopping needs, and offer employment opportunities with strong earning potential for all age groups.
- **New Zoning Districts.** To enable commercial growth, new zoning districts with available vacant land should be established. The following districts and corresponding commercial uses are suitable for Brookline and are in keeping with the Town's economic development strategy. All new commercial districts should be designed to encourage concentric development patterns and discourage strip development. Key intersections of major roads in certain neighborhoods should be targeted.
 1. Neighborhood Business District. The intent of this district would be to provide for those businesses that serve local shopping needs and which are compatible with surrounding residential neighborhoods. Clusters of shops, small-scale shopping centers, and individual stores would be encouraged, while large regional shopping uses such as department stores would be discouraged. Examples of acceptable uses may include antique shops, banks, bakeries, beauty parlors, bed and breakfasts, child care facilities, drug stores, dry cleaners, florist shops, food stores, hardware stores, home businesses, and professional offices. Residential activity may also be permitted in the district to encourage a more integrated land use pattern.
 - This district may be appropriate at major road intersections in some Town neighborhoods.
 2. Office Park District. The intent of this district would be to attract corporate office and research facilities to a campus environment providing large open spaces, generous setback requirements, and compatible architectural and landscaping standards. Examples of acceptable uses may include corporate offices and research facilities.
 - This district may be appropriate on Route 13 near the Milford town boundary; on Route 130 near the Hollis town boundary adjacent to the Industrial District in Hollis; and west of Route 13 on the Townsend (MA) town boundary adjacent to the Outlying Commercial District.
 3. Light Industrial District. The intent of this district would be to provide for light industrial parks meeting specific performance standards. Traffic generation, building bulk, and intensity of site development would be restricted and standards would be set for environmental factors such as noise and air quality. Examples of acceptable uses may include office buildings, research and development, distribution and mailing facilities, machine shops, printing, publishing shops, and storage facilities.
 - This district may be particularly appropriate for Route 130 on the Hollis town boundary adjacent to the Industrial District in Hollis; at the intersection of Route 13 and Milford Street; and west of Route 13 on the Townsend (MA) town boundary adjacent to the Outlying Commercial District.

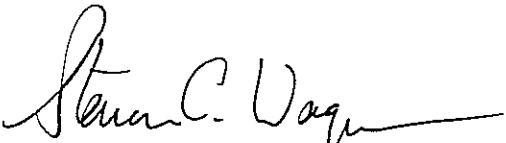
4. Town Center District. The intent of this district would be to maintain and enhance the historic character of the town center and to provide a central gathering place for town residents and visitors by encouraging commercial activity which is dependent on pedestrian traffic and which requires little land area. Examples of acceptable uses may include a community center, historic retail shops, bed and breakfasts and cottage-type businesses that cater to tourists.
 - This district may be particularly appropriate for the Main Street area, which includes Town Hall, the Library, and the Village Store.
- **Strategies to improve the economic environment.** Specific actions which may be taken by Town leaders to improve the Town's economic attractiveness include:
 1. Amend the Zoning Ordinance to remove obstacles to economic growth.
 2. Utilize public education mechanisms such as public meetings, special mailings, and media advertisements to address resident opposition to an expansion of the commercial district.
 3. Cooperate with neighboring communities to develop and conduct a marketing/advertising campaign to attract desirable industry to the Brookline region.
 4. Establish a formal, regular line of communication between Town officials and business leaders by creating a local business association, Chamber of Commerce, or Rotary Club or by utilizing more informal measures such as monthly breakfast meetings.
 5. Join the New Hampshire Main Street Program which provides technical support and training to promote historic and economic redevelopment of traditional business districts.

Telecommunications Recommendations

- A site selection committee should be formed to assess the current level of service, determine the number of towers necessary to provide adequate coverage, and research and recommend appropriate telecommunication sites within Town. Representatives from telecommunication carriers and industry experts should be included on the committee to ensure the sites are viable. This effort may result in a town wireless master plan, which could be used by the Planning Board in reviewing telecommunication facility applications. The committee should coordinate its plan with adjacent communities to ensure a coordinated regional telecommunication system, which may take the form of a negotiated regional service agreement.
- Once the plan is developed, the Town should explore the possibility of developing a strategy to purchase suitable telecommunication sites with the intent of leasing them to telecommunication providers, thus generating a steady source of revenue for such activity.

General Recommendations

1. Brookline should amend the Town's existing zoning ordinance to achieve the following:
 - a. Allow accessory units and cluster developments as a way of increasing housing diversity. These may also fit appropriately in the Town Center area.
 - c. Eliminate zoning that splits lots and zone along lot lines and visible features such as rivers and roads as much as possible. This will reduce confusion, and the workload of the Zoning Board of Adjustment.
2. The overall zoning ordinance should be reviewed and revised to create a coherent whole.
3. The Planning Board should develop and execute a process to determine what changes are required to be made to the Town's existing zoning ordinance regarding Commercial-Industrial zones in order to accommodate Commercial-Industrial growth in a manner that discourages "strip" zoning and encourages small commercial-industrial clusters.
4. The Town should ensure that existing land use regulations are enforceable.
5. The Town should identify and sell small town-owned parcels of land which offer marginal public benefit and use the revenue to purchase a tract of land that will meet a top-priority need of the Town and its residents.
6. The Town should consider the development of Neighborhood Business Districts in appropriate areas.


Steven C. Wagner, Chairman
Brookline Planning Board

CHAPTER II.

BROOKLINE HISTORY

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BROOKLINE HISTORY

Brookline was officially chartered on March 30, 1769 when the so-called "west-enders" from the Town of Hollis merged with the previously unaffiliated one mile wide tract of land called Mile Slip. The town was originally named the township of Raby in honor of one of the English peerages held by the Wentworths, the family that governed the colony for half of the 18th century. The new township was home to 70 settlers and included seventeen square miles of pine forest and hills as well as several tiny brooks funneling into numerous ponds and rivers. At this time only two framed houses had been erected in town, with the remaining settlers living in log cabins. Raby's early days were filled with legal battles ranging from a border dispute with Hollis and an internal struggle over where to build a new meetinghouse.

It is believed the current name of Brookline, adopted in 1798, was most likely suggested by one of the town's leading citizens, Benjamin Shattuck, who was from Brookline, MA. The impetus for the name change was reportedly that the town hoped to distance itself from a bad reputation developed as a result of an unscrupulous group of settlers residing in the southern end.

Farming was the town's main industry until the late 1800's, when lumbering and mills broadened the town's business base. The magnificent forests were the principal source of its prosperity, as eleven sawmills would spring up by 1840. In the town's early days they furnished large quantities of lumber for local use and later they were the cause of the establishment of the coopering business which for many years was the principal source of income for many inhabitants. At about the same time that lumbering became prevalent, the town's plentiful waterways also spawned a booming ice business on the 350 acre Muscatanipus Pond where the Fresh Pond Ice Company built what was then the largest ice house contained under one roof. Other early town industries included tanneries, brick manufacturing, granite quarrying, and blacksmithing.

Commercial activity in town was also enhanced by granting of a railroad charter to the Brookline Railroad Company by the state legislature in 1891. Operating under the name of the Brookline and Pepperell Railroad, the fourteen-mile line extended from Lake Potanipo to a point at or near the station on the Worcester, Nashua and Portland railroad in Pepperell, Massachusetts. The Brookline Station, one of three stations in town, soon became the center of commercial and social activity. At one point at the turn of century over seventy to eighty cars a day regularly left Brookline station for Boston loaded with ice, lumber and granite as well as passengers. Unfortunately, Brookline and other small rail stops became casualties of the decline of the railroad industry in the mid-20th century due to the rise in private truck transportation.

As a whole, the town's growth was slow for over 200 years, as the town essentially remained a quiet rural community. However, the pace of change quickened dramatically in the last 25 years, as the population growth rate soared. Brookline is now recognized as the fastest growing town in the state. This growth in population occasioned a rise in public services and community activities since the late 1960's. The following chronology reflects some of the more significant events in recent town history:

- 1962: New elementary school constructed.
- 1965-6: First elementary school expansion.
- 1968: Current firehouse built. Structure was expanded in 1980.
- 1969: Town enters into cooperative educational agreement with the Town of Hollis to send Brookline children in grades 7 through 12 to Hollis Junior and Senior High Schools. Town police department consists of six part-time officers. Brookline Recreation Commission formed. Lake Potanipo beach membership consists of 129 families.
- 1970: New diamond constructed for men's softball and little league programs. Town recreational activities consist of five leagues.
- 1973: Federal funds acquired to completed Babe Ruth baseball field. Way Off Broadway Players thespian group formed.
- Early 1970's: Town enters into regional agreement for emergency ambulance service with towns of Amherst, Hollis, Milford, Wilton and Lyndeborough.
- 1976: Town residents vote to fund first town 24-hour, all volunteer ambulance service.
- 1979, 1980, 1984: New fire truck purchased in each year.
- 1987: Brookline Elementary School expanded. New youth basketball league for over 180 children created.
- 1988: Town hires two paid attendants for ambulance service. Fourth of July fireworks event started.
- 1989: New Cooperative School District formed with the Town of Hollis.
- 1990: October's Eve event begun.
- 1992: First 24-hour police coverage initiated after expansion of police headquarters at town hall. Former Methodist Church youth activity center purchased and renovated to house town library, offering expanded meeting rooms and a reading area. First Fishing Derby held. Renovations to Town Hall (Daniels Academy Building) started.
- 1993: New youth soccer league formed. Brookline Public Library opened. Fire station and ambulance bay outfitted with a generator to serve as emergency shelters. Hi-band, multi-channel radio with paging capability installed to allow local control of emergency departments. New septic system and parking lot added to ambulance bay. Ambulance service enters into mutual aid agreement with the Town of Mason, to begin January 1994. Hollis-Brookline High School renovated.
- 1994: Police department obtains 4-wheel drive pickup. Ambulance service establishes Paramedic Intercept program as well as cooperative education program for high school students. Upgrade of computer infrastructure in Town offices begins. Local cable access channel begins operation.

- 1995: Elementary school receives six-room addition. Fire department purchases new fire truck and breathing apparatus'. Enhanced 9-1-1 emergency phone system installed with master street address guide for every house location. Emergency Operation Center relocated to Town Hall providing radio capability. Conservation Commission purchases Whitcomb lot at the headwaters of the Nissitissit across from the "Grove", and adds 49 acres of land to the Palmer Wildlife Preserve. Ambulance bay renovations completed. Brookline World-Wide-Web home page established. Town participates in N.H. Department of Transportation low-salt pilot program on Route 130.
- 1996: New Hollis-Brookline High School constructed on the 95-acre former Hackett Farm. Brookline school district explores new school sites and potential for a kindergarten program. New ambulance purchased. Library begins conversion of card catalog to computerized system. Town enters pilot program to retail electric power.
- 1997: Fire department includes twenty-five firemen, three fire engineers, three lieutenants and a captain. Ambulance staff comprised of two paid daytime attendants and 21 volunteers. Police department has grown to four full-time and ten part-time patrolmen. Brookline elementary school adds four portable classrooms to accommodate increased enrollment, which currently stands at 342 students. Lake Potanipo beach membership now consists of 242 families. Nineteen town recreational leagues in existence.

Sources: Brookline, New Hampshire: Two hundred twenty-five years 1769-1994, Brookline Historical Society, 1994.
History of Brookline New Hampshire, Edward E. Parker, 1914.
Gateways to Greater Nashua, Greater Nashua Chamber of Commerce, 1996.
Brookline Annual Reports.

CHAPTER III.

GOALS

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GOALS

This chapter presents the goals and tactics of the Master Plan Committee and Planning Board for future growth and development in Brookline. For each topic a goal statement is given, followed by one or more tactics. For each tactic there is a brief rationale and the sources from which it is derived. Specific recommendations for meeting these tactics and striving to attain the goals are located at the end of each chapter of the Master Plan and also in the Executive Summary.

PUBLIC INPUT

A public forum called the Brookline Community Profile was held in late January of 1997 to solicit public input for the update of the town's Master Plan. Those residents who attended provided their view of where Brookline stands now and their preferred vision for the town's future. These opinions are incorporated into this document where appropriate, and a copy of the Profile summary report is available at Town Hall for public review. Based on the input received at that meeting, the following statements were developed to describe resident's opinion of where Brookline is today and how it should develop in the future.

What is Brookline Like Today?

- Small, quiet, rural bedroom community
- Strong history
- Pristine natural environment
- Traditional values
- Prudent town leaders providing an excellent educational system and core public services
- Rapid growth placing a strain on public services, natural resources and common identity
- Slow commercial growth, resulting in the Town becoming increasingly expensive to reside

Vision Statement: What We Want Brookline To Be Like In The Future

- Rural character with small town atmosphere
- Residential, agricultural, home and small businesses, light commercial
- Grow in a balanced fashion, including residential, commercial, and open space
- Public facilities compatible with a small, growing town
- Town center as a focal point for community activities
- Balance this with protecting the natural environment

GENERAL

1) GOAL: To foster a greater sense of community identity.

a Tactic: Develop a true town center.

Rationale: A common theme that was expressed by participants at the Brookline Community Profile was the lack of a unified town identity. One of the top priority projects identified at the meeting to address that issue was the creation of a town center, which most residents feel currently does not exist. A town center would serve as a focal point for community activity, both economic and social, and would provide a central gathering place for all age groups. A town center may also serve to stimulate commercial activity, which would complement the economic development goals later in this chapter.

b Tactic: Strengthen town neighborhoods.

Rationale: Another strategy to build community identity is the creation of identifiable community neighborhoods. The planning and design of future residential developments could incorporate physical elements such as common greens, which would provide opportunities for citizen interaction. Neighborhood groups may be formed which could work with town officials to plan and implement improvements, which are based on the unique needs of each neighborhood. A strategy to foster a sense of neighborhood identity represents the first step in developing a sense of community pride and attachment to the town.

c Tactic: Increase volunteerism and citizen involvement in town affairs.

Rationale: One of the strongest sentiments expressed at the Profile was that many residents do not feel informed about or involved in their community. A need was identified to increase opportunities for community gatherings as well as to improve the lines of communication about those opportunities. These actions will engender a greater sense of community identity by making residents more knowledgeable about their community, fostering a sense of ownership in the town's future, and ensuring a vital pool of local leadership.

NATURAL RESOURCES

- 1) **GOAL:** To preserve the sensitive natural resources of Brookline and protect such resources from the adverse impacts of development for their future enjoyment and use by the public.

- a **Tactic:** Preserve and protect the quality of Brookline's water resources, whether occurring as surface water or groundwater, from contamination.

Rationale: While the threats to water contamination are numerous, cautious review of development proposals and a rational land use plan can prevent many of the problems other communities have suffered. Because Brookline does not have a community water supply system, the availability of a potable water supply is critical. Since water quality is an issue, which transcends municipal boundaries, an effort should be made to develop a coordinated water quality protection program with neighboring communities.

- b **Tactic:** More closely relate land uses to the land's capability to support development, and prevent intensive land uses from locating on soils and slopes unsuitable for such uses.

Rationale: Brookline does not have an abundance of the soil types, which are most well suited for development. In fact, most of Brookline's soils are rated by the Soil Conservation Service as having "severe" limitations for the safe operation of septic systems, as described in the Natural Resources Chapter. Additionally, substantial areas are wetland, floodplains, excessively sloped, and have shallow soil layers over bedrock. Some of these areas are unsuitable for development of almost any type and should be preserved, not only for their aesthetic or environmental qualities, but also because their development may ultimately impose a burden on the Town and may often cause problems for the occupants of such developments.

- c **Tactic:** Preserve and protect natural resource areas of open space and conservation lands within the Town for both people and wildlife including wetlands, forest lands, recreation lands, scenic areas, and other unique and/or sensitive resources.

Rationale: Natural resources are a finite entity. Attention needs to be focused on preserving those natural resources that exist today. Areas of wetlands, forest lands recreation lands and scenic vistas are valuable assets. When managed properly, these areas can offer a wealth of recreation, potential nature education, provide a natural habitat for land and water plants and animals, protect and recharge aquifers, provide scenic vistas from hilltop lookouts, and produce forest resources. As there is considerable acreage of this kind within Brookline, the Town should plan accordingly for their protection, preservation and optimum use based on community need.

- d **Tactic:** Preserve and protect Brookline's rural character and open space including areas of existing agricultural use.

Rationale: While Brookline does not have extensive areas of agricultural soils of statewide importance, it does have areas where agricultural practices presently

occur. Though the soils may not be best suited for agricultural use, their size, location, and ownership allow for their viable and economical agricultural use. As these areas contribute to Brookline's cultural, economic and rural character, efforts are needed to protect the more important areas from permanent conversion to another, more intensive land use.

- e Tactic: Develop a strategy, which allows reasonable opportunity for excavations within town while minimizing the impact on the human and natural environment.

Rationale: Every town in the state must by law provide "reasonable opportunity" for commercial earth removal. Brookline originally allowed excavations anywhere in town by special exception, but a petition by residents was approved at Town Meeting to limit excavations to the Industrial-Commercial District. Given the relatively small area, which this zone covers, and the limited vacant space within the zone, the guarantee of reasonable opportunity is in question. A sensible strategy will help to comply with legal requirements while ensuring that environmental quality is preserved.

- f Tactic: Increase the human and financial resources available for conservation planning and public education.

Rationale: Enhancing environmental protection was one of the key issues identified by residents who participated in the Brookline Community Profile. Past conservation efforts were characterized as relatively weak and sporadic, mainly due to limited manpower and financing. As such, a committee was formed to provide support to the Brookline Conservation Commission and to enhance the visibility of environmental issues within Town. This group provides a solid foundation upon which to build a comprehensive, organized and sustainable conservation program.

- g Tactic: Develop a long-range plan for the conservation of sensitive lands within Town.

Rationale: A long-range plan is necessary to ensure that valuable conservation land is properly identified and prioritized, and that limited conservation resources are expended in a prudent manner.

- h Tactic: Ensure that local environmental ordinances are effective, enforceable, and current with state laws and regulations.

Rationale: An ordinance, which is improperly drafted, unenforceable, and/or outdated, is of no benefit to the environment or the Town's residents.

CULTURAL RESOURCES

- 1) GOAL: To preserve areas and institutions within Brookline having cultural value to the Town as evidence of its unique character.

- a Tactic: Preserve and protect existing areas of historical significance from incompatible future development.

Rationale: Brookline is fortunate to have both unique cultural resources and strong community desire for their preservation. Much of the Town's present rural character, which is considered a valuable community asset by residents, is the direct result of historical growth patterns and events. However, if not regulated, future growth can permanently and extensively alter this valuable cultural resource. Therefore, there is immediate need for protection and preservation of areas of historical significance.

- b Tactic: Continue to preserve the rural character and scenic quality of the Town's roads.

Rationale: Many of the roads in Town, particularly those categorized as Class VI, have natural features which enhance the rural nature of Town, which is a characteristic which many residents hope to preserve.

TRANSPORTATION

- 1) GOAL: To provide safe and efficient transportation facilities within the Town of Brookline.

- a Tactic: Provide roads of sufficient design to allow for safe use of traffic generated by existing and future residential growth.

Rationale: The Town has experienced rapid growth, primarily residential, in recent years. This development has resulted in new roads being built and has heightened the demand on road facilities in Town. New roads must be designed, and existing roads must be upgraded, to accommodate the increased traffic demands of a growing community.

- b Tactic: Provide for proper maintenance of existing local roads.

Rationale: The rural character of Brookline's road network, including its paved and gravel roads that are often narrow, winding, steep, and/or in deteriorating condition, may lead to safety problems as future growth in Town occurs. To help provide favorable transportation conditions, the Town should continue to examine necessary improvements to the roads, which will see significant increases in traffic or where safety hazards need correction.

- c Tactic: Provide for commercial and industrial development within existing and potential future zones designated for such development that will not negatively impact existing traffic conditions along NH Route 13.

Rationale: Strip development along major highways often leads to congested, unsightly, unsafe traffic conditions. For people using the highway for through travel, this leads to unsafe conditions, thereby negating its intended use. Proper siting of commercial and industrial zones along with efforts to regulate unlimited access to fronting lots will help to prevent the conditions that lead to traffic problems along major roads such as NH Route 13.

- d Tactic: Identify potential future road corridors within Town and between adjacent communities to serve future travel demand.

Rationale: A long-range plan should be developed to assess potential future travel demand and to propose new road facilities which will facilitate efficient travel for destinations inside and outside of town. This proactive measure will ensure that a coordinated system will be achieved by requiring developments to provide road access where those corridors are designated.

- e Tactic: Seek to provide a variety of transportation alternatives for town residents.

Rationale: Driving an automobile is currently the only mode of transportation available to most residents. However, not everyone has the ability or inclination to drive. An effort should be made to identify and implement improvements, which will facilitate pedestrian, bicycle, transit, and other travel options for those residents who are interested in using alternative modes. These improvements will especially benefit school-age children, the disabled, disadvantaged residents and the elderly.

- f Tactic: Encourage land use patterns, which make transportation alternatives viable.

Rationale: Since Brookline is a newly developing community, an opportunity exists to shape the future development of the town in a way that reduces the need for driving and increases the opportunity for, and attractiveness of, alternative modes of travel. Strategies such as cluster housing, neo-traditional design, and mixed land use may result in less demand on public road facilities and an improved quality of life for town residents.

COMMUNITY FACILITIES

- 1) GOAL: Provide adequate levels of community facilities and services to present and future residents and businesses in an effective manner that adequately promotes public health and safety, safeguards environmental quality and achieves accepted standards.

- a Tactic: Maintain a well-trained and equipped Town Fire Department to protect the Brookline community from avoidable loss of life and property due to fire.

Rationale: Like any rural community, Brookline requires fire protection, but must provide it with a limited budget. With Town purchased equipment and call-paid staffing, the Town attempts to provide a professional fire protection service. The Department must grow in its ability to adequately provide fire protection in step with Brookline's future growth.

- b Tactic: Maintain a well-trained and equipped Town Police Department, ready to provide police protection in time of Community need or emergency.

Rationale: Brookline's need for police protection is often greater than existing budgets and levels of staffing are able to provide. Future growth will increase demand. The Department must grow in ability to adequately provide police protection in step with Brookline's future growth.

- c Tactic: Maintain a well-trained and equipped Town Ambulance Service to provide medical response to the Brookline Community in times of emergency or need.

Rationale: Medical emergencies in any community demand immediate and experienced attention in order to prevent loss of life or serious injury. Rural communities often have a further disadvantage over more populated towns or cities in that they do not have the funds or trained personnel to be able to provide the service. For communities without local ambulance service, the responding medical help comes from larger neighboring communities but over greater distances that use up critical time.

- d Tactic: Furnish adequate resources to provide for resident needs in the case of major emergencies.

Rationale: The Town recently implemented an Emergency Management program, which coordinates emergency departments and provides a central location for emergency management efforts. As the town grows, the adequacy of current resources should be reevaluated to ensure that adequate facilities and manpower is available to serve the needs of all residents.

- e Tactic: Provide for adequate space and staffing in order to allow proper functioning of Town Departments and Boards.

Rationale: In order for Towns to function in an organized, effective manner, they need both adequate personnel and facilities to conduct business. Small-town offices are often staffed with part-time workers and have marginally adequate available Town Hall facilities. To insure continued efficient handling of all Town operations in response to future demands, review and evaluation of existing facilities and staffing is necessary.

- f Tactic: Provide educational facilities and programs to provide educational opportunities for all school age Brookline residents. The use of school buildings for community-based activities should be encouraged.

Rationale: Municipal school systems are an integral element in the life of any community. As it is a Town's responsibility to provide the necessary facilities, staff, and materials to educate the Town's school-age children, each Town is faced with substantial expenditures of public funds to do so. Currently the Brookline School District is planning for the construction of a second school building. However, a review of Brookline's educational resources versus future growth demands is necessary so that suggestions can be developed to allow educational facilities to meet the future needs of Brookline students. A study of present and future educational facilities for use by the Town's citizens and organizations is encouraged to maximize the benefits of the public expenditures for those facilities.

- g Tactic: Provide for an adequate public library facility offering the Brookline community a variety of children and adult reading materials and programs.

Rationale: The local library is important, whether it provides pre-school learning materials, supplements existing school educational programs, or provides popular materials for pleasure reading. The Brookline Public Library currently offers an excellent variety of services to the community, as reflected by the strong support expressed at the Community Profile, and has continued to expand its offerings since its inception. As the Town grows, steps should be taken to identify resident needs and available resources, and to program new services to meet those demands within resource constraints.

- h Tactic: Provide a variety of accessible recreational resources for individual, family, and group enjoyment within the community.

Rationale: Helping residents better identify with and appreciate their community, public recreation provides opportunities for all residents to enjoy themselves and the natural resources around them. Those attending the Community Profile expressed an interest in greater availability of and access to recreation land. Since recreational opportunities often transcend municipal boundaries and since public resources are often limited, an effort should be made to coordinate recreational facility programming with neighboring communities. Recreational needs and programs vary from one community to another, but common interests such as greenways may be found.

- i Tactic: Provide for disposal of Brookline's solid waste, septage and sludge in an environmentally and economically sound manner.

Rationale: Local communities are now beginning to face the reality of limited means of safe and economical disposal of their wastes. Due to problems such as increasing costs, limited sites and groundwater contamination, communities have to cooperatively address the problem as a regional issue.

- j Tactic: Encourage new developments to provide its proportional share of public facility and road improvements.

Rationale: The Selectmen should continue to ensure through the off-site improvement negotiation process that developments pay their proportional share of public improvement costs and that all developments are treated equally with respect to their impact on public services.

- k Tactic: Ensure the availability of adequate land for future community facility expansions.

Rationale: The rapid growth of the town has resulted in an increased demand for public services. All of the aforementioned departments have experienced significant growth in their activity, and as this trend continues, physical expansions will inevitably be necessary. An evaluation of current community facilities, their utilization, and future needs and a long-range plan for future expansion will ensure that they are provided in an orderly, fiscally prudent manner.

- l Tactic: Develop and maintain a realistic, current Capital Improvements Program (CIP).

Rationale: The CIP is the key document which describes in detail each Town department's personnel, facility and equipment needs for a six-year period. This document is based on the goals and future plans identified in the Master Plan, and is required by state law since the Town has a growth management ordinance in place. The CIP, in conjunction with the Master Plan, is used in analyzing existing and future availability of public facilities to service new growth; it contributes to stability in tax rates through advance financial planning; and it is a management tool for Town officials. The Selectmen and department heads must provide realistic information to ensure the accuracy of the document, and must rely on the document in conducting Town business.

HOUSING

- 1) GOAL: Ensure adequate and affordable housing for all Brookline residents.

Tactic: Identify and amend current land use regulations which may impede the development of alternative housing types, or unnecessarily add to the cost of housing without adding comparable value.

Rationale: The Town, through its current policies, regulations and zoning, can influence the cost of housing. Ensuring affordable housing is important to encourage a diversity of population and to allow residents who work in the service sectors to afford to live in Brookline. Employees who cannot afford adequate housing often live in substandard housing or may relocate to other areas. Strategies should be explored which address the lack and high cost of rental units within Town.

- 2) GOAL: Encourage a diversity of housing opportunities and appropriate housing types including housing for the elderly and lower income residents of Brookline and the region.

- a Tactic: Develop zoning regulations and districts to provide adequate opportunities for the siting of elderly housing, manufactured housing, accessory units, and multi-family units in Brookline.

Rationale: Ordinances that allow and encourage affordable housing will increase housing diversity in Town. Elderly housing has been determined to be the top-priority affordable housing goal. Inclusionary housing strategies that provide incentives to affordable housing developers should be explored. The effectiveness of the existing manufactured housing district should be assessed in relation to the goal of providing a greater diversity of housing options and revised if necessary.

- b Tactic: Utilize the expertise and assistance of various organizations in addressing current and future housing needs within Brookline

Rationale: Organizations, such as local citizen groups, town staff, non-profit housing groups, state agencies and the Nashua Regional Planning Commission possess valuable expertise and resources to assist the Town in addressing affordable housing needs.

LAND USE

- 1) GOAL: To accommodate a reasonable rate of residential growth in suitable areas of town in accordance with the capability of land and the capacities of town services and facilities.

Tactic: Maintain Brookline's rural character and protect critical natural resources through residential zoning which accounts for the land's capability to support development, and the suitability of certain areas for residential uses.

Rationale: Brookline is one of the few truly rural communities remaining in the Nashua region, and this rural character is what has attracted new residents to it. The dilemma the town faces is how to preserve this character, which is what makes it so attractive, and yet accommodate its "fair share" of the region's growth without losing this character. Brookline recognizes its obligation to accept a share of this growth and realizes that it is inevitable, yet the common perception of residents is that the rate of residential growth has been too fast. For this reason, Brookline will continue to accept reasonable rates of growth which do not strain community facilities and services, which do not threaten environmentally sensitive features, such as wetlands and water sources, and which are located in suitable areas of the community.

2) **GOAL:** To expand opportunities for commercial development in a manner which accounts for land capability and the suitability of proposed locations, so as to broaden the tax base without causing excessive service demands, traffic hazards, overly intensive uses, or aesthetic incompatibilities with Brookline's land uses and character.

- a Tactic: Allow for selected types of commercial activity in locations meeting criteria for land capability, locational suitability, traffic and access considerations, intensity of use, demand for public services, and site design and architectural considerations.

Rationale: The community's desire for expanding the tax base through additional commercial land uses was strongly recommended by residents at the Brookline Community Profile as well as in the 1985 Master Plan public survey. Certain types of commercial uses were more favorably viewed than others, and the general sentiment was that the rate of residential growth has far outpaced commercial growth, creating an imbalance, which has produced a significant rise in the local tax burden. Residents expressed a desire for a cautious expansion of commercial opportunities of a very narrow range of types. Activities such as home businesses and office developments are examples of desirable commercial development, while more intensive uses such as heavy industry and general strip development were opposed.

However, it should be noted that Brookline's slow rate of business growth is a function of the Town's remote location relative to the regional market, lack of a strong local market to support any exclusively local commercial uses, and availability of more attractive commercial land and locations elsewhere in the region. As such, the town should focus first on the retention and expansion of existing businesses, and then seek to attract a variety of less intensive commercial enterprises which will serve the daily needs of residents, retain more local spending, and provide employment opportunities for young adults.

- b Tactic: Cooperate with neighboring communities to stimulate economic development.

Rationale: Brookline alone may encounter difficulty in attracting commercial growth, owing to its small population base and limited marketing resources. However, by joining with neighboring communities in the region, an effective campaign may be waged which would produce benefits for all municipal participants.

- c Tactic: Provide reasonable opportunity for the siting of telecommunication facilities.

Rationale: The Federal Telecommunications Act of 1996 requires that all municipalities comply with this mandate. However, the Town may still establish siting and design standards to ensure compatibility with the Town's rural character.

- 3) **GOAL:** Provide opportunities for limited industrial development, of a scale that is compatible with Brookline's rural character and in a manner which considers the capability of land to support such uses, the suitability of proposed locations for industry and the possible environmental and fiscal impacts of industry.

Tactic: Establish locations, siting criteria and review standards to allow for a cautious expansion of Brookline's limited industrial base in a manner which prevents environmental harm and land use incompatibilities.

Rationale: Community Profile participants expressed some interest in industrial development, such as small industrial parks. Both the 1985 and 1989 Brookline Master Plan Opinion Surveys asked several questions regarding industrial development. Responses to the 1985 questions generally point to the conclusions that (1) previous five years industrial growth has been "about right" to "too slow"; (2) light industry (assembly) should be "allowed" if not "encouraged"; (3) only 20 percent of households said new industry should not be allowed, while 52 percent called for a cautious review of such proposals, and 28 percent said the Town should encourage industrial development; (4) over 70 percent of households express a preferred location for new industrial development.

The 1989 survey results were similar, with over half the respondents stating that commercial growth from 1985 to 1989 was "about right". Many of the respondents wanted to keep the current commercial-industrial zoning (along Route 13), and nearly one-third wanted areas added to encourage industry to locate within Town.

With these responses in mind, the Town will probably not see a great demand on the part of industry to locate here. This conclusion is based primarily on Brookline's lack of public water systems and relative high cost of housing and housing and land in this Region and in the Town.

For these reasons, Brookline will not likely be the site of new facilities for major manufacturers. However, Brookline could attract smaller scale, less labor and service intensive type uses such as warehousing, small assembly operations, and small, non-labor intensive manufacturers. Individually, such uses do not broaden the tax base significantly, but several such uses, in a well-designed industrial park setting, would have the desired effect on the tax base and could be sited without environmental harm or excessive demands for Town services such as police, fire or schools.

- 4) GOAL: Ensure that all existing land use regulations are effective, enforceable, and current with state standards.

Tactic: Review the Zoning Ordinance and subdivision and non-residential site plan regulations annually.

Rationale: An ordinance which is improperly drafted, unenforceable, and/or outdated is of no benefit to the Town's residents, adds unnecessarily to administrative burden, and fuels a negative public perception of the regulatory process.

CHAPTER I V . .

NATURAL & CULTURAL RESOURCES

CHAPTER IV

NATURAL AND CULTURAL RESOURCES

This chapter examines the natural and cultural resources of the Town of Brookline. First, the natural features are identified which impose limitations or constraints to development. Particular emphasis is placed upon those natural features which determine land capability to support land uses of different intensities, such as topography, soils, and both surface and groundwater features. Second, the Town's cultural resources are discussed with regard to their importance to the Town and future planning considerations for their protection.

NATURAL RESOURCES

An understanding of Brookline's natural resource base is important when developing an overall plan to guide development. The following sections provide a brief description and inventory of the natural resources found within Town.

The Town of Brookline is located in the Lower Merrimack River Valley. Like most communities in the Nashua region, the Town is overlain by glacial till soils deposited as glaciers slowly retreated in a northwesterly direction over this region thousands of years ago. These glacial till soils are, in many areas of town, sparsely spread over granite or other types of bedrock.

Topographic Features

The topography of Brookline can generally be described as consisting of gently sloping hills located in three of its four corners with a central low-land which runs generally from the north-central portion of Town to the southeast. Topographic features consist of two characteristics: elevation and slope.

Elevation

Elevation is a measure of the height of a given point of land relative to Mean Sea Level. To make elevations comparable, they are expressed as "feet above Mean Sea Level" (ft. aMSL). Elevations in Brookline range from a low point of under 220 ft. aMSL, in the Town's southeast corner, to a high point of just over 800 ft. aMSL along the Town's eastern border with Hollis, on Birch Hill. Other significant elevations include Russell Hill which rises to 738 ft. aMSL, and Potanipo Hill and Hutchinson Hill, both over 600 ft. aMSL (Map IV-1).

The higher elevation areas within Brookline are important as they provide a vantage point from which to view the area's scenic vistas. Table IV-1 shows these vistas and their corresponding elevation.

TABLE IV-1
SCENIC VISTAS

Hill Name	Elevation (aMSL)
Birch Hill	810
Russell Hill	738
Unnamed (northwest corner)	642
Potanipo Hill	627
Bear Hill	615
Unnamed (SW of Rocky Pond)	613
West Hill	590
Unnamed (northwest corner)	557
Hutchinson Hill	600
Unnamed (E of Corey Hill)	523
Corey Hill	515
Hobart Hill	508
Rock Ramond	477

Source: U.S.G.S. maps

Slope

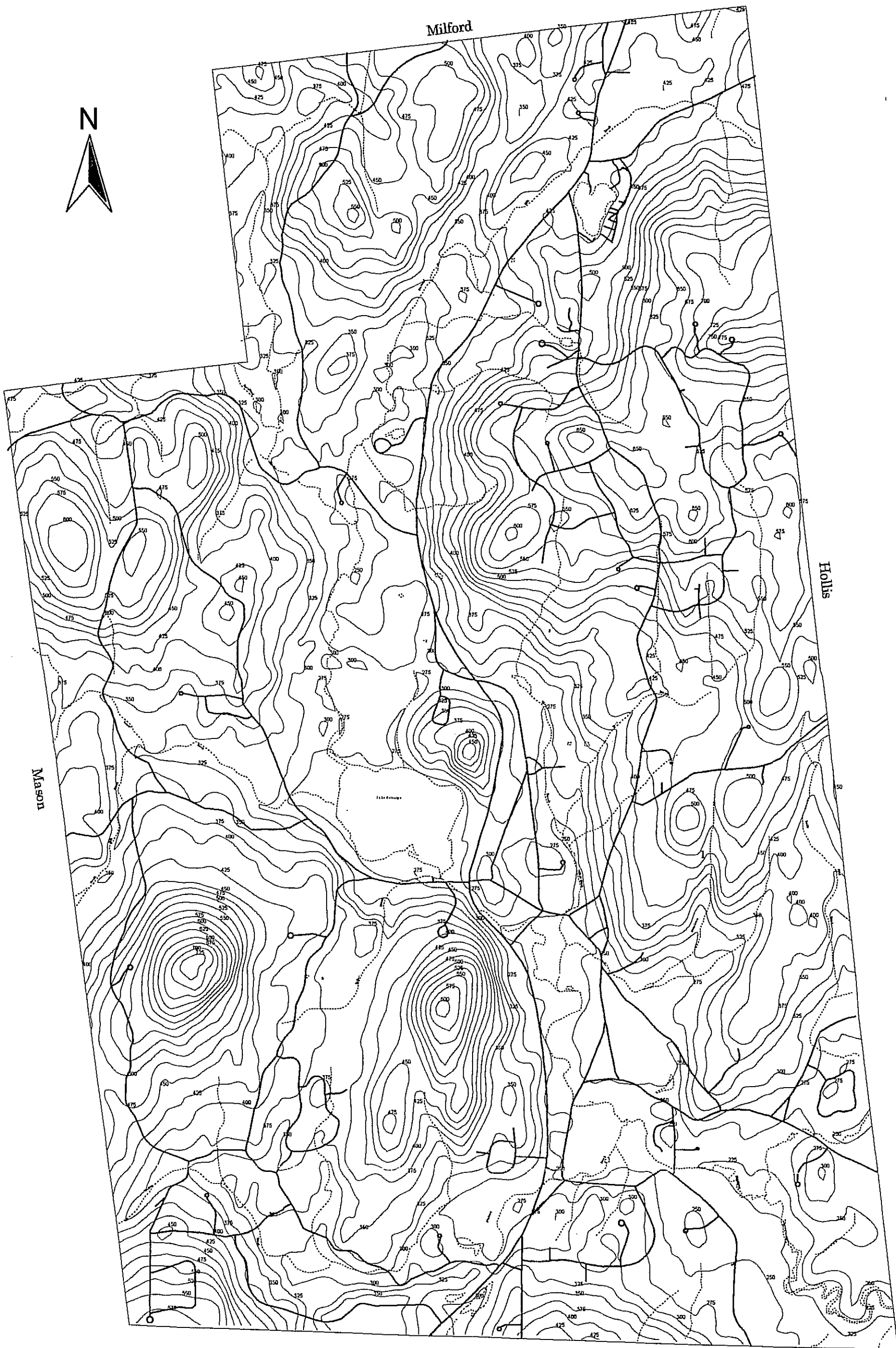
Slope is a measure of the pitch or "steepness" of land between two given points. It is expressed as a percentage, which is calculated by dividing the change in elevation between two points by the distance between the two points. Land with 0% slope is level, and land with 100% slope has a pitch equal to a 45 degree angle. The slope or relative steepness of a parcel of land is a critical determinant of its ability to support certain land uses. Slope categories, and the problems of development on them are described below. Areas within Town with steep slopes, defined as slopes greater than 15 percent, are shown on Map IV-2.

25% and Greater Slopes

Land areas in this category are among the most difficult to develop. These areas will require extreme care and usually need special engineering and landscaping to be developed properly. The major problem of development on slopes of 25% or more is that generally, steep slopes have only a very shallow layer of soil covering bedrock. Because of this, safe septic system installation is very difficult, storm water run-off is accelerated rather than absorbed, and soil erosion potential increases. Road and driveway construction to steep sloped sites is more difficult and costly, and also increases the amount and velocity of surface run-off.

15% to 25% Slopes

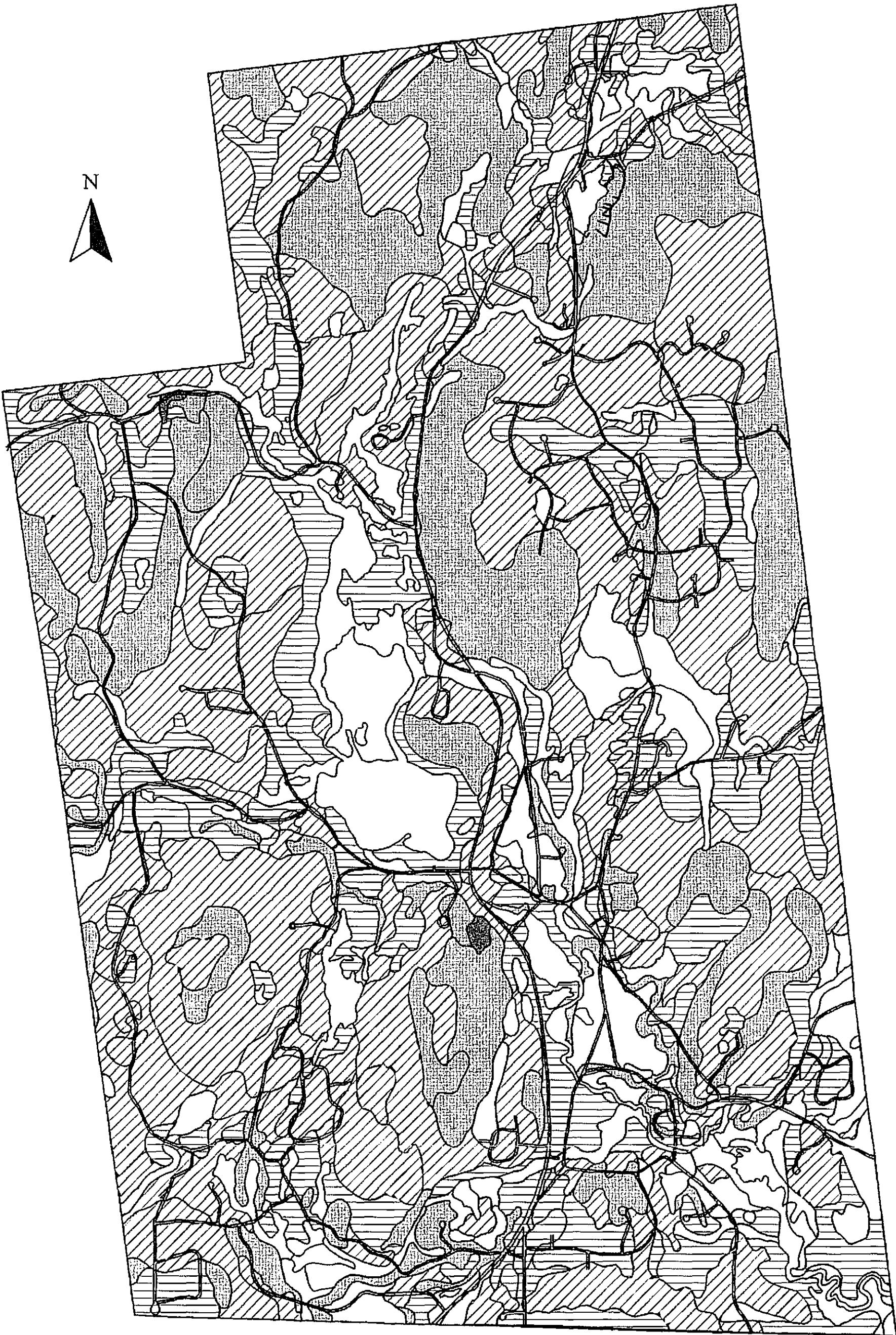
While somewhat less severe, the same problems and concerns expressed above regarding slopes in excess of 25% apply to slopes in the 15-25% category. The soil layer over bedrock on 15-25% slopes may be slightly deeper, but in many cases it may be insufficient to properly support the safe installation of a sub-surface waste disposal system. Accelerated surface water run-off and soil erosion will also be legitimate concerns of development proposals for these areas. Road construction will also encounter the same problems as in the 25%+ slope category.



Town of Brookline
TOPOGRAPHIC MAP

Not to Scale

Note: Full Scale version available
for review at Town Hall



- 0 - 3 Percent Slope
- 3 - 8 Percent Slope
- 8 - 15 Percent Slope
- 15 to 25 Percent Slope
- Greater than 25 Percent Slope

Town of Brookline
STEEP SLOPES MAP

Not to Scale
Full scale version available
at Town Hall

Land areas within the 15-25% slope category should also be subject to thorough reviews of the proposed safeguards needed to protect down slope properties from insufficient septic system treatment of wastes, soil erosion and accelerated surface water run-off.

8% to 15% Slopes

Land areas in this slope category will exhibit, to a lesser extent, similar difficulties to those of steeper slopes; however, in many cases the costs to overcome these problems make the development of such slopes much more feasible. Development potential of such sites will, in most cases, be determined by specific site characteristics, such as depth and type of soils and the intensity of the proposed development. For these reasons, specific site investigations and a close review of proposed septic and erosion safeguards are urged for any development proposals on parcels in this category. It is reasonable to expect that more and more proposals to develop such sites will arise as the more suitable low and flat land becomes developed.

0% to 8% Slopes

Land areas within this slope category are generally the best for active development, provided soil types are suitable. Land in this slope category will generally be capable of supporting the most active or intensive land uses in Town, unless specific site characteristics, other than slope, impose constraints upon its use. One notable exception would be for land of 0 to 3% slope at low elevations overlaid by poorly or very poorly drained soils.

The purpose of establishing these slope categories and delineating steep slopes on a map is not to preclude the use of such areas, but rather to identify such areas and provide a general guide to the potential problems which development of such areas may face. The mapping and descriptions of such slope categories is not a definitive guide as to where development should or should not occur. Specific site characteristics should be investigated to determine the extent to which the potential problems identified herein must be overcome in the course of development. The slope data must be used along with soils and water resources information to determine a specific site's natural capability to support a proposed use.

Soil Features

Soil types are perhaps the single most critical determinant of a parcel's capability to support development. In communities such as Brookline, soils serve as the sole medium of sewage purification because of the Town's total reliance upon individual septic systems. Additionally, each soil type has different physical and chemical properties influencing the ways in which that soil may be used. The Natural Resources Conservation Service (N.R.C.S.) of the U.S. Department of Agriculture, has conducted extensive surveys and analyses of the soils found in Brookline and Hillsborough County. From these surveys and analyses, the N.R.C.S. has identified the characteristics of each soil type and determined the capabilities and limitations of each for particular uses (see Soil Potentials for Development, Town of Brookline Soils and their Interpretations for various Land Uses, and the Soils Survey of Hillsborough County, New Hampshire--Eastern Part all available in Town Hall).

For planning purposes, soils are examined here in two ways; the first analysis divides the soil types into seven distinct categories, which have broad implications regarding development potential and planning for future land uses. The second analysis examines the ability of a soil type to support the proper functioning of a sub-surface septic system by determining the limitations of the soil to absorb and purify septic effluent.

In general terms, Brookline's soils are predominantly of two types: the low-lying land in the Town Center and southeast quadrant is of Hinckley-Windsor types, while the balance of Town is characterized as being of Canton-Chatfield soil varieties. The first type (Hinckley-Windsor) is described as excessively drained, gravelly and sandy. However some land areas within this group are poorly and very poorly drained soils or wetlands. The Canton-Chatfield soils are well-drained, loamy soils and are often found on slopes and covered with forest. Map IV-3 shows individual soil types by area throughout Brookline.

A more specific analysis divides the many soil types into the following seven categories: wetland, floodplain, sand and gravel, seasonally wet soils, shallow-to-bedrock, hardpan, deep-stony, and soils which are prime farmland or of statewide importance for agriculture.

1) Wetland or Wet Soils: Soils in this category are poorly and very poorly drained, and serve as water storage areas which recharge stream flows during dry months. They are often nearly level and may be ponded or have standing water on their surface. They pose tremendous problems to development and their active use for development purposes is prohibited through the Wetlands Zoning Ordinance. More detail is given to this resource later in the chapter and in the Water Resources Management and Protection Plan.

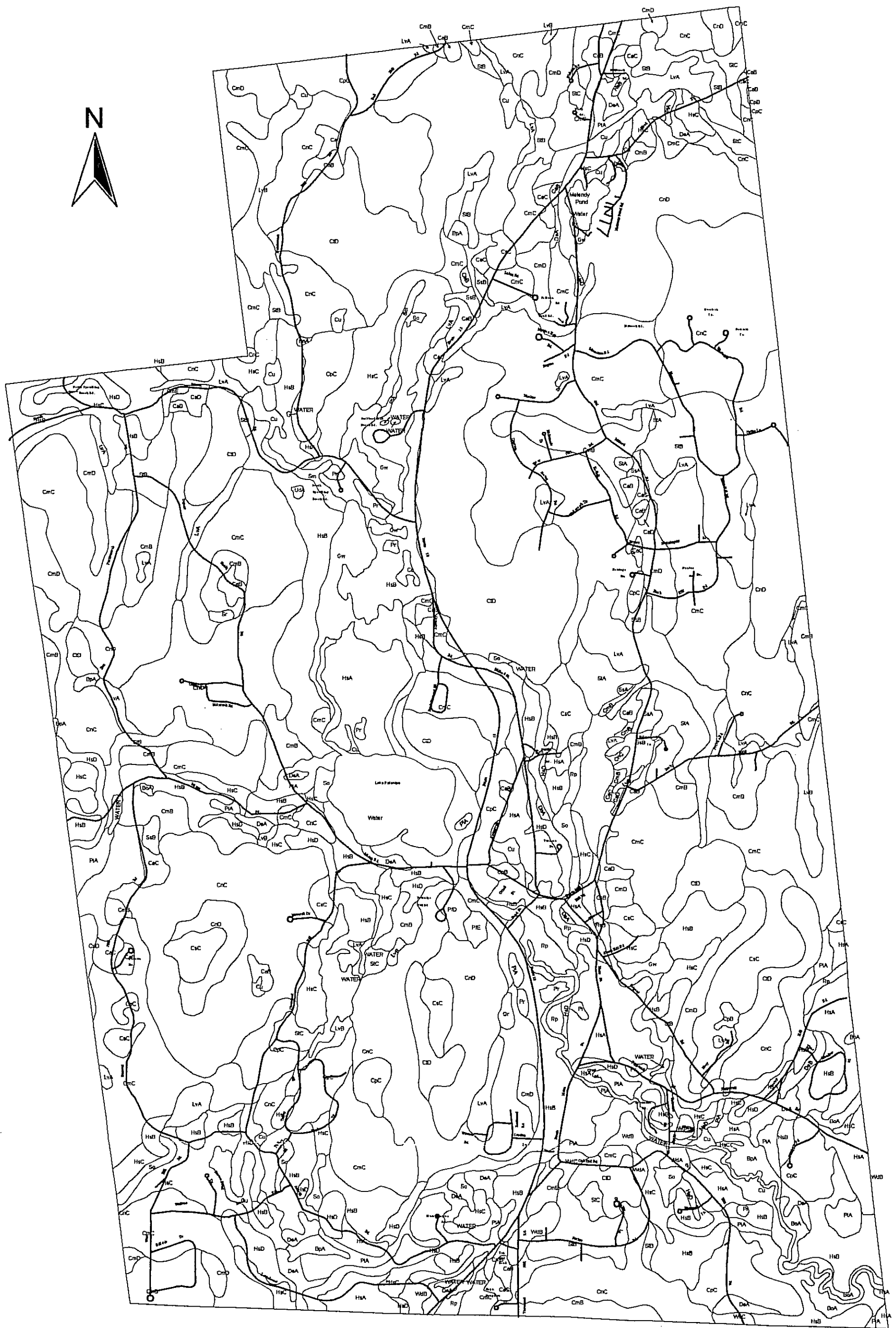
2) Floodplain Soils: These are soils found adjacent to rivers and streams, which deposit the soil by flooding of these water courses. Because Brookline has only a few minor water courses, there is little floodplain soil within Town. These soils are often among the finest agricultural soils in the State.

3) Sand and Gravel Soils: These soils are excessively drained and are characterized by their rapid permeability. These are among the most predominant soil types in Brookline. Because of the rapid permeability, they act as a poor filter. These soils may also be stony, especially the Hinckley soils. They are highly erodible, do not yield groundwater to a great degree, and are the least stable in holding slopes or banks.

4) Seasonal Wet Soils: These soils are moderately well drained and found in upland depressions. Because they generally form a relatively thin soil layer over bedrock, they will have a tendency to have a seasonally high water table, which imposes severe restrictions on their ability to be used for septic systems and home construction. They are found in scattered locations among the hills surrounding the low-lying Town Center and southeast portion of Town.

5) Shallow-to-Bedrock Soils: This category contains several soil types, which generally form an extremely thin layer over bedrock (generally 30 to 40 inches deep). They are moderately to well-drained, are generally covered by woodland and have very limited capacity to yield groundwater. Because they are so thin, their use for septic systems is severely limited, although sites with sufficient depth to bedrock can be found.

6) Hardpan Soils: These soils are characterized by a 24 inch layer of well-drained soil underlain by a dense, slowly permeable hardpan layer of up to 60 inches deep. Due to this hardpan layer, these soils have severe limitations for use as septic system leaching areas. They are found in one location in Brookline, just south of Lake Potanipo on the slopes of a drumlin, or glacier-formed hill.



Town of Brookline
SOILS MAP

Source: Soils Conservation Service

Not to Scale

Note: Full Scale version available
for review at Town Hall

7) Deep-Stoney Soils: Soils in this category represent the predominant soil type in Brookline. They are described as well drained, often contain stones and boulders at or near the surface, and are found on slopes of the hilly uplands which surround the Main Street area and Route 13. Depth to bedrock is typically in excess of five feet, much of this soil type is covered by woodland, and the availability of groundwater is moderate. The greatest limitations to development imposed by these soils are the stoniness of the soils and their designation as having severe limitations to development, although relatively flat or moderately sloped parcels of this soil type may have only moderate limitations to development.

Soils and Septic Limitations

Our second analysis of soils examines the limitations of each soil type and slope combination imposed on its use for subsurface septic system installation and operation. It is important to remember that this analysis combines information regarding both soil types and slope, and that it does this at a scale, which is unsuitable for site-specific analysis and decision making. This analysis will not replace or eliminate the need for site investigation to determine land capability. It is provided to give a broad overview of the potential for development in Brookline and to alert the planning board of potential problems, which certain land areas will present. While the soil types are delineated on the Master Plan maps with a reasonable degree of accuracy, specific soil types referred to on the map are those of the predominant soil type within the mapped area. Actual boundaries between soils on the ground are not so easily discernible and will vary from those mapped. Thus, site inspections and more thorough study of the soils of any site cannot be replaced by the maps, which accompany this plan. (See Septic Limitations Map in Town Hall.)

The septic limitation's analysis by the N.R.C.S. examines the following characteristics or properties of land areas for their capability to support the safe installation and operation of subsurface septic systems:

- 1) permeability of soil
- 2) depth to water table
- 3) depth to bedrock
- 4) steepness of slope
- 5) stoniness or rockiness of soil
- 6) susceptibility to flooding

Land areas have been categorized as possessing either slight, moderate or severe limitations to proper septic system operation due to the combined effect of these six characteristics.

Slight Limitations: Land areas designated as having slight limitations are the most capable of supporting safe operation of septic systems. Any limitations of these areas are considered to be easy and inexpensive to overcome. Unless other site characteristics limit their suitability, they are recommended for active use and development. In fact, because there is so little land of this classification in Town, these parcels should be used as efficiently as possible, perhaps by clustering residential or commercial uses to maximize the efficient use of these most buildable land areas in Brookline.

Note: For Legend of Soil Types refer to *Soil Survey of Hillsborough County New Hampshire Eastern Part*.

Moderate Limitations: Land areas in this category have moderate limitations or constraints to septic system installation or operation. Their development and use will require planning, careful review, and usually remedial engineering or landscaping work to overcome the limitations imposed. These limitations will not preclude the development of these parcels, but they are identified to alert interested parties that special consideration and potentially expensive remedial work may be required to safely develop such sites. Land areas in this category are scattered among the hilly uplands, and are in more plentiful supply than parcels of slight limitation. Because there is so small a portion of the land in Town within this category, these land areas should be used as efficiently as feasible while recognizing that limitations to their use exist. Moderate-density clustering may be feasible on selected sites, which are so designated.

Severe Limitations: Land areas with this designation have the poorest capability to be used for septic system operations due to one or more of the characteristics used to evaluate its potential. This designation should not be interpreted to mean that these land areas are incapable of supporting development. Rather, the "severe" designation alerts the developer and planning board of the need to identify the limitation(s) and make sure that any and all remedial actions to overcome the limitations are made. The importance of site inspections in such cases cannot be over-emphasized.

By applying this classification to Brookline soils, approximately 80% of the Town is found to be in the severe category. As previously mentioned, however, these are six different soil characteristics or properties that are considered in classifying a soil. Depending on which specific property warranted the severe rating, this will be reflected in the economical and technological requirements necessary to use the soil for residential septic systems.

Those areas classified as having moderate limitations for septic system operation, when combined, total approximately one-fifth of the Town's total area. The predominant areas of soils classified as such are located in the southeast corner of Brookline, west and southwest of Russell Hill, south of North Mason Road, along portions of Old Milford Road, and south of Rocky Pond Road.

Unfortunately, not much of the Town is underlain by soils falling into the slight limitation class. These 5-20 acre parcels are scattered over much of the Town, but total only 150-200 acres. Since these areas of slight and moderate septic limitations do not constitute a large portion of the Town, where applicable, planning for future growth should allow for their optimum use.

Water Resources

Natural resources within Brookline associated with water include watersheds, floodplains, wetlands and aquifers. A more detailed description and assessment of Brookline's water resources can be found in the Water Resources Management and Protection Plan.

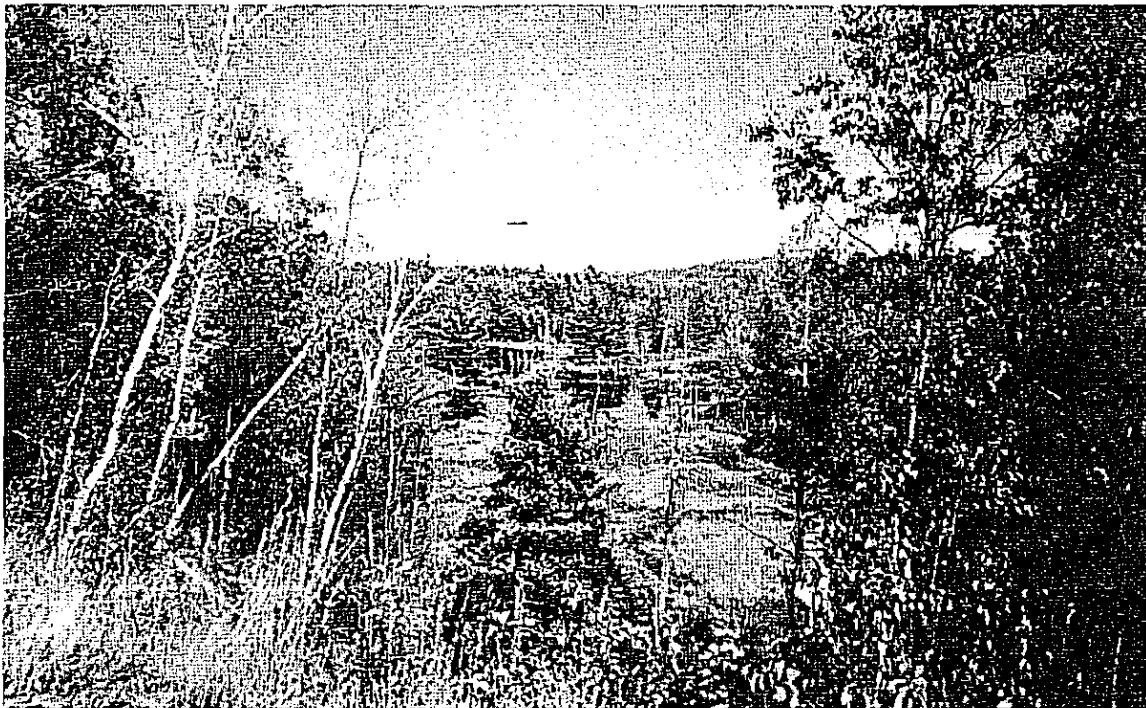
Surface Water

Watershed Areas

Brookline can be divided into a number of watershed areas based on the existing stream channel network and topographic divides. The major watersheds include North Stream/Scabbard Mill Brook, Village/Stonehouse Brooks, Talbot Brook, Wallace Brook, and Rocky Pond Brook. Water from each of these watersheds combines to flow into the Nissitissit River, the beginning of which runs through southeast Brookline.

Floodplains

Although the Nissitissit River runs through southeastern Brookline, flowing out from Lake Potanipo, only small amounts of floodplain exist within Town. Most of it is located along the banks of the Nissitissit River, Wallace Brook, Stickney Brook, Mill Brook, Spaulding Brook, North Stream, parts of Scabbard Mill Brook and Stonehouse Brook, and Talbot Swamp, Pout Pond, Trout Pond, Pierce Pond and Lake Potanipo. These are shown as Zone A on the Federal Emergency Management Agency (FEMA) maps dated 1987 and shown in the Water Resources Plan.



Floodplain development is restricted by the Floodplain Ordinance, which is part of the Zoning Ordinance.

Wetlands

Existing wetlands include those areas particularly sensitive to development. They perform a unique function within the hydrologic system of each watershed. Wetlands provide the vital link between incoming precipitation and aquifer recharge, flood storage and prevention, erosion control, and water purification of sediment contaminants and problem nutrients. Depending on the type of wetland involved, they also provide important habitat to a variety of vegetation and animal life including aquatic plants, insects, amphibians, fish, and

waterfowl. In mapping the region's soils, the NRCS has delineated those soils having poor to very poor drainage based on individual soil properties. Wetland soils found in Brookline, shown on Map IV-4, are of the following type:

Very poorly drained	Symbol	Poorly Drained	Symbol
Borochemists (BoA, BpA)	BoA, BpA	Binghamville	Bg
Chocorua (Cu)	Cu	Leicester Variant	LeA, LsA
Greenwood (Gw)	Gw	Leicester-Walpole Complex	LtA, LtB, LvA, LvB
Saco Variet	Sm	Pipestone	PiA, PiB
Scarboro	So, Sr		
Ridgebury	RbA, ReA, ReB		
Saugatuck	Sn		

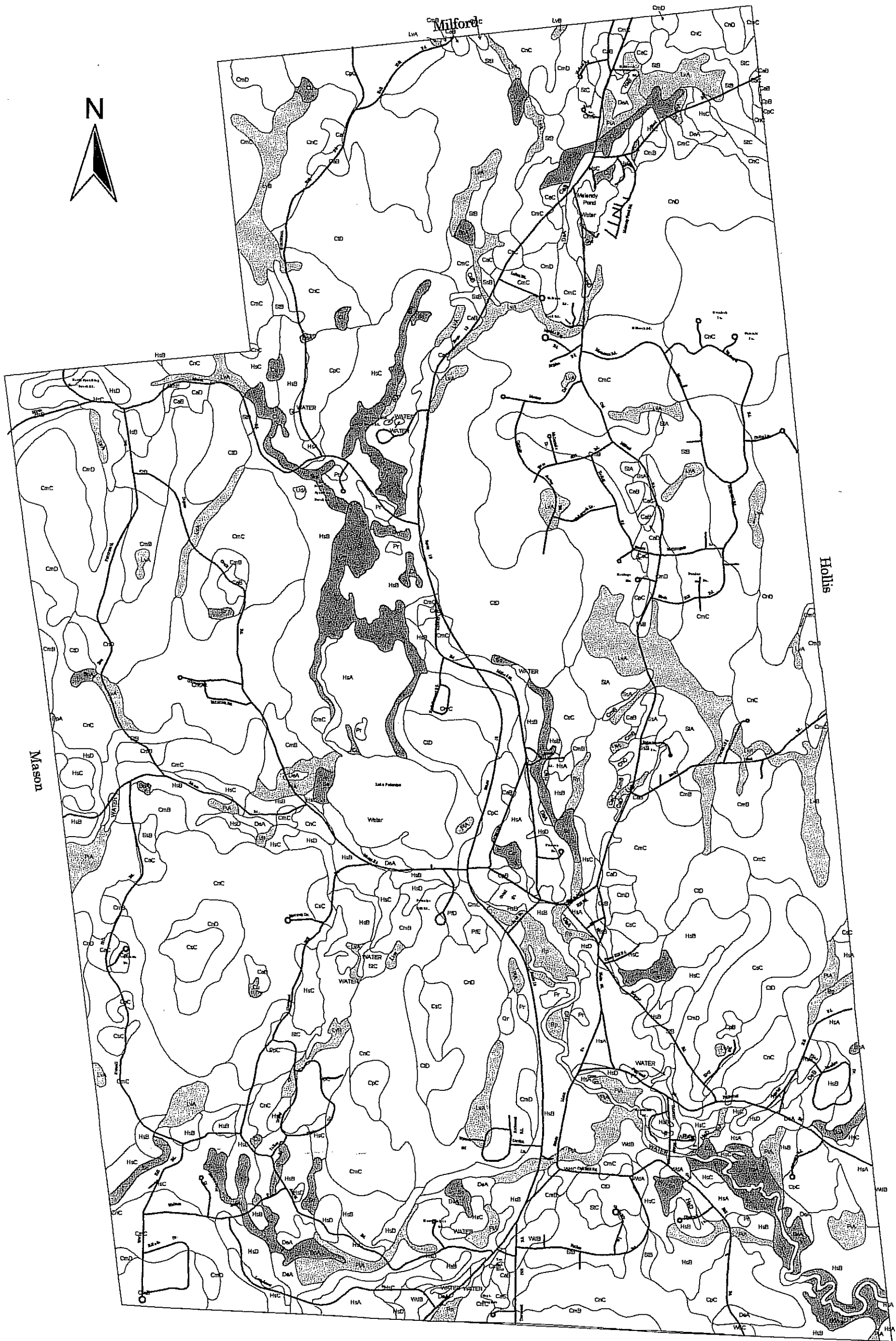
As shown, major concentrations of these soils are found to exist in the areas of Wallace Brook, Stickney Brook, Rocky Pond Brook, and the Nissitissit River in southern Brookline; Lancy Brook, Lake Potanipo, North Stream, Village Brook, and Stonehouse Brook in central Brookline; and Scabbard Mill Brook and Melendy Pond in northern Brookline.

Wetland areas are usually located adjacent to or very near open water as found in the Town's rivers, streams lakes and ponds. This relationship is the result of a localized higher water table and the source of greater quantities of water during periods of high stream flow. There are also some scattered pockets of wetland soils throughout the Town, usually at the bottom of low-lying areas or depressions.

In 1987, the Town passed the Wetland Conservation District as part of the Zoning Ordinance. This article restricts development within wetlands and ensures that each lot in Town has at least 60,000 square feet of non-wetland area to accommodate sewage disposal.



Wetlands such as this one near Route 13 are protected by the Wetland Conservation District, which is part of the Zoning Ordinance.

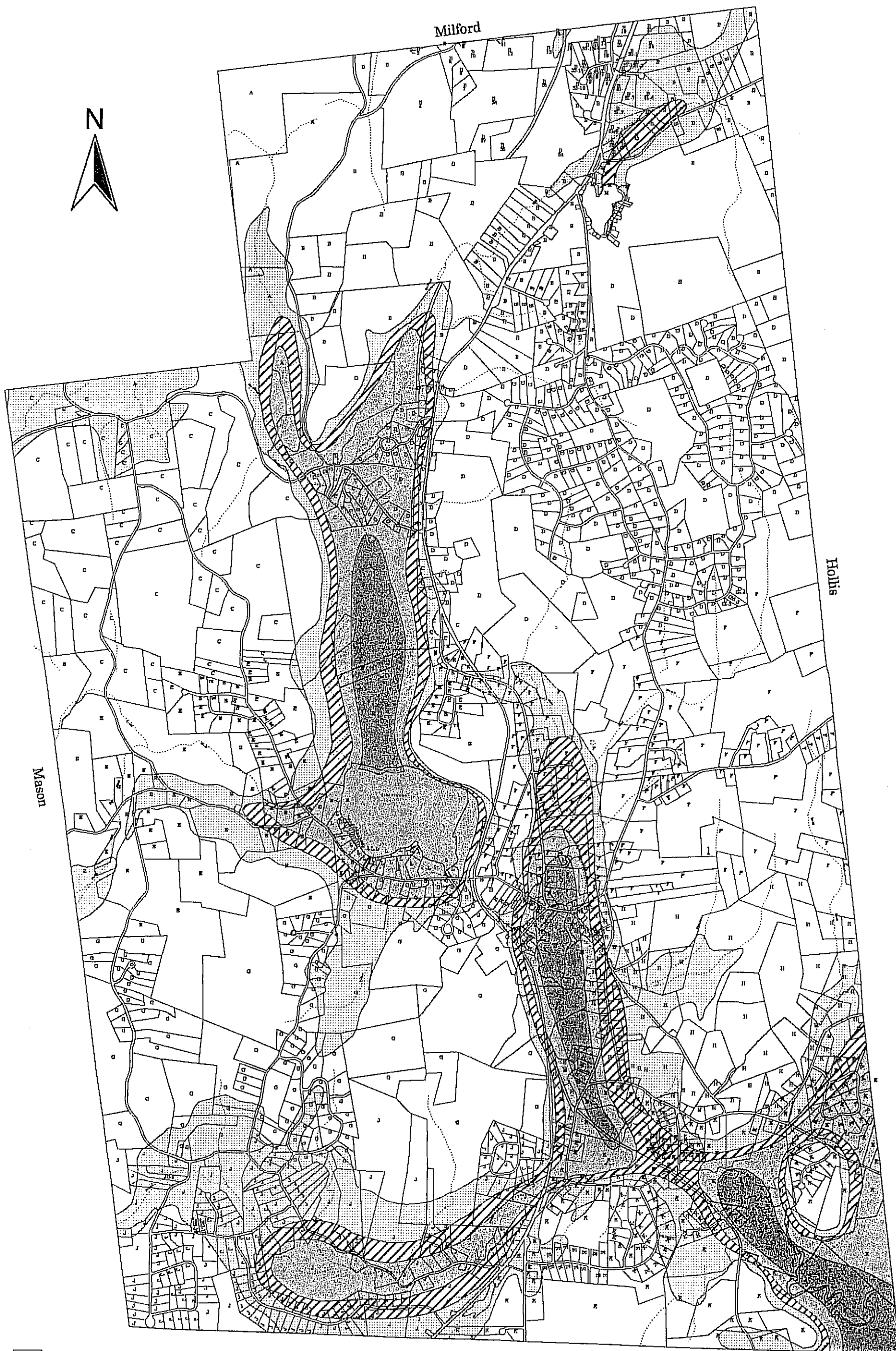


- Roads
- Poorly Drained
- Very Poorly Drained

Town of Brookline
WETLAND SOILS

Not to Scale

Note: Full Scale version available
for review at Town Hall



- Undefined Areas
- Low-Moderate Yield (0-2,000)
- Moderate Yield (2,000-4,000)
- Moderate-High Yield (4,000-8,000)
- High Yield (8,000 Plus)
- Parcel Lot Lines & Numbers
- Waterbodies

Not to Scale

Note: Full Scale version available
for review at Town Hall

Town of Brookline AQUIFER MAP

Groundwater

Aquifers

Existing aquifers presently being used or having potential for future use in Brookline are grouped either as being composed of stratified drift, glacial till, or bedrock materials. Studies and mapping completed by the USGS in 1987 entitled Hydrogeology of Stratified Drift Aquifers and Water Quality in the Nashua Regional Planning Commission Area, better delineates the hydrogeologic characteristics of this resource (see Map III-5).

Stratified drift aquifers provide the best potential for providing adequate supplies of water in Brookline. According to the USGS study, 31 percent of Brookline is underlain by stratified drift. These deposits, laid down in the valleys during periods of glacial retreat, are generally well sorted sands and gravels. These materials have a higher porosity than finer-grained sediments or poorly sorted till deposits and therefore contain larger quantities of water and provide larger well yields. High potential aquifer areas exist north of Lake Potanipo, between Route 13 and Main Street, and in southeast Brookline near the Nissitissit River. These are shown in dark blue on the USGS aquifer map located in Town Hall. Moderate potential aquifer areas are more numerous in Brookline. These mapped areas are found farther north and directly south of Potanipo Pond, along Wallace Brook, and beneath more of the Nissitissit River northwest of the high potential area.

Other mapped areas in this study included low potential yielding aquifers within the glacial till deposits covering much of the remainder of Town. The poorly sorted nature of these materials and their shallowness contribute sufficient quantities of water for domestic use only.

The USGS study delineates where the till aquifers may be by showing where stratified drift deposits are not found. Because of the type of material involved in till aquifers, this type of aquifer is relatively shallow and directly overlaying bedrock. It is also very likely to be localized in extent. These aquifers can be easily impacted by contaminants from land use practices including septic system operation, agriculture, industry, underground fuel storage tanks, and surface runoff containing road salt. Unfortunately, little else is known about the till aquifers other than where the deposits are. Further site specific study using existing water well and soils information may be helpful in defining them. As these localized, shallow aquifers are tapped for a large percentage of private water supplies, compatible land use siting is of concern here as it is with the stratified drift aquifers.

Construction Materials (Extractive)

Construction materials, such as sand and gravel, are usually found in areas with stratified drift deposits. Excessive removal of the materials overlying the saturated drift can increase the potential for groundwater contamination. The soil above the groundwater acts as a filter by removing suspended contaminants as the water percolates down, although this soil type is generally not considered a good filter due to its rapid permeability. Thus, if too much material is removed, the filtering capacity of the soil is diminished and contaminants can reach the groundwater more rapidly and in increased concentration.

Canton and Hinckley soils, which are found throughout most of Brookline, are also good indications of the presence of sand and gravel. Both the Soils Map (Map IV-3) and the Aquifer Map (Map IV-5) show the location of construction materials within Brookline.

In November 1989, the Planning Board adopted Excavation Site Plan Review Regulations. Before 1989, earth removal permits were granted by the Board of Selectmen. Permits, which have been granted by the Town, and other recent decisions regarding earth removal, are listed in Table IV-2.

TABLE IV-2
EXCAVATIONS WITHIN BROOKLINE

Year Approved	Lot Number	Applicant Name	Description
1984	J-57	Torres	Averill Rd.; excavate muck from pond and refill (completed)
1985	C-10	Bourassa	S. Spaulding Brook Rd.; (completed)
1986	H-91	Joki	(Completed)
1986	D-89	Whitcomb	Route 13/Scabbard Mill Brook Rd.; renewed annually; last renewed May 1990 (completed)
1997	J-9-2	Town of Brookline	Averill Road; for town road projects (active)
1997	A-6	Burbee	Spill-over from Milford operation; 35 acres rezoned to I-C (active)

Source: Brookline Town records.

The Conservation Commission should:

- Prepare a Conservation Plan as allowed under RSA 36-A.
- Consider hosting a public forum such as the Community Profile sponsored by the University of New Hampshire Cooperative Extension to seek public input on and assistance with conservation planning and implementation.

Historic Resources

The Historical Society should:

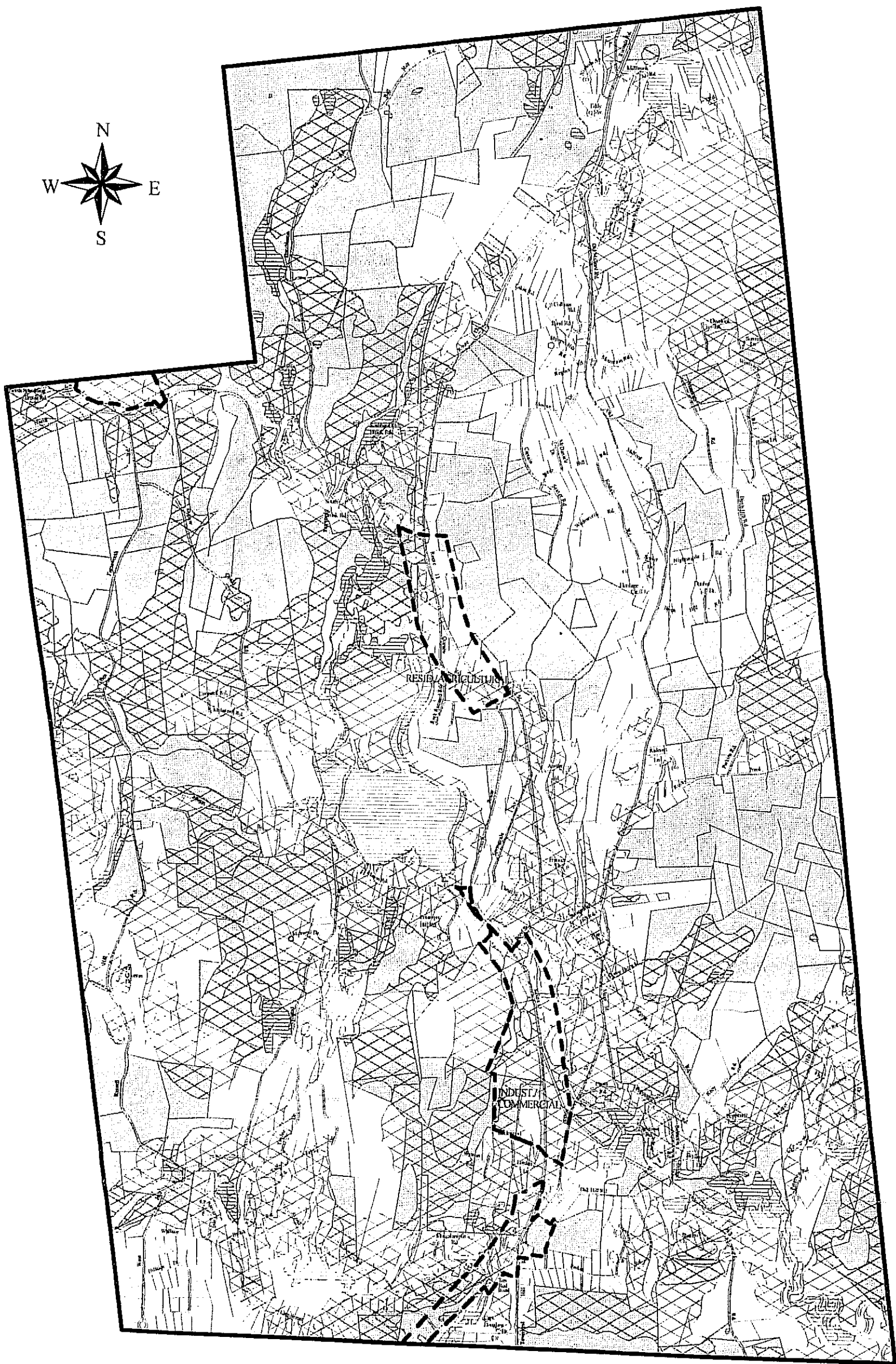
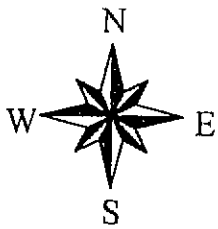
- Prepare a historic resources inventory of Brookline.
- Encourage owners of eligible structures to seek National Register listing.

The Town Boards should:

- Promote the upgrading, preservation, and protection of the Town cemeteries, and other historical resources.
- Encourage the establishment of additional scenic roads.

The Planning Board should:

- Continue the practice of naming new roads with names of significant local natural features or historical significance (such as Conneck, McIntosh, Captain Seaver, Captain Douglass, Shattuck, and Parker) approved by the Historical Society.
- Include historic resource preservation as a priority when possible in ordinance and regulation.



- Brookline Zoning Districts
- Vacant
- Hinkley / Canton Soils

This map shows the co-occurrence of vacant lands within the Commercial & Industrial Districts that contain Hinkley or Canton soils. These areas may be available and suitable for excavation.

Town of Brookline Excavation Map

Not to Scale
Note: Full Scale version available
for review at Town Hall

Land Available for Excavations

The Town is legally required to provide "reasonable opportunity" for excavation operations. Before 1992, excavations were permitted anywhere in Town by special exception granted by the Zoning Board of Adjustment. However, at the 1992 Town Meeting, Brookline residents submitted a petition to limit excavation operations to the Industrial-Commercial District, which was approved.

Map IV-6 shows vacant land with suitable soil for excavation activities. Approximately 65 acres are currently available; however, only four lots totaling 16 acres lie entirely within the industrial/commercial district, as shown in Table IV-3 below.

TABLE IV-3
VACANT LOTS WITH EXCAVATION POTENTIAL
ENTIRELY WITHIN THE I-C DISTRICT

<u>Lot Number</u>	<u>Location</u>	<u>Acreage</u>
C-36-1	Route 13, south of N. Mason	2.0
H-101	Route 13, west of S. Main	3.5
H-107	S. Main	1.8
K-75	S. Main / Rt. 13	9.2
Remaining Acreage		<u>48.1</u>
Total Vacant Acreage		64.7

It is recommended that the Town and Planning Board seek to ensure that the Town fulfills its legal obligation to provide reasonable opportunity for excavation operations by submitting a zoning amendment at Town meeting. This amendment would permit excavations where suitable soils are located in Town by special exception granted by the Zoning Board of Adjustment. Clear, strict standards must be adopted which will address resident concerns about the impact of such activity in residential neighborhoods. The Town and Board must educate citizens about the legal necessity of providing reasonable excavation opportunity and the economic benefits of allowing that activity within town. Concerned citizens should be involved in drafting the ordinance.

The Town and Planning Board should also pursue a longer-term goal of identifying and purchasing suitable excavation sites to use for Town projects. This strategy will result in significant cost savings over the long term by reducing the need to obtain and haul materials from out-of-town locations. The Melendy Pond area and Camp Tevya area are examples of potentially attractive locations for this purpose.

Agricultural Land Use

As mentioned earlier, there is little floodplain soil within Brookline. Since floodplain soils are usually areas of good agricultural land, Brookline does not have large acreage of good agricultural land. A minimal amount of land in Brookline is currently used for agricultural purposes.

Wildlife

Brookline is endowed with a vast array of plant, fish and animal species. The variety is due to the variations in habitat, such as hills and mountains, rivers, lakes, ponds, and streams, wetlands, open fields and forests found within Town. Variety and quality of habitat are the most important factors in maintaining a diversity of species in quantities healthy enough to ensure their viable continuation. Wildlife habitat areas are important because they meet specific needs of certain species. Wetlands and fresh water marshes provide nursery areas for waterfowl and fish, hunting grounds for predatory birds and general habitat for many species of birds, small mammals, reptiles and amphibians. It should also be noted that many species of endangered and threatened plants and animals can be found in or rely on wetland areas. Change, however, is inevitable, and some species are better adapted to change than others. Those species unable to adapt will move elsewhere and be replaced by a species better suited to the environmental conditions.

Both the Federal and State governments have established inventories of endangered and threatened species. The New Hampshire Natural Heritage Inventory records indicate that endangered and threatened species are found in Brookline, as they are in almost all Nashua region communities. Those species found in Brookline include the great blue heron (rookery), piled-up sedge, and prostrate tick-trefoil.

Community Attitudes

Protecting the natural environment was a top-priority issue identified by those citizens in attendance at the Brookline Community Profile. Some of the diverse and often conflicting opinions on natural resources articulated at the Profile are repeated below. These comments may or may not reflect majority opinion.

Natural resource base: water, energy, and minerals:

- **Strengths:** wildlife; forests; large lot size; sand and gravel repositories; good and plentiful drinking water; good water quality; Lake Potanipo (easy access, swimming and boating); Melendy Pond; Nissitissit River; recycling; tree farming; wetlands; easy access for recreational skiing; big chunks of undeveloped land; zoning; lack of natural disasters; orchards; quarries; hunting; air quality; conservation commission conservation land.
- **Concerns:** rapid land development; dumping; recreational vehicles and overzealous usage; lack of respect of the land; quarries are inactive; lack of financial resources to sustain natural resources; irresponsible hunting; two-acre lots as opposed to cluster housing; two-acre is too low; forest reduction; radon gas in household air; loss of "Our Place" newsletter.

- **Key issues for now and vision for the future:**

- Annual survey of natural resources and changes: publish the results
- Purchase more conservation land and make accessible like Beaver Brook
- Environmentally conscious development
- Better job of public relations
- Increase public input into the Conservation Commission planning
- Don't want to see trees destroyed for sake of developments
- Maintain same as it is
- Enhance the natural landscape with controlled development
- More open space left available for recreational and conservation
- Maintain responsible commercial use of resources such as forestry, small farming

Working landscape: village, farm, and forest:

- **Strengths:** not air or noise polluted; several conservation lands; quiet, rural; outdoor activities; gardening; houses not close together; conservative road program; friendly; growth has not destroyed community; horses; downtown architecture attractive; accessibility to Boston; central location; lake; woods; river; recreation; Musket Mountain; beaver lodges.
- **Concerns:** growing too fast; wildlife crunched into small area; growth not managed; need more volunteers on boards; town divided between long-timers and newcomers; isolation between developments; outside developers.
- **Key issues for now and vision for the future:**
 - Balance between protecting water quality and landowners' rights - not excessively restricting use of land
 - Protect forests - limit clear-cutting to sustain forests
 - Maintain same ratio of open land to developed land
 - Increase in volunteerism to maintain conservation and recreation
 - More activities (social) and more people participating in activities
 - Activities that use and increase appreciation for natural resources
 - Conservation Commission working to increase wise use of land
 - Increased awareness of availability

Conservation key issues:

- Educational programs (such as recycling education on cable media, school programs, homeowner programs)
- Public forums: specific topics, growth issues
- Investigate developing a land trust to buy development rights

One of the five citizen volunteer committees formed from the Profile was the "Team Resource for Environmental Education (TREE)". The goal of this group is to "preserve, protect and encourage the responsible use of the Town's natural resources for now and forever, through education, communication and support of the Conservation Commission." This committee is an obvious statement about the importance of natural resources to Town residents, and it should become an active participant in natural resource planning within Town.

CULTURAL RESOURCES

Cultural resources include the historical aspects of Brookline's development. Brookline is the product of over 200 years of history. Many of the roads in Town follow paths originally beaten through the wilderness. Stonewalls, memorials to the enormous labors of early farmers, trail through the woods. Today's Brookliners are privileged to be surrounded by that abundant history. In terms of planning, historic structures and sites should be considered an integral part of the community's environmental resources for, like other resources of this nature, they are non-renewable. Preservation opportunities that are passed by today may never be available again.

Historic sites are found throughout Town, although the main concentration is in the Town Center/Main Street area. Historic sites in this area include, but are not limited to: Daniels Academy Building (Town Hall), Brookline Train Station, churches, old post office, historic homes along Main Street, and one of the four old cemeteries within Town, the locations of which are briefly described below.



*The Brookline Public Library, located on Main Street,
renovated in 1992, was built in 1839 as the Methodist Church.*

Four old cemeteries exist within Town: the Pond Cemetery (west cemetery) on the west side of Lake Potanipo, and shown on page III-17; the South Cemetery on Main Street; the North Cemetery on the west side of Route 13; and the Cemetery-in-the-Woods, located south of Rocky Pond Road, which dates to at least 1752. Even as early as 1914, as documented in the History of Brookline, NH, there was concern over protecting these historic cemeteries.

Community Attitudes

Both the 1985 Community Attitude Survey and the 1989 Master Plan Survey showed strong community support for addressing historic resource preservation. In 1985, there was response in favor of historic preservation within Brookline. The voter's subsequent rejection of the creation of a formal historic district zone proved that involuntary restrictive regulation was not acceptable at that time. Protection of historic resources is clearly an important priority supported by the Town residents. This was shown again in the 1989 Master Plan survey when two-thirds of the respondents either "strongly agreed" or "agreed" that the Town should take public actions to preserve and protect historic homes, buildings and other sites.

Historic preservation was not an issue identified at the Brookline Community Profile, but that does not necessarily reflect the general sentiment among Town residents.

Historic Inventory

Although a variety of different sites and structures were specified by many respondents of the survey, defining an exhaustive list of what is or is not of historical importance cannot be done until there has been a comprehensive historic inventory conducted throughout the Town. An inventory should ideally document all structures, sites, events, trails, and cemeteries having any cultural or historical significance to the Town. The list should include, but not be limited to: mill dams, "Cemetery in the Woods", the Stone House, Devil's Den, Bear's Den and stone walls and other structural remnants.



*Cemeteries, like Pine Grove Cemetery, shown above,
are valuable historic resources that should be preserved.*

Once the inventory has been completed, setting boundaries for a Historic District and the drafting of necessary ordinances and regulations, or protection of individual historic sites within the town can begin. Interpretation of the historic inventory results by the Brookline historical society, Planning Board, and other assisting officials will govern where the District boundaries will be, or what individual sites will be protected. Inventory findings will also have an effect on the type of regulations and ordinances if any, that will be necessary to adequately protect the historical nature of a District.

Brookline is fortunate to have an existing historical society. This group along with other Town Boards and the interested public, can begin to organize the necessary tasks involved in protecting the town's cultural resources while there is still time.

National Register of Historic Places

The National Register of Historic Places is the official list of the Nation's resources worthy of preservation. The Register lists properties of local, state, and/or national significance in the areas of American history, architecture, archaeology, engineering, and culture. Resources may be nominated individually, or in groups, as districts or as multiple resource areas and must generally be older than 50 years. Listing in the register does not interfere with a property owner's right to alter, manage, dispose of or even demolish his property unless for some reason Federal funds are involved. Nor does National Register listing require that an owner open his property to the public. Although eighteen individual buildings or sites and four districts in the Nashua Regional Planning Commission (NRPC) region are listed on the Register, none are in Brookline.

Historic Markers

Originated by the NH Legislature in 1955, the aim of the Historical Marker Program is the erection of appropriate markers designating events, people and places of historical significance to the State of New Hampshire. Communities who would like to be considered for a marker submit a request for consideration by the State Highway Department and Division of Historical Resources. There is generally no cost involved for a marker on a state-maintained road, and a \$900 charge for a marker on a private road. Statewide, there are approximately 150 historical markers, few of these in NRPC communities. There are no markers of this type in Brookline.

Scenic Road Designations

Brookline's country roads constitute an important local resource and to date several have been locally designated as scenic roads. Such designation enables a community to preserve the rural environs around its historic structures and stimulates pride in, and respect for, the existing landscape. Two roads in Town, North Mason and Averill Roads, have been designated as scenic roads. The Transportation Chapter recommends continuing to utilize the N.H. Scenic Road Law to preserve the Town's rural character by identifying and targeting roads, especially those currently classified as Class VI, which possess natural characteristics worth preserving.

CONCLUSIONS

Considerable natural and cultural resources currently exist within the Town of Brookline. Those types of resources considered worthy of additional protection efforts include steep slopes, poorer soils, wetlands, aquifers, any existing agricultural uses, and cultural features. The needed protection of these resources can come from developing and/or updating wetland, aquifer, and historic district ordinances; subdivision regulation amendments to address steep slopes and poorer soils; and seeking additional professional consultation (NRCS, hydrologist, botanist, etc.) when there is a question concerning the impacts of development on a particular resource.

GENERAL RECOMMENDATIONS

Slopes

The Town should:

- Establish a policy to acquire scenic vista property, or an access easement thereto, as those lands become available.

The Planning Board should:

- Seek to ensure where possible the preservation of access to scenic vistas in new subdivisions.
- Ensure that proper safeguards are applied to steep sloped sites to minimize hazards to downslope properties, and these safeguards usually mean costly engineering and landscaping solutions. For these reasons, active use of steep slope sites should be avoided wherever possible, or approached with extreme caution and subjected to a thorough review of the safeguards to be employed. If possible, the Planning Board and Town should consider preserving such areas as open space.
- Amend the subdivision regulations by including soil erosion and sedimentation control provisions as has already been done in the non-residential site plan review regulations and the excavation site plan review regulations.

Soils

The Planning Board should:

- Replace the requirement for a High Intensity Soil Survey with Site Specific Soils Mapping Standards Society of Soil Scientists of Northern New England.

Wetlands

The Town should:

- Encourage the development of school and public environmental education programs that utilize the outdoors as natural classrooms, especially at the elementary school currently being planned.
- Gain better control of environmentally important areas, through conservation easements, deed restrictions and purchase of development rights of land.

The Conservation Commission should:

- Re-examine the wetlands ordinance every few years to determine its effectiveness and make improvements, if necessary.

Floodplains

- Brookline should attempt to use floodplains as recreational land/open space.

Aquifers

The Conservation Commission should:

- Review the Aquifer Protection Ordinance every few years to determine its effectiveness and make improvements, if necessary.

The Town should:

- Continue exploring methods to reduce salt on Town roads, especially near watersheds.

Open space/Easements

The Conservation Commission should:

- Develop maps showing the location of its acquired open space and easement throughout town and publicize its availability. This map should also show future sites which will be targeted for acquisition or easement.
- Seek to connect greenways and wildlife corridors where possible.

Conservation and Preservation

The Town, Planning Board, and Conservation Commission should:

- Continue to monitor changes to the N.H. Shoreland Protection Act to ensure the continued protection of its two major lakes--Lake Potanipo and Melendy Pond.
- Identify and sell small town-owned parcels of land which offer marginal public benefit and use the revenue to purchase land that will meet a top-priority need of the Town and its residents.

The Conservation Commission should:

- Prepare a Conservation Plan as allowed under RSA 36-A.
- Consider hosting a public forum such as the Community Profile sponsored by the University of New Hampshire Cooperative Extension to seek public input on and assistance with conservation planning and implementation.

Historic Resources

The Historical Society should:

- Prepare a historic resources inventory of Brookline.
- Encourage owners of eligible structures to seek National Register listing.

The Town Boards should:

- Promote the upgrading, preservation, and protection of the Town cemeteries, and other historical resources.
- Encourage the establishment of additional scenic roads.

The Planning Board should:

- Continue the practice of naming new roads with names of significant local natural features or historical significance (such as Conneck, McIntosh, Captain Seaver, Captain Douglass, Shattuck, and Parker) approved by the Historical Society.
- Include historic resource preservation as a priority when possible in ordinance and regulation.

CHAPTER V .

RESIDENT DEMOGRAPHICS & ECONOMIC PROFILE

CHAPTER V

RESIDENT DEMOGRAPHICS AND ECONOMIC PROFILE

Introduction

This chapter provides a statistical and descriptive profile of the population of Brookline, including significant features of historical and future growth, as well as of the businesses that operate in Town. The population data used here are derived primarily from the 1990 United States Census. While the U.S. Census data is somewhat dated at the time of this writing, more recent statistical information from state, regional and local sources are used where possible. Economic data sources include the New Hampshire Departments of Employment Security, Resources and Economic Development, and Revenue Administration

This chapter provides the base upon which the balance of this plan rests -- its assumptions and projections determine how much growth in population and industry is expected, and thus, how much should be accommodated in land use regulations and community facilities planning.

Population Growth

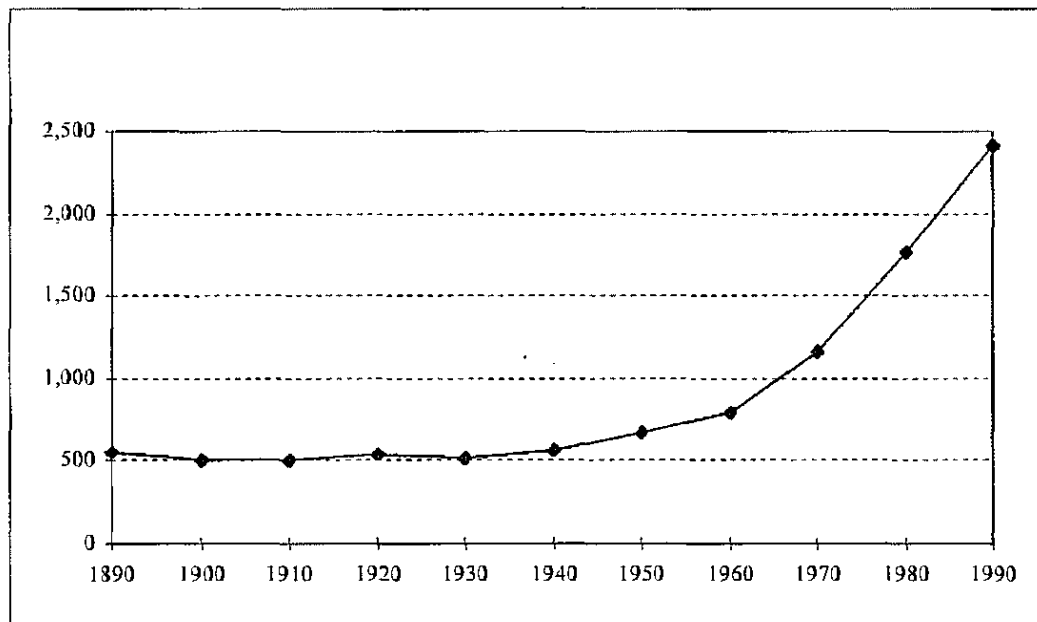
Brookline's population has increased rapidly since 1960, while before then; the Town experienced minor fluctuations in the absolute count of persons. The following table summarizes the Town's population growth since 1890 in relation to regional, county, state, and national growth rates.

TABLE V-1
POPULATION GROWTH 1880-1980
BROOKLINE, NRPC REGION, HILLSBOROUGH COUNTY,
NEW HAMPSHIRE, U.S.A.

Year	Brookline	Percent Change	NRPC Region	Percent Change	Hillsborough County	Percent Change	State of N.H.	Percent Change	U.S.A.	Percent Change
1890	548		30,998		93,247		376,530		62,947,714	
1900	505	-7.8%	36,731	18.5%	112,640	20.8%	411,588	9.3%	75,994,575	20.7%
1910	501	-0.8%	38,467	4.7%	126,072	11.9%	430,572	4.6%	92,228,496	21.4%
1920	546	9.0%	40,796	6.1%	135,512	7.5%	443,083	2.9%	106,021,537	15.0%
1930	511	-6.4%	45,347	11.2%	140,165	3.4%	465,293	5.0%	123,202,624	16.2%
1940	561	9.8%	48,214	6.3%	144,888	3.4%	491,524	5.6%	132,164,569	7.3%
1950	671	19.6%	52,900	9.7%	156,987	8.4%	533,242	8.5%	151,325,798	14.5%
1960	795	18.5%	68,893	30.2%	178,161	13.5%	606,921	13.8%	179,323,175	18.5%
1970	1,167	46.8%	100,862	46.4%	223,941	25.7%	737,578	21.5%	203,211,926	13.3%
1980	1,766	51.3%	138,089	36.9%	276,608	23.5%	920,475	24.3%	226,504,825	11.5%
1990	2,410	36.5%	171,478	24.2%	335,838	21.4%	1,109,117	20.5%	248,709,873	9.8%

SOURCE: U.S. Census

FIGURE V-1
BROOKLINE POPULATION GROWTH
1890-1990



Population Growth 1960-1990

Table V-2 below shows the growth of Nashua Regional Planning Commission (NRPC) communities since 1960. As you can see, the region as a whole grew extremely fast in each decade, but the growth rate has steadily declined. Like many communities in Southern New Hampshire, Brookline experienced rapid growth in population from 1960 to 1990, increasing by over 1,600 persons in that thirty-year period. From 1960 to 1970 Brookline's population increased 46.8 percent, from 1970 to 1980 it increased 51.3 percent, and from 1980 to 1990 it grew by 36.5 percent. While the growth rate in Town appears to have slowed in the 1980's, note that Brookline had the third highest increase in that decade and that the average annual rate has steadily increased from the 1960s.

TABLE V-2
 POPULATION GROWTH
 NRPC REGION, 1960-1990

Municipality	1960 Population	1970 Population	% Change 1960-70	1980 Population	% Change 1970-80	1990 Population	% Change 1980-90
Amherst	2,051	4,605	124.5%	8,243	79.0%	9,068	10.0%
Brookline	795	1,167	46.8%	1,766	51.3%	2,410	36.5%
Hollis	1,720	2,616	52.1%	4,679	78.9%	5,705	21.9%
Hudson	5,876	10,638	81.0%	14,022	31.8%	19,530	39.3%
Litchfield	721	1,420	96.9%	4,150	192.3%	5,516	32.9%
Lyndeborough	594	789	32.8%	1,070	35.6%	1,294	20.9%
Merrimack	2,989	8,595	187.6%	15,406	79.2%	22,156	43.8%
Milford	4,863	6,622	36.2%	8,685	31.2%	11,795	35.8%
Mont Vernon	585	906	54.9%	1,444	59.4%	1,812	25.5%
Nashua	39,069	55,820	42.9%	67,865	21.6%	79,662	17.4%
Pelham	2,605	5,408	107.6%	8,090	49.6%	9,408	16.3%
Wilton	2,025	2,276	12.4%	2,669	17.3%	3,122	17.0%
NRPC Region	63,893	100,862	57.9%	138,089	36.9%	171,478	24.2%
Hillsborough Co.	178,161	223,941	25.7%	276,608	23.5%	336,073	21.5%
New Hampshire	606,921	737,578	21.5%	920,475	24.8%	1,109,252	20.5%

SOURCE: U.S. Census

Population Growth Since 1990

Since 1990, Brookline has continued to grow while growth in most other communities has leveled off. The New Hampshire Office of State Planning's (OSP) 1996 estimate of the Town's population is 3,128, indicating 29.8 percent growth in the past 6 years -- representing approximately 5 percent growth annually (Table V-3). Brookline was the undisputed regional leader in population growth during this period.

TABLE V-3
POPULATION GROWTH
NRPC REGION, 1990-1996

Municipality	1990 Population	1996 Population	% Change 1990-96
Amherst	9,063	9,663	6.6%
Brookline	2,410	3,123	29.8%
Hollis	5,705	6,431	13.6%
Hudson	19,530	21,072	7.9%
Litchfield	5,516	6,540	18.6%
Lyndeborough	1,294	1,414	9.3%
Merrimack	22,156	23,200	4.7%
Milford	11,795	12,660	7.3%
Mont Vernon	1,812	1,960	8.2%
Nashua	79,662	82,285	3.3%
Pelham	9,408	10,374	10.3%
Wilton	3,122	3,243	3.9%
NRPC Region	171,478	182,020	6.1%
Hillsborough Co.	336,073	354,317	5.4%
New Hampshire	1,109,252	1,162,000	4.8%

SOURCE: U.S. Census; Office of State Planning Annual Population Estimates

Population growth in a community may be attributed to two factors: natural population increase due to more births than deaths, and increases caused by more persons taking up residence in town than those who move away (net in-migration). While we cannot count in-migrants, by recording the natural population growth and subtracting it from the total growth in population we can calculate how much of the Town's growth is due to in-migration.

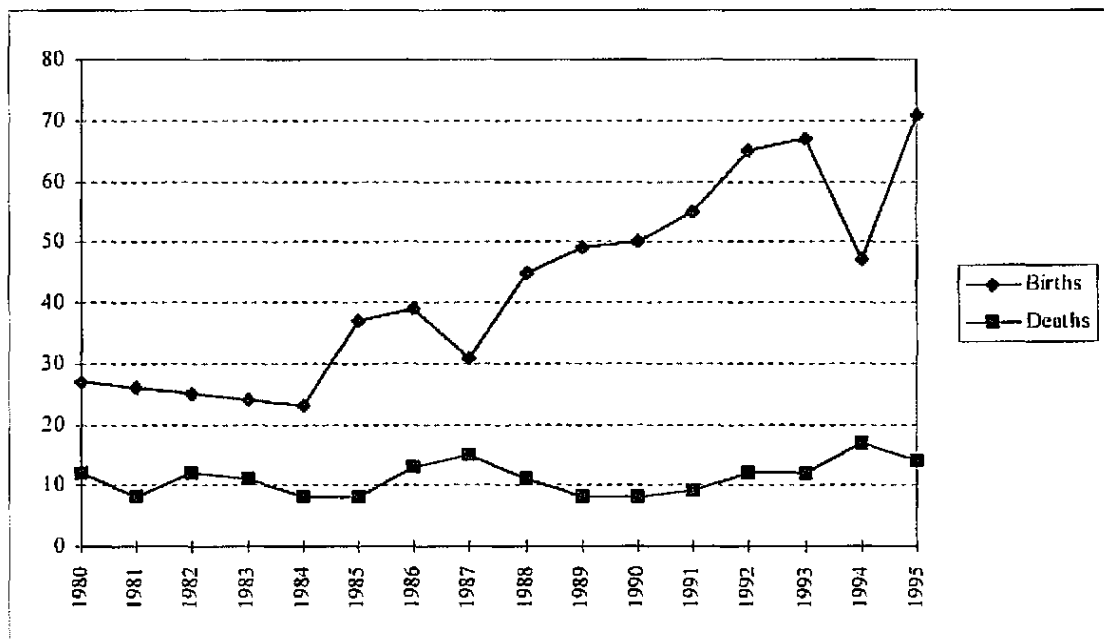
Brookline birth and death data since 1970 is provided in Table V-4. It is evident that the net increase, or natural growth, in population is growing rapidly, especially since 1990.

TABLE V-4
 BIRTHS, DEATHS, AND POPULATION GROWTH
 BROOKLINE, 1970-1995

Year	Births	Deaths	Net Increase	Total Population
1970	26	10	16	1,167
1971	23	11	12	
1972	22	11	11	
1973	31	10	21	
1974	21	7	14	
1975	24	10	14	
1976	19	6	13	
1977	25	12	13	
1978	19	10	9	
1979	22	9	13	
<i>Subtotal</i>	232	96	136	
1980	27	12	15	1,766
1981	26	8	18	
1982	25	12	13	
1983	24	11	13	
1984	23	8	15	
1985	37	8	29	
1986	39	13	26	
1987	31	15	16	
1988	45	11	34	
1989	49	8	41	
<i>Subtotal</i>	326	106	220	
1990	50	8	42	2,410
1991	55	9	46	
1992	65	12	53	
1993	67	12	55	
1994	47	17	30	
1995	71	14	57	
<i>Subtotal</i>	355	72	283	
Total	913	274	639	

SOURCE: N.H. Division of Public Health Services Vital Statistics; U.S. Census

FIGURE V-2
BROOKLINE BIRTHS & DEATHS
1980-1995



A brief analysis of vital statistics recorded by the State from 1980 through 1990 indicates that the Town of Brookline had a net natural population increase of 220 persons (326 births - 106 deaths = 220 net increase) (Table V-5). The U.S. Census Bureau reported a total population increase of 644 persons in Brookline over the same period. Thus, we can see that of the 644 new residents between 1980 and 1990, 220, or 34.2 percent, can be attributed to natural population growth while the balance, 424 persons, or 65.8 percent of population growth between 1980 and 1990, can be attributed to net in-migration to the Town. The same figures from 1970 to 1980 were 25.2 and 74.8 percent respectively, which indicates that natural population growth is becoming a stronger influence in overall growth, but in-migration is still the dominant factor. This conclusion is supported by the fact that Brookline posted the third highest in-migration rate of all communities in the region.

This figure of 66 percent of growth due to in-migration may be of little predictive value because the extent of future in-migration will be a function of both the availability of housing in Town and jobs within the region. And these two factors are most influenced by national economic conditions, although the Planning Board can have some impact on the local housing supply. Unfortunately, we are unable to predict future population growth solely on the basis of prior in-migration trends. However, it is reasonable to suggest that as the national economy grows, housing starts and employment opportunities will both increase locally and regionally; thus, in-migration and population growth will continue at a relatively high rate. If the national economy does not continue to grow, both the local and regional economies may also suffer.

TABLE V-5
 POPULATION GROWTH: MIGRATION VS. NATURAL INCREASE
 NRPC REGION, 1980-1990

Municipality	1980 Pop.	1990 Pop.	# Change	# Natural	Natural % of Total Growth	# Migrated	Migrated % of Total Growth
Amherst	8,243	9,068	825	566	68.6%	259	31.4%
Brookline	1,766	2,410	644	220	34.2%	424	65.8%
Hollis	4,679	5,705	1,026	387	37.7%	639	62.3%
Hudson	14,022	19,530	5,508	1,757	31.9%	3,751	68.1%
Litchfield	4,150	5,516	1,366	746	54.6%	620	45.4%
Lyndeborough	1,070	1,294	224	139	62.1%	85	37.9%
Merrimack	15,406	22,156	6,750	2,458	36.4%	4,292	63.6%
Milford	8,685	11,795	3,110	993	31.9%	2,117	68.1%
Mont Vernon	1,444	1,812	368	170	46.2%	198	53.8%
Nashua	67,865	79,662	11,797	6,907	58.5%	4,890	41.5%
Pelham	8,090	9,408	1,318	837	63.5%	481	36.5%
Wilton	2,669	3,122	453	338	74.6%	115	25.4%
NRPC Region	138,089	171,478	33,389	15,518	46.5%	17,871	53.5%

SOURCE: NRPC using natural growth data from N.H. Division of Public Health Services; U.S. Census

Population Growth Projections

The task of projecting future population growth in a community such as Brookline is extremely uncertain for a number of reasons. Brookline has a relatively small population currently residing in a community with a large proportion of vacant developable land (see the Land Use Chapter for more detail on the amount of vacant developable land). There is the potential for significant subdivision activity to occur. There are also many factors that influence the rate of growth in Brookline that are relatively unpredictable and beyond the control of the Town. Because of this large growth potential and the unpredictable nature of other growth factors, an accurate projection of future population for a given future date is uncertain at best.

With these caveats in mind, and because it is essential that the Master Plan identify reasonable expectations of future growth in population, the following projections prepared by the New Hampshire Office of State Planning (OSP) in consultation with the Nashua Regional Planning Commission (NRPC) represent the best professional judgment of future growth within Town (Table V-6 and Figure V-3).

It is important to note that the farther away the target projection year is, the less reliable a projection will be due to unforeseen circumstances which will inevitably occur in the future. OSP's projections since 1981 have historically been very accurate within the short-term, overestimating population by an average of only three percent within five years and underestimating by eight percent within ten years. However, the longer-term estimates for a fifteen-year span have proven less accurate by underestimating growth by approximately 28 percent. OSP did not anticipate the growth that Brookline has experienced in recent years, but has taken that factor into account in its most recent estimates. These points should be kept in mind when using the following figures.

The methodology used to devise these numbers is based on a community's historical share of the county's growth. The principal assumption with this method is that trends of a community's population growth will remain about the same relative to the parent county in the future. For towns like Brookline that increased its share of total county population from 1970 to 1990, the rate of increase in county share was applied on a declining basis through the projection period. The resulting figures were then modified based on professional knowledge of the Town and area by the NRPC.

Strong growth is expected to continue through the end of the decade, and as the base population grows, the Town's growth rate will decline steadily until the year 2020. However, as shown in Table V-7 and Figure V-4, Brookline still will far outpace any other community in the region by growing at an average annual rate of 6.9 percent.

It is instructive to compare the Projected Population figure in table V-6 for the year 2020 with table IX-5 in the Land Use chapter; the latter figure does not take into consideration physical limitations, nor do the computations account for any rezoning that may occur. Potential buildout population will fluctuate up or down depending on whether minimum residential lot size is increased or decreased and whether the commercial district is expanded. If more commercial-industrial zones are added which do not permit residential uses, or if minimum lot sizes are increased, the maximum population of Brookline would be less than the range shown, and vice-versa.

TABLE V-6
POPULATION PROJECTIONS
TOWN OF BROOKLINE, 1996-2020

Year	Projected Population	% Change
1990 census	2,410	
1996 est.	3,128	29.8%
2000	4,140	32.4%
2005	5,135	24.0%
2010	5,953	15.9%
2015	7,243	21.7%
2020	8,279	14.3%

SOURCE: NH Office of State Planning, Annual Population Projections, October 1997

FIGURE V-3
 BROOKLINE POPULATION PROJECTIONS
 1990-2020

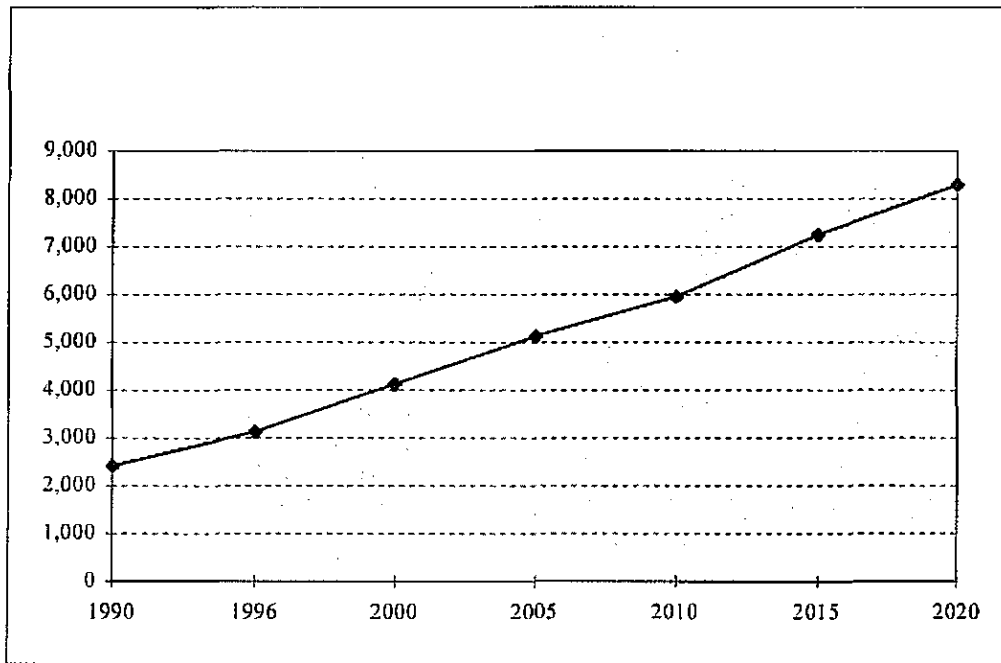
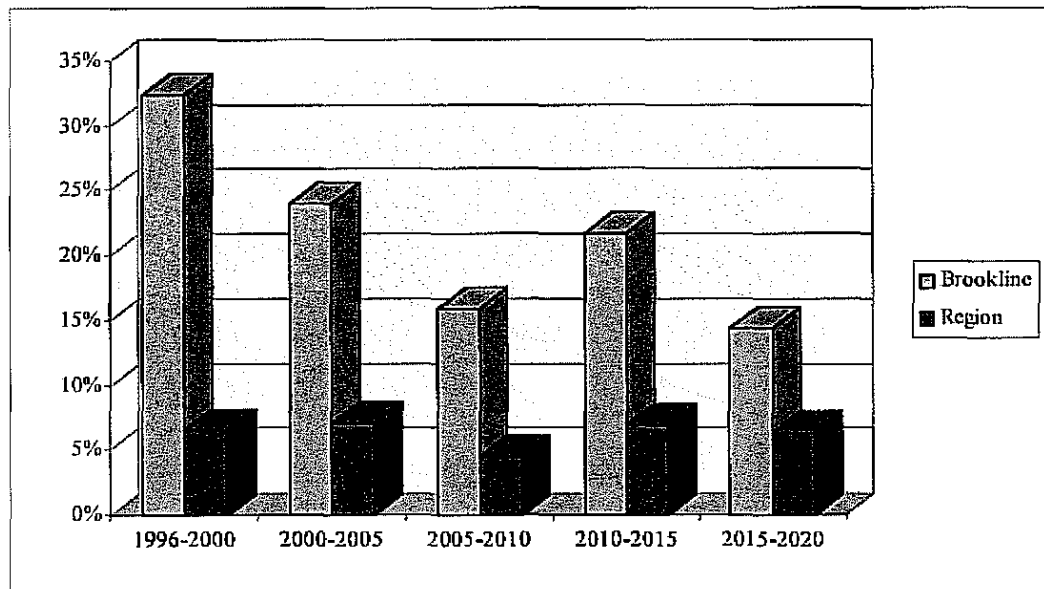


TABLE V-7
 POPULATION PROJECTIONS
 NRPC REGION, 1996-2020

Municipality	1990	Estimated	Projected Population					Avg. Annual
	Census	Pop. 1996	2000	2005	2010	2015	2020	Growth '96-'20
Amherst	9,068	9,663	10,300	11,295	12,113	13,457	14,686	2.2%
Brookline	2,410	3,128	4,140	5,135	5,953	7,243	8,279	6.9%
Hollis	5,705	6,481	7,374	8,535	9,299	10,696	11,940	3.5%
Hudson	19,530	21,072	23,156	24,904	26,267	29,013	31,656	2.1%
Litchfield	5,516	6,540	7,612	8,856	9,674	10,749	11,785	3.3%
Lyndeborough	1,294	1,414	1,557	1,756	1,920	2,178	2,427	3.0%
Merrimack	22,156	23,200	24,601	26,664	28,126	30,813	32,886	1.7%
Milford	11,795	12,660	13,392	14,452	15,106	16,073	17,006	1.4%
Mont Vernon	1,812	1,960	2,115	2,326	2,448	2,708	2,978	2.2%
Nashua	79,662	82,285	84,667	86,906	87,997	89,072	91,145	0.4%
Pelham	9,408	10,374	11,506	13,082	14,118	15,730	17,285	2.8%
Wilton	3,122	3,243	3,433	3,704	3,889	4,104	4,363	1.4%
Total	171,478	182,020	193,853	207,615	216,910	231,836	246,436	1.5%

SOURCE: NH Office of State Planning, Annual Population Projections, October 1997

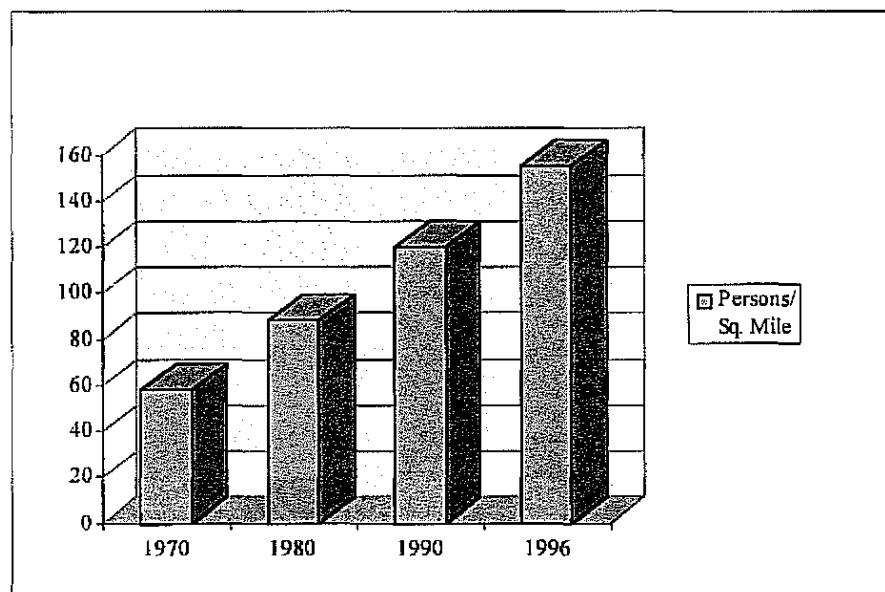
FIGURE V-4
POPULATION PROJECTIONS: GROWTH RATES
TOWN OF BROOKLINE VS. REGION, 1996-2020



Population Density

Population density is also an instructive indicator of the growth of the Town. This statistic is calculated by dividing the number of persons residing in town by the total town area. Since Brookline is 20.1 square miles and the estimated 1996 population is 3,128 persons, the Town currently holds 156 persons per square mile. It is evident from figure V-4 that density has grown sharply since 1970.

FIGURE V-5
POPULATION DENSITY
TOWN OF BROOKLINE, 1970-1996



However, compared to other communities in the region and the region as a whole, Brookline may still be characterized as a relatively low-density environment (Table V-8).

TABLE V-8
 POPULATION DENSITY
 NRPC REGION, 1970-1996

Municipality	Area (Sq.Miles)	Density 1970	Density 1980	Density 1990	Density 1996
Amherst	34.5	133.5	238.9	262.8	280.1
Brookline	20.1	58.1	87.9	119.9	155.6
Hollis	32.6	80.2	143.5	175.0	198.3
Hudson	29.2	364.3	480.2	668.8	721.6
Litchfield	15.1	94.0	274.8	365.3	433.1
Lyndeborough	30.6	25.8	35.0	42.3	46.2
Merrimack	33.0	260.5	466.8	671.4	703.0
Milford	25.9	255.7	335.3	455.4	488.8
Mont Vernon	16.8	53.9	86.0	107.9	116.7
Nashua	30.6	1824.2	2217.8	2603.3	2689.1
Pelham	26.7	202.5	303.0	352.4	388.5
Wilton	26.1	87.2	102.3	119.6	124.3
NRPC Region	321.2	314.0	429.9	533.9	566.7
Hillsborough Co.	876.0	255.6	315.8	383.6	404.5
State of N.H.	8993.0	82.0	102.4	123.3	129.2

CHARACTERISTICS OF THE POPULATION

Age Distribution

An examination of the age distribution of the population of the community can reveal the needs of the community and help plan for the future. For example, a high percentage of children under age four can indicate the need for school expansion, and can be used to help program recreational opportunities within the community.

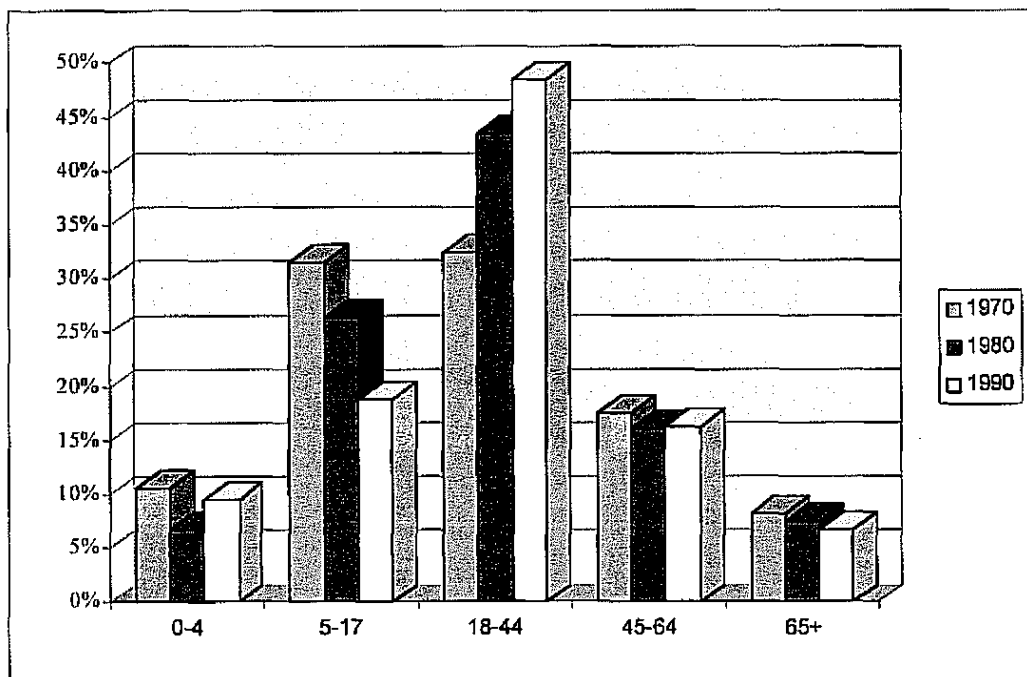
Table V-9 and figures V-6 and V-7 show the historical trends of age distribution in Brookline. This data clearly indicates the decrease in 5-17 year olds from 1970 to 1990. This decline is partially a reflection of the few births during the late 1970s and early 1980s. The largest component increase has been in the 18-44 year olds, which comprise most first-time homebuyers and about half of the labor force, reflecting the strong growing economy in the southern New Hampshire region from 1970 to 1990.

TABLE V-9
 AGE DISTRIBUTION, 1970-1990

Age	1970	%	1980	%	1990	%
0-4	123	10.5%	119	6.7%	228	9.5%
5-17	368	31.5%	464	26.3%	453	18.8%
18-44	378	32.4%	769	43.5%	1,170	48.5%
45-64	204	17.5%	284	16.1%	394	16.3%
65+	94	8.1%	130	7.4%	165	6.8%
Total	1,167	100.0%	1,766	100.0%	2,410	100.0%

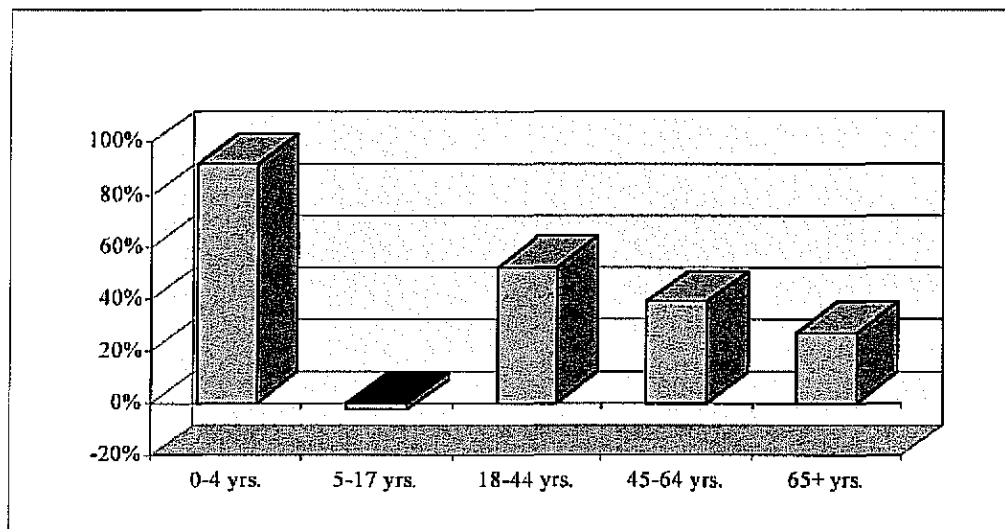
SOURCE: U.S. Census

FIGURE V-6
 AGE GROUPS AS A PERCENT OF TOTAL POPULATION
 TOWN OF BROOKLINE, 1970-1990



SOURCE: U.S. Census.

FIGURE V-7
 GROWTH IN AGE CATEGORIES
 TOWN OF BROOKLINE, 1980-1990



Pre School Age Population

This is one of the largest increasing components of the population, nearly doubling since 1980. A census conducted by town officials in 1996 found a total of 324 preschool children residing in Brookline, which is an increase of 42 percent since 1990 (Table V-10). This has major ramifications for the future, as school expansions will possibly need to be considered. The Town should anticipate the 0-4 year olds going through the school system.

School Age Population

As you can see from the previous figures, the percent of children in this category has decreased in each decade from 1970 to 1990. However, this age category grew by nearly 45 percent from 1990 to 1996, reaching 655 students enrolled in elementary through high school. This growth may help to explain recent capacity concerns in the school system.

TABLE V-10
 SCHOOL-AGE POPULATION
 TOWN OF BROOKLINE, 1996

	Number	Percent
Preschool	324	30.0%
Elementary	414	45.5%
Junior High	87	8.3%
High School	154	16.1%
Total	1,079	100.0%

SOURCE: School district enrollment data, Town of Brookline census

Working Age Population

The most recent data for non-school age Brookline residents is from the 1990 U.S. Census shown in Table V-9. Note that the largest increase in any age category is in the number of 18 to 44 year olds; this group comprised 1,170 persons or nearly half of Brookline's population in 1990. This together with the 45-64 year olds is generally considered to be the labor force. This data may indicate that many people live in Brookline during their "working" years, and then retire elsewhere.

In addition, the 18-44 age category is generally considered to be the child-bearing years for women. Of the 1,170 residents in this age category, 584, or 49.9% are women. This information would indicate that the number of births in Town would increase in the early 1990s, which has been verified in the previous section.

Elderly Population

The number of people in the age category has nearly doubled since 1970; however, the percentage of the overall population has dropped steadily. Only 165 residents, or 7 percent of the population, were considered elderly in 1990. The small percentage of senior citizens reflects the large number of young in-migrants to Brookline.

Regional Comparison

Table V-11 shows the Brookline age distribution in 1990 compared to that of other local communities. This better illustrates the high percentage of 0-4 year olds and the low percentage of elderly. Part of this can be attributed to the type of housing stock available in Town. The large number of 3 and 4 bedroom single family homes are better suited to young families than elderly.

Brookline has the second highest percentage of 0-4 year olds. This percentage has remained high as the number of births has increased over the past three years. The number of 5-19 year olds was the third lowest in 1990. But as the high number of 0-4 year olds get older, Brookline can anticipate an increasing percentage of 5-19 year olds.

TABLE V-11
 AGE DISTRIBUTION
 NRPC REGION, 1990

	0-4	5-19	20-34	35-64	65+
Amherst	6.7%	25.0%	16.5%	45.8%	5.9%
Brookline	9.5%	21.4%	25.0%	37.3%	6.8%
Hollis	6.9%	22.6%	16.9%	44.9%	8.6%
Hudson	8.6%	21.3%	28.4%	35.2%	6.5%
Litchfield	10.4%	25.7%	26.2%	34.6%	3.1%
Lyndeborough	8.0%	24.2%	19.5%	40.3%	8.0%
Merrimack	8.6%	23.4%	26.5%	36.9%	4.7%
Milford	8.9%	20.0%	29.1%	31.8%	10.3%
Mont Vernon	8.3%	24.0%	19.5%	40.1%	8.1%
Nashua	8.1%	18.6%	29.6%	33.7%	10.1%
Pelham	7.6%	24.5%	24.2%	37.3%	6.5%
Wilton	8.0%	22.0%	22.4%	37.2%	10.4%
NRPC Region	8.2%	20.8%	27.1%	35.7%	8.2%
Hillsborough Co.	8.1%	20.4%	27.1%	34.2%	10.2%
State of N.H.	7.6%	20.6%	25.9%	34.5%	11.3%

Source: U.S. Census

Education

The education levels of a population were formerly measured by the median number of school years completed by persons over 18 years of age (median is the point above and below which 50 percent of respondents fall). In Brookline, the median education level was 12.1 years in 1960, and 12.3 years in 1970. Starting in 1980, the U.S. Census began providing the number of residents categorized by years of schooling. This data is provided in Table V-12. The town's population is becoming increasingly more well-educated, as the number of residents lacking a high school degree has dropped while those possessing post-secondary education has grown. Compared to the regional average in Table V-13, Brookline residents generally have completed more coursework past high school than residents of other communities. Most notable are the number of Brookliners who hold a graduate/professional degree, ranking third in the region.

TABLE V-12
 EDUCATIONAL ATTAINMENT
 TOWN OF BROOKLINE, 1980-1990

Years of Schooling*	1980		1990	
	Number	Percent	Number	Percent
Total Population Age 18+	1,175	100.0%	1,729	100.0%
No High School Degree	265	22.6%	192	11.1%
High School Graduate	391	33.3%	484	28.0%
Some College, No Degree	271	23.1%	363	21.0%
Associate's Degree	n/a	n/a	175	10.1%
Bachelor's Degree	170	14.5%	340	19.7%
Graduate or Professional Degree	78	6.6%	176	10.2%

* Persons over 18 years of age

Source: U.S. Census

TABLE V-13
 EDUCATIONAL ATTAINMENT
 NRPC REGION, 1990

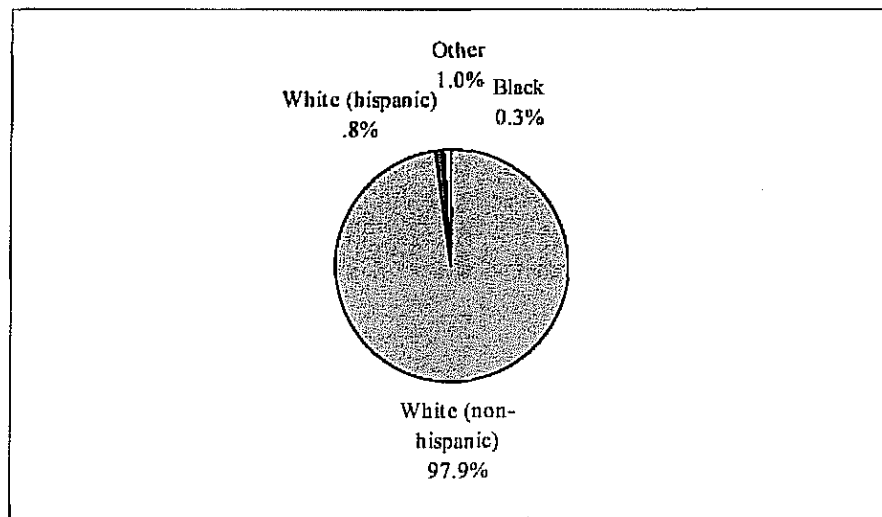
Municipality	No High School Degree	High School Graduate	Some Coll. No Degree	Associate's Degree	Bachelor's Degree	Graduate/ Prof. Degree
Amherst	7.0%	20.0%	19.0%	10.0%	28.0%	16.0%
Brookline	11.0%	28.0%	21.0%	10.0%	20.0%	10.0%
Hollis	11.0%	18.0%	22.0%	8.0%	27.0%	15.0%
Hudson	16.0%	31.0%	21.0%	10.0%	17.0%	6.0%
Litchfield	11.0%	33.0%	22.0%	9.0%	20.0%	6.0%
Lyndeborough	10.0%	26.0%	24.0%	10.0%	21.0%	8.0%
Merrimack	10.0%	27.0%	23.0%	10.0%	22.0%	8.0%
Milford	16.0%	35.0%	20.0%	8.0%	16.0%	5.0%
Mont Vernon	13.0%	24.0%	23.0%	9.0%	22.0%	9.0%
Nashua	18.0%	27.0%	20.0%	8.0%	19.0%	8.0%
Pelham	19.0%	35.0%	18.0%	9.0%	14.0%	5.0%
Wilton	16.0%	33.0%	18.0%	7.0%	19.0%	8.0%
NRPC Region	16.0%	28.0%	20.0%	9.0%	20.0%	8.0%

Source: U.S. Census

Ethnicity and Gender

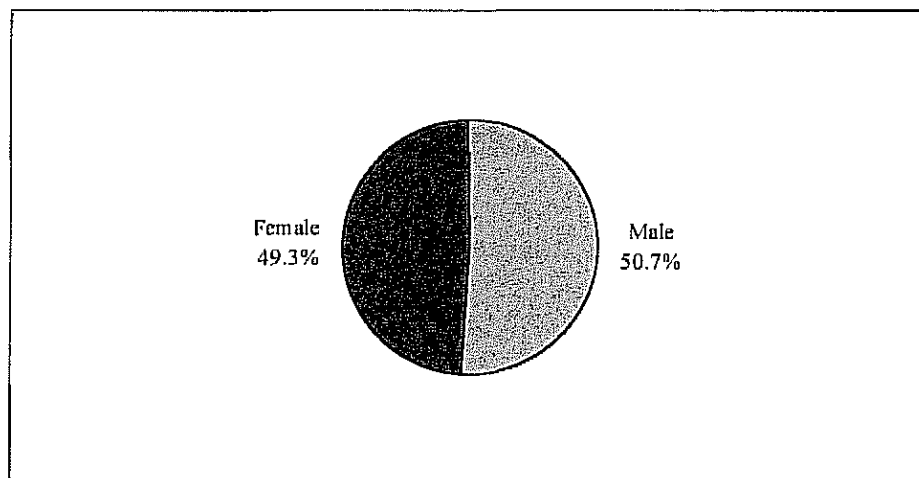
Figures V-9 and V-10 demonstrate that Brookline in 1990 was an ethnically homogeneous community evenly split by gender. While a significantly lower proportion of Brookline residents are minorities (2.1 percent) than the regional average (5.1 percent), the ethnic patterns are fairly consistent with the regional and state profile.

FIGURE V-8
ETHNICITY
TOWN OF BROOKLINE, 1990



Source: U.S. Census

FIGURE V-9
GENDER
TOWN OF BROOKLINE, 1990



Source: U.S. Census

Persons with Disabilities

A total of 107 Brookline residents above the age of 16 in 1990 were disabled. Nearly two-thirds of these people were disabled as a result of their job (Table V-14). These residents comprise 4.4 percent of the total Town population, which was lower than the regional average of 7.4% in 1990 (Table V-15).

TABLE V-14
PERSONS WITH DISABILITIES: AGE 16 AND ABOVE
TOWN OF BROOKLINE, 1990

	Age 16-64 #	% of Age Group	Age 65+ #	% of Age Group
Work Disability	68	4.0%	n/a	n/a
Mobility/Self Care Limit.	19	1.1%	20	12.1%
No Disability	1,593	94.8%	145	87.9%
Total Population	1,680	100.0%	165	100.0%

Source: U.S. Census

TABLE V-15
PERSONS WITH DISABILITIES: AGE 16 AND ABOVE
NRPC REGION, 1990

	Work Disability Age 16-64	Mobility/Self Care Limit. Age 16-64	Mobility/Self Care Limit. Age 65+	Total Disabled	% of Total Population
Amherst	262	114	71	447	4.9%
Brookline	68	19	20	107	4.4%
Hollis	124	40	55	219	3.8%
Hudson	812	363	195	1,370	7.0%
Litchfield	130	111	20	261	4.7%
Lyndeborough	76	13	14	103	8.0%
Merrimack	782	339	118	1,239	5.6%
Milford	542	195	108	845	7.2%
Mont Vernon	53	24	39	116	6.4%
Nashua	3,914	1,471	1,518	6,903	8.7%
Pelham	363	164	83	610	6.5%
Wilton	241	96	57	394	12.6%
NRPC Region	7,367	2,949	2,298	12,614	7.4%
Hillsborough Co.	15,616	6,529	5,780	27,925	8.3%
State of N.H.	26,825	20,035	19,675	66,535	6.0%

Source: U.S. Census

Income

Income is generally measured by three indicators: median family income, median household income, and per capital income. Median family income is defined as the total money income received in the calendar year divided by all family members 15 years of age and older. Median household income is the total money income received in the calendar year divided by all household members 15 years old and over. Family income differs from household income by excluding income received by household members not related to the householder, persons living alone and others in non-family households. Per capita income is the mean income computed for every man, woman and child in a community, and is derived by dividing the total income by total population.

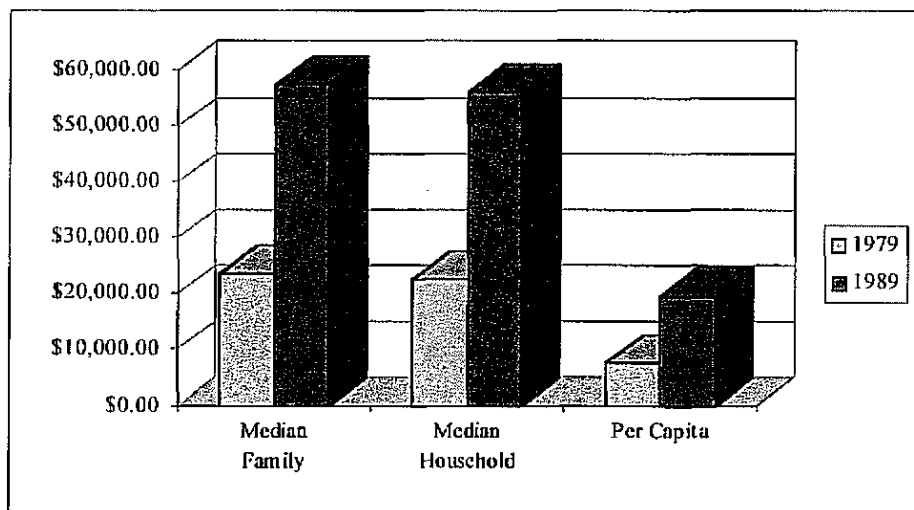
The Town of Brookline may be characterized as relatively affluent, as the median family income in 1989 (most recent data available) was \$57,372 (Table V-16, Figure V-11), which ranked third in the region. Residents enjoyed the second-highest income growth in the region in the decade since 1979 (Table V-17).

TABLE V-16
INCOME
TOWN OF BROOKLINE, 1979-1989

	1979	1989	% Change
Median Family	\$23,608.00	\$57,372.00	143.0%
Median Household	\$22,545.00	\$55,858.00	147.8%
Per Capita	\$7,528.00	\$19,564.00	159.9%

Source: U.S. Census

FIGURE V-10
INCOME
TOWN OF BROOKLINE, 1979-1989



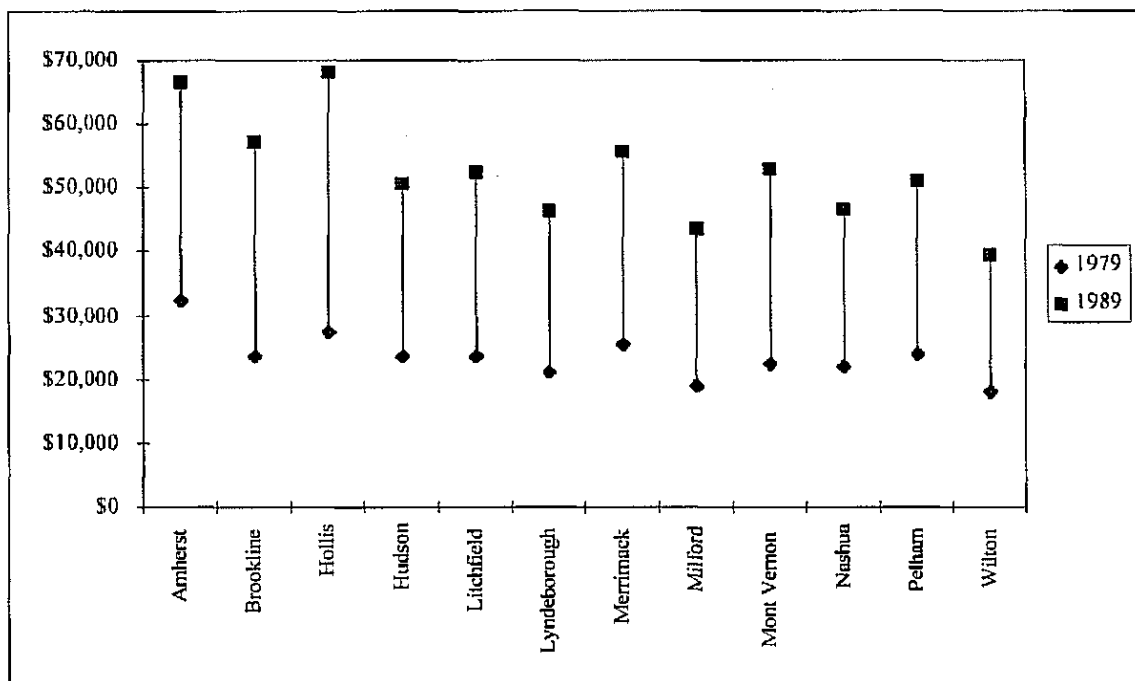
Source: U.S. Census

TABLE V-17
INCOME GROWTH
NRPC REGION, 1979-1989

	1979	1989	% Change
Amherst	\$32,469	\$66,491	104.8%
Brookline	\$23,608	\$57,372	143.0%
Hollis	\$27,485	\$68,096	147.8%
Hudson	\$23,670	\$50,714	114.3%
Litchfield	\$23,551	\$52,438	122.7%
Lyndeborough	\$21,176	\$46,250	118.4%
Merrimack	\$25,443	\$55,844	119.5%
Milford	\$19,082	\$43,628	128.6%
Mont Vernon	\$22,326	\$52,740	136.2%
Nashua	\$22,003	\$46,614	111.9%
Pelham	\$23,967	\$51,147	113.4%
Wilton	\$18,117	\$39,402	117.5%
NRPC Region	\$23,575	\$52,561	123.0%
Hillsborough Co.	\$21,483	\$46,249	115.3%
State of N.H.	\$19,723	\$41,628	111.1%

Source: U.S. Census

FIGURE V-11
INCOME GROWTH
NRPC REGION, 1979-1989



Source: U.S. Census

Brookline Economic Profile

This section provides an overview of the businesses that currently operate in town. As is evident in Table V-18, major employers in town represent a wide variety of industries. Local government, industrial concerns and service establishments are important players in the town's economy.

**TABLE V-18
 MAJOR EMPLOYERS
 TOWN OF BROOKLINE, 1995**

Name	Location	Product/ Service
Town of Brookline	1 Main St.	Government
Bingham Lumber	89 Route 13	Lumber
Brookline Elementary School	22 Milford St.	Education
Grant Plastics	86 Route 13	Plastics
Hall Manufacturing, Inc.	56 Milford St.	Sewn Products
Donovan Engineering	31 Route 13	Piping, conveyors
Route 13 State Line Mart	44 Route 13	Convenience store
Superior Steel Fabricators	46 Route 13	Steel fabricators
Griffing's Riverside	Route 13	Restaurant

** Major = 10 or more employees*

*American Business Disc, American Business Info., 1995 Edition
 Community Profiles, N.H. Department of Resources & Economic Development,
 December 1995*

A total of 62 private companies conducted business in town in 1995, employing nearly 500 workers (Table V-19). Government employment accounted for an additional 78 employees. Non-manufacturing enterprises accounted for the majority of the town's employment and total wages, while workers in the manufacturing sector earned considerably more in weekly wages than their counterparts in the non-manufacturing and government sectors.

**TABLE V-19
 EMPLOYMENT
 TOWN OF BROOKLINE, 1995**

	Manufacturing	Non-Manufacturing	Government	Total
# Businesses	10	52	n/a	62
# Employees	136	352	78	566
Total Wages	\$3,885,214.00	\$7,190,525.00	\$1,346,391.00	\$12,422,130
Avg. Weekly Wage	\$551.07	\$392.84	\$331.24	\$422.25

Source: N.H. Department of Employment Security

Business growth has been strong in the ten-year period from 1985 to 1995, as the number of people working for private companies in Town doubled in that period (Table V-20). No comparable data was collected for government employment in 1985 or 1990. Nearly all of the business growth was in the non-manufacturing sector (Figure V-12). Total wages earned by Brookline workers also grew at a brisk pace, but weekly wage growth as a whole slowed from 1990 to 1995, particularly in the non-manufacturing sector (Figure V-13).

TABLE V-20
PRIVATE EMPLOYMENT*
TOWN OF BROOKLINE, 1985 - 1995

	1985	1990	% Change 1985-90	1995	% Change 1990-1995
# Private Businesses					
Manufacturing	7	9	28.6%	10	11.1%
Non-Manufacturing	33	44	33.3%	52	18.2%
Total	40	53	32.5%	62	17.0%
# Employees					
Manufacturing	85	98	15.3%	136	38.8%
Non-Manufacturing	161	247	53.4%	352	42.5%
Total	246	345	40.2%	488	41.4%
Total Wages					
Manufacturing	\$1,356,844.	\$2,087,254.	53.8%	\$3,885,214.	86.1%
Non-Manufacturing	\$2,530,899.	\$5,383,017.	112.7%	\$7,190,525.	33.6%
Total	\$3,887,743.	\$7,470,271.	92.1%	\$11,075,739.	48.3%
Average Weekly Wages					
Manufacturing	\$306.98	\$408.54	33.1%	\$551.07	34.9%
Non-Manufacturing	\$302.31	\$418.82	38.5%	\$392.84	-6.2%
Total	\$303.92	\$415.90	36.8%	\$436.84	5.0%

* Does not include government employment

Source: N.H. Department of Employment Security

FIGURE V-12
CHANGE IN PRIVATE EMPLOYMENT
TOWN OF BROOKLINE, 1990 - 1995

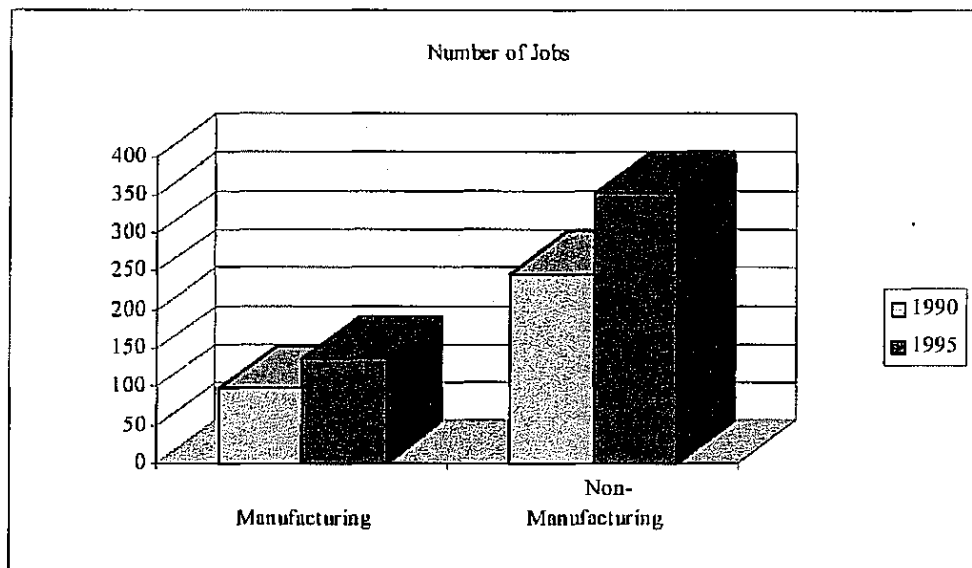
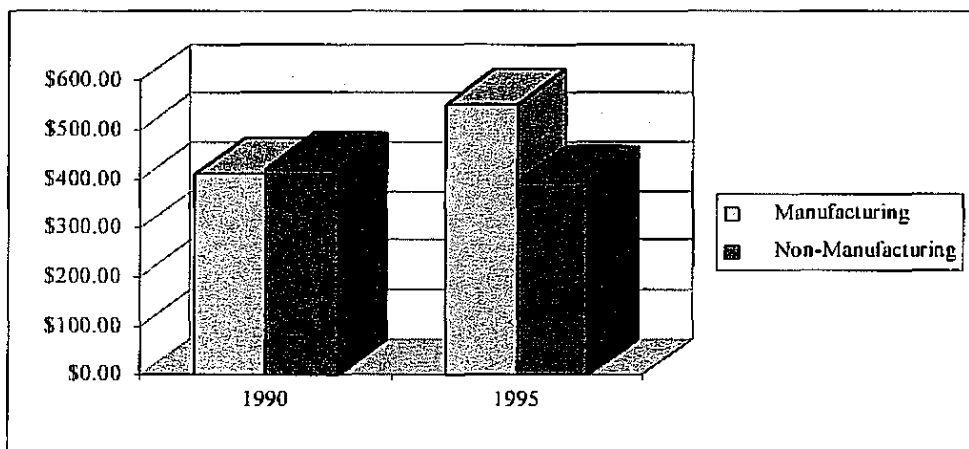


FIGURE V-13
CHANGE IN AVERAGE WEEKLY WAGES
TOWN OF BROOKLINE, 1990 - 1995



On a regional basis, Brookline does not compare favorably to other communities in terms of economic activity (Table V-21, Figure V-14). The Town accounted for only one percent of regional employment in 1995. While Brookline may reasonably be expected to attract less economic activity than communities such as Nashua or Hudson, Brookline even lags behind other comparable towns such as Hollis, Wilton and Amherst.

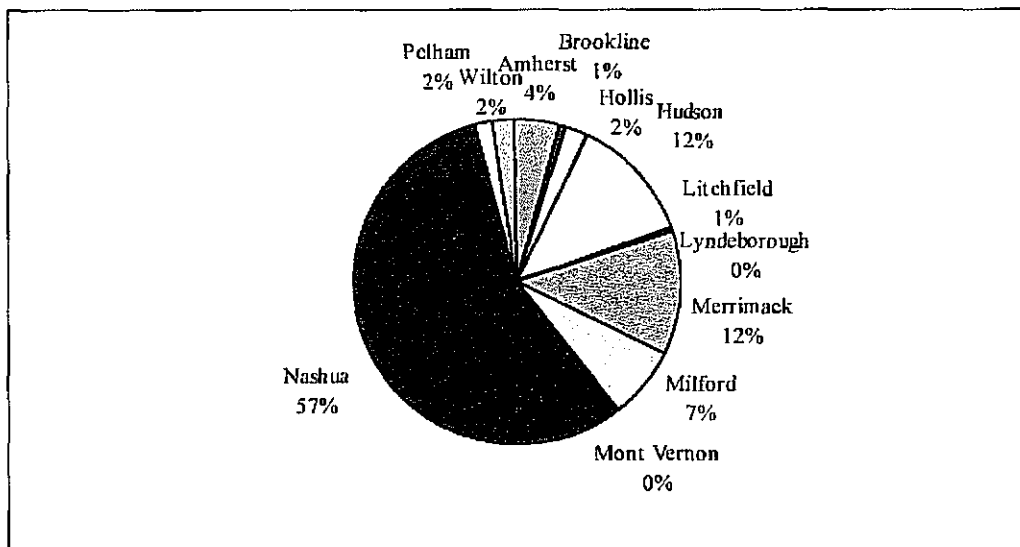
TABLE V-21
 PERCENTAGE OF REGIONAL EMPLOYMENT BY COMMUNITY
 NRPC REGION, 1995

Municipality	# Private Businesses	% of Region	Total Employment*	% of Region
Amherst	394	8.0%	3,700	4.4%
Brookline	62	1.3%	566	0.7%
Hollis	168	3.4%	1,850	2.2%
Hudson	546	11.1%	10,267	12.3%
Litchfield	49	1.0%	463	0.6%
Lyndeborough	19	0.4%	99	0.1%
Merrimack	542	11.0%	9,924	11.9%
Milford	371	7.5%	6,051	7.3%
Mont Vernon	17	0.3%	107	0.1%
Nashua	2,470	50.2%	46,969	56.4%
Pelham	182	3.7%	1,538	1.8%
Wilton	98	2.0%	1,804	2.2%
NRPC Region	4,918	100.0%	83,338	100.0%
Hillsborough Co.	9,951		151,322	
State of N.H.	34,914		457,542	

* Includes government employment

Source: N.H. Department of Employment Security

FIGURE V-14
 PERCENT OF TOTAL EMPLOYMENT IN THE NRPC REGION
 BY COMMUNITY, 1995



Owing to its relatively small base of employment, employment growth in Brookline ranked second in the region from 1990 to 1995 (Table V-22, Figure V-15). This positive trend indicates that the town possesses assets that are attractive to some companies that have chosen to expand or relocate.

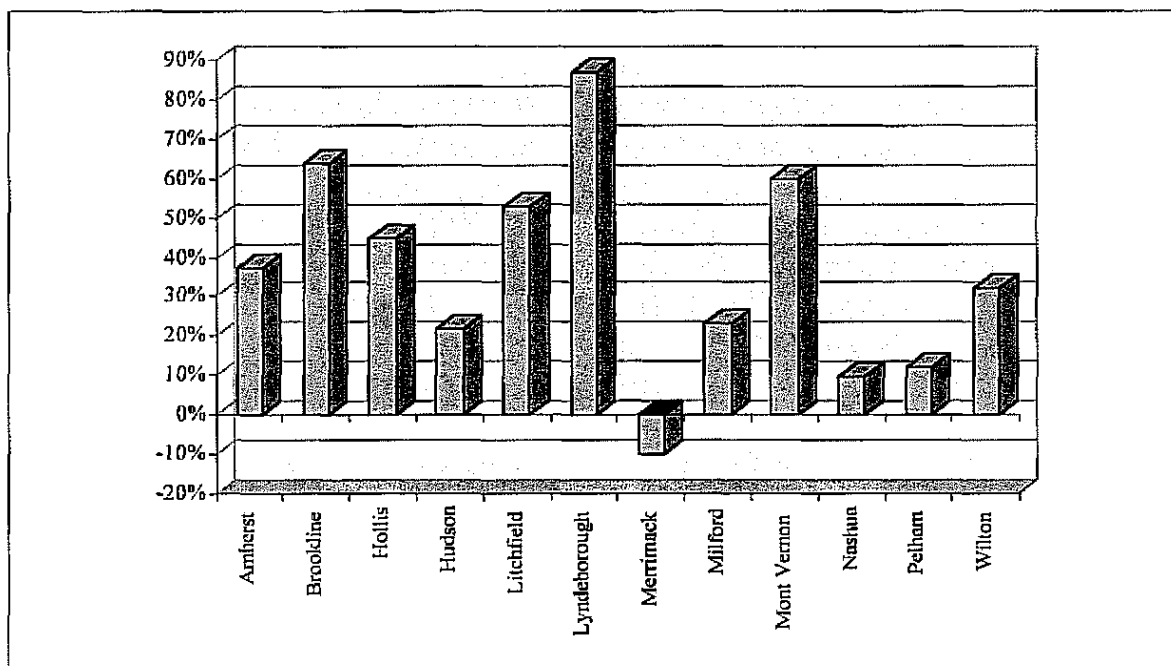
TABLE V-22
 PRIVATE EMPLOYMENT GROWTH BY COMMUNITY*
 NRPC REGION, 1985 - 1995

Municipality	1985 # Employees	1990 # Employees	% Growth 1985-90	1995 # Employees	% Growth 1990-95
Amherst	2,660	2,694	1.3%	3,700	37.3%
Brookline	246	345	40.2%	566	64.1%
Hollis	744	1,277	71.6%	1,850	44.9%
Hudson	7,221	8,438	16.9%	10,267	21.7%
Litchfield	169	303	79.3%	463	52.8%
Lyndeborough	46	53	15.2%	99	86.8%
Merrimack	10,606	11,044	4.1%	9,924	-10.1%
Milford	4,480	4,905	9.5%	6,051	23.4%
Mont Vernon	57	67	17.5%	107	59.7%
Nashua	44,529	42,909	-3.6%	46,969	9.5%
Pelham	1,423	1,370	-3.7%	1,538	12.3%
Wilton	1,355	1,366	0.8%	1,804	32.1%
NRPC Region	73,536	74,771	1.7%	83,338	11.5%
Hillsborough Co.	147,870	148,706	0.6%	151,322	1.8%
State of N.H.	400,338	429,529	7.3%	457,542	6.5%

* Does not include government employment

Source: N.H. Department of Employment Security

FIGURE V-15
PRIVATE EMPLOYMENT GROWTH
NRPC COMMUNITIES, 1990 - 1995



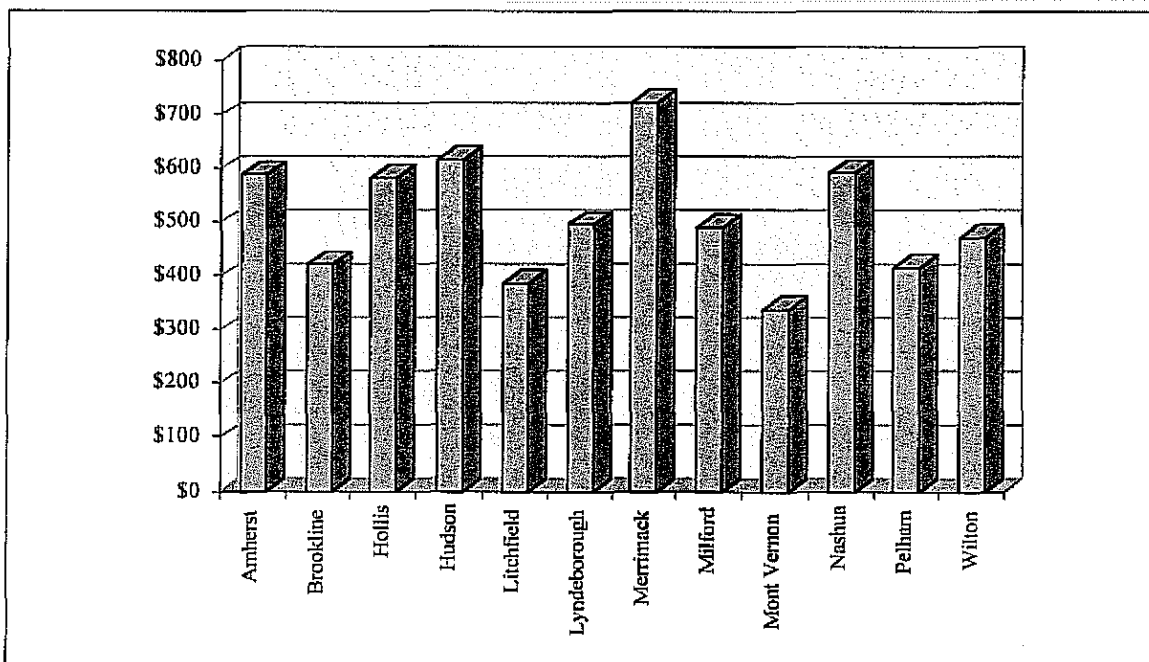
It is also evident in Table V-23 that workers account for only a slight percentage of total wages in the region, and that they earn significantly less than their counterparts in other communities (Figure V-16). The average weekly wage of \$422 in 1995 represented only 83 percent of the average regional wage. This statistic may point to the need to attract companies offering higher wage potential.

TABLE V-23
 WAGES BY COMMUNITY
 NRPC REGION, 1995

Municipality	Total Wages	% of Region	Avg. Weekly Wage	% of Reg. Average
Amherst	\$113,317,487	4.4%	\$588.93	115.3%
Brookline	\$12,422,130	0.5%	\$422.25	82.6%
Hollis	\$56,119,016	2.2%	\$583.52	114.2%
Hudson	\$328,963,451	12.8%	\$616.17	120.6%
Litchfield	\$9,305,651	0.4%	\$386.51	75.6%
Lyndeborough	\$2,565,048	0.1%	\$496.17	97.1%
Merrimack	\$373,882,140	14.5%	\$724.53	141.8%
Milford	\$154,829,085	6.0%	\$492.08	96.3%
Mont Vernon	\$1,894,855	0.1%	\$340.29	66.6%
Nashua	\$1,447,533,860	56.1%	\$592.67	116.0%
Pelham	\$33,352,719	1.3%	\$417.17	81.6%
Wilton	\$44,187,074	1.7%	\$471.17	92.2%
NRPC Region	\$2,578,372,516	100.0%	\$510.96	100.0%
Hillsborough Co.	\$4,971,385,428		\$569.34	
State of N.H.	\$13,976,916,051		\$509.83	

Source: N.H. Department of Employment Security

FIGURE V-16
 AVERAGE WEEKLY WAGE
 NRPC COMMUNITIES, 1995



A related measure of the economic health of Brookline is its tax rate. A common concern raised at the Town's Community Profile was the burdensome residential property tax rate, and the need to balance commercial with residential growth. Table V-24 and Figure V-17 show local assessed valuation, which is the total value of all land and improvements in town; the local tax rate, calculated from the town's Statement of Appropriations and Taxes Assessed (MS-2 form) and the Summary Inventory of Valuation (MS-1 form); and the full-value tax rate, which is the local tax rate multiplied by the annual assessment ratio (assessed vs. market value).

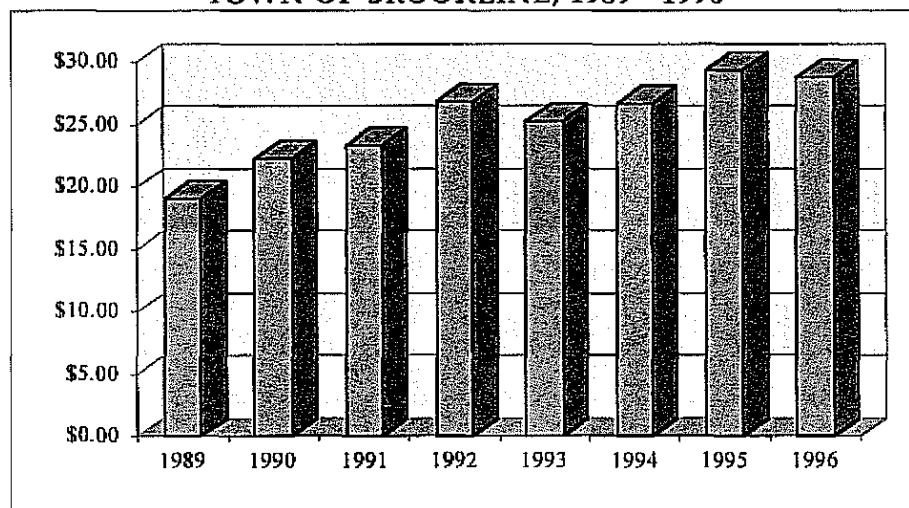
The overall tax base of the Town has been increasing regularly over the last several years, yet the tax rate has also increased. This increase may be attributed to inflationary factors as well as service demand costs of new development outpacing its benefit to the tax base. Most of the development that occurs in Brookline is single-family residences, which often fail to generate sufficient tax revenue to balance the costs generated, especially for school services. It is important to note that the full value rate decreased twice within the last seven years, once in 1993 after the Town's assessed value was adjusted, and again in 1996.

TABLE V-24
TAX RATE
TOWN OF BROOKLINE, 1989 - 1996

Year	Net Local Assessed Valuation	Local Tax Rate	% Change Local Tax Rate	Assessment Ratio	Full Value Tax Rate	% Change F.V. Tax Rate
1989	\$166,887,103	\$18.15		1.05	\$19.06	
1990	\$172,540,047	\$18.08	-0.4%	1.23	\$22.24	16.7%
1991	\$177,440,974	\$17.40	-3.8%	1.34	\$23.32	4.9%
1992	\$186,377,373	\$18.16	4.4%	1.48	\$26.88	15.3%
1993	\$141,150,266	\$25.54	40.6%	0.99	\$25.28	-6.0%
1994	\$145,188,239	\$28.74	12.5%	0.93	\$26.73	5.7%
1995	\$151,409,450	\$30.89	7.5%	0.95	\$29.35	9.8%
1996	\$160,632,984	\$30.92	0.1%	0.93	\$28.76	-2.0%

Source: N.H. Department of Revenue Administration

FIGURE V-17
FULL VALUE TAX RATE
TOWN OF BROOKLINE, 1989 - 1996



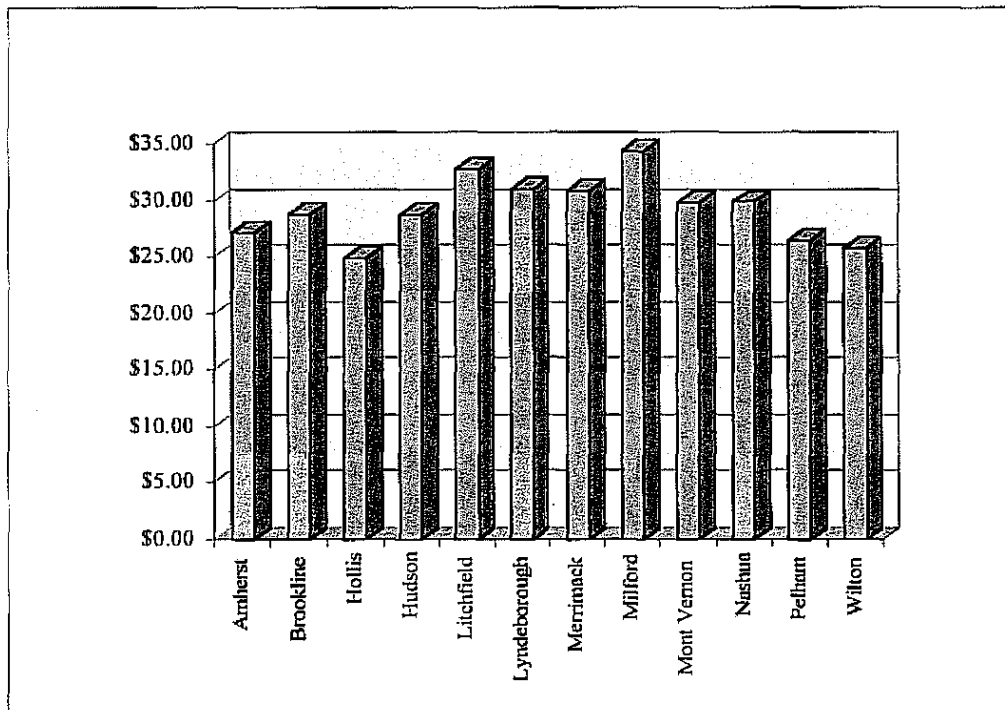
Despite the growth in Brookline's tax rate, the Town compares favorably with other communities in the region (Table V-25, Figure V-18). The town's local rate is higher, but the full value rate is lower, than the county average.

TABLE V-25
 TAX RATES BY COMMUNITY
 NRPC REGION, 1996

	Local Tax Rate	Percent of County Rate	Full Value Tax Rate	Percent of County Rate
Amherst	\$28.36	99%	\$27.23	88%
Brookline	\$30.92	107%	\$28.76	93%
Hollis	\$24.33	85%	\$24.82	81%
Hudson	\$25.62	89%	\$28.69	93%
Litchfield	\$24.83	86%	\$32.78	106%
Lyndeborough	\$42.00	146%	\$31.08	101%
Merrimack	\$32.19	112%	\$30.90	100%
Milford	\$25.70	89%	\$34.44	112%
Mont Vernon	\$24.80	86%	\$29.76	97%
Nashua	\$30.20	105%	\$29.90	97%
Pelham	\$47.18	164%	\$26.42	86%
Wilton	\$44.50	155%	\$25.81	84%
Hillsborough Co.	\$28.79	100%	\$30.81	100%

Source: N.H. Department of Revenue

FIGURE V-18
FULL VALUE TAX RATE
NRPC COMMUNITIES, 1996



GROWTH MANAGEMENT

The Town of Brookline adopted a Growth Management Ordinance in 1994 to "flatten the rate of growth in the Town" for the following reasons:

- ☑ To meet the demand for schools.
- ☑ Prevent an unacceptably high growth in the tax rate.
- ☑ Allow the Town an opportunity to absorb increases in Town services in an orderly way.
- ☑ Insure that Brookline accommodates a fair share of the regional population growth.

The ordinance was based on an analysis of growth data in the 1990 Brookline Master Plan, which recommended an annual growth rate "cap" of three percent. The overall goal is to slow growth to no more than three percent by limiting the number of building permits for the construction of new residential dwelling units that may be issued in any calendar year. This permit limitation does not apply to lots existing before November 24, 1993 or to non-residential or alteration permits.

The Planning Board determines the number of annual permits based on a calculation which compares the actual number of units in Town to the target number of units, but in no case is the annual allotment less than ten. New subdivisions are guaranteed a minimum number of permits based on their size, and the remaining permits are distributed quarterly on a one-for-one basis. The Board must annually review the Town's growth data and determine if that data justifies continuation of the ordinance for an additional year.

Based on data and analysis contained in this chapter, the Growth Management Ordinance is still considered necessary for the following reasons:

- ☑ Brookline has absorbed more than its fair share of the growth in the 1980s and 1990s, showing high rates of growth relative to other communities in the region. The Town has been the undisputed leader in population growth since 1990, growing by nearly 30 percent during that period.
- ☑ The Office of State Planning has estimated that Brookline will grow faster than any other community in the region, at nearly 7 percent annually until the year 2020.
- ☑ The preschool age population has grown by 42 percent since 1990.
- ☑ School enrollment figures as of October, 1997 indicate that the Brookline Elementary School is currently at 80 percent of capacity; the Hollis/Brookline Junior High School is at 73 percent of capacity; and the newly constructed Hollis/Brookline Senior High School is already over capacity. Based on future enrollment projections, capacity is anticipated to be reached in the year 2005 in the Brookline Elementary School and 2003 in the Junior High, while capacity constraints are obviously already a concern in the newly constructed Hollis-Brookline High School.
- ☑ The number of housing units in Town grew by 43 percent since 1990, by far the highest rate of growth in the region. Nearly all of this growth was comprised of single-family homes.
- ☑ Brookline issued an average of 37 building permits annually in the 1980s. Brookline is issuing an average of 57 building permits annually thus far in the 1990s.
- ☑ Based on the average household size of 2.97 in 1990, issuing 57 permits per year will result in a 5.4 percent growth rate annually. This is a higher growth rate than any community in the region.
- ☑ Brookline issued a higher number of building permits in 1996 relative to its population than any community in the region. The average percentage issued was 1.82 percent of the population, compared to a regional average of .49 percent. If Brookline had issued that percentage, 15 permits would have been issued in 1996.
- ☑ As of October, 1997, there were a total of 68 lots with approval for development remaining undeveloped, 13 phased lots that could draw building permits, and an indeterminate number of vacant lots of record.
- ☑ Brookline can grow at 3 percent annually (94 people), which would still be faster than the O.S.P. projections for all but three communities in the Nashua region and twice as fast as the regional average. This would allow the Town time to prepare adequate facilities and prepare for future growth.

Growth Management Recommendations

1. Actions need to be taken in order to accommodate the growth while minimizing the impact on the tax rate. One of these actions must include an updated CIP, which programs the costs of capital projects as evenly as possible.
2. Another part of the solution is to time the growth so that the improvements can come further along in the future, allowing the Town more time to accommodate the growth. By limiting the number of building permits that can be issued annually, the Planning Board can help moderate the growth in school enrollments.
3. Phasing plans should be required for all major subdivisions. This would ensure slow, steady growth. This would allow both the Planning Board and School Board to anticipate the growth in Town.
4. The Planning Board should begin to look beyond the lifetime of the Growth Management Ordinance and consider other alternatives for managing growth.

CHAPTER VI .

TRANSPORTATION

CHAPTER VI

TRANSPORTATION

This Chapter of the Brookline Master Plan includes an inventory of the existing highway network in the town of Brookline, including highway classification, traffic volumes, roadway conditions and travel patterns. Issues related to transportation and mobility including highway policy, safety and capacity deficiencies, forecasts of future travel, and non-motorized and alternative modes are discussed. Recommendations to improve the highway network, and mobility in general, are also provided.

EXISTING HIGHWAY NETWORK

Highway Classification

There are a total of 48.1 miles of road in Brookline. Brookline's existing roadway network and the state's functional classification for roads are shown in Map VI-1. Roads and highways are classified by the New Hampshire Department of Transportation (NH DOT) into different categories according to their functions and source of funding. The highways are classified by the NH DOT according to RSA 229:5.

Functional Classification

The following provides a description of the functional classification system characteristics of a road and highway network:

<u>Functional System</u>	<u>General Characteristics</u>
Principal Arterial	<ol style="list-style-type: none">1. Provides corridor movement suitable for substantial statewide or interstate travel and provides continuity for all rural arterials which intercept the urban area.2. Serves the major traffic movements within urbanized areas such as between central business districts and outlying residential areas, between major intercity communities, or between major suburban centers.3. Serves a major portion of the trips entering and leaving the urban area, as well as the majority of the through traffic desiring to bypass the central city.
Minor Arterial	<ol style="list-style-type: none">1. Serves trips of moderate length at a somewhat lower level of travel mobility than principal arterials.2. Provides access to geographic areas smaller than those served by the higher system.3. Provides intracommunity continuity, but does not penetrate identifiable neighborhoods.
Major Collector	<ol style="list-style-type: none">1. Serve county seats not on arterial routes, serve larger towns not directly served by the higher systems, and other traffic generators of equivalent intracounty importance, such as consolidated schools, shipping points, country parks and important mining and agricultural areas.2. Provides links with larger towns or cities, or with routes of higher classification.3. Serves the more important intracounty travel corridors.

- | | |
|-----------------|--|
| Minor Collector | <ol style="list-style-type: none"> 1. These routes accumulate traffic from local roads and bring all developed areas within reasonable distances of collector roads. 2. Provide service to the remainder smaller communities. 3. Link the locally important traffic generators with their rural hinterland. |
| Local | <ol style="list-style-type: none"> 1. Comprises all facilities not on higher systems. 2. Provides access to land and higher systems. 3. Through traffic usage discouraged. |

Table VI-1 provides a summary of the mileage for the classification of roads in the Town of Brookline. The table includes both the state functional classification and the state aid classification of roads. As shown in Table VI-1, there is a total of 48.1 miles of roads in the Town of Brookline.

About 14.5 percent of the road mileage is classified as non-public. NH 13 accounts for all the arterial mileage. NH 130 and Mason Road account for the major collector mileage. Pepperell Road, between NH 130 and the Hollis town line, is classified as a minor collector road.

**TABLE VI-1
STATE AID ROAD CLASSIFICATION AND FUNCTION (MILES)**

State Classification	Principal Arterials, Interstate Highways	Minor Arterials	Major Collector	Minor Collector	Local Roads	Unimproved Roads	Total
Class I- Primary State Hwys		6.8					6.8
Class II- Secondary State Hwys			4.8	0.6	1.9		7.3
Class V- Town Roads			1.2		25.8		27.0
Class VI- Unimproved roads						7.0	7.0
Totals		6.8	6.0	0.6	27.7	7.0	48.1

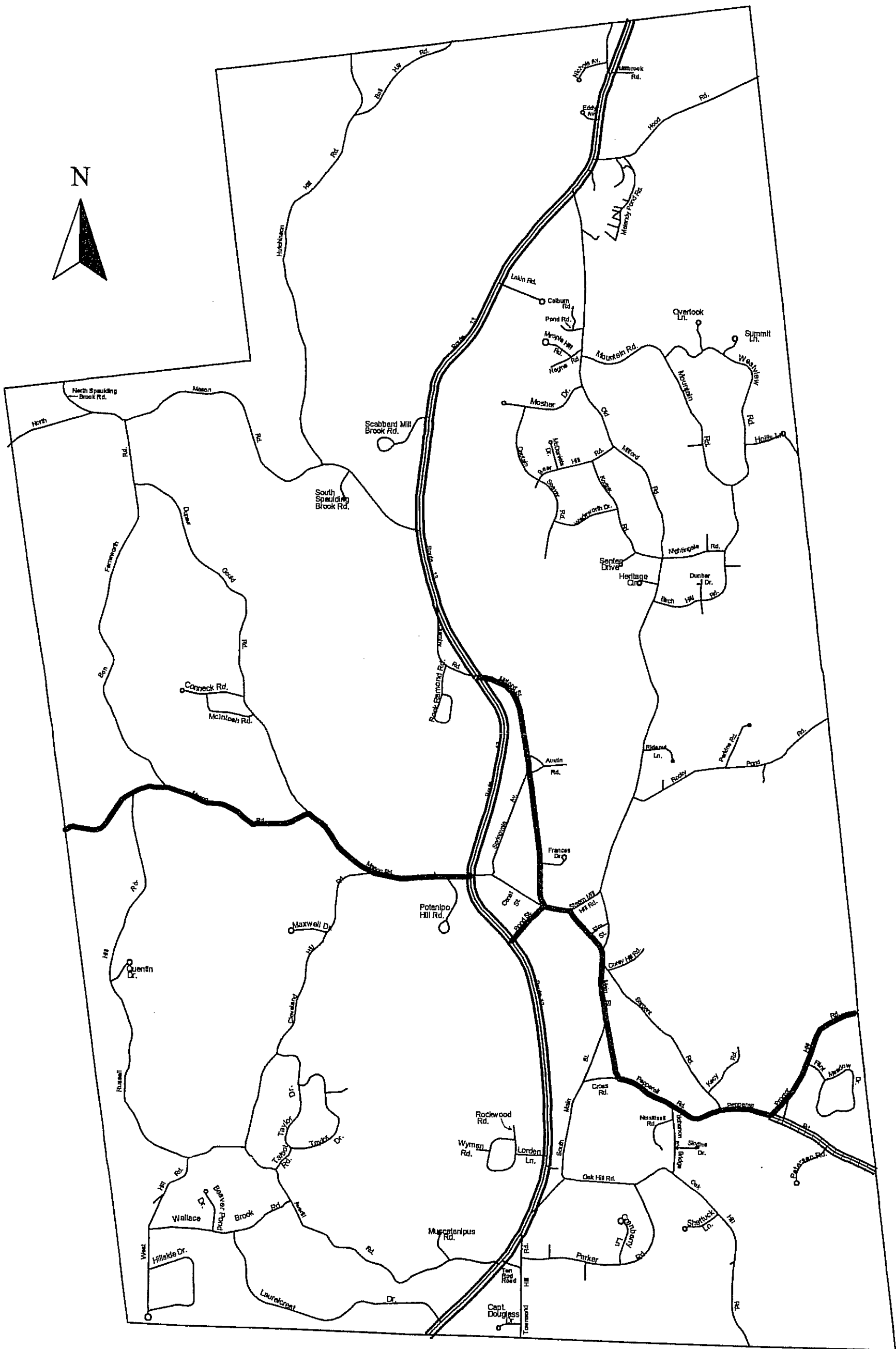
Source: New Hampshire Department of Transportation, 1997

Note: The NHDOT is currently updating the town mileage, and there will be approximately 8 miles added to the Class V local roads classification.

Funding Classification

State Aid

The State-aid classification system has been defined by RSA 229 to 231 to determine responsibility for construction, reconstruction and maintenance as well as eligibility for use of state aid funds. The following is a description of the state-aid system:




 Major Collector
 Minor Arterial
 Minor Collector

Town of Brookline STATE HIGHWAY FUNCTIONAL CLASSIFICATION

Not to Scale
 Full Scale version available
 at Town Hall

Class I, Primary State Highway System, 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, provided that the portions of turnpikes and interstate highways within the compact sections of those cities are Class I highways.

Class II, Secondary State-Highway System, 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.

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, consists of all such roads leading to, and within state reservations designated by the Legislature. The NH DOT assumes full control of reconstruction and maintenance of such roads.

Class IV Highways, consist of all highways within the compact sections of cities and towns listed in RSA 229:5, V. The compact section of any such city or town shall be the territory within such city or town where the frontage on any highway, in the opinion of the Highway Commissioner, is mainly occupied by dwellings or buildings in which people live or business is conducted, throughout the year. No highway reclassification from Class I or II to Class IV shall take effect until all rehabilitation needed to return the highway surface to reputable condition has been completed by the State.

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

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

Scenic Roads, are special town designations of Class IV, V, and VI roads where cutting or removal of a tree, or disturbance of a stone wall, must go through the hearing process and written approval of local officials (See RSA 231).

The state aid classification road mileage in Brookline is summarized in Table VI-1. As shown in Table VI-1, there are only Class I, II, V, and VI type roads in Brookline. There are no Class III (recreational roads) or Class IV (urban compact roads) in Brookline. The major source of funding for maintenance of minor collector roads and local roads, which make up 28.2 miles, comes from the Town of Brookline and the New Hampshire State block grant for roads. Map VI-2 shows the state's funding classification for Brookline.

Federal Aid

The Inter-modal Surface Transportation Efficiency Act of 1991 (ISTEA) replaced federal funding programs that date back to the Federal Interstate System of Highways under President Eisenhower. In addition to the restructuring of the federal funding programs, ISTEA also provides funding for

conformance with the Clean Air Act Amendments of 1990. The Federal Interstate System had directed aid to four road system categories; Interstate, Primary, Secondary, and Urban. ISTEA creates two road systems; the National Highway System (NHS), and the Interstate System (which is a component of the NHS.) The NHS is intended to provide for interstate and inter-regional travel and to meet national defense requirements.

In addition to the NHS funding program, a new block grant type funding program called the Surface Transportation Program (STP), is available for all roads (including NHS roads) not functionally classified as a local road or rural minor collector. Transit capital projects are also eligible under this program. ISTEA also created the Congestion Mitigation and Air Quality Improvement Program (CMAQ) to help states implement their air quality plans and attain the national standards for carbon monoxide, ozone, and particulate matter. CMAQ funding is focused on air quality improvements and provides funds that expand or initiate transportation services or policies with air quality benefits. In addition, the Transportation Enhancements (TE) program provides funding for a variety of transportation-related projects such as pedestrian and bicycle facilities, preservation of abandoned railway corridors, and rehabilitation of historic transportation facilities,

There are no highways in Brookline designated as part of the National Highway System. There are approximately 12.8 miles of highway in Brookline eligible under the STP category. These include roads classified as Arterials and Major Collectors (NH 13 and NH 130).

Traffic Volumes

Historic traffic volume data for the Town of Brookline is compiled from several sources. The New Hampshire Department of Transportation (NHDOT) collects traffic counts in accordance with federal guidelines under the Federal Highway Performance Monitoring Program (HPMS.) The HPMS guidelines describe federal procedures for sampling highway and road volumes. These procedures provide the Federal Highway Administration with highway volumes for design standards and meet the Environmental Protection Agency's requirements for estimating vehicular highway travel. In addition to the NHDOT's annual traffic counting program, the Nashua Regional Planning Commission maintains an ongoing traffic count program for validating the region's traffic mode. The NRPC also provides traffic counts for member communities upon request.

A State permanent traffic recorder is located on NH 13 just north of Old Milford Road near Melendy Pond. Historical traffic growth at this location is shown in Table VI-2 and illustrated in Map VI-3.

As shown in Table VI-2, traffic on NH 13 grew at an annual rate of over ten- percent between 1982 and 1985. Average annual growth rates since 1986 have varied between 1 percent and 11 percent per year. Compared with the growth trends at other permanent counting stations in the area for the same period, this growth rate is similar to that of NH 101 in Amherst, and NH 101A in Milford.

Traffic count data collected at other locations in Brookline are compiled in Table VI-3. These counts represent an average weekday (24-hour period) and have not been adjusted by a seasonal factor.

The most heavily traveled road in Brookline is NH 13 which runs north-south through the town from the Massachusetts state line to Milford. Route NH 130, which connects with NH 13 at the intersection of Quimby Road, provides access to Hollis and Nashua. In Brookline, Milford Street, Main Street, Pepperell Road (between Main St. and Proctor Hill Rd), and Proctor Hill Road make up Route NH 130. Mason Road, which is classified as a major collector road, and Pepperell Rd. which is

classified as a minor collector between the Hollis Town Line and Proctor Hill Road, both provide access to adjacent communities. Old Milford Road, Cleveland Hill Road, and Averill Road have played an increased role in collecting and distributing traffic in the town due to heavy increases in residential development. Cross Road and Bohanon Bridge Road also perform important collector functions by channeling traffic to and from NH 130.

TABLE VI-2
 HISTORICAL TRAFFIC GROWTH ON NH 13
 NEAR MELENDY POND IN BROOKLINE

YEAR	Average Annual Daily Traffic(vehicles per day)	Annual Percent Change	Percent Change 1980-1996
1980	3,408		121 %
1981	3,573	4.84 %	
1982	3,545	- 0.78 %	
1983	3,983	12.36 %	
1984	4,451	11.75 %	
1985	4,941	11.01 %	
1986	5,262	6.50 %	
1987	5,879	11.73 %	
1988	6,192	5.32 %	
1989	6,392	3.23 %	
1990	6,224	- 2.63 %	
1991	6,385	2.59 %	
1992	6,785	6.26 %	
1993	6,934	2.20 %	
1994	7,013	1.14 %	
1995	7,355	4.88 %	
1996	7,529	2.37 %	
		AVG 5.179 %	

Source: New Hampshire Department of Transportation, 1980 - 1996

FIGURE VI-3
HISTORICAL GROWTH TRENDS ON NH 13

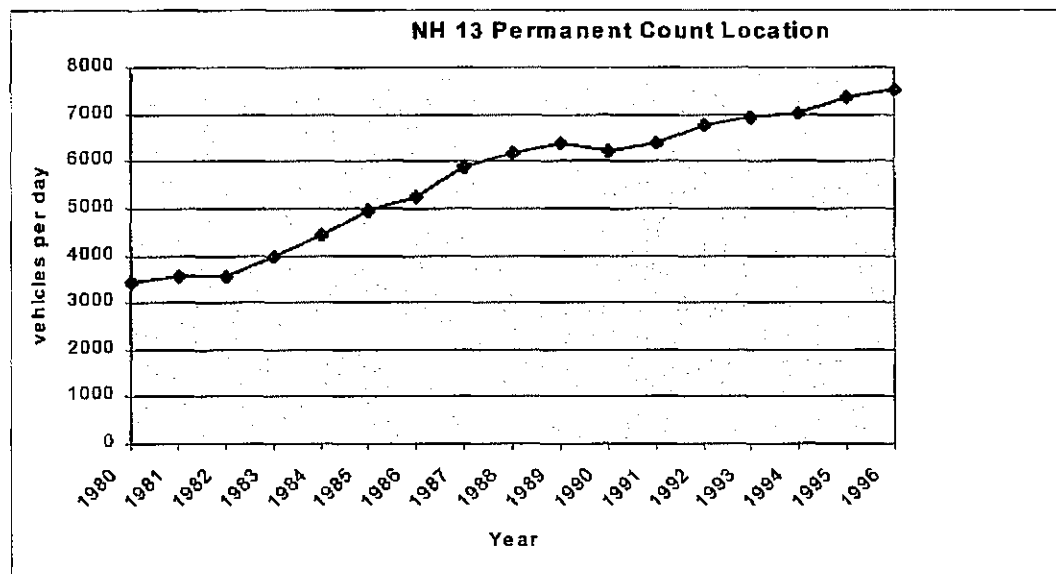


TABLE VI-3
WEEKDAY TRAFFIC COUNTS IN BROOKLINE

Street and Location	1993	1994	1995	1996
NH 13 at Mass State Line	6,372	nc	6,674	nc
NH 13 south of Milford St	5,000	nc	nc	nc
Pepperell Rd. at Hollis T/L	nc	1,681	1,624	1,708
NH 130 east of Cross Rd.	5,194	nc	5,843	6,133
Milford St east. of NH 13	nc	2,218	nc	2,276
Mason Rd. west of NH 13	2,450	nc	2,407	2,500
Mason Rd. at Mason T/L	nc	959	947	nc
Old Milford Rd south of NH 13	nc	nc	nc	1,305
Old Milford Rd north of Steam Mill Hill	800	nc	1030	nc
Averill Rd west of NH 13	nc	nc	nc	539

Source: Nashua Regional Planning Commission, nc; not counted that year.

The average daily traffic volumes shown in Table VI-3 are illustrated on a map of Brookline in Map VI-4.

Roadway Conditions

The pavement conditions of Brookline's Class V roads (town owned roads) were surveyed by the Nashua Regional Planning Commission in 1995. The survey was performed using Road Surface Management System (RSMS) software, which was developed by the University of New Hampshire for use by small towns. The software allows for an inventory of town roads to be compiled and also documents the condition of road surfaces. The software allows the user to prioritize repairs and will assign a recommended repair strategy for each road or road segment. The serviceability and the cost of

maintenance for a road within the initial 75 percent of a pavement's design life is less than one-fifth the cost of maintenance and reconstruction during the final 25 percent of the design life. The purpose of developing a pavement management system is to help the road agent determine when a road has reached that critical 75 percent point.

The reports resulting from the RSMS study are intended to provide assistance in assigning specific repair strategies and prioritizing repair needs. This software system is designed to be flexible and is not intended to take the place of the town road agent's experience and judgment. The RSMS software allows the user to prioritize repairs based on three general weighing factors including traffic volume, roughness, and road conditions. This software recommends that traffic volume be allotted the most weight (50 to 60 %), roughness the second highest (25 to 30 %) and the road condition the lowest (15 to 25 %). Based on the pavement management study, Table VI-4 lists the top ten road segments prioritized by the RSMS software. It was not possible to confirm whether these segments have been improved since the study was conducted, since the Town Road Agent was not available to assist in this task.

TABLE VI-4
RECOMMENDED REPAIR STRATEGIES FOR SELECTED ROAD SEGMENTS

Road Segment	Recommended Repair and life span
Bond Rd segment 2, from NH 13 east to 0.1 miles	Rebuild 5 to 12 yrs (Base Repair and Pavement Replace, or Hammermill or Reclaimer Recycling)
North Mason Rd segment 3, 0.55 miles, near North Rd and Spaulding Brook Rd	Rebuild 5 to 12 yrs (Base Repair and Pavement Replace, or Hammermill, or Reclaimer Recycling)
Old Milford Rd segment 1, 0.3 miles from Main to Steam Mill Hill Rd	Rebuild 5 to 12 yrs (Base Repair and Pavement Replace, or Hammermill, or Reclaimer Recycling)
Old Milford Rd segment 2, 2.3 miles from Steam Mill Hill to Bear Hill Rd	Rebuild 5 to 12 yrs (Base Repair and Pavement Replace, or Hammermill, or Reclaimer Recycling)
Steam Mill Hill Rd 0.15 miles	Rebuild 5 to 12 yrs (Base Repair and Pavement Replace, or Hammermill, or Reclaimer Recycling)
Bohanon Bridge Rd 0.30 miles	Overlays 5 to 12 yrs (Shim Coat, or Thin Overlay, or Thick Overlay)
Cross Rd 0.15 miles	Overlays 5 to 12 yrs (Shim Coat, or Thin Overlay, or Thick Overlay)
North Mason Rd segment 1, from NH 13 west to 0.8 miles	Rebuild 5 to 12 yrs (Base Repair and Pavement Replace, or Hammermill, or Reclaimer Recycling)
Springvale Ave 0.52 miles	Rebuild 5 to 12 yrs (Base Repair and Pavement Replace, or Hammermill, or Reclaimer Recycling)
Cleveland Hill Rd segment 1, 1.0 mile west from Averill Rd	Rebuild 5 to 12 yrs (Base Repair and Pavement Replace, or Hammermill, or Reclaimer Recycling)

Source: New Hampshire Department of Transportation

Bridges

There are thirteen bridges in Brookline that are regularly inspected by the NH Department of Transportation. Five of the bridges are owned by the Town of Brookline. The remainder are owned by the State of New Hampshire. Three of the town's bridges are classified as either structurally deficient or functionally obsolete by the state. Bohanon Bridge over the Nissitissit River is closed for repairs. Two of the state's bridges, Mason Road over the Nissitissit and South Main Street over the Nissitissit, are classified as functionally obsolete. A list of the bridges and the status of weight restrictions is provided in Table VI-5.

TABLE VI-5
BRIDGE CONDITION REPORT

Bridge	Owner	Status
North Mason Rd over Spaulding Brook	Town	Open
Dupaw Gould Rd over Lancy Brook	Town	Open-Structurally Deficient
North Mason Rd over Scabbard Mill Brook	Town	Open-Functionally Obsolete E-2 Load Restriction
Bond Street over the Nissitissit River	Town	Open-E-2 Load Restriction
*Bohanon Bridge Rd over the Nissitissit	Town	Closed-Structurally Deficient Bridge
Mason Rd over the Nissitissit	State	Open-Functionally Obsolete E-2 Load Restriction
NH 13 over the Nissitissit	State	Open
NH 13 over Bela Brook	State	Open-E-2 Load Restriction
NH 13 over Wallace Brook	State	Open
NH 130 over Store Brook	State	Open-E-2 Load Restriction
South Main Street over Wallace Brook	State	Open
South Main Street over the Nissitissit	State	Open-E-2 Load Restriction
Pepperell Rd over Rocky Pond Brook	State	Open

Source: New Hampshire Department of Transportation

E-2 Load Restrictions prohibit crossing by any certified vehicle. Certified vehicles are those trucks that receive special state certification to exceed the load limit (up to a designated weight) set within their specified weight class.

- *Note: Bohanon Bridge scheduled for replacement – Fall 1998*

Although the NH DOT inspects locally owned bridges as well as state bridges, the NH DOT only recommends a load restriction posting. The municipality bears the responsibility for installing signs for the posting of load restrictions, in accordance with NH DOT recommendations.

Commuting Travel Patterns of Brookline Residents

Information on origin and destination patterns for travel to workplace is available from the U.S. Census. Although the 1990 US Census data is now seven years old and total commuter trips have most likely changed since that time (due to residential growth and changes in employment), this information represents the latest available data on destination patterns for travel to work. The 1990 US Census data was compared to the data available from the 1980 US Census. The results are summarized in Table VI-6. The numbers in Table VI-6 indicate the number of persons commuting from one community to another, not the number of daily round trips made.

TABLE VI-6
COMMUTING PATTERNS FROM BROOKLINE

Place of Work	1980 US Census Number of Brookline Commuters	Percent of Total Commuters	1990 US Census Number of Brookline Commuters	Percent of Total Commuters
Amherst	32	3.9 %	46	3.5 %
Brookline	134	16.1 %	190	14.7 %
Hollis	31	3.7 %	49	3.8 %
Merrimack	65	7.8 %	71	5.5 %
Milford	101	12.1 %	80	6.2 %
Nashua	213	25.6 %	355	27.4 %
Bedford	17	2.1 %	14	1.1 %
Manchester	15	1.8 %	57	4.4 %
Other N.H.	45	5.4 %	107	8.2 %
Massachusetts	179	21.5 %	325	25.2 %
Total	832	100 %	1,294	100 %

Source: U.S. Census, 1980

Table VI-6 shows that the amount of people who both live and work in the town has dropped from 16.1 percent in 1980 to 14.7 percent in 1990, even though the overall number has increased from 134 to 190. The percentage of commuters living in Brookline and working in Nashua, Manchester, and Massachusetts has increased while the percentage of Brookline residents working in Amherst, Merrimack, Milford, and Bedford, has decreased. The number of commuters overall has increased from 832 in 1980 to 1,294 in 1990. This represents an increase of 4.5 percent per year over the ten year span.

The vast majority of Brookline residents travel to work in a car by themselves, as shown in Table VI-7. Over 85 percent did so in 1990, representing an increase of 14 percent from 1980. The 1990 figure was slightly higher than the regional drive alone average of 82 percent, nearly 10 percent of Brookliners carpool to work, just under the regional average of 11 percent, while 3 percent worked at home in 1990.

TABLE VI-7
COMMUTER MODE OF TRANSPORTATION, 1980-1990

	Regional				
	1980	Percent	1990	Percent	Average, 1990
Drive Alone	604	71.1%	1,099	85.2%	82.4%
Carpool	175	20.6%	123	9.5%	10.9%
Public Transportation	3	0.4%	2	0.2%	0.8%
Bicycle	n/a	n/a	4	0.3%	0.3%
Walk	25	2.9%	15	1.2%	2.1%
Other	11	1.3%	8	0.6%	2.8%
Work at Home	31	3.7%	39	3.0%	0.7%
Total Workers Age 16+	849	100.0%	1,290	100.0%	

Source: U.S. Census

Table VI-8 shows that Brookline residents are spending more time traveling to work, the result of increased traffic congestion or more distant work sites.

TABLE VI-8
TRAVEL TIME FOR COMMUTER TRIPS, 1980 - 1990

Minutes	1980 Number	Percent	1990 Number	Percent
< 10	90	10.8%	102	8.2%
10-19	149	17.8%	243	19.4%
20-29	257	30.7%	278	22.2%
30-44	209	25.0%	377	30.1%
45-59	65	7.8%	152	12.2%
60+	67	8.0%	99	7.9%
	837	100.0%	1,251	100.0%

Mean Travel Time 1980: 26.6 minutes

Mean Travel Time 1990: 29 minutes

Source: U.S. Census

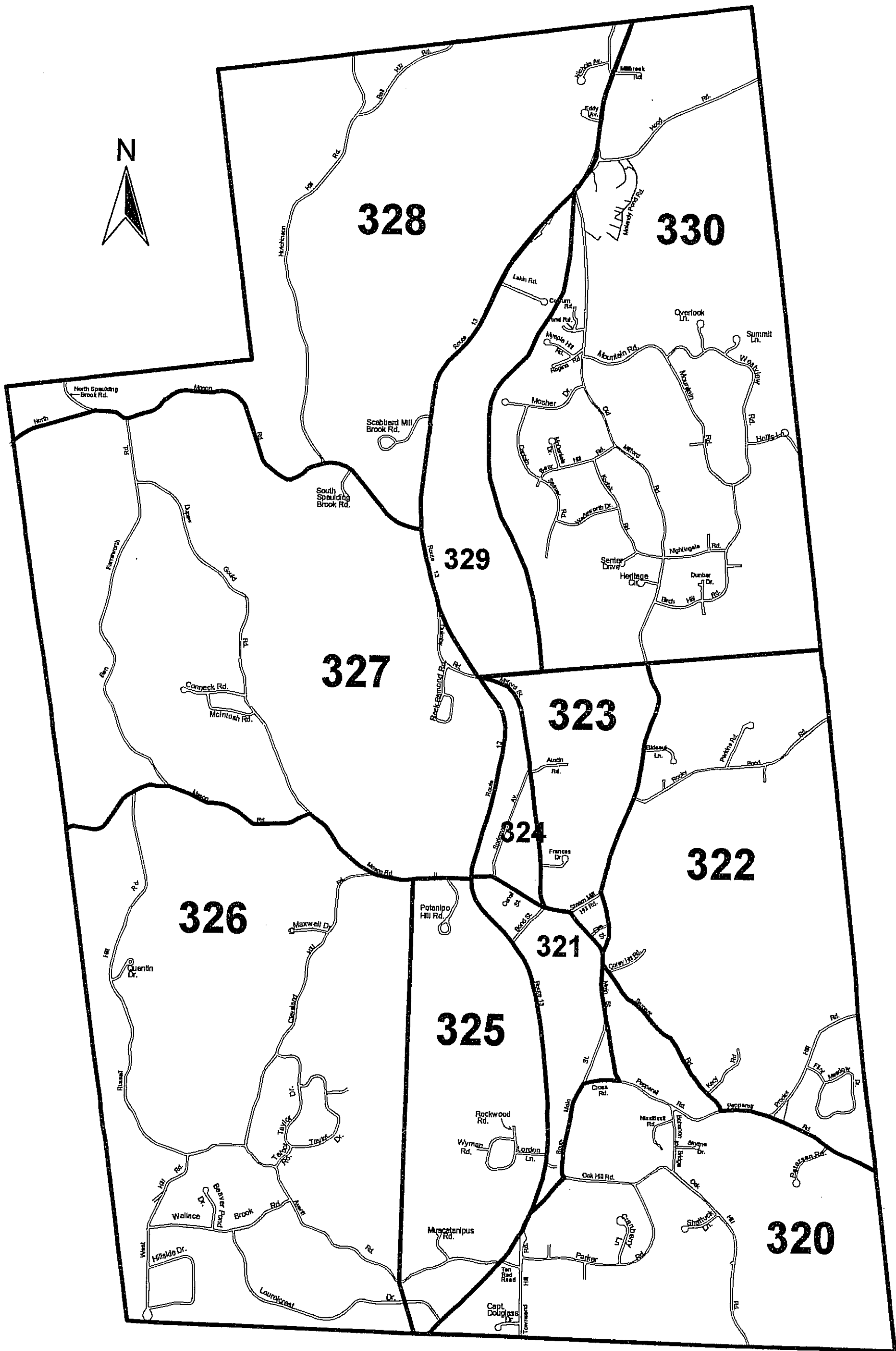
Historical Residential Traffic Growth

An inventory of building permits issued by the town for new home construction over the past six years shows an overall annual growth rate in the Town of Brookline of 5.6 percent in housing units. The inventory of permits was performed in order to update the region's traffic model. The new single family homes built as a result of the issued permits are aggregated within 11 traffic analysis zones in Brookline. These zones are shown in Figure VI-5 and were created for traffic model analysis purposes. Table VI-9 shows the increases in single-family homes in Brookline between 1990 and 1996.

TABLE VI-9
NEW SINGLE FAMILY HOMES

Traffic Analysis Zone (see Figure VI-5)	Total Housing Units 1990	New Homes 1990 to 1996	Total Housing Units 1997	Annual Growth Rate (Percentage)
320	123	29	152	3.6 %
321	59	0	59	0.0 %
322	79	10	89	2.0 %
321	52	6	58	1.8 %
324	59	1	40	0.4 %
325	31	21	52	9.0 %
326	129	91	220	9.3 %
327	105	21	126	3.1 %
328	52	10	66	3.1 %
329	107	9	116	1.4 %
329	104	143	247	15.5 %
Total	881	344	1225	3.6 %

Source: Town of Brookline Building Department: Building Permits



Not to Scale

Town of Brookline TRAFFIC ANALYSIS ZONES

Full scale version available
for review at Town Hall

The number of new vehicle trips on the town's roads and highways is dependent upon land use and development (residential, commercial, industrial, etc.) Based on the trip rate for a single family home published by the Institute of Transportation Engineers in their handbook, Trip Generation, the average single family home is likely to generate 10 vehicle trip ends on an average weekday (a trip end is described as a trip in or trip out, therefore, 10 vehicle trip ends equal five round trips.) Based on the ITE average trip rate of ten vehicle trip ends per house, the 344 single family homes constructed in Brookline since 1990, have probably added 3,440 new vehicle trips ends per day distributed throughout Brookline's road system.

Table VI-9 also indicates the fastest growing residential areas in Brookline. Traffic analysis zone 330, which is located in the northeast of the town, is growing at an annual rate of 15.5 percent per year (see Map VI-4). The impact of vehicular traffic due to residential growth within this Traffic Analysis Zone (TAZ) will be focused on Old Milford Road which provides access to Route NH 13 to the north and Route NH 130 to the south. Traffic analysis zones 325 and 326, which are located in the town's southwest quadrant, are growing at an annual rate of 9.0 percent and 9.3 percent respectively. Traffic due to residential growth in these two zones will impact Cleveland Hill Road and Mason Road, which provide access to Route NH 13 to the north, and Averill Road which provides access to Route NH 13 and 130 to the south and east.

Future Traffic Growth

Future traffic volumes on Brookline's major highways and roads were projected using NRPC's computerized traffic model. The traffic model was developed on a region-wide basis as a tool to forecast future traffic and to determine future highway needs. The model utilizes land use development as the determinant for trip generation, and then distributes and assigns the traffic on the road network based on a mathematical gravity model. Land use determines the production and attraction of vehicle trips for each traffic analysis zone, while the gravity model determines the paths of least resistance between the zones when assigning traffic to specific roads. The model is validated utilizing field counts from automatic traffic recorders. Table VI-10 shows the model's forecasted traffic volumes to the year 2015 for Brookline's major highways.

**TABLE VI-10
FUTURE TRAFFIC**

Highway Location	1994 Traffic	Year 2015 Estimate	Percent Change
NH 13 at Mass state line	6,350	8,650	36.2 %
NH 13 south of NH 130	5,150	6,450	25.2 %
NH 130 east of Cross Rd	5,200	7,750	49.0 %
Mason Road at Mason T/L	950	1,450	52.6 %
Pepperell Rd at Hollis T/L	1,700	1,900	11.8 %

Source: Nashua Regional Planning Commission Traffic Model

Table VI-11 shows the operational characteristics of Brookline's major roads based on the volumes forecasted in Table VI-10. Table VI-11 provides the functional classification, the volume to capacity ratio (V/C), and the level of service ranking for each road segment.

Functional classifications were described earlier in this chapter. Volume to capacity ratio is a formula expressed as the amount of existing traffic on a road divided by the maximum carrying capacity of that road. Level of service (LOS) is a qualitative measure of operating conditions that occur on a road or facility within a given period of time. Level of service analysis is a qualitative and quantitative measure of the effects of a number of operational factors including roadway geometrics, travel delay, freedom to maneuver, and safety. The level of service (LOS) ranking categories range from LOS "A" to LOS "F" and are described as follows:

- Level of Service "A" - Represents free flow operating conditions. Individual users are virtually unaffected by others.
- Level of Service "B" - Represents stable flow conditions with other traffic in the stream becoming noticeable. The freedom to select desired speeds is still unaffected.
- Level of Service "C" - Represents stable flow but marks the beginning of increases in the formation of platoons of vehicles.
- Level of Service "D" - Represents high density but stable flow. Freedom to maneuver and speeds are highly restricted.
- Level of Service "E" - Represents operating conditions at or near capacity. Congestion level and delays are high.
- Level of Service "F" - Is representative of forced flow conditions with lengthy queues and very long delays.

**TABLE VI-11
 OPERATIONAL CHARACTERISTICS**

Highway Location	Year 2015 Estimate	Functional Classification	Theoretical Capacity	Vol/Cap	LOS
NH 13 at Mass state line	8,650	MN ART	26,500	0.33	C
NH 13 south of NH 130	6,450	MN ART	26,500	0.24	B
NH 130 east of Cross Rd	7,750	MJ COLL	23,800	0.33	C
Mason Road at Mason T/L	1,450	MJ COLL	23,800	0.06	A
Pepperell Rd at Hollis T/L	1,900	MN COLL	21,400	0.09	A

Alternative Transportation

The rapid rate of growth within Town has resulted in greater demands being placed on Town roads, since the majority of Brookliners choose vehicular travel for most travel purposes. To accommodate this increased demand and to preserve the rural environment which residents favor, steps should be taken to provide citizens with the opportunity to use a variety of travel modes for work and non-work travel. In particular, walking and bicycling are viable options for a rural community such as Brookline. Alternative travel options may particularly benefit those who are not able or willing to drive, such as children, the elderly, and the disabled.

In 1995 the Town of Brookline, as part of the region's Metropolitan Planning Organization, endorsed the NRPC Region Bicycle & Pedestrian Plan (RBPP) which was created to develop and implement a comprehensive bicycle and pedestrian system within the region. The primary goals of the plan are to insure the incidence of bicycling and walking by establishing a continuous, coordinated non-motorized transportation network and by creating a traveling environment in which bicycling and walking are attractive alternatives. The RBPP recommendations for physical and institutional improvements as well as a non-motorized network comprised of local and state roads on which bicycle and pedestrian improvements should be focused.

The key recommendations of the RBPP are to:

- Use the existing and planned street system to the maximum extent possible, consistent with safety considerations, for bicycle travel. The preferable facility for bicycle travel is a four-foot paved shoulder on existing roads, separated from motorized travel lanes by a 6 to 8 inch painted white stripe. Paved shoulders will serve the needs of all non-motorized users and minimize acquisition and construction costs, and are especially appropriate for the rural roads located in Brookline. Shared roadways, with appropriate signage and safety improvements, are recommended where paved shoulders and bicycle lanes are not possible. "Bike Route" signage is recommended for all non-motorized road segments.
- Install five-foot sidewalks on both sides of arterial roads where possible. These facilities are desirable on high-volume corridors to improve walking safety. Sidewalks are also desirable on at least one side of collector roads. For rural and low-volume routes, paved shoulders may be used by both pedestrians and bicyclists.
- Provide pedestrian crossings at high-volume intersections on all arterial roads.
- Establish a regular non-motorized facility maintenance program. This program would include regular inspection of facilities to identify hazardous conditions, road shoulder sweeping, and maintenance of facilities based on safety considerations.
- Adopt land use strategies which facilitate non-motorized travel. Strategies such as encouraging mixed-use development, programming non-motorized improvements into the local Capital Improvements Program, requiring non-motorized improvements as a part of development approval, and adopting bicycle and pedestrian-friendly design standards would result in a more attractive traveling environment for non-motorized modes.
- Implement non-motorized educational programs in schools. This program would teach children basic principles for safely sharing roadways with vehicles and would ideally incorporate on and off-road training time. A key component of this program is teaching the importance of wearing bicycle helmets.

The Brookline non-motorized network adopted by Town officials is shown in Map VI-5, and includes Route 13, Route 130, Main Street, Milford Street and Mason Road. These routes were selected to provide for regional non-motorized travel; additional roads may be suitable to provide for local travel.

As part of the study, an inventory was conducted from July to September 1994 to assess the suitability of each road for bicycle and pedestrian travel. The results of this survey are shown in Table VI-12. The major north-south link, Route 13, and east-west link, Route 130 are both in excellent condition for non-motorized travel, but safety improvements are warranted due to high vehicular travel speeds and located here and the only sidewalks in town are both located on this street. Mason Road is suitable for non-motorized travel, but is constrained by a lack of available room for improvements.

**TABLE VI-12
INVENTORY OF NONMOTORIZED NETWORK**

Road Section	Road Type (1)	Speed Limit	ADT (2)	Pavement Condition (3)	Grades (4)	Right of Way (5)
NH 130 - Hollis Line to NH 13	2LU	35/30	4,546	F	M	A
NH 13 - Mass. Line to Milford Line	2LU	50	6,183	G	M	E
Mason Road	2LU	50	1,855	G	S	L
Milford Street	2LU	50	1,773	F	S	A

(1) Type of Road	(2) ADT	(3) Pavement	(4) Grades	(5) ROW
2L = 2 Lanes	Average	G = Good	F = Flat	E = Extensive
U = Undivided	Daily	F = Fair	S = Slight	A = Adequate
	Traffic	P = Poor	M = Moderate	L = Limited
			E = Extreme	

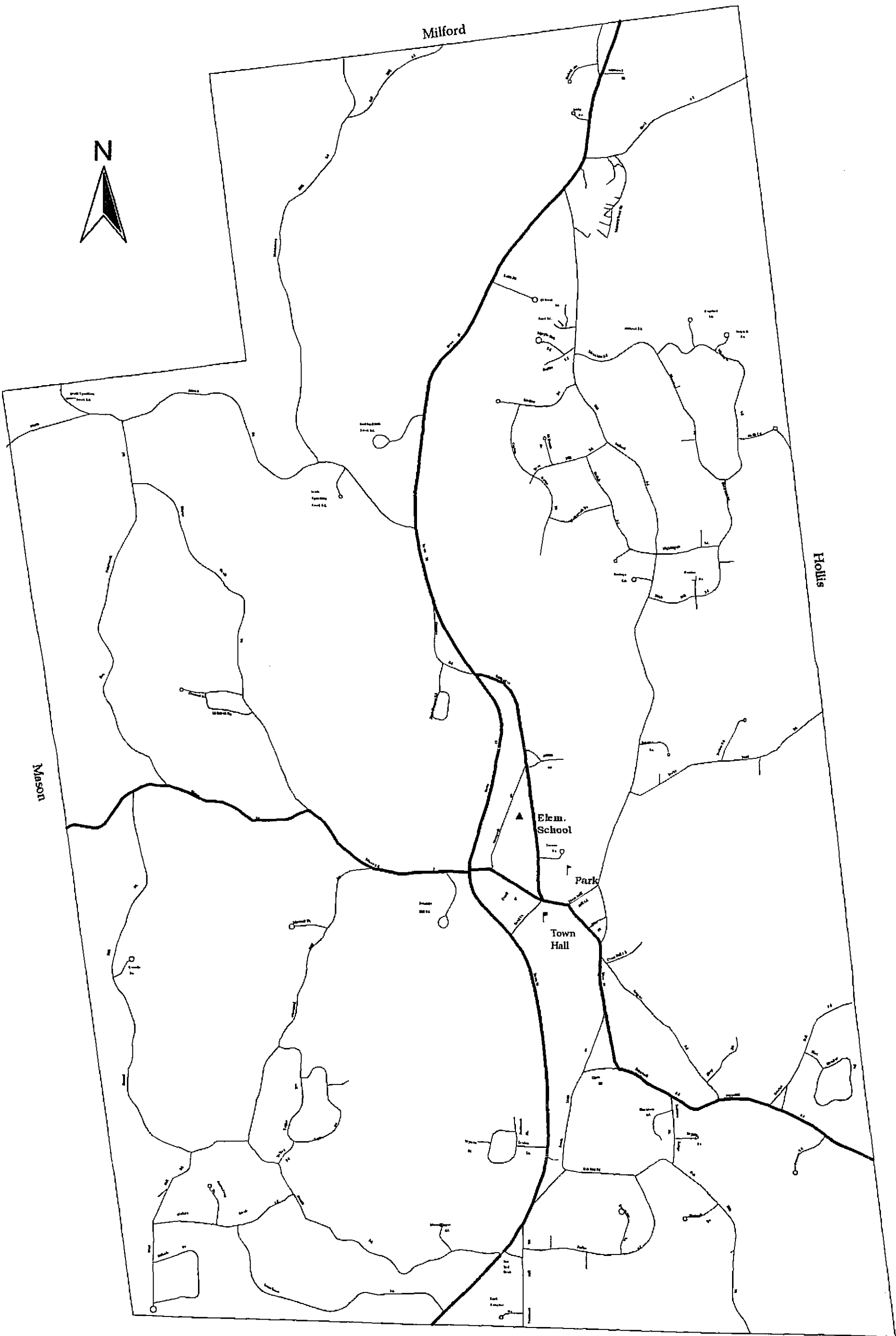
KEY TRANSPORTATION ISSUES



Developing Alternative Road Corridors




Table VI-6, which showed the commuting patterns of Brookline residents, indicated that the majority of traffic generated in Brookline is going to and returning from points north via NH 13, points east and southeast via NH 130 and Pepperell Rd, and points south via NH 13. These commuting patterns are reflected in the average daily traffic on Brookline's major roads (see Table VI-3). These patterns were also reiterated in a 1993 NRPC questionnaire that was distributed to Brookline residents on Rocky Pond Rd., Old Milford Rd., and side streets off of Old Milford Rd. Residents were asked to document the roads on all vehicle trips to and from their homes. The largest amount of trips were made using Route NH 13 to and from the north and Route NH 130 to and from the east. Based on this questionnaire and the census data on commuting patterns, several potential road corridors were developed. The development of these corridors is described in detail in a traffic study completed for the Town of Brookline by the Nashua Regional Planning Commission in 1996.

The potential new roads corridors are described as follows:

- **Hood Road.** Improve Hood Road from NH 13 in Brookline to Milford. This road corridor will allow a connection to Route NH 101A and NH 122 via Foster Road and Ponemah Hill Rd. in Milford and Federal Hill Rd. in Hollis.



 Bicycle and Pedestrian road network
 Town Roads

 Elem. School
 Park
 Town Hall

Town of Brookline
BICYCLE and PEDESTRIAN NETWORK

Not to Scale

Note: Full Scale version available
for review at Town Hall

- **New Road.** A new road running east/west from Overlook Lane in Brookline to Adams Rd. in Milford just north of the Hollis town line. This road will facilitate east west access to Route NH 122 from one of the fastest growing residential areas in Brookline.
- **Rocky Pond Road.** The improvement of Rocky Pond Road will allow eastbound and westbound traffic to be routed around the Cross Rd./NH 130 intersection and the NH 130/Pepperell Rd. intersection.
- **Wood Road.** Improve Wood Road from Rocky Pond road to NH 130. Improvements to this road, running north/south from Rocky Pond to NH 133, will provide an alternative route to the Main St.-Pepperell Rd (NH 130) corridor. An alternative corridor which was conceptually proposed as part of the Gavin subdivision on lot F-18 would be from Dunbar Drive or Hollis Lane to Perkins Road.
- **New Road.** A new road running east/west from Old Milford Road to Milford Street (Route NH 130), or the continuation of Bear Hill Road to NH 13.
- The extension of Cross Road over the Nissitissit River to NH 13.

The improvements to all the above mentioned roads includes widening, improving the drainage system, improvements to the horizontal and vertical alignments (grading and curves), and a paving with a bituminous concrete surface. All of the alternative road corridors were proposed to provide a more direct route to the regional highway system including NH 122, NH 101A, and NH 130. These alternative routes will provide a by-pass around the most heavily traveled intersections and highways in Brookline such as NH 13, Pepperell Road (NH 130), Cross Rd., Main Street, and Old Milford Road.

Development Impacts On Highways

Communities face the problem of having to upgrade the local road network as new development occurs. To the extent that new development projects create a need for improvements, developers should be required to pay their proportion of the cost to implement these improvements. The amount of developer contributions should bear a rational connection to the needs created by and the benefits conferred upon the subdivision. The administrative costs of a formal impact fee system are too great for the Town at this time. As such, it is recommended that the current system of off-site improvement negotiations by the Selectmen in consultation with the Planning Board be continued.

Scenic Road Designation

As New Hampshire's residential, commercial and industrial development has grown, so has the need to improve the road system, thereby reducing the number of country roads that constitute an important asset to the State. To prevent the elimination of scenic roads, communities are enabled by State legislation to designate roads other than state highways as Scenic Roads. This Law protects such roads from repair or maintenance, which would involve the cutting or removal of medium and large-sized trees, except with the written consent of an official body. The law is an important tool in protecting the scenic qualities of roads. The large trees and stone walls that line many rural roads are irreplaceable and contribute heavily to the New England character of the region's towns.

In Brookline, North Mason and Averill Roads have been designated as Scenic Roads. The Town should continue to utilize the N.H. Scenic Road Law as a method of preserving the town's rural character, in particular those roads currently classified as Class VI, such as Ball Hill, Hutchinson Hill, the southern end of Ben Farnsworth, the southern end of Russell Hill, and the northern end of Dupaw Gould Roads.

Development Policy for Class VI Roads

The Town should form a policy to control and guide future developments along Class VI roads. The Planning Board should consider the effect, which proposed subdivisions may have on the roads and require the developer to upgrade the roads as a condition for subdivision approval. Even if the new road in a subdivision meets the Town's specifications, the other roads (especially Class VI roads) in the area may not be adequate to accommodate the increased traffic resulting from the new development. In this case the developer should pay his proportion of the cost to upgrade these off-site roads. Development on Class VI roads should not be allowed until those roads are improved to Class V or better.

Cul-De-Sacs and Turnarounds

Cul-De-Sacs can be an integral part of an efficient road network if properly designed. If improperly designed, cul-de-sacs can lead to an inefficient road system and level of service problems on collector roads. One of the many issues raised when reviewing plans with cul-de-sacs is whether the road should extend to the property boundary. The following should be used as a guide to both the planning board and developers in building roads in Town.

The Planning Board should encourage cul-de-sacs to the property boundary in the following situations:

- Extending cul-de-sacs to the property edge to have less curb cuts off Route 13. For example, Rock Ramond Road can service a lot, which also has access from Route 13, thereby discouraging a curb cut on Route 13, and close to a major intersection.
- Where a future possible connection may be appropriate for establishing an efficient road network in Town. For example, by including a stub road off of Talbot Road, future access to other lots and possibly Route 13 may exist, thereby establishing another possible east-west road from Cleveland Hill to Route 13, possibly reducing traffic along Mason Road and Averill Road.

The Planning Board should discourage cul-de-sacs in the following situations:

- Where the cul-de-sac would be between two zones. For example, a through road leading from a solely residential zone to a solely commercial zone may not be appropriate. A through road may encourage truck traffic and patrons to drive through a residential neighborhood to get to the commercial area. However, at this time, there is no zone in town which is zoned for only commercial use.
- Where creating it would produce a dangerous intersection.
- Where it is coming off of an existing cul-de-sac. This may produce long cul-de-sacs, when an option of building a proper road network exists.

- Where an extension of the cul-de-sac to abutting property would *not* be feasible due to steep slopes, major wetland areas or other natural features of the land.
- Where an extension would lead to property, which would be better, serviced from another road.

The Planning Board should also ensure that both hammerhead and cul-de-sac turnarounds should be designed with enough space to accommodate emergency vehicles such as fire trucks and ambulances. The Board should undertake a review of the cul-de-sac design standards currently in place.

Development Control on NH 13

The only industrial/commercial zones in Brookline are 1000 feet wide along NH 13; south of Mason Road to the State Line in the South, and between 500 feet South of Milford Street and North Mason Road to the North. The Town should have a well planned and consistent way of dealing with future development plans along NH 13 so that it will not become another highway that is characterized by numerous traffic lights and curb cuts causing severe traffic tie-ups and delays (NH 101A in Nashua is an example). In preparing such a policy for development control along NH 13, the Planning Board should consider the following:

- Future developments should provide safe and convenient access to NH 13. The safest possible location for access shall be selected and all access points should meet the minimum safe sight distance standard published by the American Association of State Highway and Transportation Officials in the publication entitled *A Policy on the Geometric Design of Highway and Streets*.
- The existing frontage requirement of 200 feet in the Residential-Agricultural District and 150 feet in the Industrial-Commercial District, as well as the 30-foot front setback requirement in the zoning ordinance will also maintain the rural characteristics of NH 13. Buffers in the front of the lots will also serve this purpose. Good examples of front yard buffering along NH 13 are Grant Plastics and Bingham Lumber.

Alternative Travel Modes

As discussed earlier, a critical component of the quality of life within Town is a balanced transportation system providing a variety of travel options. Steps should be taken to facilitate the use of alternative travel modes, such as:

- Integrating four-foot paved shoulders on Main Street, Mason Road, and Milford Street when those roads are improved. In addition, improvements should be focused on Old Milford Road, Cleveland Hill Road, Averill Road, and North Mason Road to provide for local non-motorized travel.
- Install "Bike Route" signage on non-motorized routes.
- Explore the potential to convert the abandoned railway corridor running north south through Town into an off-road non-motorized facility.
- Install five-foot sidewalks on both sides of Route 13, Route 130, and Main Street, and on one side of Mason Road and Milford Street, where physically possible, and within one mile of any school.
- Provide pedestrian crossings at the intersections of all non-motorized routes.

- Establish a regular non-motorized facility maintenance program. The Road Department should regularly inspect road shoulders and sidewalks for hazardous conditions and program maintenance to address the most critical needs.
- Adopt land use strategies which facilitate non-motorized travel. The Planning Board should pursue strategies such as mixed-use development, consider pedestrian and bicyclist travel as a part of every development approval, and adopt bicycle- and pedestrian-friendly road design standards.
- Identify key non-motorized facility improvement needs and program them into the Capital Improvements Program.

Implement non-motorized educational programs in schools. Teachers in the local school system should be encouraged to adopt an educational program available from many bicycle and pedestrian organizations, or to create one of their own. Information is available on these programs from the Nashua Regional Planning Commission.

GENERAL RECOMMENDATIONS

1. Frontage roads parallel with NH Route 13 within the subdivision(s) should be encouraged in order to limit the number of curb cuts on NH Route 13.
2. Access drives to developments on either side of NH Route 13 should be aligned to form a four-way intersection.
3. Encourage land use patterns, which will facilitate the use of a variety of transportation modes, especially walking and bicycling, for residents of all ages.
4. As a long-term strategy, the town should explore the feasibility of establishing a transit feeder route to Milford and/or Nashua to serve residents and workers.
5. The Town should assess the impact of traffic on the Town's road network that may occur as a result of the Manchester Airport expansion.
6. The Town should contact the New Hampshire Department of Transportation to investigate the possibility of no salt or reduced salt zones on all state roads that drain towards Brookline aquifers or wetlands. For example, South Main Street at the Nissitissit River, Route 13 from the state line to a point north of Lake Potanipo and Melendy Pond to a point north of marsh land on Route 13.

CHAPTER V I I .

COMMUNITY FACILITIES

CHAPTER VII

COMMUNITY FACILITIES

How well a town functions is often governed by the type and adequacy of community services it provides. This section of the Master Plan identifies existing community facilities of Brookline. Also presented are recommendations to better address deficient areas of service.

As recently experienced by many New Hampshire towns, inadequacy of community facilities is the result of accelerated town growth. New residential, commercial, and industrial growth brings with it a greater demand on existing facilities and requirements for added levels of service. School enrollments increase, greater volumes of waste need to be disposed of, and more calls are made to the town for fire, police, and ambulance services. Town roads require upgrading and extension, as do water and sewer facilities if they exist. Any town is obligated to provide certain community services to its residents and businesses. As town growth takes place, so must the level of community facilities and services provided.

The following chapter outlines existing areas and levels of service provided by the Town of Brookline and anticipated needs to meet existing deficiencies and cover future levels of projected growth. The recommendations at the end of the chapter are based on future growth projections. Should growth patterns be found to differ from what is projected, so must the Town's plan change to meet those different community needs.

This chapter does not provide the financial analysis found in the Capital Improvements Program (CIP), but it does help define the goals and priorities that a CIP is based on, and should be used in conjunction with the CIP when analyzing community facilities. The following facilities and services are examined to determine their capability to meet present and projected future needs:

- Ambulance Service
- Cemeteries
- Fire Protection
- Police Protection
- Public Library
- Public Schools
- Recreation and Open Space
- Solid Waste and Septage Disposal
- Town Office Facilities

BROOKLINE AMBULANCE SERVICE



The following sections look at various aspects of the Ambulance Service, its structure, facilities and equipment.

Personnel

Brookline Ambulance Service consists of a 23-member force that is a mixture of 2 full-time paid attendants and 21 volunteers. With this group, the service is able to provide 24 hour a day, 365 days a year emergency response. However, this is not an easy task as the Ambulance Service is presently short-staffed on all shifts. To adequately cover all shifts, it is estimated that a volunteer force of 25 to 30 members is needed.

The Ambulance Service is always looking into different ways to get new members and better fill their ranks. The addition of two daytime paid attendants has taken a great deal of the burden off the volunteer members. The day shift has always been the most difficult to cover. With addition of a full time paid director and another full time paid attendant, this is no longer a problem.

The mutual aid agreements between neighboring towns have developed into something greatly beneficial to all involved. Neighboring town ambulance services have joined together into a loose "association" to provide joint CPR and EMT training sessions, emergency methods testing, and local/regional councils to advance their cause. Each neighboring town's ambulance service has within it a core of very dedicated individuals. This core group has and continues to work together for the benefit of all.

Activity

Ambulance service activity from 1990 to 1996 is shown in Table VII-1 and Figure VII-1. The demands on the department have increased dramatically since 1990.



Community Facilities

Town of Brookline COMMUNITY FACILITIES

Not to Scale
Note: Full Scale version available
for review at Town Hall



Town of Brookline Recreation and Conservation Facilities

Note: Full Scale version available
for review at Town Hall

Not to Scale

Brookline Elementary School Playground

The playground area of the Elementary School covers one and one half acres of the seven-acre parcel. Within this area there is a playground equipped with swings, jungle gyms, slides and monkey bars. The area also includes an outside basketball court. Though owned and maintained by the Elementary School, Town resident use is encouraged.

Brookline Ball Park

Owned and maintained by the Town, the 6.5 acre site provides a baseball field, a softball field, a playground and soccer fields to support the over 400 participants in the youth soccer program. An irrigation system was installed in 1997. There are two utility buildings, and a concession building with a bathroom. Existing parking currently holds about 50 cars but could be expanded to accommodate nearly 80 cars. There are no plans for further expansion of recreational facilities at this site. A playscape was installed in 1998.



The Ball Park on Frances Drive has 1 softball field, 1 baseball field and a playground.

Lake Potanipo and the Max Cohen Memorial Grove

Providing approximately 170 acres of state-managed surface water to enjoy Lake Potanipo offers boating, fishing, and swimming to the Brookline community. Any body of water over ten acres in size is considered a "great pond" and falls under State regulations for protection and public access requirements (Melendy Pond is also a great pond). Access to the lake for boating is over a designated right-of-way where a gravel, public boat launching area has been constructed.

Additional recreation use is made of Lake Potanipo from a Town-owned lakeshore park known as the Max Cohen Memorial Grove. Within this 1.5 acre area, there is approximately 0.3 acres for picnicking or day use, with five picnic tables provided. Along the property's 250 feet of lake frontage, there is approximately one-quarter acre of public beach and one acre of buoyed-off swimming area. A playground facility for children, including a small play structure with two slides and several ladders, was added to the park in 1997. Overflow parking for the Grove is provided across Mason Road.



Max Cohen Memorial Grove swimming beach looking out across Lake Potanipo

Laurelcrest Land

The Town's first subdivision approved under the Open Space Development Ordinance included nearly 80 acres of conservation land (lot J-39) between Averill Road and Laurelcrest Road, including a parking area off of Averill Road. Two lots, J-39-45 and J-39-46, totaling 20 acres were also deeded to the Town as common land for residents. A trail exists along the esker on the western edge of the pond on these two lots. Future plans include establishing a trails system on the remainder of the property.

Lot K-66-20 (south side of Oak Hill Road)

This tract of 28.2 acres was donated to the Town of Brookline by Tom and Marge Moran in 1992. Development of this area into its full recreational and conservation potential has taken a back seat to other areas since the gift was made, but could take on more significance to the neighborhood in the future. The shape of the area, although irregular on paper, was deliberate, mainly to accommodate existing and potential trails for walking and horseback activities. The area is accessible from Oak Hill Road, Shattuck Lane, and two locations on Parker Road. Approximately one mile of trail network currently exists leading to and from these locations, but some segments of the network are on adjacent private property. Some clearing and grading is necessary within the lot to keep the trails on Town land, or alternately, easements could be acquired from abutting property owners.

A fairly large swamp exists adjacent to Oak Hill Road Park (described below), but a 25-foot strip on high ground has been established so that a practical foot trail could be built around the whole wetland if desired. There is also significant contiguous acreage on the south end of the parcel that is sloping high ground containing some small streams. This area has a potential for future active recreational use and possible for more intensive purposes. It is also adjacent to land being considered for a new elementary school, and could possess some value in conjunction with this use.

A small area on this lot now serves as a "bonus" back yard for homes adjacent to Shattuck Lane and mid-Parker Road. It is fairly flat and open, and a more formal use such as a tennis court or playground could be added if desired.

Melendy Pond

Town-owned and managed under the Melendy Pond Authority, this 265.4 acre parcel of land, including 19 acres of water, provides recreation for those leasing the existing camp lots. There are 36 (50' X 75') lots on the property within a 3.1 acre area that are leased out on a long-term basis for recreational use only. At present, there are 28 privately owned structures on lots leased from the Melendy Pond Authority. The owners of the structures pay real estate tax on the structures alone. The yearly rental payments on the lots vary from \$75 to \$110 per year. When leases and options are renewed, an effort is being made to establish a uniform final termination date in the 2020's.

The 19 acres of surface water provide recreation to those who lease camp lots, and to Brookline residents. There is one boat launch area at the edge of the lot and a 30' X 30' sandy beach. No area is provided for parking of vehicles at this launch/beach area. There is another beach area on the opposite side of the lake with 50 feet of lake frontage. This area's use is limited to only the people leasing lots from the Melendy Pond Authority.

The remaining 262.3 acres of land being managed by the Melendy Pond Authority is primarily forest. Currently one trail exists on this land, running up Birch Hill from Old Milford Road.

Morrill Land

Abutting the property managed by the Melendy Pond Authority is a 110 acre parcel of land also owned by the Town (lot B-94). Managed by the Brookline Conservation Commission, the property consists of mostly forest vegetation and no recreation improvements as of yet. Future management considerations could include hiking trails connecting Mountain Road to Melendy Pond and tree management practices. An additional 16 acres abuts this land and Melendy Pond with access to Mountain Road.

The Nissitissit Park

The Conservation Commission has prepared a site plan for the proposed "Nissitissit Park" (lot G-20) which is located across from the Max Cohen Grove. This two-acre parcel of land was purchased in May of 1995. The BCC's site plan includes a graveled parking area, two picnic areas located on each side of the river, a walking trail leading from the Route 13 access point to Potanipo Hill Road and a wildflower park. Fundraising efforts have already begun to replace the former bridge that spanned the river that would create access to the proposed walking trail from the Mason Road side of the property.

Oak Hill Road Park

Oak Hill Road Park is a privately owned facility of 3.2 acres at the junction of Oak Hill Road and Bohanon Bridge Road. It is a full-size, unlighted softball field with basic team and spectator facilities and a 10-foot high outfield fence. Its primary use is adult softball, currently serving two teams from Brookline in the Souhegan Valley League, and one team from Brookline in the Fossil League. At times when the field is not being utilized for adults, it is

made available to girls' softball and Little League, and to local citizens and organizations for activities such as field days and group parties. At times when there is no team play or other organized activity scheduled, the fields is used frequently by children playing pickup games or practicing, and even a few golfers and kite flyers. While not a Town-owned facility, it exists primarily for the benefit of local adult teams that otherwise would be seeking to find playing time on Town fields, thus reducing the demand for public facilities. The site has a little more room for future expansion, which might accommodate facilities such as a tennis court, playground, or horseshoe pits.

Palmer Wildlife Preserve

According to the terms and conditions of Florence Palmer's gift, this property is to be managed by the Conservation Commission for the town, and is to be maintained as an undeveloped tract of land in its natural state. It will, in effect, be reserved in perpetuity as a refuge for wildlife, a water recharge area and a limited recreational resource. The deed states that hunting, off-road vehicles, and overnight camping will not be allowed. Hiking, skiing and (with the permission of the Brookline Conservation Commission) camping by groups will be allowed.

In 1989, the BCC built the main trail into the Preserve. This trail leads hikers across the Scabbard Mill Brook, up a hill covered with mountain laurel, across submerged and moss-and-fern covered stones to the old railroad bed, which was a spur of the Boston and Maine railroad on which ice, granite and lumber from Lake Potanipo were transported.

The land is comprised of a variety of woodlands and wetlands, conifers, hardwoods, softwoods, streams, a marsh and ponds. It is an important wildlife habitat and serves as a natural watershed and flood control plain (a wetland area capable of absorbing vast amounts of water). Waters from Melendy Pond pass through the Palmer property into Lake Potanipo and eventually into the Nissitissit River. The land has significant natural resource as well as aesthetic value and is a very important asset to the town.

In 1995 and 1996, the BCC undertook negotiations with the Palmer Trust to acquire almost 50 more acres to enlarge the preserve and include the pond and other natural features that needed to become an integral part of the preserve. This land was purchased using monies from the BCC's Land Acquisition Fund. Located on this parcel is an old cabin located near a man-made pond and waterfall. Unfortunately, the severe winter storm that hit New England in December 1996 caused significant damage in the Preserve. Two large pine trees fell on the cabin, collapsing the roof and the supporting beams. Heavy rains and snowmelt have also destroyed the four footbridges located in the Preserve. In May 1997, the BCC applied for and received grant monies from the William Wharton Trust for the sole purpose of restoring/enhancing the Palmer Wildlife Preserve. It is the intent of the BCC to transform the cabin into a pavilion-type structure that would be used for environmental education purposes by the local Scout Troops, schools and other interested organizations. The materials presented in the cabin display units would be seasonal in nature and provide helpful information to Preserve visitors in terms of the types of flora and fauna they should expect to see during their visit.

Other future additions to the Preserve include:

- Building a sitting bench at the banks of Scabbard Mill Pond
- Procuring and erecting new trail signs and property boundary markers
- Preparing and publishing a Palmer Wildlife Preserve Trail Guide and Information Brochure
- Procuring and erecting a large bulletin board for the entrance of the Preserve where the trail guides and other pertinent information about the Preserve can be posted
- Purchasing additional property off of Route 13 to create another public access point into the Preserve

Talbot-Taylor Wildlife Sanctuary

Termed Brookline's "best kept secret" by the Town's Conservation Commission, Taylor Pond is a 92 acre parcel of forested/open land and water. The owners have deeded certain rights, easements and interests to the Town. Through a deed-of-dedication process, the owner's intent is for the Town to develop the area to provide public recreation for Town residents and to protect the natural and water resources of the area. With 70 acres of land and 22 acres of surface water, the area has considerable nature education and wildlife sanctuary potential. The dedicated public right-of-way to the pond and the addition of a future nature trail system will allow public recreation (canoeing, hiking and fishing) to occur within this sensitive conservation area. However, currently the forest is inaccessible, and to gain access it will be necessary to acquire access to Averill Road and/or Mason Road.

Privately-owned Recreation/Conservation Land

In addition to publicly-owned recreational/conservation land, two private non-profit conservation associations own land within Town and make it available for public use:

- **Beaver Brook Association.** Formed to protect conservation lands, the Beaver Brook Association holds title to, and conservation easements on, a number of parcels. The Association owns 7 lots totaling nearly 105 acres in the southeastern portion of Town, as well as various conservation easements.
- **Nissitissit River Land Trust.** Formed to protect natural conservation lands along the Nissitissit River, the Nissitissit River Land Trust owns and manages land areas in both Brookline and Hollis. Within Brookline, the Land Trust owns and manages 10 parcels of land totaling over 90 acres in the southeastern portion of Town.

Camp Tevya, located off of Route 13 and Mason Road (lot E-15), also provides private recreational opportunities primarily for school-age children.

Analysis of Recreational Facility Needs

The NH Outdoor Recreation Plan (1994) outlines a suggested range of recreation facilities standards that can be used in assessing a Town's future recreation needs. Estimates are calculated using recreation facility "standards" generated by the NH Office of State Planning. These standards reflect the "norm" for each type of facility found in NH communities -- as determined through an extensive survey process. As such, they are less "requirements" as they are "indications of average performance" to which a community may be compared. Over or underabundance of facility may not be cause for alarm; however, a community should assess whether any such surplus or shortfall is justifiable given the recreational preferences of its residents.

Table VII-14 lists common recreation facilities to consider and their respective range of suggested amounts based on a given population size. Based on these suggested standards and Brookline's current population, Table VII-15 compares the Town's existing facilities in 1996 to the suggested range of standards developed for Brookline, resulting in potential Town recreational needs. Table VII-16 shows areas where the Town may be deficient in recreational facilities in future years based on its projected population. This table may be used as a guide in planning to provide the community with recreational opportunities in the future.

TABLE VII-14
RECREATION FACILITY SUPPLY STANDARDS
Units Required Per

Facility	1,000 People
Baseball Diamond	1.10
Basketball Court	0.80
Boating Access	1.80
Campsites	13.00
Golf Courses	0.04
Gymnasiums	0.25
Ice Hockey Rinks	0.05
Ice Skating Rinks	0.14
Picnic Tables	8.00
Community Parks	6.00
Playgrounds	0.50
Playgrounds (acres)	2.00
Soccer Fields	0.16
Swimming (beach)	0.50
Swimming Pools	0.14
Tennis Courts	0.95
Trails, Hiking (miles)	2.20

*Source: State Comprehensive Outdoor Recreation Plan
N.H. Office of State Planning, July 1994*

TABLE VII-15
ANALYSIS OF EXISTING RECREATIONAL FACILITY NEEDS
BROOKLINE, 1996

Facility	Current Population Requirements*	Existing Facilities	Current Needs
Baseball Diamond	3.44	4	-0.56
Basketball Court	2.50	2	0.50
Boating Access	5.63	2	3.63
Campsites (acres)	40.66	7.76	32.90
Golf Courses (acres)	18.77	0	18.77
Gymnasiums	0.13	1	-0.87
Ice Hockey Rinks	0.78	0	0.78
Ice Skating Rinks	0.16	0	0.16
Picnic Tables	0.44	6	-5.56
Community Parks (acres)**	25.02	11.53	13.49
Playgrounds	1.56	4	-2.44
Playgrounds (acres)	6.26	13.40	-7.14
Soccer Fields	0.50	1	-0.50
Swimming (beach)	1.56	2	-0.44
Swimming Pools	0.44	0	0.44
Tennis Courts	2.97	0	2.97
Trails, Hiking (miles)	6.88	n/a	n/a

* Based on estimated 1996 population of 3,128

** Brookline (improved) community parks: D-25, F-132, G-61-30, L-35
(other potential parks: D-52-53, D-96, J-33-11, K-66-18)

TABLE VII-16
PROJECTED RECREATIONAL FACILITY REQUIREMENTS
TOWN OF BROOKLINE, 1996 - 2020

	Existing Facilities	Projected Additional Recreational Needs				
	1996	2000	2005	2010	2015	2020
Population*	3,128	4,140	5,135	5,953	7,243	8,279
<u>Facility</u>						
Baseball Diamond	4	0.55	1.65	2.55	3.97	5.11
Basketball Court	2	1.31	2.11	2.76	3.79	4.62
Boating Access	2	5.45	7.24	8.72	11.04	12.90
Campsites (acres)	7.76	46.06	59.00	69.63	86.40	99.87
Golf Courses (acres)	0	24.84	30.81	35.72	43.46	49.67
Gymnasiums	1	-0.83	-0.79	-0.76	-0.71	-0.67
Ice Hockey Rinks	0	1.04	1.28	1.49	1.81	2.07
Ice Skating Rinks	0	0.21	0.26	0.30	0.36	0.41
Picnic Tables	6	-5.42	-5.28	-5.17	-4.99	-4.84
Community Parks (acres)	11.53	21.59	29.55	36.09	46.41	54.70
Playgrounds	4	-1.93	-1.43	-1.02	-0.38	0.14
Playgrounds (acres)	13.40	-5.12	-3.13	-1.49	1.09	3.16
Soccer Fields	1	-0.34	-0.18	-0.05	0.16	0.32
Swimming (beach)	2	0.07	0.57	0.98	1.62	2.14
Swimming Pools	0	0.58	0.72	0.83	1.01	1.16
Tennis Courts	0	3.93	4.88	5.66	6.88	7.87
Trails, Hiking (miles)	n/a	n/a	n/a	n/a	n/a	n/a

*N.H. OSP, Municipal Population Projections, November 1997

Based on these standards, Brookline residents may be in need of additional boating access, campsites, golfing facilities, community parks, tennis courts, and hiking trails. In a survey conducted for the 1989 Master Plan, fifty percent of Brookline households responding felt that the Town had enough park and recreational facilities at that time, while thirty-four percent felt there were not enough facilities. A tennis court was the most common answer when respondents were asked what improvements the Town could make. This response was followed by developer donations for recreation, an additional children's playground, opening the lake/beach to Town residents, and walking/running/hiking trails.

Conservation Easements

In response to the need for protection of the Town's major wetland and water resource areas, conservation easements have also been sought. In contrast to the outright purchase of land for conservation purposes, a conservation easement is the grant of a property right by the owner stipulating that the described land will remain in its natural state and precluding future development on that land. Known Town conservation easements are listed in Table VII-17.

A total of nine acres of land within the 33 acre South Spaulding Brook Road subdivision on North Mason Road has been deeded to the Town through a conservation easement. The conservation land "buffer" protects both Spaulding and Scabbard Mill Brooks that flow through the property in addition to their adjacent wetland areas. Besides protecting the water/wetland resource, the easement allows public access to the brooks for fishing and hiking along their banks.

Additional conservation easements have been granted within both the Thurston and Millbrook Estates Subdivisions. Within the Thurston Subdivision, (west of NH Route 13 and southwest of Melendy Pond) approximately 1.1 acres of land has been given in a conservation easement to the Town for the protection of Scabbard Mill Brook. The easement extends ten feet along both sides of the Brook and also includes a small area to the rear of the subdivision, adjacent to a stream entering Scabbard Mill Brook to the southwest.


Within the Millbrook Estates Subdivision, (east of NH Route 13 and north of Hood Road) approximately 25.4 acres of wetland area has been given added protection. A conservation easement of approximately 0.9 acres has been given to the Town along Scabbard Mill Brook. Also, approximately 24.5 acres of wetland area has had restrictive covenants attached to all property deeds. The covenants are designed to prevent damage to sensitive wetland areas within each lot that are all inter-connected within the subdivision. As with all conservation easements, the Brookline Conservation Commission has been given the responsibility and authority to enforce any and all provisions of the easements and deed covenants.

TABLE VII-17
MAJOR CONSERVATION EASEMENTS
TOWN OF BROOKLINE, 1997

Name	Lot	Street
John and Nicole Pelletier	B-31-2	Route 13
Millbrook Estates	B-31-5, 6	Mill Brook Rd.
Chellis	B-43-2, 3	Hood Rd.
Thurston Subdivision	B-65-5...7, 12	Route 13
Lakin Road	B-84-1...4	Lakin Rd.
Spaulding Brook	C-10-1...16	Spaulding Brook Rd. / N. Mason Rd.
Scabbard Mill Brook Rd.	D-89-1, 5	Scabbard Mill Brook Rd.
McHowery Subdivision	E-9-20	Connick/McIntosh Rd.
Cropp	E-12...12-5	Dupaw-Gould Rd.
Farson Homes	E-44, 44-1	Russell Hill Rd.
Russell Lyford	F-79-1...3	Milford St.
Kowalski / Frances Drive	F-98-2, 3	Frances Dr.
Matthew Sawyer (Talbot-Taylor)	G-28	Cleveland Hill Rd.
Fresh Pond Realty	G-60-14	Potanipo Hill Rd.
Talbot-Taylor Estates	G-61-4	Taylor Rd.
Chapman Trust	H-77-1, 5	Sargent Rd.
J. Sandra Leonard	J-3-1...4	Russell Hill Rd. / West Hill Rd.
Neil Johnson	J-9...9-2	Averill Rd.
Lorden/Elevations	J-17-1...8	Lorden Ln.
Wallace Brook Estates	J-30-2...4, J-61-37	Wallace Brook Rd.
Pax Builders	J-57-3, 5, 6	Muscatanipus Rd.
Austin Subdivision	K-2-1...6	Cross Rd. / 130
Fresh Pond	K-2-2, 7	Cross Rd.
Flint Meadow Drive	K-19-7...12	Proctor Hill Rd.
Moran / Beaver Brook	K-28-1	Oak Hill Rd.
Nowak / Beaver Brook	K-60	Oak Hill Rd.
Ruggiero / Capt. Douglass	K-83-2, 4	Townsend Hill Rd.

Source: Town files



 Other Town Owned Land

Town of Brookline OTHER TOWN OWNED LAND

Not to Scale
Note: Full Scale version available

Other Town-Owned Land

Listed in Table VII-18 and shown on (Map VII-3) is an inventory of other Town-owned land. This land is scattered throughout Town, with much of it vacant. The Town has acquired many of these parcels by tax deed and owner default, and as such many parcels are small, of irregular shape, and/or situated in inaccessible locations. It is recommended that the Town attempt to sell some or all of these lots and use the proceeds to purchase more useful land for Town activities.

**TABLE VII-18
OTHER TOWN OWNED LAND
TOWN OF BROOKLINE, 1997**

Lot Number	Location	Use	Acreage
B-37	E. Hutchinson Hill Rd.	Vacant (rear land)	12.0
B-49	Milford Town Line	Vacant	0.6
B-54	Milford Town Line	Vacant (rear land)	3.4
C-3	N. Mason Rd.	Vacant	0.7
D-18-25	Old Milford Rd.	Fire pond	0.8
D-37	Off Route 13	Vacant (backland lot D-74)	1.2
D-57-7	Birch Hill Rd.	Vacant	7.5
D-91	Off Route 13	Vacant (unbuildable)	0.1
D-93	Birch Hill Rd.	Fire pond	0.3
F-118	Hollis line	Vacant (rear land)	0.6
F-141	6 Main St.	Vacant (unbuildable)	0.3
G-65	Cleveland Hill Rd.	Vacant	0.1
H-43	Main St.	Vacant	0.3
H-70	Proctor Hill Rd.	Vacant (backland)	7.1
H-71	Proctor Hill Rd.	Vacant (backland)	4.0
J-39-45	Laurelcrest Dr.	Vacant (common land)	19.1
J-39-46	Laurelcrest Dr.	Vacant (common land)	1.2
J-54	28 Route 13	Vacant (irregular)	1.8
K-66-20	Parker Rd.	Vacant	28.2

Source: Tax records

SOLID WASTE DISPOSAL

Currently, Brookline residents bring their trash to the Town transfer station located on 40 acres on North Mason Road (lot C-12), two-thirds of a mile west of NH Route 13 (Map VII-1). At this facility waste is dumped directly into trailers, compacted, and then delivered to a landfill in Pennacook, New Hampshire. The Amherst landfill, where Town waste was formerly dumped, is in the process of being closed. The handling and disposal of solid waste in Brookline is conducted by the Souhegan Regional Landfill District (SRLD), which also serves the neighboring communities of Amherst, Hollis, and Mont Vernon.

Metals, tires and oil are stored at the transfer facility and the Town must contract periodically for their removal. Stumps are buried at the transfer facility and brush is burned. In 1989, Brookline began a voluntary recycling program at the transfer station. Items which are separated include glass, aluminum cans, newsprint, scrap metal, corrugated, PET plastic and HPDE plastic. The program removes approximately 17 percent of the waste volume by weight; this rate has remained relatively flat since 1995 (Table VII-19).

TABLE VII-19
RECYCLE RATES
SOUHEGAN REGIONAL LANDFILL DISTRICT, 1995 - 1997*

	1995	1996	1997*
Amherst	23.1%	24.0%	21.4%
Brookline	16.8	17.0	16.2
Hollis	21.7	22.2	19.7
Mont Vernon	14.4	16.8	16.0
All Towns	20.7%	21.5%	19.5%

* Through third quarter only

Note: recyclables include commingled, newspaper,
mixed paper, corrugated paper, and textiles

Source: Amherst Solid Waste Commission

Hazardous materials, manure and empty hazardous containers are not accepted at the Brookline transfer facility or Pennacook landfill. Residents and small businesses in the Town of Brookline may discard these materials at the Nashua Regional Household Hazardous Waste / Small Quantity Generator Waste Collection Center, which was opened in 1996 and provides seven monthly collection dates.

Brookline is also part of the Nashua Region Solid Waste Management District that includes eight other communities: Amherst, Hollis, Hudson, Merrimack, Milford, Mont Vernon, Nashua, and Windham. The District was formed at the direction of the legislature, which required all communities in the State, except those with an "approved facility", to join into an inter-municipal solid waste planning district. This District provides administrative oversight and consulting services to the member communities, as well as a solid waste management plan as required by Chapter 149-M. The NRSWMD plan was completed and approved in 1993.

The solid waste volumes generated by the Town from 1995 through the third quarter of 1997 are shown in Table VII-20. In 1996, the Town generated 1,579 tons of solid waste, representing 16 percent of the 9,861 tons of waste processed in the SRLD. Based on the population in that year (3,128 persons), the Town's generation rate was 2.8 pounds/person/day. Brookline's 1996 apportionment to the District of \$103,543 (which includes a tipping fee, transportation costs, capital costs, and the operation of the transfer station) results in a cost of \$66 per ton generated that year for disposal.

TABLE VII-20
SOLID WASTE VOLUMES
TOWN OF BROOKLINE, 1995 - 1997*

	Volume (tons)		
	1995	1996	1997*
Trash	1,282	1,311	1,014
Commingles	92	99	79
Newspapers	97	81	68
Mixed paper (mag., paper)	48	57	28
Corrugated paper	19	26	18
Textiles	4	5	3
Others*	---	---	---
Total	1,542	1,579	1,210

* Through third quarter only

* Batteries, prop. cyl., met. scrap, tires, shingles, oil, demo., appli. comp.

Source: Amherst Solid Waste Commission; Town records

As growth continues, so does the amount of solid waste produced. Table VII-21 and Figure VII-7 shows solid waste volume projections based on the overall 1996 generation rates for each community in the SRLD. Although the generation rate for Brookline contained in the NRSWMD plan was calculated at 2.7, the 1996 figure of 2.8 was used to improve the accuracy of the future projections. As shown, Brookline may generate nearly 4,180 tons per year by the year 2020. At \$66 per ton, the future cost for solid waste management may total \$275,880 by the year 2020.

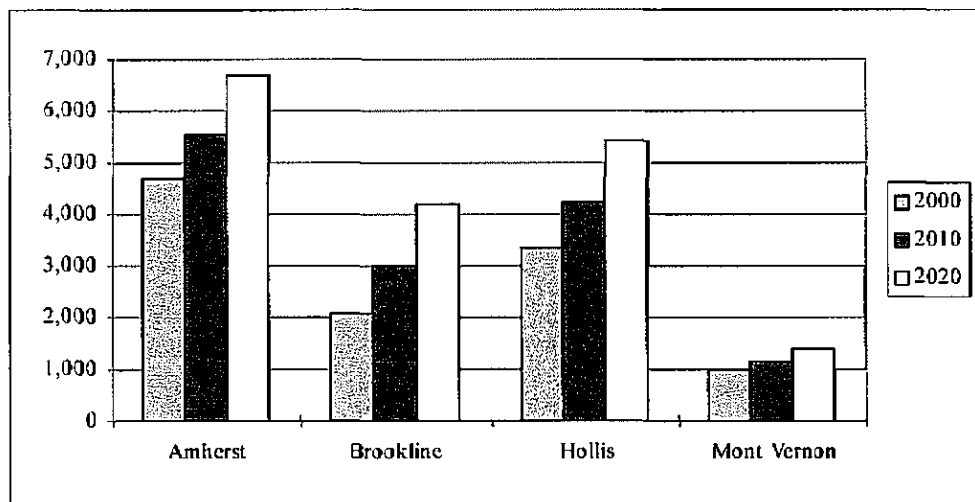
TABLE VII-21
SOUHEGAN REGIONAL LANDFILL DISTRICT
SOLID WASTE VOLUME PROJECTIONS, 2000-2020

	Projected Population			1996 Generation Rate (lbs./person/day)	Solid Waste Volume Projections (tons/year)*		
	2000	2010	2020		2000	2010	2020
Amherst	10,300	12,113	14,686	2.5	4,699	5,526	6,700
Brookline	4,140	5,953	8,279	2.8	2,090	3,005	4,180
Hollis	7,374	9,299	11,940	2.5	3,360	4,237	5,440
Mont Vernon	2,115	2,448	2,978	2.6	993	1,149	1,398

* Volume Projections = (population x rate x 365 days) / (2,000 lbs./ton)

Source: N.H. Office of State Planning Population Projections, October 1997;
Amherst Solid Waste Commission

FIGURE VII-7
SOUHEGAN REGIONAL LANDFILL DISTRICT
SOLID WASTE VOLUME PROJECTIONS, 2000-2020



Space Needs

Currently Town officials foresee no capacity constraints with regard to solid waste collection and processing. However, there is a need in the near future to make improvements to the battery and waste oil area at the Brookline transfer station including enhancing the containment features and adding a roof.

SEPTAGE DISPOSAL

Because there is no sewer system in Brookline, residents rely on on-site septic systems for wastewater disposal. These private systems typically use 1,000 gallon tanks and require pumpout every three to five years. Brookline's septage is currently hauled to Milford or Merrimack for treatment at their municipal wastewater facilities. Few problems with existing septic systems in the Town have been reported to date. It is recommended that the Town and Planning Board consider amending the Zoning Ordinance to allow more flexibility in designing and using community septic systems and wells.

BROOKLINE TOWN OFFICES

Facilities

Brookline houses the majority of its Town offices and functions within the Daniels Academy Building (dedicated in 1913) located in the center of Town, at the corner of Bond St. and Main St. (lot H-31) (Map VII-1). The building houses the Police Department, the Selectmen's Office, Planning Board Office, Building Inspector's Office, the Tax Collector's Office, the Town Vault, two meeting halls, a kitchenette, and the Historical Society archives. Renovations to Town Hall were completed in 1993, which provided additional space for town departments and also made Town Hall handicapped-accessible. The slate roof was replaced on the Academy Building in 1997.

The Town Offices are located on the main floor. About 480 square feet of this area is used by the Selectmen's Secretary, Planning Board Secretary and the Assessors. Also located on the main floor is the Building Inspector's office consisting of 120 square feet, the Tax Collector's office consisting of 324 square feet, a work room consisting of 323 square feet, a conference room with a fire rating for 30 people, the kitchenette, and two handicapped-accessible restrooms.

The upper floor of the Daniels Academy Building consists of approximately 1,800 square feet of floor space, with a raised stage area and balcony. The Town Fire Chief has rated the upper hall capacity at 200 people. The upper hall is rarely used except for the theater group, nursery school, and other group activities. The hall is also available for other public functions for a small rental fee. A long-range goal for this room is installing acoustical improvements to facilitate communication at public meetings.

The basement floor of the building houses the Brookline Police Department. Besides the Police Department, the basement floor contains the 36 square foot Town vault and rest rooms.

Equipment

A new computer system was installed in 1991 in the Town offices to record tax collection and voter registration as well as to handle general ledger and check-writing tasks. In 1994, a computer infrastructure renewal program was initiated to gradually upgrade all town computers to windows capability as well as to network all computers. A laser printer was also purchased in 1994.

PUBLIC INPUT AT COMMUNITY PROFILE

At the 1997 Brookline Community Profile (described in the Goals chapter), Brookline residents expressed a number of thoughts about the current state of town facilities and services as well as their desires for future improvements. Some of these diverse and often conflicting opinions are repeated below, which may or may not reflect majority opinion. A copy of the full Profile report is available at Town Hall for public review.

Mosaic: What is Brookline Like Today?

No golf course; not enough services; recycling program; good library but not great; no town green or center; good no golf courses; great ambulance and fire service; overburdened dump; high energy costs; power failures; excellent elementary education; no street lights; lots of sports.

Vision: What We Want Brookline To Be Like in the Future

100% recycling; street lights; no street lights; playgrounds; teen pool hall; sports program; our own school system grades 1-12; joint school system; affordable and dependable energy; nature trails; more programs for children; teen center; no pool hall; refurbished Route 130 cemetery; public kindergarten.

Component 2: Informed Citizen Participation

Strengths: Recreation Commission; schools; dump; Town Hall; local cable access station; basketball and soccer leagues.

Concerns: no central location for gathering; few support services for young families and the elderly.

Key issues: teen center; support services for the elderly.

Component 4: Cultural Heritage

Strengths: Friends of the Library; Recreation Commission; Brookline Youth Soccer League; Town beach; softball league; Town Dump; story-telling at the library/Christmas story reading/summer reading program; Co-op school sports.

Concerns: city people that like a rural community but want city services; lack of youth center; lack of summer activities.

Vision: art gallery; community center; more all-ages activities; more access to recreation/conservation land.

Component 5: Education and Social Services

Strengths: Churches work together to provide outreach; library - good; active recreation commission; free ambulance service; high level of dedication of volunteers (ambulance, fire, school); continuity of school and town administrations; shrewd financial management of school and town; strong elementary program.

Concerns: tension between Hollis/Brookline school issues; lack of communication between town reps (planning, school, selectmen, and so on); parents feel insecure about letting their kids play in community.

Vision: make the school the core for more programs in the summer; more sense of security within the community; retain Brookline's own identity and sense of community.

Component 6: Community Infrastructure

Strengths: school in good shape; public offices in good condition; new elevator in Town Hall; library expansion; emergency vehicle expansion along with building; having public buildings accessible to various groups; have ballfields, lake access, playgrounds.

Concerns: unauthorized use of Dump by out-of-town people and businesses; school filled to capacity (can't add to existing school, portables, inadequate acoustics); no services for elderly; no community center; need more street lights in critical/dangerous parts of town; no power substation or underground utility lines.

Vision: required recycling; controlled and limited dumping; power substation; additional school building; better acoustics in school gym; no portables; better street lighting for safety.

Component 7: Natural Resources Base

Strengths: Lake Potanipo; easy access to Lake Potanipo; swimming and boating at Lake Potanipo; Melendy Pond, Nissitissit; recycling; easy accessible for recreation-skiing; big chunks of undeveloped land; Conservation Commission conservation land.

Concerns: rapid land development; dumping; recreational vehicles and overzealous usage; lack of respect of the land; lack of financial resources to sustain natural resources; forest reduction.

Vision: Publish results of annual survey of natural resources; purchase more conservation land and make it accessible like Beaver Brook; increase public input into the Conservation Commission planning; maintain same as it is; environmentally-conscious development; more open space left open for more recreation and conservation.

RECOMMENDATIONS

General

1. The emergency services departments should explore coordinating their activities to ensure maximum efficiency in service to the public. An annual meeting between the departments, the Selectmen, and the Planning Board is recommended.
2. Provide for handicapped access to community facilities.
3. Each Town Department should develop long-term plans for capital equipment needs and include those in the Capital Improvements Program (CIP).
4. Each Town Department should recruit and train staff and reward them with public recognition and adequate resources to perform their duties.
5. All Town Departments should explore leasing equipment instead of purchasing.

Cemeteries

1. The Selectmen should explore the long-term goal of constructing a public mausoleum to house resident remains.
2. The Selectmen should explore the need to re-landscape cemeteries, which are suffering from natural deterioration.

Fire Protection

1. The Fire Department should continue to actively participate with the Planning Board and Building Inspector to review subdivision, site, and building plans to ensure adequate fire department access and fire protection for all new and existing developments.
2. The Fire Department should consider developing a policy to address false alarms by automated systems.
3. The Fire Department should explore the feasibility of sharing space with the Police department in a separate building.

Police Protection

1. The Police Department should explore the feasibility of sharing space with the Fire department in a separate building.
2. The Selectmen and Police Department should explore the need for establishing an independent dispatch and detective service.
3. The Selectmen and Police Department should explore the need to expand staffing levels based on current and anticipated activity.

Public Library

1. The Selectmen and Library Trustees should consider providing additional parking at the library.
2. The Selectmen and Library Trustees should explore the need to expand staffing levels based on current and anticipated activity.

Public Schools

1. Based on currently capacity constraints, the School Board should work towards constructing new school facilities within Town, which will comfortably accommodate Brookline's anticipated future growth.
2. Continue the sidewalk program to link all schools to the nearby area. Sidewalks should be provided within the radius around a school in which students are required to walk.
3. As the Town grows, the Selectmen and School Board should consider providing for the schooling needs of all Brookline school-age children.
4. The School Board should continue to utilize school facilities as a "town center" focal point for youth activities, especially in the summer.

Recreation and Conservation Facilities

1. The Recreation Commission should develop a coordinated, long-range recreation plan that will provide for the support, expansion, and improvement of park and recreational facilities within each neighborhood in Brookline.
2. The Conservation Commission should coordinate and publicize the Town's open space and easement location throughout the Town.
3. The Town should establish a land acquisition policy so that a coordinated effort can be made to acquire land when it becomes available.
4. Town officials and the Melendy Pond Authority should work together to evaluate the present status of Melendy Pond property and to develop long-range plans for its future use to maximize benefit to the Town.
5. The Conservation Commission should establish a Town-wide recreational trail system for community-use.

Solid Waste

1. The Town should continue to develop a long-term cost-effective form of waste disposal which will meet local, state and federal requirements.
2. The Planning Board should amend the Zoning Ordinance to allow greater flexibility in the design, construction, and usage of community septic systems and wells.
3. The Selectmen should assess the economic implications of the current method of recycling and assess the need to expand this program.

4. The Selectmen should consider making containment and roofing improvements to the battery and waste oil area at the Brookline transfer station.

Town Facilities

1. The Selectmen should continue to evaluate the need for an expansion and/or improvements to Town facilities.
2. The Planning Board and Selectmen should identify and sell small town-owned parcels of land which offer marginal public benefit and use the revenue to purchase a tract of land that will meet a top-priority need of the Town and its residents.

CHAPTER VIII.

HOUSING

CHAPTER VIII

HOUSING

The characteristics of a community's housing supply are of critical importance in determining how it will grow in future years. The availability of housing of various types may be the most significant factor in determining population distribution, future population growth and the demand for local services.

This chapter will examine several aspects of the role and function of Brookline's housing market: the number, type, cost, value and size of housing units as well as recent housing growth. In addition, housing projections are made as well as a comparison of housing growth to other NRPC communities and a local housing needs analysis based upon the Regional Housing Needs Assessment as required by RSA 674:2, II.

HOUSING CHARACTERISTICS

Compared to other communities in the region, Brookline had the fifth fastest rate of housing growth from 1970 to 1980, increasing by over 200 housing units (65%). As shown in Table VIII-1 and Figure VIII-1, Brookline climbed to fourth in the region from 1980 to 1990, growing by 45 percent (close to 300 units). Since 1990, the Town is on a pace to eclipse the growth rate of the previous decade and has far outpaced all other communities in the region and state.

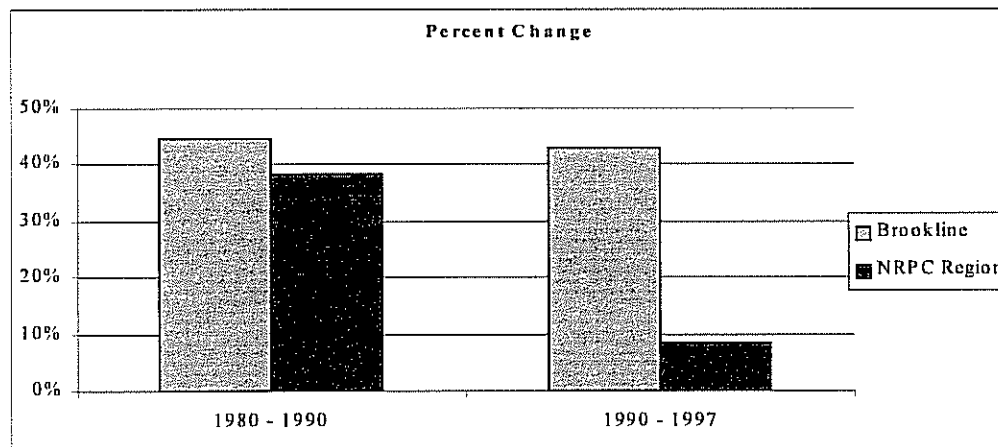
TABLE VIII-1
TOTAL HOUSING UNITS
NRPC REGION, 1980 - 1997*

			% Change		% Change
	1980	1990	1980 - 1990	1997*	1990 - 1997
Amherst	2,594	3,179	22.6%	3,628	14.1%
Brookline	609	881	44.7%	1,258	42.8%
Hollis	1,562	2,006	28.4%	2,427	21.0%
Hudson	4,369	6,902	58.0%	7,695	11.5%
Litchfield	1,319	1,845	39.9%	2,267	22.9%
Lyndeborough	404	488	20.8%	560	14.8%
Merrimack	4,584	7,915	72.7%	8,631	9.0%
Milford	3,245	4,793	47.7%	5,175	8.0%
Mont Vernon	466	614	31.8%	698	13.7%
Nashua	25,444	33,383	31.2%	34,619	3.7%
Pelham	2,408	3,118	29.5%	3,620	16.1%
Wilton	919	1,251	36.1%	1,314	5.0%
NRPC Region	47,923	66,375	38.5%	71,892	8.3%
Hillsborough Co.	100,047	135,622	35.6%	144,270	6.4%
State of N.H.	349,172	503,904	44.3%	533,019	5.8%

* Through August

Source: NH Office of State Planning, Current Estimates & Trends in New Hampshire's Housing Supply (update 1994), November 1995.
U.S. Bureau of the Census, Construction Statistics Division,
Building Permits Branch; U.S. Census

FIGURE VIII-1
GROWTH IN HOUSING UNITS
TOWN OF BROOKLINE VS. REGION, 1980 - 1997



HOUSING TYPE

The housing supply of a community is comprised of a variety of housing types. These are categorized as single-family, multi-family (including duplexes), and manufactured housing. Manufactured housing is synonymous with mobile homes; pre-site built homes are included in the other categories. Among these categories, a unit is defined as housing for one household, whether it is a family, individual, or a group of persons.

Single family units are the most common type of housing found in Brookline, and are usually owner-occupied. Duplexes and multi-family housing units are two or more units in one structure, and are typically rented or leased to the occupants. Manufactured housing also offers an alternative to single-family homes. Table VIII-2 and Figure VIII-2 show the distribution of these types of units in Brookline from 1970 to 1997.

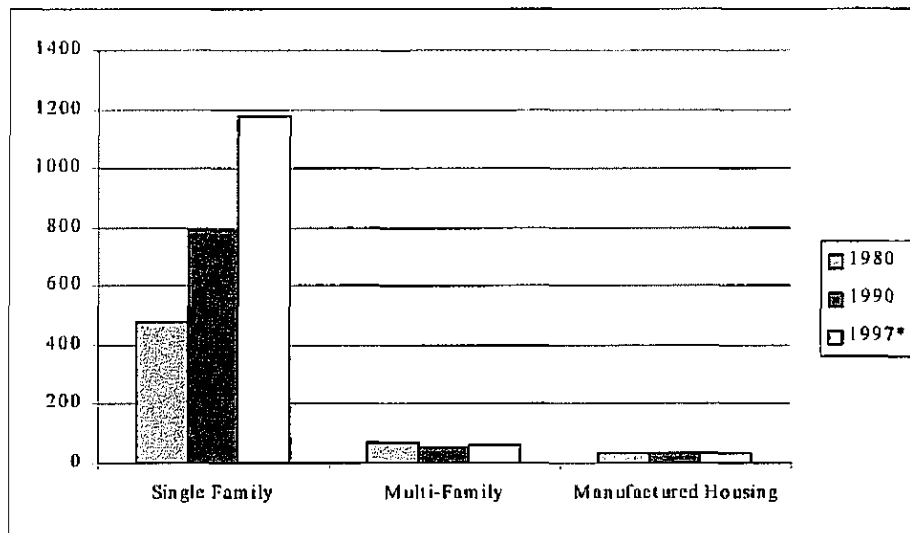
TABLE VIII-2
HOUSING UNITS BY TYPE
TOWN OF BROOKLINE, 1970 - 1997

	1970		1980		1990		1997*	
	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total
Single Family	311	87.6%	480	81.8%	792	89.9%	1,176	92.9%
Multi-Family	21	5.9%	70	11.9%	57	6.5%	58	4.6%
Manufactured Housing	23	6.5%	37	6.3%	32	3.6%	32	2.5%
Total	355	100.0%	587	100.0%	881	100.0%	1,266	100.0%

* As of October 31

Source: NH Office of State Planning, *Current Estimates & Trends in New Hampshire's Housing Supply* (update 1994), November 1995; Brookline Town Report, 1995, 1996; Building Inspector's Report, October 31, 1997; U.S. Census

FIGURE VIII-2
HOUSING UNITS BY TYPE
TOWN OF BROOKLINE, 1980 - 1997



Brookline's zoning ordinance does not allow more than a two-family unit (duplex). But the zoning ordinance is only one of the factors affecting the type of housing built in Brookline. Residential development is also determined by other factors including: lot size requirements; the lack of public water and sewer; the supply and demand variables within the construction market and economy; proximity to employment; and existing housing units. As a result of these factors, the growth of single-family units has far outpaced multi-family and manufactured housing units in recent years.

Single Family Homes

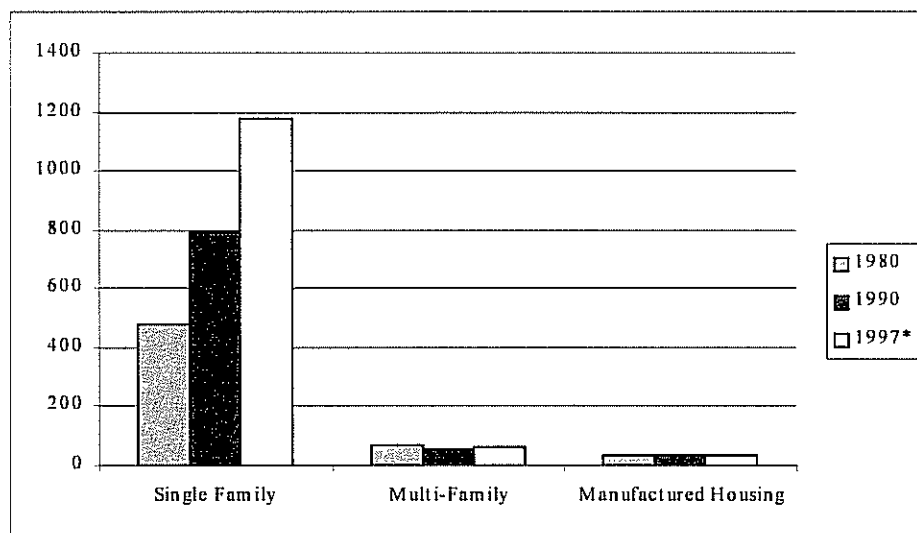
As shown in Table VIII-2, nearly 93 percent of the housing stock in Brookline is single family homes. The percentage of housing units that were single family homes dropped six percent between 1970 and 1980, as the amount of multi-family and duplex housing increased. Since 1980 single-family homes have accounted for all of the housing growth within the Town, which has grown by nearly 1 1/2 times. By contrast, both multi-family and manufactured housing units have decreased from their 1980 levels. This trend is shown in Table VIII-3 and Figure VIII-3 in the number of building permits issued annually in recent years.

TABLE VIII-3
RESIDENTIAL BUILDING PERMITS ISSUED,
TOWN OF BROOKLINE, 1990 - 1997

	Est. Units 1990 Census	1990	1991	1992	1993	1994	1995	1996	1997
Single Family	792	23	55	62	58	47	42	56	50
Multi-Family	57	0	0	0	0	0	0	1	0
Manufactured Housing	32	0	0	0	0	0	0	0	0
Total	881	23	55	62	58	47	42	57	41

Source: NH Office of State Planning, *Current Estimates & Trends in New Hampshire's Housing Supply*:
Update: 1994, November 1995.
Brookline Town Report, 1995
Brookline Building Permit Book

FIGURE VIII-3
TOTAL BUILDING PERMITS ISSUED
TOWN OF BROOKLINE, 1990 - 1997



Duplexes and Multi-Family Housing

Brookline's current zoning allows duplexes anywhere in town on a minimum lot size of 160,000 square feet, but allows only pre-existing multi-family housing of more than two units. There are currently three apartment buildings within Town, all near the Main Street/Steam Mill Hill Rd. area totaling 12 units. There has been an increase of only one multi-family (duplex) unit since 1990. Over half of the multi-family housing and duplexes in Brookline were built in the 1970's.

Manufactured Housing

Brookline's zoning ordinance permits manufactured housing in the Residential-Agricultural District only as part of Manufactured Housing District of 20 acres or greater. Since 1980, the amount of manufactured housing has actually decreased by five units. The only manufactured housing district within Town is an 11-lot subdivision located on Petersen Road, while the Field and Stream Trailer Park located on Dupaw-Gould Road provides 53 seasonal hookups. The rest of the manufactured housing is scattered throughout the Town.

It is also instructive to assess the number of building permits issued as a percent of a community's population to determine the impact of residential growth on a community. As is evident in Table VIII-4, the permit activity in Brookline is far more significant than the activity in other communities.

TABLE VIII-4
BUILDING PERMITS VS. POPULATION
NRPC REGION, 1996

	1996 Est. Population	1996 Single Fam. Permits Issued	Permits Issued as a % of Population
Amherst	9,663	113	1.17%
Brookline	3,128	57	1.82%
Hollis	6,481	45	0.69%
Hudson	21,072	106	0.50%
Litchfield	6,540	35	0.54%
Lyndeborough	1,414	15	1.06%
Merrimack	23,200	104	0.45%
Milford	12,660	43	0.34%
Mont Vernon	1,960	12	0.61%
Nashua	82,285	264	0.32%
Pelham	10,374	88	0.85%
Wilton	3,243	11	0.34%
Region	182,020	893	0.49%
County	354,317	1,708	0.48%

Source: NH Office of State Planning, 1996 Annual Population Estimates,
December 1995.

NH Office of State Planning, Current Estimates & Trends in
New Hampshire's Housing Supply (update 1994), November 1995.

In addition to the current housing stock, the Planning Board has approved 68 new house lots, with another 23 pending (Table VIII-5). None of these approved developments include manufactured housing, and only a small percentage are suitable for duplexes. Note that if all of these are built, Brookline's population will increase by 234 persons, based on the current estimated household size of 2.58. It is important to remember, however, that these lots will most likely develop gradually over time.

TABLE VIII-5
 APPROVED UNDEVELOPED RESIDENTIAL LOTS
 TOWN OF BROOKLINE
 AS OF OCTOBER 31, 1997

<i>Subdivision</i>	<i># Lots Approved</i>	<i># Lots Remaining</i>	<i>Parcel #'s</i>
<i>Major subdivisions</i>			
Mountain Rd. Estates II & Birch Hill Estates II	60	4	D-18-13; D-20-13; D-20-6; D-57-17
Talbot Taylor Est.	23	2	G-61-4, -30
Elevations	23	7	J-17-5, -6, -7, -8, -10, -20, -21
Laurelcrest	44	13	J-39-11, -15, -18, -19, -20, -21, -22, -23, -24, -25, -30, -36, -43
<i>Approved 1997</i>			
Gavin Construction	6	5	F-18, 18-1, -2, -3, -4
One Line Realty	1	1	J-39-49
One Line Realty	1	1	J-39-48
Keith & Elaine Dunton	2	1	J-8-1
Robert & Beverly Petersen	2	1	K-56-1
Fresh Pond Realty	1	1	D-25-4
Cropp/Dupaw Realty Trust	(8 pending)		
Glendale Homes	(12 pending)		
David/Jeanne Marie Janik	(3 pending)		
<i>Approved 1996</i>			
Ruth Gaudet	3	1	G-45
Woodland Acres	8	8	J-25, 25-1, -2, -3, -5, -6, -7, -8
Adamyk/Chapman	6	3	H-77-3, -4, -5
Geo. Nelson, Jr.	6	2	E-11, 11-5
<i>Approved pre-1996</i>			
Cropp/Dupaw Realty	6	4	E-12, 12-1, -4, -5
Marlene Young	2	1	E-48-1
Capt. Douglass Dr.	4	1	K-83-2
Coon	3	2	F-43, 43-2
Peterson Rd.	13	6	K-57-1, -2, -4, -5, -6, -11
Scabbard Mill	13	2	D-89-2, -9
TOTAL	227	66	

AGE OF HOUSING STOCK

Data regarding the age of a region's housing stock can relay useful information relative to housing needs of a particular area. In general, a large proportion of older houses may serve as an indication of the need for renovation and rehabilitation. A large number of older homes may also suggest a high percentage of buildings of potential historic significance.

Currently just over 17 percent of the region's housing stock was built before 1939, a decline from 25 percent in 1980, reflecting the tremendous amount of new construction experienced in the region since World War II (Table VIII-6 and Figure VIII-4).

In 1980, over one-third of Brookline's housing stock was built before 1939. This was the fourth highest percentage in the region. Due to the large number of housing units built in Brookline in recent years, the percent of housing units in town built before 1939 has dropped to 17 percent, matching the regional average. By contrast, 43 percent of Wilton's and 35 percent of Lyndeborough's housing stock predates 1940. (Total housing units include occupied and unoccupied units.)

TABLE VIII-6
 HOUSING UNITS BUILT BEFORE 1939
 NRPC REGION, 1980 - 1997

	Units Pre-1939	Total 1980	Percent of 1980 Total	Total 1990	Percent of 1990 Total	Total 1997*	Percent of 1997 Total**
Amherst	531	2,598	20.4%	3,179	16.7%	3,628	14.6%
Brookline	216	587	36.8%	881	24.5%	1,258	17.2%
Hollis	364	1,563	23.3%	2,006	18.1%	2,427	15.0%
Hudson	670	4,533	14.8%	6,902	9.7%	7,695	8.7%
Litchfield	110	1,360	8.1%	1,845	6.0%	2,267	4.9%
Lyndeborough	198	376	52.7%	488	40.6%	560	35.4%
Merrimack	335	4,711	7.1%	7,915	4.2%	8,631	3.9%
Milford	1,292	3,287	39.3%	4,793	27.0%	5,175	25.0%
Mont Vernon	178	487	36.6%	614	29.0%	698	25.5%
Nashua	7,765	25,928	29.9%	33,383	23.3%	34,619	22.4%
Pelham	277	2,411	11.5%	3,118	8.9%	3,620	7.7%
Wilton	571	926	61.7%	1,251	45.6%	1,314	43.5%
Total	12,507	48,767	25.6%	66,375	18.8%	71,892	17.4%

* Through August

** Assuming no loss of pre-1939 units

Source: NH Office of State Planning, *Current Estimates & Trends in New Hampshire's Housing Supply* (update 1994), November 1995.
 U.S. Bureau of the Census, Construction Statistics Division,
 Building Permits Branch; U.S. Census

FIGURE VIII-4
HOUSING UNITS BUILT BEFORE 1939
TOWN OF BROOKLINE VS. NRPC REGION, 1980 - 1997

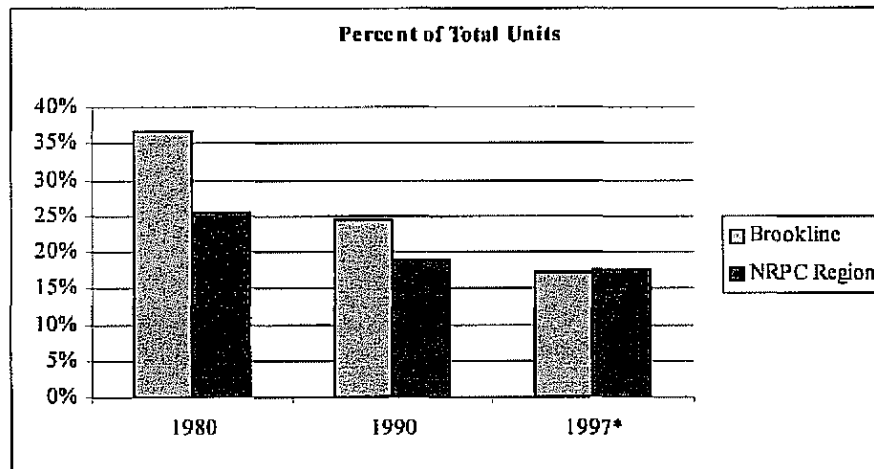


Table VIII-7 provides further evidence that the housing stock in Brookline is relatively new compared to neighboring towns.

TABLE VIII-7
MEDIAN YEAR HOUSING BUILT
NRPC REGION, 1990

Municipality	Year
Amherst	1973
Brookline	1974
Hollis	1975
Hudson	1977
Litchfield	1976
Lyndeborough	1962
Merrimack	1978
Milford	1973
Mont Vernon	1973
Nashua	1969
Pelham	1968
Wilton	1961
Hillsborough Co.	1968
State of N.H.	1968

Source: U.S. Census

HOUSEHOLDS

A household is defined as a family living together in a single dwelling unit with common access to and use of all living and eating areas. Unfortunately, the available data on existing households from the U.S. Census and projections from the Office of State Planning are outdated, and as such may serve to indicate general trends but should be viewed with caution. As shown in Table VIII-8, while the number of households in Town is increasing rapidly, household size is decreasing. (Households are occupied housing units.)

TABLE VIII-8
 POPULATION, HOUSEHOLDS, AND AVERAGE HOUSEHOLD SIZE
 TOWN OF BROOKLINE, 1970-1990

	1970	1980	% Change	1990	% Change
Population	1,167	1,766	51.3%	2,410	36.5%
Households	331	561	69.5%	811	44.6%
Avg. H.H. Size	3.53	3.15	-10.8%	2.97	-5.7%

Source: U.S. Census

Brookline's growth in households has been well above the regional average in the last two decades, and was the third highest in the region in the 1980's behind Merrimack and Hudson (Table VIII-9). The average annual rate from 2000 to 2010 is anticipated to be 2.8%, based on the NH Office of State Planning (OSP) projections, which indicate a significant anticipated decline in the growth of the number of households in the coming decades.

TABLE VIII-9
 NUMBER OF HOUSEHOLDS
 NRPC REGION, 1970-1990

	1970	1980	% Change 1970-1980	1990	% Change 1980-1990
Amherst	1,327	2,446	84.3%	2,988	22.2%
Brookline	331	561	69.5%	811	44.6%
Hollis	755	1,470	94.7%	1,942	32.1%
Hudson	2,823	4,221	49.5%	6,630	57.1%
Litchfield	397	1,283	223.2%	1,725	34.5%
Lyndeborough	227	346	52.4%	451	30.3%
Merrimack	2,183	4,384	100.8%	7,439	69.7%
Milford	2,107	3,148	49.4%	4,463	41.8%
Mont Vernon	253	454	79.4%	582	28.2%
Nashua	16,997	24,489	44.1%	31,051	26.8%
Pelham	1,377	2,336	69.6%	2,907	24.4%
Wilton	726	895	23.3%	1,152	28.7%
NRPC Region	29,503	46,033	56.0%	62,141	35.0%
Hillsborough Co.	68,236	95,820	40.4%	124,567	30.0%
State of N.H.	225,378	323,493	43.5%	411,186	27.1%

Source: U.S. Census

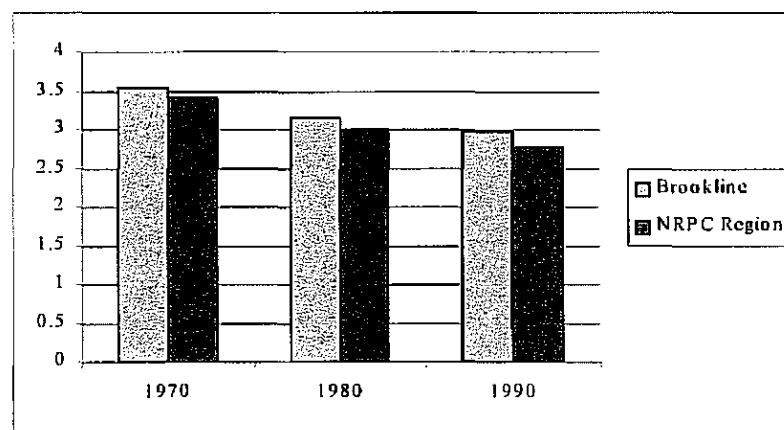
It is interesting to note in Table VIII-10 and Figure VIII-5 that the household size in Brookline is one of the largest in the region and has decreased more slowly than households in other communities.

TABLE VIII-10
PERSONS PER HOUSEHOLD
NRPC REGION, 1970-1990

	1970	1980	% Change 1970-1980	1990	% Change 1980-1990
Amherst	3.47	3.37	-2.9%	3.03	-10.1%
Brookline	3.53	3.15	-10.8%	2.97	-5.7%
Hollis	3.46	3.18	-8.1%	2.94	-7.5%
Hudson	3.77	3.32	-11.9%	2.95	-11.1%
Litchfield	3.58	3.23	-9.8%	3.2	-0.9%
Lyndeborough	3.48	3.09	-11.2%	2.87	-7.1%
Merrimack	3.94	3.51	-10.9%	2.98	-15.1%
Milford	3.14	2.76	-12.1%	2.64	-4.3%
Mont Vernon	3.58	3.18	-11.2%	3.11	-2.2%
Nashua	3.28	2.77	-15.5%	2.57	-7.2%
Pelham	3.93	3.46	-12.0%	3.24	-6.4%
Wilton	3.13	2.98	-4.8%	2.71	-9.1%
NRPC Region	3.42	3.00	-12.3%	2.76	-8.0%
Hillsborough Co.	3.28	2.89	-11.9%	2.7	-6.6%
State of N.H.	3.27	2.85	-12.8%	2.7	-5.3%

Source: U.S. Census

FIGURE VIII-5
PERSONS PER HOUSEHOLD
TOWN OF BROOKLINE VS. NRPC REGION, 1970 - 1990



Household projections for future years were last made by the N.H. Office of State Planning in 1987, and are no longer performed by that agency. In 1987, OSP projected a higher household size for Brookline than for the NRPC region as a whole.

HOUSING COSTS

The U.S. Census provides an initial picture of housing costs in Brookline and the region. Most of the housing stock in Brookline was valued in 1990 in the \$125,000 to \$250,000 range (Table VIII-11 and Figure VIII-6). The median value of housing in town in 1990, shown in Table VIII-12, was \$170,900. This figure represented almost a tripling of house value from 1980 and far exceeded the county value of \$137,500; only housing in Hollis and Mont Vernon grew in value at a faster rate in that time period.

TABLE VIII-11
 VALUE COUNT OF OWNER-OCCUPIED HOUSING UNITS
 TOWN OF BROOKLINE, 1990

	Units	Percent
<\$60,000	7	1.2%
\$60,000 - \$99,999	20	3.4%
\$100,000 - \$124,999	36	6.1%
\$125,000 - \$149,999	127	21.7%
\$150,000 - \$174,999	119	20.3%
\$175,000 - \$199,999	116	19.8%
\$200,000 - \$249,999	102	17.4%
\$250,000 - \$299,999	56	9.6%
>\$300,000	3	0.5%
Total	586	100.0%

Source: U.S. Census

FIGURE VIII-6
 VALUE COUNT OF OWNER-OCCUPIED HOUSING UNITS
 TOWN OF BROOKLINE, 1990

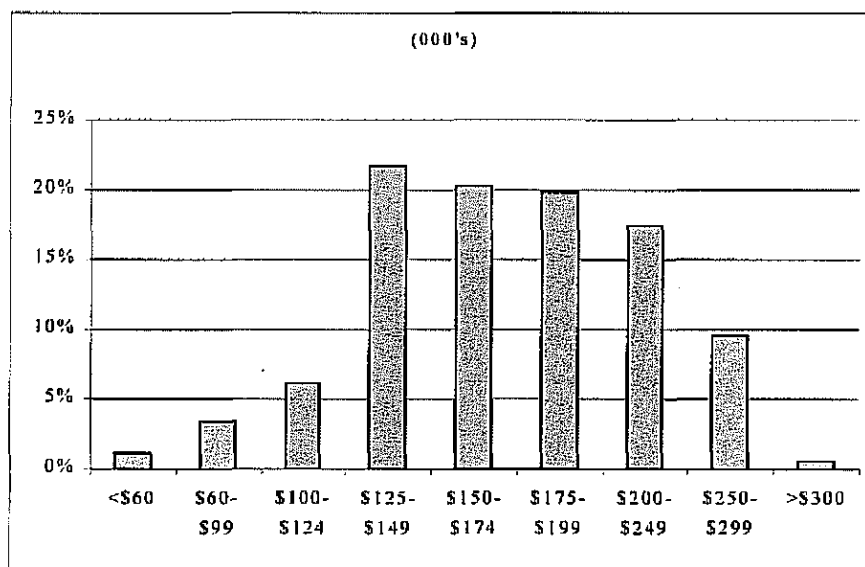


TABLE VIII-12
 MEDIAN VALUE, OWNER-OCCUPIED HOUSING
 NRPC REGION, 1980-1990

	1980	1990	% Change 1980-1990
Amherst	\$82,300	\$197,700	140.2%
Brookline	\$59,100	\$170,900	189.2%
Hollis	\$74,200	\$229,800	209.7%
Hudson	\$59,500	\$145,000	143.7%
Litchfield	\$62,400	\$147,500	136.4%
Lyndeborough	\$47,900	\$134,300	180.4%
Merrimack	\$59,400	\$139,700	135.2%
Milford	\$54,800	\$137,600	151.1%
Mont Vernon	\$60,200	\$176,400	193.0%
Nashua	\$55,800	\$138,800	148.7%
Pelham	\$59,100	\$160,500	171.6%
Wilton	\$49,200	\$134,400	173.2%
Hillsborough Co.	\$54,300	\$137,500	153.2%
State of N.H.	\$48,000	\$129,400	169.6%

Source: U.S. Census

More recent information is collected by The New Hampshire Housing Finance Authority (NHHFA), which maintains a database containing owner-occupied cost information for each of the communities in the state. NHHFA tracks the purchase price of homes broken down by new and existing (previously occupied) homes. It should be noted that small sample sizes produce highly volatile median figures.

Based on this survey, the median purchase price of existing single family homes in 1996 in Brookline was well above the regional average and ranked third out of twelve communities (Table VIII-13 and Figure VIII-7). However, new homes in Town are more affordable than in six of the ten communities in which new homes were sold in 1996.

TABLE VIII-13
MEDIAN HOME PURCHASE PRICE*
NRPC REGION, 1996

Community	Existing Home	Sample Size	New Home	Sample Size
Amherst	\$158,000	156	\$235,250	44
Brookline	\$145,000	21	\$160,000	19
Hollis	\$187,000	66	\$256,400	26
Hudson	\$119,000	162	\$131,900	45
Litchfield	\$114,000	35	\$144,650	14
Lyndeborough	\$143,500	5	n/a	n/a
Merrimack	\$101,000	492	\$175,400	90
Milford	\$108,050	132	\$154,750	20
Mont Vernon	\$130,000	11	n/a	n/a
Nashua	\$96,000	880	\$182,100	150
Pelham	\$131,100	54	\$162,080	40
Wilton	\$102,500	12	\$151,460	2
NRPC Region	\$110,000	684	\$174,540	177

* Includes single-family homes and condominiums

Source: N.H. Housing Finance Authority

FIGURE VIII-7
MEDIAN HOME PURCHASE PRICE
TOWN OF BROOKLINE VS. NRPC REGION, 1996

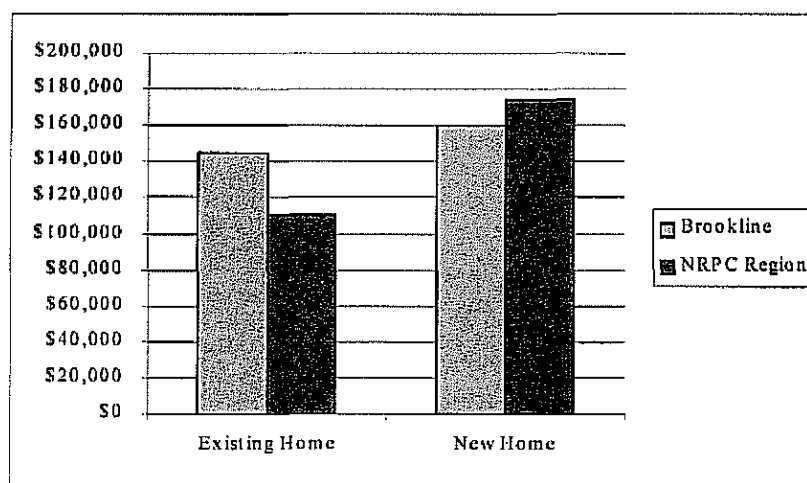


Table VIII-14 and VIII-15 and Figure VIII-8 show the median purchase prices of existing and new single-family homes from 1992 to 1996. Consistent with the purchase price data shown in Table VIII-13, the growth in existing home prices in Brookline is nearly the highest in the region, while the growth in new home prices trails most other communities.

TABLE VIII-14
 GROWTH IN MEDIAN EXISTING HOME PURCHASE PRICE*
 NRPC REGION, 1992 - 1996

Community	1992	1993	1994	1995	1996	% Change 1992-1996
Amherst	\$147,905	\$136,190	\$155,500	\$155,500	\$158,000	6.8%
Brookline	\$124,000	\$138,000	\$147,500	\$137,000	\$145,000	16.9%
Hollis	\$162,238	\$175,000	\$183,000	\$176,000	\$187,000	15.3%
Hudson	\$106,000	\$94,452	\$113,900	\$118,250	\$119,000	12.3%
Litchfield	\$104,000	\$106,024	\$111,450	\$109,900	\$114,000	9.6%
Lyndeborough	\$98,625	\$130,000	\$92,500	\$127,000	\$143,500	45.5%
Merrimack	\$96,000	\$97,762	\$92,750	\$99,600	\$101,000	5.2%
Milford	\$105,048	\$95,900	\$98,000	\$94,500	\$108,050	2.9%
Mont Vernon	\$126,238	\$107,905	\$149,000	\$137,000	\$130,000	3.0%
Nashua	\$101,048	\$105,024	\$94,900	\$93,450	\$96,000	-5.0%
Pelham	\$130,000	\$113,000	\$123,750	\$131,000	\$131,100	0.8%
Wilton	\$93,000	\$99,048	\$87,000	\$91,450	\$102,500	10.2%
NRPC Region	\$107,667	\$105,000	\$100,833	\$106,000	\$110,000	2.2%

* Includes single-family homes and condominiums

Source: N.H. Housing Finance Authority

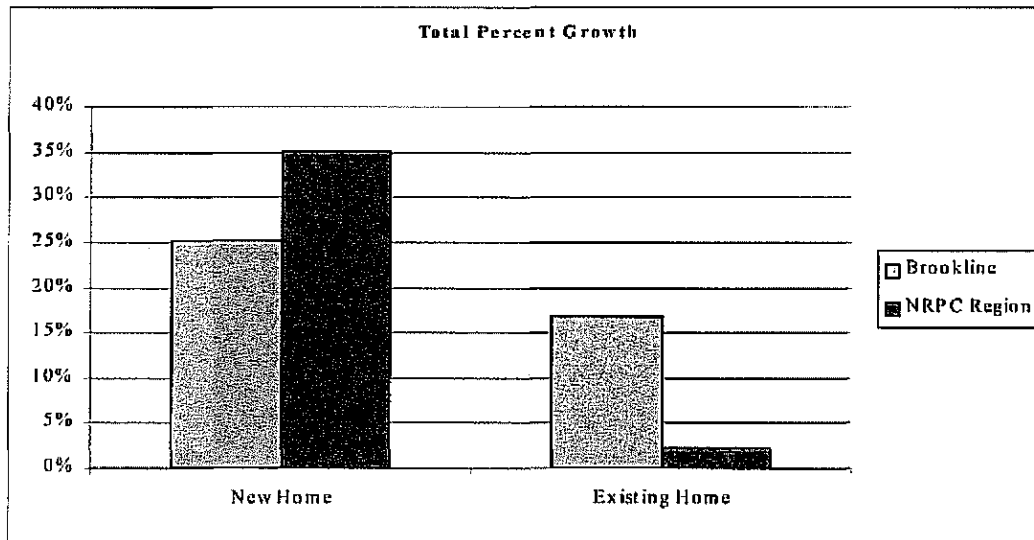
TABLE VIII-15
 GROWTH IN MEDIAN NEW HOME PURCHASE PRICE*
 NRPC REGION, 1992 - 1996

Community	1992	1993	1994	1995	1996	% Change 1992-1996
Amherst	\$177,166	\$187,524	\$180,800	\$204,000	\$235,250	32.8%
Brookline	\$127,762	\$141,700	\$153,750	\$155,100	\$160,000	25.2%
Hollis	\$209,274	\$218,428	\$230,500	\$250,000	\$256,400	22.5%
Hudson	\$122,952	\$128,900	\$136,350	\$139,900	\$131,900	7.3%
Litchfield	\$114,381	\$121,380	\$132,400	\$155,100	\$144,650	26.5%
Lyndeborough	n/a	n/a	n/a	n/a	n/a	n/a
Merrimack	\$152,000	\$146,050	\$165,100	\$158,000	\$175,400	15.4%
Milford	\$110,476	\$133,393	\$130,750	\$128,950	\$154,750	40.1%
Mont Vernon	\$119,952	n/a	\$134,900	n/a	n/a	n/a
Nashua	\$141,000	\$149,350	\$142,700	\$146,800	\$182,100	29.1%
Pelham	\$129,429	\$132,100	\$146,500	\$152,700	\$162,080	25.2%
Wilton	n/a	\$114,950	n/a	n/a	\$151,460	n/a
NRPC Region	\$129,215	\$145,016	\$152,967	\$157,200	\$174,540	35.1%

* Includes single-family homes and condominiums

Source: N.H. Housing Finance Authority

FIGURE VIII-8
GROWTH IN MEDIAN HOME PURCHASE PRICE*
TOWN OF BROOKLINE VS. NRPC REGION, 1992 - 1996



COST OF RENTAL HOUSING

The cost of rental housing in the region is significantly greater than the county or state averages, according to data collected by the U.S. Census and a statewide survey conducted annually by the New Hampshire Housing Finance Authority. As shown in Table VIII-16, median rent for all units in the region was \$605 in 1990 compared to \$513 for the county and \$479 for the state. Rents have increased dramatically in the ten-year period since 1980.

Brookline's rental costs in 1990 were the second highest in the region, owing largely to the lack of available units. Brookline landlords say that vacancy rates are extremely low, and that rental units are advertised for only short periods of time (usually less than a week) before being taken. The demand is outweighing the supply, which is driving up prices. As a result, the Town's median rental rate grew faster than any other community.

TABLE VIII-16
MEDIAN RENTS
NRPC REGION, 1980-1990

	1980	1990	% Change 1980-1990
Amherst	\$285	\$757	165.6%
Brookline	\$245	\$710	189.8%
Hollis	\$233	\$653	180.3%
Hudson	\$243	\$636	161.7%
Litchfield	\$248	\$531	114.1%
Lyndeborough	\$232	\$467	101.3%
Merrimack	\$278	\$702	152.5%
Milford	\$250	\$557	122.8%
Mont Vernon	\$253	\$538	112.6%
Nashua	\$255	\$574	125.1%
Pelham	\$276	\$623	125.7%
Wilton	\$197	\$507	157.4%
NRPC Region	\$250	\$605	142.2%
Hillsborough Co.	\$214	\$513	139.7%
State of N.H.	\$206	\$479	132.5%

Source: U.S. Census

Few rental units exist in Brookline. These include the duplexes and the preexisting apartment buildings mentioned earlier and other rental units such as a refinished basement, room, or barn, or renting of an entire single family home. According to the 1990 Census, there were 88 renter occupied units within Town. At that time, it was ten percent of the total number of units within Town. It is now estimated that approximately seven percent of the units within Brookline are rental, as only one duplex was built since that time.

Because of the small number of rental units within Town, obtaining current rental price data is not possible. The best indication of Brookline rental costs are shown in Table VIII-17 which shows the range and median of 1996 rental costs in the Nashua Primary Metropolitan Statistical Area (PMSA), and Table VIII-18 which shows Nashua PMSA prices from 1992 to 1996.

TABLE VIII-17
 MONTHLY COST FOR RENTAL HOUSING
 NASHUA PMSA*, 1996

Number of Bedrooms	Sample Size	Median Contract Rent	Median Gross Rent	Rent Range
0	57	\$411	\$450	\$265-\$603
1	561	\$565	\$606	\$336-\$870
2	1094	\$650	\$718	\$404-\$1,294
3	169	\$650	\$768	\$465-\$1,301
4+	8	**	**	\$665-\$1,368
All Units	1,839	\$630	\$696	\$265-\$1,368

* Nashua PMSA includes Amherst, Brookline, Greenville, Hollis, Hudson, Litchfield, Mason, Merrimack, Milford, Mont Vernon, Nashua, New Ipswich, Wilton

** Indicates inadequate sample size

Source: New Hampshire Housing Finance Authority,
1996 Residential Rental Cost Survey

As seen in Table VIII-18, rental costs in the PMSA have remained relatively stable for efficiency, one and two bedroom units, while the cost of three bedroom units actually decreased. As shown in Table VIII-19, the cost of rental housing in the Nashua PMSA is higher than state and county averages.

TABLE VIII-18
 AVERAGE MONTHLY RENTAL HOUSING COSTS
 NASHUA PMSA, 1992-1996

	1992	1993	1994	1995	1996
0 Bedrooms	\$411	*	\$433	\$434	\$450
1 Bedroom	\$588	\$618	\$608	\$571	\$606
2 Bedrooms	\$687	\$717	\$711	\$677	\$718
3 Bedrooms	\$859	\$850	\$891	\$778	\$768
4+ Bedrooms	*	*	*	*	*
All Units	\$654	\$703	\$678	\$637	\$696

* Data not available

Note: costs shown are median monthly gross rent figures

Source: New Hampshire Housing Finance Authority,
Residential Rental Cost Survey, 1992 through 1996 issues

TABLE VIII-19
AVERAGE MONTHLY RENTAL HOUSING COSTS
NASHUA PMSA, COUNTY AND STATE: 1996

Number of Bedrooms	Nashua PMSA	Hillsborough County	State of N.H.
0	\$450	\$395	\$405
1	\$606	\$556	\$514
2	\$718	\$704	\$663
3	\$768	\$714	\$718
4+	*	*	\$747
All Units	\$696	\$656	\$596

* Data not available

*Source: New Hampshire Housing Finance Authority,
1996 Residential Rental Cost Survey*

ASSISTED HOUSING

Currently no assisted housing exists in Brookline. In 1995, 2,430 units of assisted rental housing existed in the region. This assistance comes from one of four agencies: the New Hampshire Housing Finance Authority (NHHFA), the Farmers Home Administration (FmHA), the Department of Housing and Urban Development (HUD), or the Housing Authority of Nashua. Rental assistance is provided through rental subsidies, vouchers such as the Section 8 program, or through low-income loans. Although the demand for assisted family housing is higher than the demand for subsidized elderly housing, the number of assisted units available to non-elderly families is relatively low in the region.

LOCAL HOUSING NEEDS ASSESSMENT

A growing concern nationally, as well as in New Hampshire, has been the ability of low- and moderate-income households and special needs groups, such as the elderly and the handicapped, to find safe and adequate housing at costs within their means. Recent New Hampshire legislation and court decisions have attempted to address this issue by encouraging communities to take positive steps to address the housing needs of all people including low and moderate-income families and individuals.

In 1988, the New Hampshire Legislature enacted Senate Bill 317-FN, which amended RSA 674:2, II and RSA 36:47, II, requiring that the housing section of a municipal master plan address "current and future housing needs of residents of all levels of income of the municipality and of the region in which it is located." These needs are identified in the 1994 Regional Housing Needs Assessment prepared by the Nashua Regional Planning Commission, which provides the foundation upon which this chapter is based.

The courts have also had a powerful role in influencing local housing policy. The 1983 landmark case of Southern Burlington NAACP v. Town of Mount Laurel in New Jersey affirmed local responsibility in meeting regional housing needs, and was used as a precedent in New Hampshire court cases including Soares et al. v. Town of Atkinson and Wayne Britton & a. v. Town of Chester. Key principles articulated in these decisions include:

- It is unconstitutional to use local land use regulations to discourage or prevent realistic opportunities for the development of housing affordable to certain economic classes of people
- Land use regulations cannot be used to create enclaves for the rich or ghettos for the poor. A town cannot devise its regulations to permit housing to be developed for only certain classes of people, nor can it delegate sections of a community to house people by economic class.
- Multi-family housing is the only reasonable means of providing housing for most low and all very-low income families in the southern tier of New Hampshire.

Brookline must ensure that it is in compliance with these rulings by permitting and encouraging a variety of housing types within Town.

Defining Low and Moderate Income

Income categories are defined by a comparison to the area's median family income. Very-low income households are defined by the U.S. Department of Housing and Urban Development as households with annual incomes below 50 percent of the median household income for a specified geographic area. Low income households are those which earn between 50 to 80 percent of the median income; moderate income households earn between 80 to 120 percent; middle income earn 120 to 150 percent; and higher incomes earn more than 150 percent. It is important to note that households in the categories of low and very low income are not necessarily below the poverty level. While the poverty level is a constant figure, median income levels vary widely throughout the U.S., and therefore are more significant than poverty levels in assessing local housing needs.

Very Low-Income

Very low-income households are defined as those families earning less than 50 percent of the PMSA's median family income. In 1990, this income group made up approximately 16 percent of the region's households. This group may include households below the poverty line, families on public assistance, the unemployed, as well as households comprised of young people just entering the workforce, elderly households on fixed incomes, handicapped individuals, single-parent households, and other households with special needs.

Families in this category have the most critical housing need. For most of these families, home ownership is not possible. Rental multi-family housing is the principal housing option for most households in this category, while manufactured housing may also be viable.

Obviously, obtaining adequate housing for these households is extremely difficult, particularly for those families with children. Most families in this category must spend more than the recommended percentage on housing costs. Such high percentages of household income devoted to housing may force a household to reduce expenditures on essential needs such as food and clothing. This problem is further aggravated in households with special housing needs. For most households in this income group, the housing choices must be made between living in crowded and often substandard conditions or paying costs beyond their means. At the lower end of this category, some households may be pushed into homelessness as a result of only minor financial setbacks.

Low-Income

Low-income families earn between 50 and 80 percent of the median income for the PMSA. In 1990, this income group made up approximately 19 percent of the region's households. For the

majority of households in this income group, rental of a multi-family unit is the primary housing choice. Unlike the very low-income families, however, most households within this income group can

obtain housing at market rates. Many still must pay more than recommended percentages for housing costs, particularly families with two or more children. This is largely due to the severe shortage and high rents for units with three or more bedrooms.

Moderate-Income

Moderate-income households earn from 80 to 120 percent of the PMSA's median family income. In 1990, this income group made up approximately 26 percent of the region's households and was the largest income category. Obtaining decent housing for households within this income category is possible at market rates although housing choices and location are limited. In general, households at the upper end of this income category can afford to purchase all but the most expensive condominium units on the market and most types of manufactured homes, and can obtain market rate rental housing. Relatively few households in this group, however, can afford to purchase a conventional single-family home. This is particularly true for first-time homebuyers. As with low-income households, moderate-income families with children are faced with the most difficult problems in obtaining adequate housing. At the lower end of the scale in particular, obtaining either rental or owner-occupied housing with more than two bedrooms is difficult due to high cost and lack of supply.

Middle-Income

Middle-income families earn between 120 and 150 percent of the PMSA's median family income. In 1990, this income group made up approximately 17 percent of the region's households. Most families in this category can afford to rent or purchase housing at market rates. Rental housing, condominiums, manufactured homes and moderately priced single-family homes are all housing options for this income group. The greatest housing limitation confronting this income group is location. An additional obstacle is that their income levels are too low to purchase homes in some communities, but too high to receive mortgage assistance from the N.H. Housing Finance Authority.

Higher-Income

Higher-income families are those earning more than 150 percent of the PMSA's median family income. In 1990, this income group made up approximately 22 percent of the region's households, the second largest income category. In nearly all cases, people in this group can obtain owner-occupied or rental housing at market rates. However, even families in this range may not be able to purchase a home in some of the region's municipalities. Generally, the wide range of housing choices for this income group indicates that their housing needs are currently being met within the region.

1996 Family Income Categories

In 1996, the median family income in the Nashua Primary Metropolitan Statistical Area (PMSA) was \$56,900. For the PMSA as a whole, as shown in Table VIII-21, very low-income households are those that earn less than \$28,450 annually, while low-income households earn between \$28,450 and \$45,520 annually. These income categories vary depending upon family size and are displayed in Table VIII-22 for families of one to eight people.

TABLE VIII-21
 INCOME CATEGORIES: FAMILY OF FOUR
 NASHUA PMSA*, 1996

1996 Median Family Income: \$56,900

Category	% of Median Income	Median Family Income
Very low income	Less than 50	Less than \$28,450
Low income	50 to 80	\$28,450 to \$45,520
Moderate income	80 to 120	\$45,520 to \$68,280
Middle income	120 to 150	\$68,280 to \$85,350
Higher incomes	More than 150	More than \$85,350

** The Nashua PMSA includes Amherst, Brookline, Hollis, Hudson, Litchfield, Londonderry, Merrimack, Milford, Mont Vernon, Nashua and Wilton.*

*Source: N.H. Housing Finance Authority
 U.S. Department of Housing and Urban Development*

TABLE VIII-22
 INCOME CATEGORIES: ALL FAMILY SIZES
 NASHUA PMSA*, 1996

Size of Family	Median Family Income	Very Low Income	Low Income	Moderate Income	Middle Income	Higher Incomes
1	\$39,830	Less than \$19,915	\$19,915 to \$31,864	\$31,864 to \$47,796	\$47,796 to \$59,745	Over \$59,745
2	\$45,520	Less than \$22,760	\$22,760 to \$36,416	\$36,416 to \$54,624	\$54,624 to \$68,280	Over \$68,280
3	\$51,210	Less than \$25,605	\$25,605 to \$40,968	\$40,968 to \$61,452	\$61,452 to \$76,815	Over \$76,815
4	\$56,900	Less than \$28,450	\$28,450 to \$45,520	\$45,520 to \$68,280	\$68,280 to \$85,350	Over \$85,350
5	\$61,452	Less than \$30,726	\$30,726 to \$49,162	\$49,162 to \$73,742	\$73,742 to \$92,178	Over \$92,178
6	\$66,004	Less than \$33,002	\$33,002 to \$52,803	\$52,803 to \$79,205	\$79,205 to \$99,006	Over \$99,006
7	\$70,556	Less than \$35,278	\$35,278 to \$56,445	\$56,445 to \$84,667	\$84,667 to \$105,834	Over \$105,834
8	\$75,108	Less than \$37,554	\$37,554 to \$60,086	\$60,086 to \$90,130	\$90,130 to \$112,662	Over \$112,662

** The Nashua PMSA includes Amherst, Brookline, Hollis, Hudson, Litchfield, Londonderry, Merrimack, Milford, Mont Vernon, Nashua and Wilton.*

Source: N.H. Housing Finance Authority; U.S. Department of Housing and Urban Development

Incomes Needed to Purchase and Rent in Brookline

It is first instructive to compare housing and rental costs in Brookline to the earning capacity of various income categories. Tables VIII-23 and VIII-24 show the income needed to purchase and rent housing within Town. These figures are based on the general industry rules-of-thumb that monthly rent should not exceed 30 percent of the family's gross income, and that the purchase price of a house should be no more than 2.5 times a family's gross income. Providing an estimation of the income required to purchase a house is considerably more complex, owing to the many variables involved in the amount of money needed to purchase a home, including the prevailing interest rate, the amount of downpayment, the tax on assessment of each community, the amount of outside financial assistance, and the length of the mortgage. Since current rental rates are not available by municipality, Table VIII-24 shows two rental figures: PMSA rental rates, and estimated rental rates based on the 1990 U.S. Census. As shown in Table VIII-17, average rents in Brookline in 1990 were 17 percent higher than the regional average. An estimate of current rates is then made by multiplying that percentage by PMSA rates.

TABLE VIII-23
 INCOME NEEDED TO PURCHASE A HOME
 TOWN OF BROOKLINE, 1996

	Median Purchase Price	Annual Income Needed*
Existing Home	\$145,000	\$58,000
New Home	\$160,000	\$64,000

* Assuming purchase price no more than 2.5 times income

TABLE VIII-24
 INCOME NEEDED TO RENT
 NASHUA PMSA, EST. TOWN OF BROOKLINE, 1996

Number of Bedrooms	PMSA Monthly Rent	Annual Income Needed*	Est. Brookline Monthly Rent**	Annual Income Needed*
0	\$450	\$18,000	\$528	\$21,124
1	\$606	\$24,240	\$711	\$28,447
2	\$718	\$28,720	\$843	\$33,704
3	\$768	\$30,720	\$901	\$36,052
4+	n/a	n/a	n/a	n/a

* Assuming rental costs no more than 30 percent of income

** Based on ratio to regional average in 1990 U.S. Census

It is evident by comparing these tables to the income ranges listed in Table VIII-22 that most families in the very low- and low-income categories, and even many smaller families in the moderate- and middle-income groups, can not afford to purchase either an existing or new home within Town. Estimated Town rental costs are more affordable for those families most in need, but many families are seemingly not able to afford the size unit which suits their family's space needs, or alternatively must pay more than 30 percent of their income in rent.

Existing Housing Needs

All regional planning commissions in New Hampshire are charged through RSA 36:47 (II) with preparing regional housing needs assessments. As stated in the NRPC's 1994 Regional Housing Needs Assessment, the purpose of the housing needs assessment is to determine the existing and future need for housing of all levels of income for each the region's communities and for the region as a whole.

The following section is excerpted from the NRPC's 1994 Regional Housing Needs Assessment. The reader is referred to this document for more specific information on the analysis and methodology behind the summary provided below. However, a few key points are worth repeating:

- Since it is assumed that middle and upper-income households in the region can obtain adequate market rate housing, "housing need" is considered to be limited to low and very low moderate income households and those households with special housing needs.
- The Regional Housing Needs Assessment should not be interpreted to suggest that any community has an affirmative obligation to provide housing for people of any income group. On the contrary, its purpose is to provide estimates of housing need that can serve as benchmarks for each community as it plans to meet its obligation to provide reasonable opportunity for the development of decent affordable housing for people and families of all levels of income.
- Absent the use of a survey, the most reliable estimate of the number of low and very low-income households that pay more than 30% of household income is provided by the U.S. Census. The income categories used by the Census, however, do not correspond to the Nashua PMSA's low and very low-income thresholds. This discrepancy is due to variations in median incomes for each geographical area. The Census categories correspond to income groups which represent households with annual incomes between 44% and 76% of the PMSA's median income (\$20,000 to \$34,999), 22% to 44% of the median income (\$10,000 to \$19,999) and less than 22% of the median income (<\$10,000).

In 1990, the median household income for the Nashua PMSA was \$46,786. Low-income households, therefore, were those with annual household incomes between \$22,893 and \$37,429. Very low-income households were those which earned less than \$23,393 annually.

Table VIII-25 depicts the number of renter households in each of the region's communities that pay in excess of 30% or 35% of total household income for rent. A total of 30 renter households existed in Brookline in 1990, which is a very small percentage of the over 11,000 households in the region. Most of those households in Brookline were in the 44 to 76 percent category. It is evident most of the region's households are concentrated in the urban centers of Nashua, Merrimack, Hudson and Milford.

TABLE VIII-25
NUMBER OF RENTER HOUSEHOLDS PAYING IN EXCESS OF
30% or 35% OF ANNUAL INCOME FOR RENT BY MUNICIPALITY
1990

MUNICIPALITY	INCOME CATEGORIES			Total
	<\$10,000	\$10,000 to \$19,999	\$20,000 to \$34,000	
Amherst				
30% to 34%	0	0	6	6
>35%	12	0	16	28
Total	12	0	22	34
Brookline				
30% to 34%	0	0	0	0
>35%	6	0	24	30
Total	6	0	24	30
Hollis				
30% to 34%	0	0	0	0
>35%	8	0	17	25
Total	8	0	17	25
Hudson				
30% to 34%	26	32	57	115
>35%	89	105	172	366
Total	115	137	229	481
Litchfield				
30% to 34%	0	21	26	47
>35%	0	16	27	43
Total	0	37	53	90
Lyndeborough				
30% to 34%	0	0	0	0
>35%	4	0	0	4
Total	4	0	0	4
Merrimack				
30% to 34%	0	12	31	43
>35%	59	128	130	317
Total	59	140	161	360
Millford				
30% to 34%	21	36	171	228
>35%	107	143	145	395
Total	128	179	316	623
Mont Vernon				
30% to 34%	0	0	0	0
>35%	0	5	2	7
Total	0	2	2	7
Nashua				
30% to 34%	149	244	482	875
>35%	1,305	1,490	884	3,679
Total	1,454	1,734	1,366	4,554
Pelham				
30% to 34%	0	0	0	0
>35%	5	24	23	52
Total	5	24	23	52
Wilton				
30% to 34%	13	8	11	32
>35%	31	40	0	71
Total	44	11	11	103
NRPC REGION				
30% to 34%	1,835	2,264	2,224	6,363
>35%	1,626	1,951	1,440	5,017
Total	3,461	4,215	3,664	11,380

Source: Nashua Regional Planning Commission, Regional Housing Needs Assessment, June 1994

However, simply tabulating the number of households that pay excessive amounts for rent is not an adequate measure of housing need, since it does reflect the number of households which may be paying in excess of 30% of their incomes for housing for reasons other than the unavailability of lower-cost housing. Table VIII-26 depicts the number of rental units occupied by households of each lower income category for each community in the region. Thirty of the 39 units in Brookline meeting this description in 1990 were occupied by low-income households, while nine were very-low income.

TABLE VIII-26
 NUMBER OF HOUSEHOLDS IN LOWER INCOME GROUPS
 BY COMMUNITY
 1990

Number of Occupied Units By Gross Rent			
Municipality	Monthly Gross Rent		
	<\$299	\$300 to \$549	\$550 to \$999
Amherst	0	7	115
Brookline	3	5	40
Hollis	0	6	50
Hudson	66	289	969
Litchfield	7	66	132
Lyndeborough	0	13	17
Merimack	40	47	807
Milford	123	404	1,015
Mont Vernon	0	8	13
Nashua	1,088	2,923	7,776
Pelham	16	36	300
Wilton	61	85	132
NRPC Region	1,404	3,889	11,366
Number of Households By Income Group			
Municipality	Annual Household Income		

Source: Nashua Regional Planning Commission, *Regional Housing Needs Assessment*, June 1994

Assuming that not more than 30% of household income should be spent for housing, the number of rental units currently in existence in each community which are affordable to households in each respective category is depicted in Table VIII-27. A total of 48 affordable units were available in Town in 1990.

TABLE VIII-27
 NUMBER OF EXISTING RENTAL UNITS AFFORDABLE TO EACH INCOME CATEGORY
 BY COMMUNITY
 1990

Number of Occupied Units By Gross Rent			
Municipality	Monthly Gross Rent		
	<\$299	\$300 to \$549	\$550 to \$999
Amherst	0	7	115
Brookline	3	5	40
Hollis	0	6	50
Hudson	66	289	969
Litchfield	7	66	132
Lyndeborough	0	13	17
Merrimack	40	47	807
Milford	123	404	1,015
Mont Vernon	0	8	13
Nashua	1,088	2,923	7,776
Pelham	16	36	300
Wilton	61	85	132
NRPC Region	1,404	3,889	11,366

Source: Nashua Regional Planning Commission, *Regional Housing Needs Assessment*, June 1994

Finally, in Table VIII-28, the number of affordable units available is subtracted from the number of lower income households in each category to estimate the number of units which would need to be added in each community to meet the existing housing need. Only 3 units were affordable to households in Brookline earning less than \$10,000, leaving a need for 6 additional units. A surplus of affordable units were available to families in the other two categories.

TABLE VIII-28
 NUMBER OF ADDITIONAL UNITS NEEDED TO MEET HOUSING NEED OF
 EACH INCOME CATEGORY BY COMMUNITY
 1990

Municipality	Number of Units Needed for Each Income Group (Surplus or Deficiency)		
	Annual Household Income		
	\$10,000 to	\$20,000 to	
	<\$10,000 (<22%)	\$19,999 (22% to 44%)	\$34,999 (44% to 76%)
Amherst	14	(7)	(53)
Brookline	6	(5)	(10)
Hollis	8	(6)	(20)
Hudson	79	(141)	(488)
Litchfield	0	(29)	(18)
Lyndeborough	4	(13)	(5)
Merrimack	33	125	(530)
Milford	43	(168)	(377)
Mont Vernon	2	(3)	(6)
Nashua	960	(781)	(4,289)
Pelham	19	12	(208)
Wilton	26	(2)	(71)
	0	0	0
NRPC Region	1,194	(1,018)	(6,075)
(#)= Number of Existing In Excess of Need			

Source: Nashua Regional Planning Commission, *Regional Housing Needs Assessment*, June 1994

The below \$10,000 income category (less than 22% of the median) is the most difficult category to serve. Little market rate housing can be developed at gross rents (inclusive of utilities) below \$299 per month without subsidy. As a result, a housing need exists for this income category in all of the region's communities. This category is also likely to include large numbers of households with special needs such as elderly households, the disabled and households in danger of homelessness. Brookline should ensure that its zoning and regulatory schemes provide reasonable opportunities for the development of market rate housing for households in the 22% to 76% income range, but the development of housing for those households will require greater assistance and ingenuity.

Future Housing Needs

Tables VIII-29 through VIII-31 compute the number of housing units, which will be needed in Brookline and in the region from 1980 to 2010 within each income category, so that housing needs for future residents can be addressed.

Tables VIII-29 and VIII-30 begin with the population projections prepared by the NH Office of State Planning. Persons per unit figures for 1980, 1990, and 1996 are provided based on known population and housing unit figures for those years. A persons per unit straight-line projection is then made for the years 2000 and 2010 based on the annual percent decline from 1980 to 1996. Dividing the population by persons per unit yields the number of housing units needed to serve the population in each year; the three percent vacancy rate is considered a healthy vacancy rate to ensure competitive pricing and is included to allow people to move between homes. The accuracy of these projections relies mainly on the accuracy of the population projections and the average household size.

TABLE VIII-29
PROJECTED HOUSING NEEDS
TOWN OF BROOKLINE, 1980-2010

Year	Population	Persons Per Unit*	Housing Units Needed	Plus 3% Vacancy	Total Units Needed
1980	1,776	2.92	609	18	627
1990	2,410	2.74	881	26	907
1996	3,128	2.55	1,225	37	1,262
2000	4,140	2.47	1,673	50	1,724
2010	5,953	2.28	2,609	78	2,687

* 1980, 1990, 1996: total population / total housing units

* 2000, 2010: straight-line projection based on historic percentage
of -0.8% decline per year

Source: N.H. Office of State Planning, *Annual Population Estimates and Projections, 1996*
1980, 1990 U.S. Census; U.S. Bureau of the Census, *Construction Statistics Division*

TABLE VIII-30
 PROJECTED HOUSING NEEDS
 NRPC REGION, 1980-2010

Year	Population	Persons Per Unit*	Housing Units Needed	Plus 3% Vacancy	Total Units Needed
1980	138,089	2.88	47,923	1,438	49,361
1990	171,478	2.58	66,375	1,991	68,366
1996	182,020	2.55	71,270	2,138	73,408
2000	193,853	2.48	78,123	2,344	80,467
2010	216,910	2.31	94,100	2,823	96,923

* 1980, 1990, 1996: total population / total housing units

* 2000, 2010: straight-line projection based on historic percentage
 of -0.7% decline per year

Source: N.H. Office of State Planning, *Annual Population Estimates and Projections, 1996*
 1980, 1990 U.S. Census; U.S. Bureau of the Census, *Construction Statistics Division*

Table VIII-31 first shows the approximate percentage of families that fall into each income category within the region based on the 1990 U.S. Census. These figures indicate the need that must be served to some extent by each community within the region; it is assumed that the current and future distribution will remain approximately the same as it was in 1990. By subtracting the total units needed in 2010 from the existing number of units in 1996 (i.e. 2,687 minus 1,225 in Brookline), the number of new units needed by 2010 can be distributed by income category.

A total of 1,462 units will be needed to serve population growth in Brookline, including 104 units to serve very low-income residents, 133 units to serve low-income residents, and 264 units to serve moderate-income residents. Taking into account the existing needs analysis in Table VIII-28, there was a deficiency of six units to serve very low-income families, and a surplus of five units for low-income and ten units for moderate-income families. This current need should be factored into the future housing needs analysis. Although there is a large housing need by the year 2010, the amount of housing to be built per year is rather small. The difficulty, however, is achieving a range of housing for all types of needs and income levels.

TABLE VIII-31
 HOUSING NEEDS BY INCOME
 BROOKLINE & NRPC REGION

Income Range	Percent of Total	Brookline Units Needed by 2010	Brookline Units Needed Annually	NRPC Units Needed by 2010	NRPC Units Needed Annually
Very low income	7%	104	7	1,833	131
Low income	9%	133	9	2,329	166
Moderate income	18%	264	19	4,629	331
Middle income	21%	310	22	5,442	389
Higher incomes	45%	651	46	11,420	816
All Incomes	100%	1,462	104	25,653	1,832

Special Housing Needs

In addition to housing needs based on income, the housing stock within a community should provide housing for the broad range of differing lifestyles, household types and for population groups with special housing needs such as the elderly, families without children, the handicapped, deinstitutionalized individuals and others. The housing needs and housing types most appropriate for some of these groups is described below.

Elderly Persons

As described in the Population chapter, the percent of the population in Brookline which is elderly has nearly doubled since 1970, but as a percentage of overall population the elderly group declined to 7 percent which was well below the regional average in 1990. The decline reflects the large number of young in-migrants, especially of working-age, to Town as well as the relative lack of support services and housing options for the elderly. This is expected to continue from 1980 to 1990 and from 1990 to 2010, following the national trend of an overall older population. Although the housing needs of the elderly vary, it is generally true that elderly households are smaller than average and, therefore, require smaller home sizes than typical single family homes.

Disabled Persons

As described in the Population chapter, a total of 107 Brookline residents above the age of 16 in 1990 were disabled. These residents comprise over 4 percent of the total population, which was lower than the regional average of 7 percent. This segment of the population may require specially designed units or housing which provides support facilities in a group setting.

Families Without Children

Families or households without children are the largest growing segment of the population in the region, comprising over 30 percent of the region's population in 1990. In many ways, these individuals or families have housing needs similar to independent elderly households. The housing types most suitable to their lifestyles are usually smaller than conventional single-family homes. For many childless households, multi-family rental units or condominiums are the housing types of choice.

STRATEGIES TO MEET BROOKLINE'S HOUSING NEEDS

Both Brookline and the Nashua region need to address housing needs for families of all income categories. These housing needs can be met in a variety of ways. The following is a brief discussion of some of the options available to Brookline based on the NRPC's 1994 Regional Housing Needs Assessment; the reader is referred to that document for a more in-depth discussion of the housing strategies presented below. It will ultimately be up to the Town's residents, the Selectmen and the Planning Board to decide which alternatives are most suitable while still meeting the legal obligation to accommodate a fair share of the region's housing needs.

Brookline Community Profile Public Comments

The primary theme expressed at the Brookline Community Profile by those citizens in attendance with respect to housing was the need to control the rate of residential growth. The Infrastructure subcommittee also identified a lack of services and housing for the elderly as a concern, while their future vision included housing architectural control to preserve the visual appearance of the Town.

Effect of Local Regulations on Housing Affordability

Currently, Brookline permits limited housing opportunities to the very-low, low, and moderate income groups, including single-family, duplex, and manufactured housing (upon the owner's request). Single family homes on 80,000 square foot lots can provide housing for middle and higher income groups. The limitation on multi-family housing and manufactured housing are barriers to the in-migration of some lower-income groups, those persons with special needs, and those persons who desire multi-family or manufactured housing for reasons other than income such as small family size and lifestyle.

The decline in non-single-family units since 1980 discussed earlier indicates that there is a need to encourage a greater diversity in the Town's housing stock to serve the needs of all income groups and types of residents. The high median rent and purchase price in Town may be a result of restrictive regulations with regard to affordable housing.

Based on available infrastructure support, there are several ways in which a municipality can use local regulatory powers to provide for a wide range of differing housing types. These include provisions for single-family homes at various densities, two-family housing, multi-family housing, clustered housing development and manufactured housing. Each of these housing types can be developed at market purchase or rental rates for the general public, or for specialized housing needs for lower-income groups, first-time homebuyers, elderly households, handicapped households, or for temporary emergency shelter. Potential strategies to meet these needs include:

- Inclusionary Housing. These programs are one way of encouraging or requiring private developers to provide housing for lower-income households. Generally, density bonuses are provided to the developer in exchange for an agreement to set aside a certain percentage of the units for lower-income households. Many of these programs also require a certain percentage of the units be designated for elderly and/or handicapped households.
- Clustered Housing. Clustered housing is a development pattern that allows residential developments to be designed in a way that "clusters" units together on lots that do not meet conventional size and setback requirements, while preserving the excess land as common open space. Although cluster developments, taken alone, are not a means of providing affordable housing, they can be a way of providing for a far more diverse range of housing needs, depending on how the ordinance is designed. Brookline currently has adopted an Open Space Development ordinance which applies to developments of 20 acres or greater; this ordinance is an excellent step toward addressing housing affordability needs within Town. A weakness of the ordinance is that it does not specifically address the needs of lower-income and special needs groups.

- Elderly Housing Districts. These districts usually take the form of zoning overlay zones, but in some communities specific areas of town have been zoned for elderly housing. In most cases, elderly housing districts provide for a far higher density than allowed in the underlying zone and contain a separate set of regulations and restrictions for unit design. Five communities in the region have some type of elderly housing district: Nashua, Merrimack, Milford, Hudson and Pelham.
- Accessory Housing. An accessory housing unit is generally defined as a small additional housing unit located within what is otherwise a single-family home. Accessory apartments are allowed in traditional single-family zoning districts as a means of providing inexpensive housing, usually for older or younger single relatives of the resident of the home. Although such units are usually apartments within a single-family home, the conversion of other buildings or the construction of a small detached home on the same lot is sometimes allowed. These units serve a wide range of housing needs, including allowing the elderly or youth to maintain a degree of independence while still receiving support from family. The rent which homeowners receive from these units also may make homeownership a possibility where it might otherwise not be.
- Group Homes. Group homes are single-family homes, which house several unrelated individuals with common needs, such as the elderly, and special needs population. This housing allows for mutual support for people of common needs within a family-type setting. The homes provide individual or shared bedrooms with common living areas. The benefit of this strategy is the ability of several housing needs to be addressed within a concentrated setting.
- Manufactured Housing. Manufactured housing, defined in RSA 674:31, can be situated in higher-density parks, on individual lots, or in manufactured housing subdivisions. State law requires each community to provide for two of the three alternatives in most but not necessarily all of the community. This housing option provides a lower-cost single-family home alternative; however, these units on individual lots or within subdivisions are limited due to the high land costs within the region.

Conclusions and Recommendations to Provide for Brookline's Current and Future Housing Needs

The foregoing analysis presents broad implications for the availability and affordability of housing in Brookline and within the region. In general, the City of Nashua and a few adjacent communities are providing the bulk of the region's new housing units as well as providing for the most diverse types of housing within the region. Brookline, like many of the communities in the region, is becoming less diverse as opportunities for housing types other than high-priced, low-density single-family homes diminish.

Both the lack of alternative housing types as well as the lack of affordable housing in Brookline and the region are problems that are rooted in the rapid growth experienced during the last few decades. In communities such as Brookline, urban housing needs have been confronting rural conditions and a lack of infrastructure support. Any effort to expand housing opportunities requires first, a recognition and acceptance of the region's existing conditions, and second, an assertive attempt to direct development for the benefit of all the region's residents into the areas best suited for differing types of development.

Market and geographical factors may play the greatest role in reducing the diversity of the housing stock of most of the region's communities. Another major influence, however, is local land use control. Local land use regulations have clearly had an impact on the distribution and availability of housing as is evident in the patterns of population growth and construction presented in this chapter.

If housing were to be viewed in isolation of other factors, it may appear that local land use controls have had an undue influence on housing affordability and availability in Brookline. However, development of the Town's land use controls has been an ongoing process designed to restrain unchecked residential growth, retain its rural character, and avoid the degradation of its natural resources. Land use regulations are designed to serve a variety of functions and often to achieve what seem to be contradictory or conflicting goals. Brookline's challenge is to expand its housing base without degrading its character, environment or economic structure.

The Brookline Master Plan Update Committee reviewed the foregoing analysis and recommend the following strategies which are deemed to be the most effective and realistic changes that could broaden the housing base of the Town to better respond to the needs of Brookline's residents:

- The Planning Board should consider amending the current zoning ordinance to allow for accessory units. The creation of a small unit within the structure of existing homes in certain locations should be considered. This option would allow new units to be built while still maintaining the rural residential character of the Town.
- The Planning Board should develop a process to assess the impact of the Town's zoning ordinance and subdivision regulations on housing to ensure that reasonable opportunities for affordable housing exist within Brookline and to promote quality, economical development.
- The Planning Board should consider amending the current zoning ordinance to allow for multi-family housing of three or more units. This will increase the amount of rental housing within town, and if sited properly by interspersing throughout all neighborhoods, can fit in with Brookline's rural New England character. In the 1989 Master Plan survey, nearly one-third of respondents felt that allowing multi-family housing in certain area(s) of town would help provide more affordable housing--the highest response of any option.
- The Planning Board, or an appointed committee, should study the elderly housing needs within Town and develop a strategy to meet those needs, such as the creation of an elderly housing district. Issues such as access to Town facilities, transportation, unit design standards, and the requirements of the 1991 Americans with Disabilities Act, as amended, should be considered. Representatives from the senior community and the development community should be involved in this effort to ensure an effective outcome.
- The Town should encourage the conversion and/or renovation of large houses into several units. While in many cases it is both practical and desirable to convert these homes into multi-family dwellings, the issues of parking, sewage disposal, structural and landscaping alterations, density, and compatibility with adjacent land uses should be reviewed by the Planning Board.

- The Town and Planning Board should attempt to increase the availability and affordability of manufactured housing. The cost of manufactured housing units should be compared to conventional single-family homes to determine if the current ordinance provides a lower-cost housing option. If it does not, consideration should be given to increasing the allowable density or designating certain areas of Town as manufactured housing districts to ensure affordability
- The Planning Board should amend the Open Space Development Ordinance to encourage or require a variety of household types for all income categories and for special needs groups.
- The Planning Board should continue to explore innovative land use that will allow all housing types while not increasing the housing density of 1 unit per 80,000 square feet, such as inclusionary housing strategies which would provide incentives for private developers to provide a variety of housing options for lower-income and special needs groups.
- The Town should utilize the expertise and assistance of citizen groups, municipal staff, non-profit housing groups, state agencies and the Nashua Regional Planning Commission in addressing current and future housing needs within Brookline.

AVAILABLE FUNDING PROGRAMS

Several state and federal government funding programs are available to meet housing needs. Within New Hampshire, most programs are administered through the New Hampshire Housing Finance Authority (NHHFA). The Town should consider seeking funding through one of the following programs, which are described in more detail in the NRPC's 1994 Regional Housing Needs Assessment, to address local housing needs:

- Rental Assistance Programs:
 - Section 8 Voucher Program. This program is a rental assistance program that provides a direct subsidy to the owner of rental housing to allow low-income families to occupy privately owned and maintained housing units without spending in excess of 30% of their total annual household income for shelter. The program is administered by HUD through the NHHFA.
 - Section 8 New Construction/Substantial Rehab Program. Gradually replacing the voucher program, this program provides assistance to developers to rehabilitate existing rental housing or to construct new rental housing within HUD guidelines.
 - Rental Rehabilitation Program. The Rental Rehab Program provides substantial incentives for the rehabilitation of existing buildings into rental housing for low-income families. The program is administered through local housing authorities. If one does not exist, the program is then administered by the NHHFA and a local community development office.
- 80/20 Mixed Income Rental Housing Program. The 80/20 Mixed Income Rental Housing Program is essentially a loan program that is designed to encourage inclusionary housing. The program provides tax exempt bond financing to developers in return for an agreement to maintain a portion of the units within a rental housing development for low-income households.

- Public Land/Affordable Rental Housing Program. The Public Land/Affordable Rental Housing Program is a new State program passed by the General Court in 1986. The program allows surplus public land to be leased at no consideration to the NHHFA for the development of low-income housing. The intent of the program is to remove the land cost from the cost of development to allow for the construction of low-income housing that can be economically feasible. The NHHFA will self-finance, construct and manage the housing.
- Housing Development Trust. The Housing Development Trust is a broad based funding program that provides funding for either owner-occupied or rental housing to benefit lower-income households. The program is intended to support projects that could be financed through conventional means.
- Single-Family Mortgage Program. The Single-Family Mortgage Program is by far the most significant State housing program. The program provides low-interest loans for first-time homebuyers within established housing price and income guidelines. The program is financed through the issuance of tax exempt bonds by the NHHFA.
- Federal Housing Administration and Veterans Administration Loans. These Federal Government programs are not administered through the NHHFA. Rather than provide low-interest loans, the programs provide assistance to qualifying home buyers primarily by: (1) allowing for a higher percentage of household income to be devoted to housing costs, (2) providing mortgage insurance or guarantees, and (3) by allowing for down payments as low as zero percent. Both of these programs are far less restrictive than NHHFA single-family home programs and are less limited in terms of funding.

CHAPTER I X .

LAND USE

CHAPTER IX

LAND USE

Land use is a description of how land is occupied or utilized. This chapter describes and analyzes how land is currently used, and how it may change in the future. The town is divided into neighborhoods and specific recommendations are made regarding the future development of each neighborhood. The chapter concludes with general recommendations to meet the Master Plan's goals.

EXISTING LAND USE PATTERNS

Mapping and analyzing existing land use patterns is necessary to support long range planning, the creation of a future land use map, and the implementation of necessary land use controls. Map IX-1 displays land use classifications for the entire town. Residential land use is segmented into single-family, multi-family, and manufactured housing. Recreation/conservation land is divided into categories by ownership, public versus private. Other major classifications include commercial/industrial, mixed-use (both residential and commercial activities on the same property), and publicly owned parcels. It is important to note that these figures are approximate and are displayed for general planning purposes only.

It is evident that residential land use is the most common land use within Town. Most of the residential uses in Town are single family homes on approximately two acres of land. Multi-family units and manufactured housing represent a minor component of the town's land use pattern and are scattered throughout the Town. The only approved manufactured housing district is located on Petersen Road, while lot B-65 near the Route 13/Old Milford Road intersection contains a significant number of multi-family houses. Most of Brookline's residential development has occurred near the Town Center, Old Milford Road, and the Averill Road/Cleveland Hill Road neighborhood.

The existing land use map shows that nearly all of the non-residential uses within Town are located along Route 13, with the exception of lots on Dupaw Gould Road (Field and Stream Trailer Park) and North Mason (Burbee excavation site). The mixed-use lots represent lots which predated the current zoning regulations or which received variances from the Zoning Board of Adjustment. Most public recreation/conservation land is situated near the Old Milford Road/Route 13 intersection, and includes Melendy Pond, the Morrill land, and the Palmer land. Private recreation land owned by the Beaver Brook Association and the Nissitissit River Land Trust is grouped in the southeast corner of town off Oak Hill Road, while the Talbot-Taylor land off Cleveland Hill Road and Camp Tevya off Route 13 at Mason Road are also significant parcels. The town center contains most of the public land, with the rest scattered throughout town.

In examining existing land use patterns, it is useful to look at the extent of each land use in the community, and the quantity of land that remains to be developed in Brookline. Table IX-1 inventories all land uses in Brookline, assigns an approximate acreage figure to each use, and computes the undeveloped land remaining in Brookline.

Of the nearly 13,000 total acres in Brookline, just over 6,200 acres remain undeveloped. However, approximately 180 acres have been approved for future development, and some of this land may be undevelopable due to physical constraints such as steep slopes and wetlands. These issues will be discussed later in the chapter.

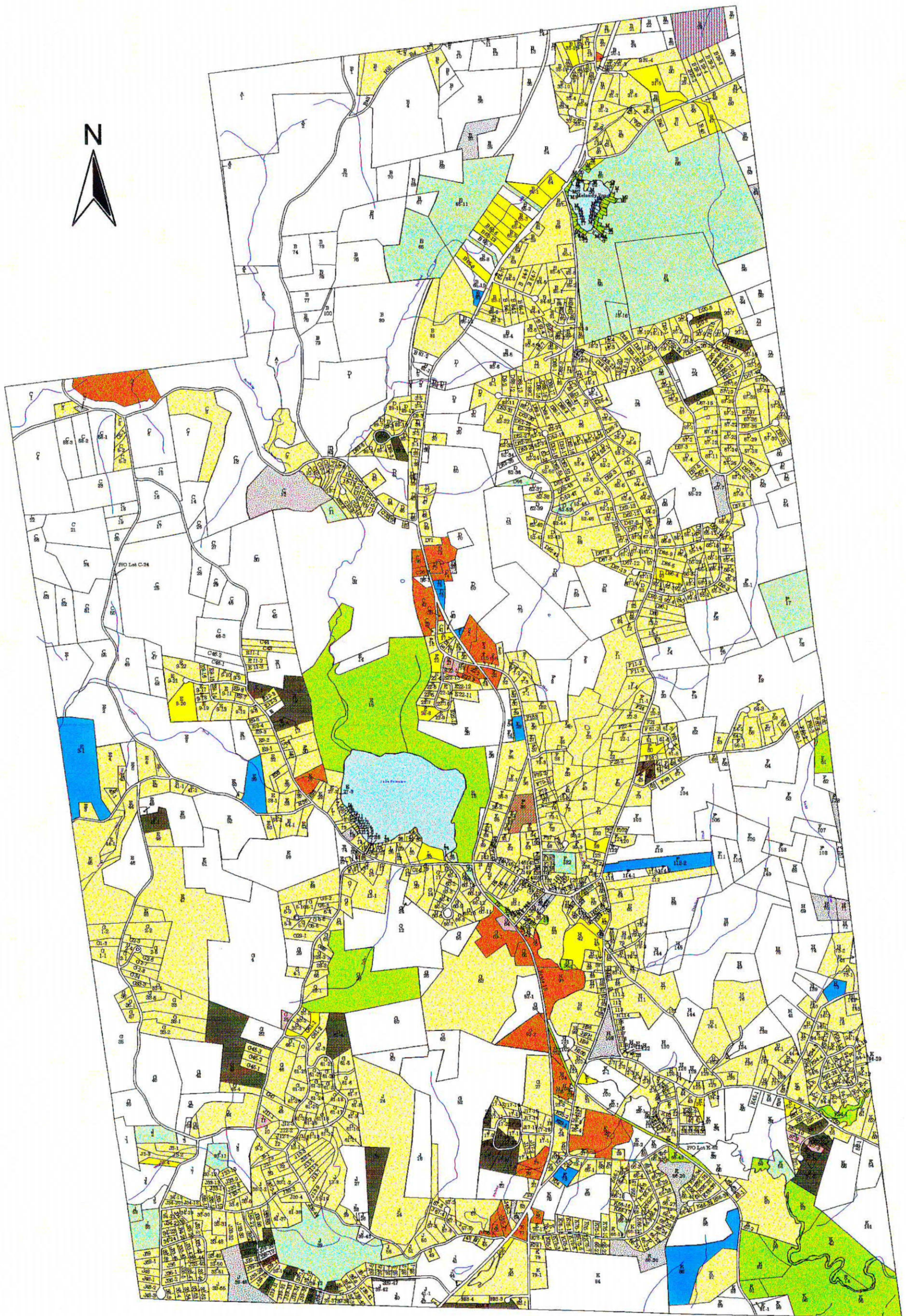
TABLE IX-1
CURRENT LAND USE
TOWN OF BROOKLINE, 1997

Land Use	Acres
Residential:	
Single-family	4,183.4
Multi-family	143.0
Manufactured Housing	13.0
Total Residential	4,339.4
Commercial / Industrial	208.4
Mixed Use	137.0
Public (Town-owned):	
Solid Waste Disposal Facility (C-12)	40.0
Elementary school (F-80)	12.7
3 Cemeteries (D-39, H-108, L-13)	12.3
Town Hall, Fire Station (H-31)	3.7
Historical Society Building (F-144)	0.8
Ambulance Bay (F-116)	0.5
Library (H-59)	0.4
Laurelcrest Common Land (J-39-45, 39-46)	20.3
Parker Road Open Space (K-66-20)	28.2
Other Public	40.6
Total Public	159.4
Recreation/Conservation	
Melendy Pond Authority land (B-55)	284.4
Palmer land (B-65-11)	119.9
Morrill land (B-94)	110.0
Town Ballpark (F-132)	6.5
Max Cohen Memorial Grove (L-35)	1.2
Laurelcrest Open Space (J-39)	80.0
Other Recreation/Conservation	139.9
Total Recreation/Conservation	741.8
Private Recreation	
Camp Tevya (E-15)	173.7
Beaver Brook Association*	104.8
Nissitissit River Land Trust**	90.3
Talbot-Taylor Wildlife Preserve (G-28)	70.0
Oak Hill Road ballpark (K-66-43)	3.2
Melendy Pond Leased Private Lots (est.)	13.1
Total Private Recreation	455.1
Roads	290.0
Utility***	28.0
Major Water Bodies	
Lake Potanipo	170.0
Melendy Pond	19.0
Total Major Water Bodies	189.0
Vacant	6,238.2
Vacant with subdivision approval	183.9
TOTAL TOWN ACREAGE	12,970.1

*F-61; K-62, 91, 94-1, 95, 99; H-146 **K-14, 42, 59, 92, 93; H-9, 29, 34, 36, 102***Two utility easements not included

Note: figures are approximate

Sources: Brookline tax assessor's database and building permit records; N.H. GRANIT database



- | | |
|-----------------------|---|
| Single Family | Recreation/Conservation (private owned) |
| Multi-Family | Recreation/Conservation (Elem. School) |
| Manufactured Housing | Vacant |
| Mixed Use | Waterbodies |
| Commercial/Industrial | Brooks and Streams |
| Public | |
| Utility | |
| Approved/Undeveloped | |

Town of Brookline EXISTING LANDUSE MAP

Note: Full Scale version available
for review at Town Hall

Not to Scale

CURRENT ZONING

In the early 1970s, Brookline established two Districts within town: a Residential-Agricultural District and an Industrial-Commercial District. Map IX-2 provides a visual representation of the two base districts. Since that time, five ordinances have been approved at Town Meeting which apply additional regulations to underlying parcels: the Wetlands Conservation District Ordinance, the Floodplain District Ordinance, the Aquifer Protection District Ordinance, the Open Space Development Ordinance and the Growth Management Ordinance. In addition, the Manufactured Housing District Ordinance creates a floating zone, which may be applied to property upon the request of the owner.

Residential-Agricultural District

The location and uses permitted in the Residential-Agricultural District as described in Section 600 of the Brookline Zoning Ordinance are as follows:

600.00 RESIDENTIAL-AGRICULTURAL DISTRICT

601.00 Location

The Residential-Agricultural District shall be:

- a. all areas of town not designated as the Industrial-Commercial District.

602.00 Uses Permitted

- a. Single dwelling unit dwellings, two dwelling unit dwellings.
- b. Churches, synagogues, parish houses, convents, day nurseries, kindergartens, and day care centers.
- c. Municipal buildings, schools, and institutions of higher learning.
- d. Recreation and community center buildings and grounds for games and sports.
- e. Home businesses in compliance with the requirements of Section 1700 of these regulations and subject to Planning Board review under the Non-Residential Site Plan Review regulations, particularly Section 5.2, Submission Requirements for Home Businesses.
- f. Farming and Forestry activities are permitted when incidental to primary residential use.
- g. Farm stands, provided that the stand is set back a minimum of 30 feet from abutting road right-of-way lines; the building area of the farm stand is not greater than two hundred (200) square feet; a minimum of two off-street parking spaces meeting the dimensional requirements of this ordinance are provided; and the stand does not pose a threat to public health, safety and welfare. Year-round, permanent structures for the sale of farm products must receive Non-Residential Site Plan approval from the Planning Board.
- h. Manufactured housing in approved Manufactured Housing Districts subject to the provisions of Section 700.
- i. Any use injurious, obnoxious, or offensive to the neighborhood is prohibited.

As shown in Table IX-2, the Residential-Agricultural District comprises 12,118 acres or approximately 97% of Brookline. Half of the district is currently developed, as 6,125 acres remain vacant. There is an 80,000 square foot minimum lot size for single-family homes and twice that for duplexes within this zone. Lots must have a minimum of 200 feet of frontage and be set back at least 30 feet from front lot lines and 15 feet from side and rear lot lines. There are separate requirements for back lots.

TABLE IX-2
VACANT ACREAGE IN ZONING DISTRICTS
TOWN OF BROOKLINE, 1997

District	Total Acres*	Percent of Total	Vacant Acres	Vacant Percent of Total
Residential-Agricultural	12,118	97%	6,125	51%
Industrial-Commercial	373	3%	114	30%
Total	12,491	100%	6,238	50%

* Excludes major water bodies and roads

Note: figures are approximate, based on G.I.S. calculations

Industrial-Commercial District

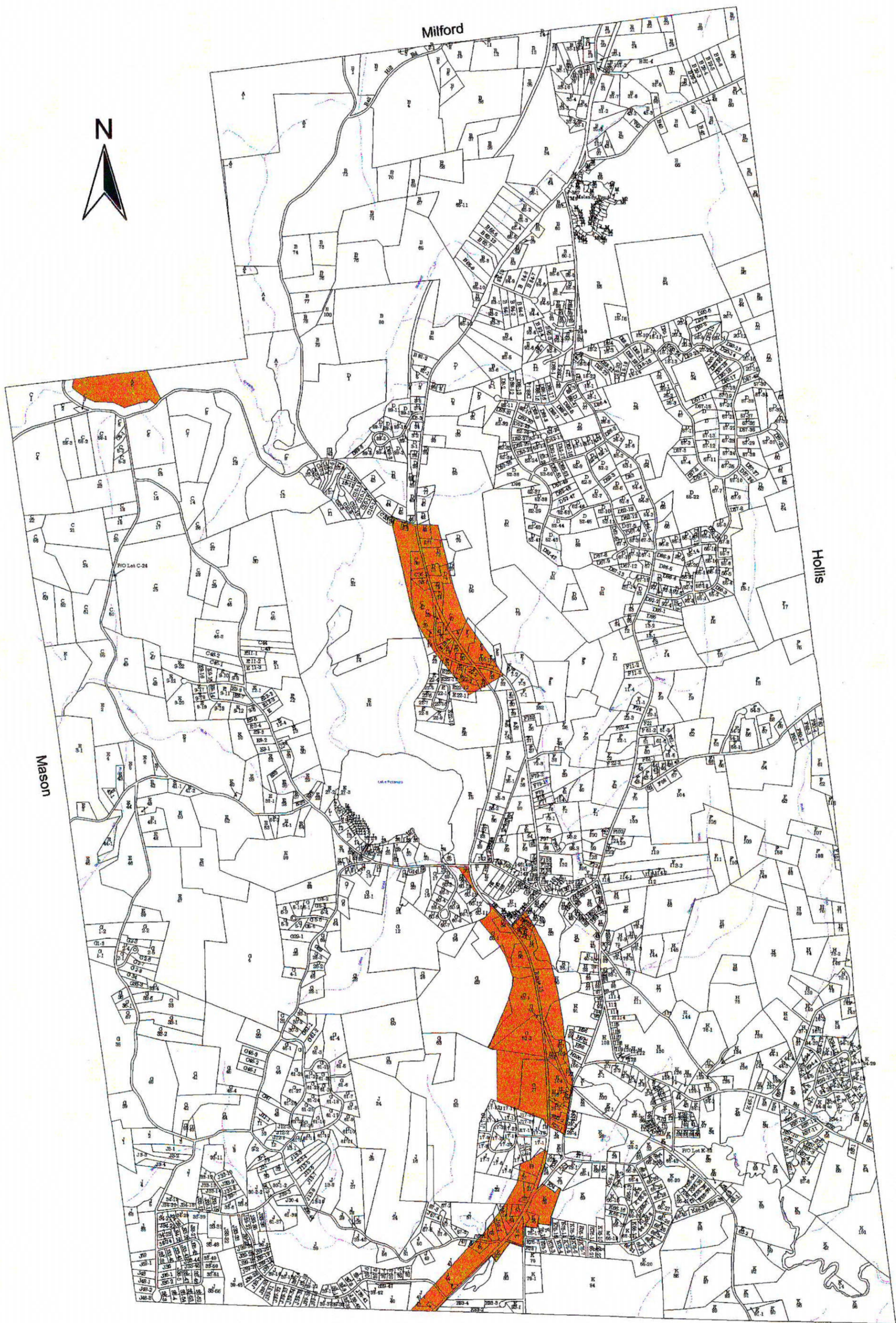
The location and uses permitted in the Industrial-Commercial District as described in Section 500 of the Brookline Zoning Ordinance are as follows:

500.00 INDUSTRIAL-COMMERCIAL DISTRICT

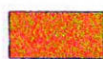
501.00 Location

The Industrial-Commercial District shall be:

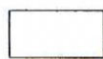
- a. the area within 500 feet west of NH Route 13 from the northern and western boundary of lot G-52-1 to the southern lot line of G-27.
- b. the area between the old tract line approximately 528 feet west of the western boundary of G-27, northeastward along the old tract line to the western tip of G-52-2, and the western boundary of G-52-1 and Route 13.
- c. the area within 500 feet of NH Route 13 from a point 500 feet south of Route 130 North to North Mason Rd. on both sides of NH Route 13.
- d. lots K-76, K-77 and the area within 500 feet west of NH Route 13 from the Massachusetts State Line to the northern boundary of lot J-19.
- e. the area within 500 feet east of NH Route 13 from Bond St. south to South Main St., then following South Main St. to the southern boundary of lot H-23-1.
- f. lot G-20.
- g. lots K-81 and K-75.
- h. a portion of Tax Map Parcel A-6 of approximately 35 acres, located within the following boundaries:
Beginning at a point on the northerly side of the North Mason Road, said point being 800 feet easterly of the centerline intersection of North Mason Road and Ben Farnsworth Road; thence by said northerly sideline of said North Mason Road



Brooks and Streams



Industrial/Commercial



Residential/Agricultural

Not to Scale

Note: Full Scale version available
for review at Town Hall

Town of Brookline
ZONING MAP

1. Easterly 250 feet to a point; thence through said Tax Map Parcel A-6
2. Northerly perpendicular to the Brookline/Milford Town Line to a point on said Town Line; thence by said Town Line
3. Westerly to a point, said point being 200 feet easterly of and perpendicular to the easterly sideline of Spaulding Brook Road; thence by a line 200 feet easterly from and parallel to said easterly sideline of Spaulding Brook Road
4. Southwesterly and Southeasterly to a point that is 200 feet northerly of and perpendicular to said northerly sideline of North Mason Road; thence by a line that is 200 feet northerly from and parallel to said northerly sideline of North Mason Road
5. Easterly to a point that is directly opposite and perpendicular to the point of beginning; thence
6. Southerly 200 feet to the point of beginning.

502.00 Uses Permitted

- a. Excavations (as per Section 1000)
- b. Establishments offering goods for sale including dry goods, foods, hardware, clothing and apparel, motorized vehicles, and other general retail commodities
- c. Farming & Forestry
- d. Lumber Yards and lumber mills
- e. Health care facilities
- f. Theaters
- g. Hotels/motels
- h. Warehousing, assembling & manufacturing
- i. Office parks
- j. Residential dwelling units existing prior to March 14, 1992 and home businesses within these units subject to the provisions of Section 1700
- k. Banks and financial institutions
- l. Restaurants
- m. Professional offices
- n. Personal services and offices
- o. Churches and associated parsonages
- p. Public, private, or non-profit recreational facilities, fraternal orders, or membership clubs
- q. Schools, nurseries and day care centers
- r. Funeral homes
- s. Automobile fueling, service and repair stations
- t. Post offices
- u. Police and fire stations
- v. Any use which does not offend by emission of smoke, dust, gas, noise, odor, or fumes

The Industrial-Commercial District comprises 373 acres, or approximately three percent of all the land in town. There are a number of commercial establishments not within the Industrial-Commercial District which predated current zoning within Town, such as those along the northern section of Route 13 near Milford and the few commercial establishments along Main Street in the center of Town. Each commercial lot must be at least one acre, have a minimum of 150 feet of road frontage, and be set back at least 30 feet from the front lot line and 15 feet from side and rear lot lines. No more than 75 percent of a commercial lot may be covered by impervious surfaces, and commercial structures may not be higher than 35 feet.

Remaining Vacant Land

Table IX-3 provides an analysis of the vacant land remaining in the Industrial-Commercial District. The statistics are striking, as only three lots totaling 25 acres are vacant and entirely in the Industrial-Commercial zone: C-36-1 (2.03 acres), G-52-1 (15.9 acres), and K-75 (9.24 acres). Lot F-4, site of the Post Office Square, also has 7 vacant commercial condominium sites on that parcel. Approximately 88 acres are partially within the zone on 5 vacant lots; however, these lots are not completely available for commercial activity.

TABLE IX-3
VACANT AREA IN THE INDUSTRIAL-COMMERCIAL DISTRICT
TOWN OF BROOKLINE, 1997

	Acreage	Lots
Vacant lots entirely within the district	25.1	3
Vacant lots partially within the district	88.5	5
Total vacant land	113.6	8

History of Industrial-Commercial Zoning

Over the past few years, amendments have been proposed to expand the current Industrial-Commercial District. They are listed here to show some of the areas of Town, which have been considered for non-residential development.

1. In 1983, an addition to the current Industrial-Commercial zoning was placed on the ballot at Town Meeting. This read as follows:

The Industrial-Commercial District shall be the area within 500 feet easterly edge of right of way and within 500 feet westerly edge right of way, of Route 13 from the Massachusetts State Line in the south, to the town line of Milford in the North (by petition, not recommended by the Planning Board). Defeated.

2. In 1984, the following amendment was defeated:

The Industrial-Commercial District shall include all land within present lots of record having frontage on Route 13 (by petition, not recommended by the Planning Board).

3. In 1987, the following area was to be added to the existing Industrial-Commercial District:

...plus the remainder of lot D-72, the remainder of lot D-37, lot D-70, the southern half of lot D-50 (the area of the lot south of an east-west dashed line which extends from the northernmost corner of lot D-70 to lot D-51 as shown on the Brookline tax map).
and a Commercial District added which would have been: lots H-73, H-73-1, H-74, K-55, and K-54.

This article was approved by the Planning Board but also defeated.

In 1991 the Town voters approved adding lots K-75, K-76, K-77, K-81 and G-20 to the southern district. In addition, upon the suggestion of local developers, the Planning Board proposed an amendment in 1997 which was approved to reduce the minimum lot size in the district from two acres to one, and to reduce the required setbacks to encourage commercial development.

Economic Development Strategies in Neighboring Communities

At the time of the writing of this plan, the neighboring communities of Hollis, Milford and Amherst are also updating their Master Plans. A meeting between the Brookline town planner and the town planners of these communities resulted in an informal agreement to attempt to coordinate economic development strategies to the maximum extent possible, for the benefit of each town.

These towns currently have zoned land on or near Brookline's borders as follows:

- **Hollis:**
 - Residential & Agricultural Zone. Permitted uses include residential dwellings, farms, roadside farm stands, condominiums, home occupations, and recreational facilities.
 - Industrial Zone. Located on Route 130 at the Brookline border. Permitted uses include offices, laboratories, machine shops, printing, publishing shops, manufacturing activities meeting specific standards, storage and warehousing, and trucking terminals.
 - Recreational Zone. Located along the Nissitissit River and Rocky Pond. Permitted uses include residential dwellings, farms, roadside farm stands, stables, condominiums, retirement communities, churches, day care facilities, schools, and recreational facilities.
- **Milford:**
 - Residence District. Permitted uses include residential dwellings, agricultural activities, manufactured housing, harvesting, and recreation and community center activities.
- **Amherst:**
 - Residential-Rural Zone. Located south of Route 101A and west of Route 122 on the Milford town boundary. Permitted uses include residential dwellings, home occupations, roadside farm stands, amateur non-profit recreational activities, and daycare facilities.
 - Industrial Zone. Located south of Route 101A and east of Route 122 on the Hollis town boundary. Permitted uses include light manufacturing, assembly, metal working, equipment sales and service, bottling plants, distribution plants, laboratories, corporate offices, wholesale, storage, banks, coffee shops, veterinary clinic, affordable housing, and amateur non-profit recreational activities.

Economic development strategies at this time are limited in each community. Hollis is focusing on an expansion of small businesses and home occupations in the town center. Milford officials have discussed opening Route 13 to more commercial development, but this proposal has met with resistance. Amherst has no formal economic program at this point.

It is also instructive to coordinate with other bordering communities, which include the Towns of Mason (NH), Pepperell (MA) and Townsend (MA). The zoning in each of these communities on the Brookline border is as follows:

- **Mason:**
 - General Residential, Agricultural, and Forestry District. Permitted uses include residential dwellings and accessory structures, mobile homes, and general farming.
- **Pepperell:**
 - Rural Residence District. Permitted uses include residential dwellings and accessory structures, group residences such as nursing homes, churches, daycare centers, schools, agricultural uses, and commercial recreation such as a golf course.
- **Townsend:**
 - Outlying Commercial District. Located east of Route 13. Permitted uses include municipal activities, educational and religious uses, sale and rental of merchandise, restaurants, office/professional/research activities, hotels/motels in operation since 1970, and single-family residential dwellings by right; and recreational facilities, commercial entertainment facilities, service stations, storage, and hotels/motels by special permit.
 - Residential District.

Public Comments from the Community Profile

The 1989 Master Plan conducted a written survey to gauge public opinion about the Town's growth. Over sixty percent of Town residents at that time felt that the rate of residential growth from 1985-1989 was too fast, while a third felt that it was about right. Over one-third of residents felt that commercial growth in the 1985-1989 time period was too slow. In addition, twenty-nine percent felt that additional commercial/industrial areas should be added.

No comparable data is available for this update, since the Community Profile described earlier in this plan was conducted in lieu of a mail questionnaire. However, some common themes were expressed at the event, which may serve to indicate the current attitude of residents regarding growth. In general, Profile participants expressed a concern that growth is out of balance, with residential growth far outpacing commercial growth. A common theme expressed at the forum was the need to expand the commercial tax base to reduce the residential property tax burden, while at the same time preserving the town's rural character and natural environment. It was recognized that this strategy would necessitate expanded town services. Many residents at the Profile felt that the town should focus its planning efforts on managing residential growth, encouraging economic diversity through a selective expansion of small businesses, creating a community center, and acquiring/preserving land for conservation and recreational purposes.

Some of the diverse and often conflicting opinions on commercial activity articulated at the Profile are repeated below. These comments may or may not reflect majority opinion:

- **Economic vitality subcommittee.**
 - Concerns about economic vitality: no sewer or water service; bad phone system in some areas; no industrial parks; the "Not-in-my-back-yard" mentality; current zoning law is restrictive to business; electrical rates not competitive with MA; lack of resources to support industry (i.e. fire, police); lack of infrastructure (i.e. electricity, phone); strong residential growth
 - Vision for the future: small industrial park; clean businesses (green); more diversity of companies (i.e. professionals); balanced growth of residential vs. commercial; more home businesses; more businesses to help relieve taxes

- **Local business subcommittee.**

➤ Concerns about local business: appear to have weak industrial base; assets not staying within town; forced to look elsewhere for contractors; lack of contact by businesses; no shopping; no work for young residents; no local banking; no water and sewer; no downtown center; piecemeal; no Chamber of Commerce.

➤ Vision for the future: more advertisement; family-based attraction; hardware store, pharmacy, dry cleaners, fast food; businesses that add character and ambiance to the community

- **General comments:**

- Amend the zoning ordinance to encourage commercial development, especially industrial parks
- Retain small, local business owners
- Encourage existing businesses to expand
- Businesses in town need to serve the needs of residents, including groups such as teens, moms, and commuters
- Look at why companies do not locate in Brookline and develop a marketing plan to attract them

Recommendations for New Commercial and/or Industrial Districts

In 1997 the Planning Board identified a need to address the lack of available commercial land within Town and the difficulty of expanding the district, as evidenced earlier in this chapter. The Master Plan Update Committee considered the opinions expressed at the Community Profile and explored a number of strategies used by neighboring communities to encourage economic development, and has come up with the following recommendations to facilitate proper economic growth within Town:

- **Brookline economic development strategy:** Facilitate the expansion of existing businesses while encouraging the growth of new small businesses which preserve and enhance the Town's rural character, provide for resident shopping needs, and offer employment opportunities with strong earning potential for all age groups.
- **New Zoning Districts.** To enable commercial growth, new zoning districts with available vacant land should be established. The following districts and corresponding commercial uses are suitable for Brookline and are in keeping with the Town's economic development strategy. All new commercial districts should be designed to encourage concentric development patterns and discourage strip development. Key intersections of major roads in certain neighborhoods should be targeted.
 1. Neighborhood Business District. The intent of this district would be to provide for those businesses which serve local shopping needs and which are compatible with surrounding residential neighborhoods. Clusters of shops, small-scale shopping centers, and individual stores would be encouraged, while large regional shopping uses such as department stores would be discouraged. Examples of acceptable uses may include antique shops, banks, bakeries, beauty parlors, bed and breakfasts, child care facilities, drug stores, dry cleaners, florist shops, food stores, hardware stores, home businesses, and professional offices. Residential activity may also be permitted in the district to encourage a more integrated land use pattern.
 - This district may be appropriate at major road intersections in some Town neighborhoods.

2. Office Park District. The intent of this district would be to attract corporate office and research facilities to a campus environment providing large open spaces, generous setback requirements, and compatible architectural and landscaping standards. Examples of acceptable uses may include corporate offices and research facilities.
 - This district may be appropriate on Route 13 near the Milford town boundary; on Route 130 near the Hollis town boundary adjacent to the Industrial District in Hollis; and west of Route 13 on the Townsend (MA) town boundary adjacent to the Outlying Commercial District.
3. Light Industrial District. The intent of this district would be to provide for light industrial parks meeting specific performance standards. Traffic generation, building bulk, and intensity of site development would be restricted and standards would be set for environmental factors such as noise and air quality. Examples of acceptable uses may include office buildings, research and development, distribution and mailing facilities, machine shops, printing, publishing shops, and storage facilities.
 - This district may be particularly appropriate for Route 130 on the Hollis town boundary adjacent to the Industrial District in Hollis; at the intersection of Route 13 and Milford Street; and west of Route 13 on the Townsend (MA) town boundary adjacent to the Outlying Commercial District .
4. Town Center District. The intent of this district would be to maintain and enhance the historic character of the town center and to provide a central gathering place for town residents and visitors by encouraging commercial activity which is dependent on pedestrian traffic and which requires little land area. Examples of acceptable uses may include a community center, historic retail shops, bed and breakfasts and cottage-type businesses which cater to tourists.
 - This district may be particularly appropriate for the Main Street area which includes Town Hall, the Library, and the Village Store.
- **Strategies to improve the economic environment.** Specific actions which may be taken by Town leaders to improve the Town's economic attractiveness include:
 1. Amend the Zoning Ordinance to remove obstacles to economic growth.
 2. Utilize public education mechanisms such as public meetings, special mailings, and media advertisements to address resident opposition to an expansion of the commercial district.
 3. Cooperate with neighboring communities to develop and conduct a marketing/advertising campaign to attract desirable industry to the Brookline region.
 4. Establish a formal, regular line of communication between Town officials and business leaders by creating a local business association, Chamber of Commerce, or Rotary Club utilizing more informal measures such as monthly breakfast meetings.
 5. Join the New Hampshire Main Street Program which provides technical support and training to promote historic and economic redevelopment of traditional business districts.

Overlay Districts

The five new ordinances and one floating zone mentioned earlier in this chapter add special requirements to the provisions of both the Residential-Agricultural and Industrial-Commercial Districts:

- The Manufactured Housing District Ordinance, passed in 1982, is a floating zone which allows manufactured housing on a tract of land 20 acres or greater upon the request of the property owner.
- The Floodplain Ordinance, passed in 1985, restricts development in the floodplain, which is located adjacent to most water bodies within Town.
- The Wetlands Conservation District Ordinance, passed in 1987, requires that each parcel contain at least 60,000 square feet of dry area. It also requires septic tank or leach field setbacks of 75 feet or 125 feet depending on the type of soil.
- The Aquifer Protection Ordinance, passed in 1989, restricts the type of permitted uses in the Aquifer Protection District (shown on page III-13). These restrictions include the subsurface storage of petroleum; the storage, processing, or disposal of hazardous waste; and the covering of more than 30% of a lot in the Residential-Agricultural zone, and 60% of a lot in the Industrial-Commercial zone by impervious surfaces.
- The Open Space Development Ordinance, passed in 1993, requires developments of 20 acres or greater to provide the Planning Board with an alternative development plan which sets aside 35 percent of the tract for low-impact recreation.
- The Growth Management Ordinance, passed in 1994, seeks to limit residential growth to 3 percent by restricting building permits for new development. A minimum of ten (10) permits must be distributed annually. This ordinance was amended in 1996 to guarantee a minimum number of permits to new subdivisions based on size, and to distribute the remaining permits on an equal basis.

Telecommunication Facilities

The Federal Telecommunications Act of 1996 was enacted by the U.S. Congress to permit and facilitate the expansion of wireless technology. By federal law, Brookline must provide reasonable opportunity for the siting of telecommunication facilities within Town; it may not prohibit these structures or discriminate among service providers. However, the Town may regulate the placement and design of such facilities to minimize the impact on surrounding land uses.

The Town of Brookline adopted the Telecommunications Facilities Ordinance in March 1998, and the Planning Board approved the Telecommunications Facilities Amendment to the Non-residential Site Plan Regulations in May 1998. The purpose of the Telecommunications Facilities Ordinance is to establish general guidelines for siting telecommunications facilities, providing reasonable opportunity for the placement of telecommunication facilities to ensure the coordinated development of communications infrastructure while preserving the health, safety and welfare of the Town and its residents. Town officials should balance the interests of residents, telecommunications providers and telecommunications customers in the siting of such facilities within the Town. The Amended Regulations outline construction performance criteria and Non-residential Site Plan application submission requirements.

Recommendations

- A site selection committee should be formed to assess the current level of service, determine the number of towers necessary to provide adequate coverage, and research and recommend appropriate telecommunication sites within Town. Representatives from telecommunication carriers and industry experts should be included on the committee to ensure the sites are viable. This effort may result in a town wireless master plan, which could be used by the Planning Board in reviewing telecommunication facility applications. The committee should coordinate its plan with adjacent communities to ensure a coordinated regional telecommunication system, which may take the form of a negotiated regional service agreement.
- Once the plan is developed, the Town should explore the possibility of developing a strategy to purchase suitable telecommunication sites with the intent of leasing them to telecommunication providers, thus generating a steady source of revenue for such activity.

EXISTING TOWN FACILITIES

Like many other small or rural New Hampshire communities, Brookline does not have public water or sewer facilities to offer or direct future growth. The most relevant facility the Town does have for guiding future growth is its road system. As roads become paved and connected with existing roads, areas of Town are "opened up" for development.

NATURAL LIMITING FACTORS

The Natural Resources chapter identifies the natural limitations to development within the Town of Brookline. These include steep slopes, wetlands, and floodplains. Other types of natural features warranting consideration include the location of ground and surface waters, soils of agricultural importance and forest lands. Map IX-3 shows the location of steep slopes and wetlands in Brookline. Table IX-4 indicates land that is available for development within each zoning district.

TABLE IX-4
DEVELOPABLE LAND IN ZONING DISTRICTS
TOWN OF BROOKLINE, 1997

Zoning District	Residential-Agricultural		Industrial-Commercial	
	District	Percent	District	Percent
Developed Land	5,993.6	49.5%	259.3	69.5%
Total Vacant Land	6,124.6	50.5%	113.6	30.5%
Developable	3,999.9	65.3%	80.7	71.0%
Undevelopable*	2,124.7	34.7%	33.0	29.0%
Total Acres	12,118.2	100.0%	373.0	100.0%

* Steep slopes or wetlands

Note: figures are approximate, based on G.I.S. calculations; excludes major waterbodies and roads

LONG-TERM POPULATION PROJECTION

By considering the requirements of the Town's zoning districts in conjunction with the natural limitations to development, one can estimate the maximum buildout of Brookline and estimate a long-term population projection for Brookline, assuming maximum buildout. The buildout projection for Brookline is shown in Table IX-5.

As noted in Table IX-2, of the 12,118 total acres in the Residential-Agricultural District, approximately 6,125 acres remain vacant without subdivision approval. Using the NRPC's computerized Geographic Information System (GIS) to calculate the amount of undevelopable land (steep slopes and wetlands), a total of just over 2,124 acres is found to be undevelopable; this figure is subtracted from the vacant land to determine gross developable land. Subtracting a standard 20 percent for roadways yields net developable land.

Assumptions in the buildout analysis include each future house lot being an average of 3 acres, about 70% more than the minimum requirement of 1.8 acres per house lot. This was determined to be a reasonable assumption because the recently approved subdivisions average 3.63 acres per lot which includes steep slopes, wetlands, and floodplains. An average household size of 2.58 persons per household is assumed, which was the estimated household size in 1996 based on an analysis of current population and housing units. This analysis shows that Brookline could physically accommodate an additional 2,751 residents under current conditions.

It is instructive to compare this figure to the projection of 8,279 Brookliners in the year 2020 by the Office of State Planning that is contained in the Demographics chapter; this figure does not take into consideration physical limitations. Also note that these computations do not account for any rezoning that may occur. Potential buildout population will fluctuate up or down depending on whether minimum residential lot size is increased or decreased and whether the commercial district is expanded. If more commercial-industrial zones are added which do not permit residential uses, or if minimum lot sizes were increased, the maximum population of Brookline would be less than the range shown, and vice-versa.

TABLE IX-5
COMPUTATION OF LONG-TERM POPULATION PROJECTION

Vacant residential land*	6,124.6
Less steep slopes and wetlands	2,124.7
GROSS DEVELOPABLE LAND	3,999.9
Less 20% for roads and rights-of-way	800.0
NET DEVELOPABLE LAND	3,199.9
Divide by 3 acres per dwelling unit	1,066.6
Multiply by 2.58 persons per household	2,751.9
Add existing population (1996)	3,128.0
BROOKLINE BUILDOUT POPULATION	5,879.9

* Does not include vacant lots with
subdivision approval

ANALYSIS OF EXISTING AND FUTURE LAND USE BY NEIGHBORHOOD

It is useful to break the Town into neighborhoods in analyzing existing land use and recommending strategies for future development. For the purposes of this analysis, the Town is divided into eleven neighborhoods which were drawn along the major roads within Town. These neighborhood boundaries are divided as shown in Map IX-4.

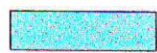
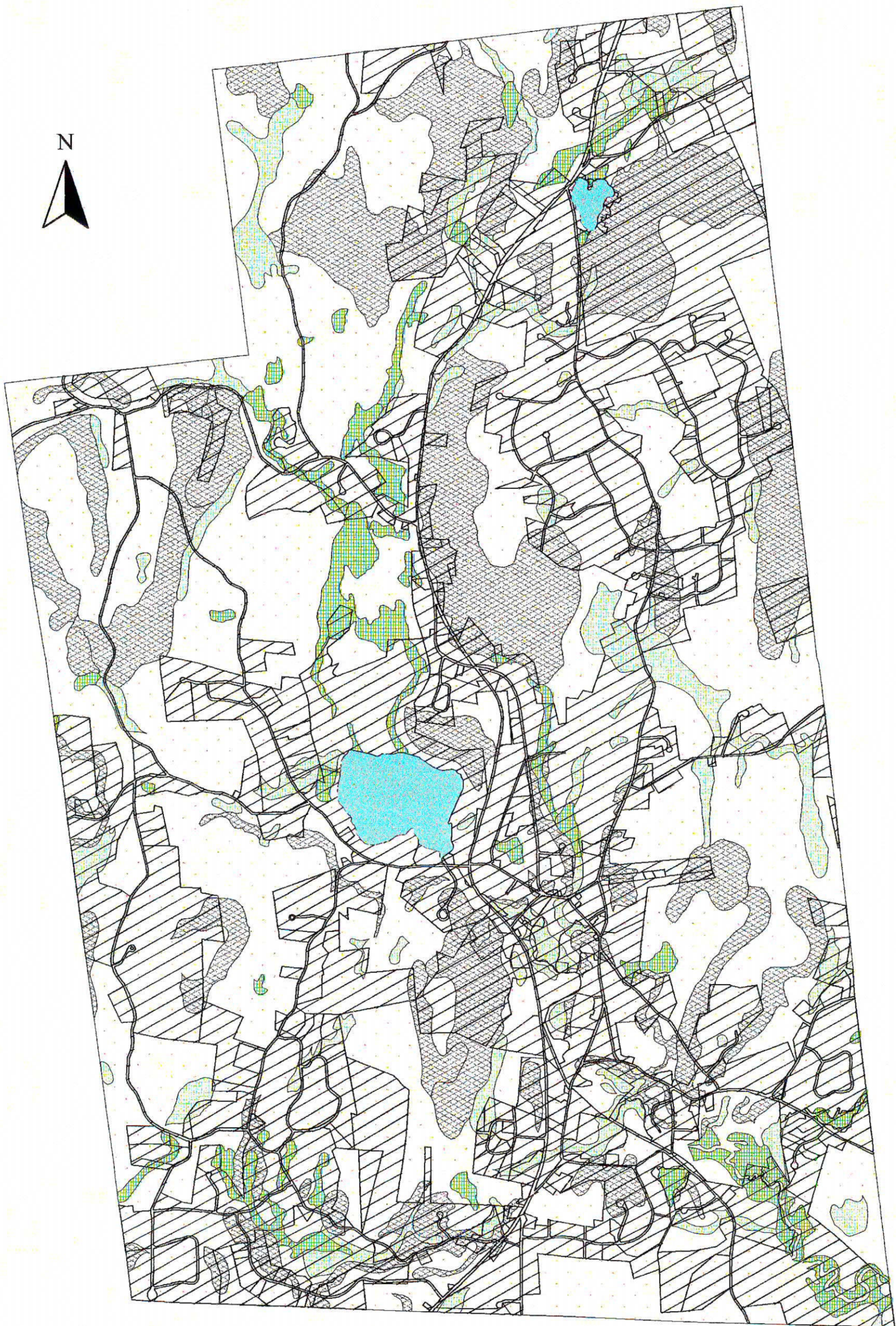
Table IX-6 provides a breakdown of land use by neighborhood, while Table IX-7 shows the amount of developable vacant land within each neighborhood (not constrained by steep slopes or wetlands). These figures will be referred to in the following discussion. Each neighborhood analysis will describe the existing land use, the current zoning, and natural limitations in that area. The future land use and recommendations for each neighborhood are then made along with a future land use map showing approved undeveloped subdivisions.

TABLE IX-6
LAND USE BY NEIGHBORHOOD
TOWN OF BROOKLINE, 1997

Neighborhood	Single-Family Residential	Multi-Family Residential	Manufactured Housing	Commercial/Industrial	Mixed Use
1	216.7	42.4	0.0	35.0	2.1
2	612.5	32.5	0.0	0.0	0.0
3	866.7	7.1	0.0	25.5	2.3
4	194.1	16.2	3.4	30.9	0.0
5	133.6	12.5	0.0	0.0	56.6
6	425.7	3.7	1.5	0.0	0.0
7	544.1	4.6	4.2	49.8	0.0
8	257.1	19.6	0.0	63.3	5.4
9	264.9	0.0	0.0	0.0	25.6
10	374.7	4.6	3.9	4.0	45.0
11	293.1	0.0	0.0	0.0	0.0
TOTAL ACRES	4,183.4	143.0	13.0	208.4	137.0

Neighborhood	Public	Recreation/Conservation	Private Recreation	Utility	Vacant	Vacant, Subdiv. Approval
1	12.9	144.1	0.0	0.0	1,380.6	5.5
2	11.2	445.0	2.5	28.0	623.1	17.9
3	2.3	11.8	0.0	0.0	621.8	0.0
4	42.1	11.3	173.7	0.0	587.9	25.7
5	0.0	0.0	0.0	0.0	797.6	0.0
6	0.0	11.9	0.0	0.0	530.9	40.5
7	1.9	2.0	70.0	0.0	456.2	49.9
8	28.8	0.0	18.5	0.0	62.3	0.0
9	11.7	0.0	5.3	0.0	704.3	0.0
10	28.2	9.0	185.1	0.0	377.0	27.5
11	20.3	106.7	0.0	0.0	96.5	16.9
TOTAL ACRES	159.4	741.8	455.1	28.0	6,238.2	183.9

Source: Brookline Assessor's Database



Waterbody



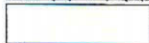
Slopes > 15 Degrees



Poorly Drained or
Very Poorly Drained Soils



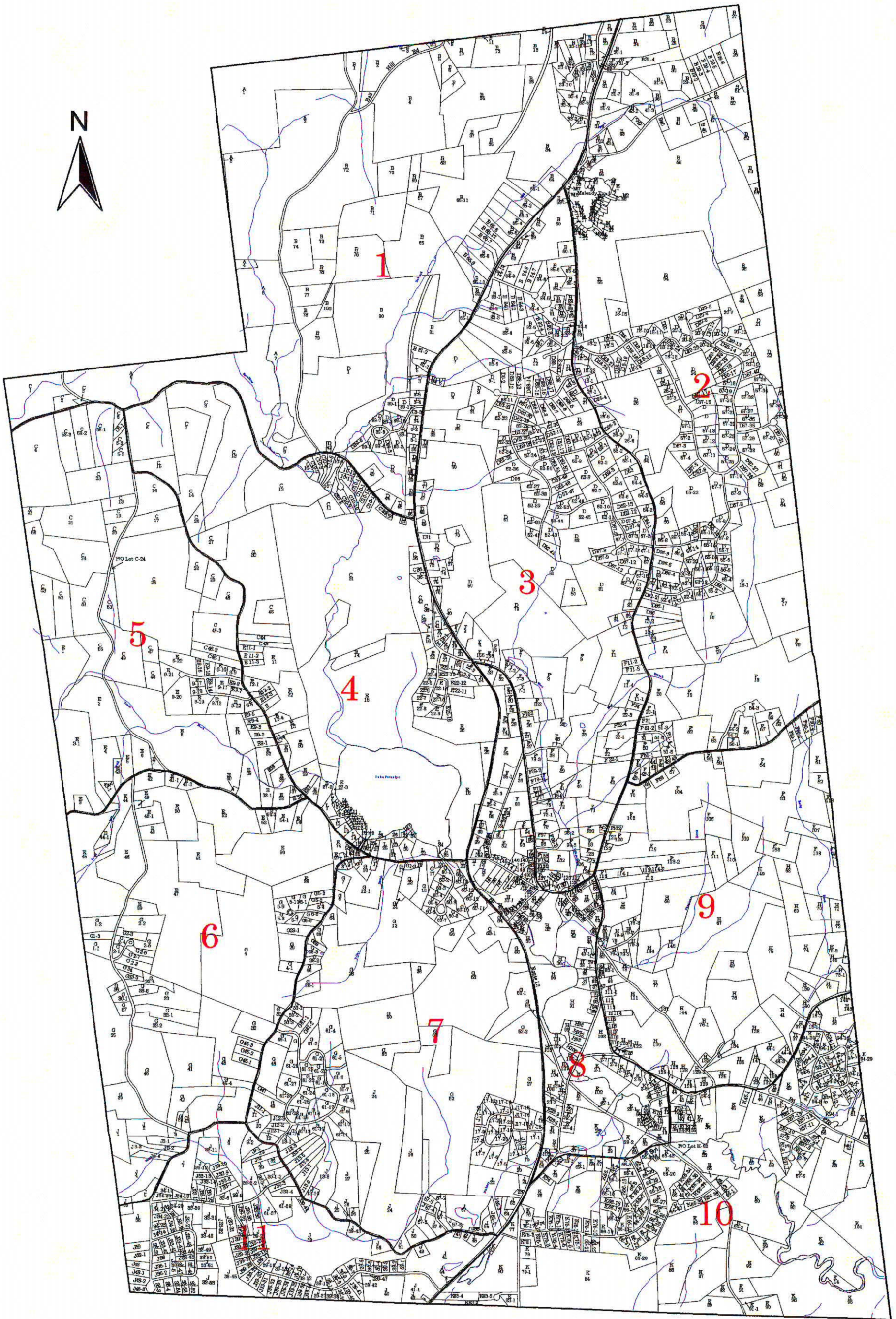
Currently Developed



Vacant and Non-constrained

Town of Brookline LAND USE RESTRAINTS MAP

Not to Scale



Town of Brookline NEIGHBORHOOD BOUNDARIES MAP

Not to Scale

Note: Full Scale version available
for review at Town Hall

TABLE IX-7
DEVELOPABLE LAND BY NEIGHBORHOOD
TOWN OF BROOKLINE, 1997

Neighborhood	Total Acres	Developed Land	Total Vacant Land	Undevelopable Vacant Land*	Percent of Vacant Undevelopable
1	1,839.5	458.8	1,380.6	554.1	40.1%
2	1,772.8	1,149.6	623.1	165.5	26.6%
3	1,537.4	915.6	621.8	400.4	64.4%
4	1,085.3	497.4	587.9	199.3	33.9%
5	1,000.3	202.7	797.6	266.7	33.4%
6	1,014.2	483.3	530.9	75.3	14.2%
7	1,182.6	726.4	456.2	148.1	32.5%
8	455.0	392.7	62.3	19.6	31.4%
9	1,011.8	307.5	704.3	224.2	31.8%
10	1,058.9	681.9	377.0	75.5	20.0%
11	533.4	436.9	96.5	28.9	29.9%
TOTAL ACRES	12,491.2	6,252.9	6,238.2	2,157.6	34.6%

* Steep slopes or wetlands

Note: figures are approximate, based on G.I.S. calculations; excludes major waterbodies and roads

Neighborhood 1 Northwest/Hutchinson Hill Rd./Spaulding Brook

Location: the area west of NH Route 13 and north of North Mason Road.

This area is the one of the least developed within Town, as it ranks first in the Town in terms of vacant land. However, nearly 550 acres, or 40 percent of the remaining land, is undevelopable due to physical constraints. The entire neighborhood is currently zoned Residential-Agricultural, with the exception of lot A-6 on North Mason Road, 35 acres of which was recently rezoned as Industrial-Commercial for a commercial excavation operation. The only future approved development in the area is two remaining lots from Scabbard Mill Brook Road, a 13-lot subdivision. This neighborhood contains the most multi-family housing in Town, located primarily on lot B-65 off of Route 13. No manufactured housing is here at present, while lot B-82 on Route 13 is classified as mixed-use, housing the 1786 House Antique Shop.

The North Cemetery is located in this area, south of the proposed Scabbard Mill Brook Road. The town owns a total of 13 acres in this neighborhood.

Recreation needs in this area are provided through the Palmer Land, lot B-65-11, which provides hiking opportunities. Recreation/conservation land in this neighborhood totals 120 acres, which is the second highest in Town.

Recommendations

- No development should be allowed to occur on Hutchinson Hill Road until it is brought up to Class V road standards or North Mason Road is improved.

- The Planning Board should encourage roads to be built off of Route 13, in order to limit the number of driveways off of this road and to ensure proper traffic flow.
- Development on Ball Hill Road, with sole access taken from Milford should be discouraged. Development in this area may lead to problems with emergency services. No further development should be allowed on this road until Hutchinson Hill Road is built. It is important to note that the Town of Milford recently approved a major subdivision across the town boundary, which may impact usage of Brookline roads in this neighborhood.
- The Town should add to the Town-owned Palmer land as development occurs in this area to increase the size of this valuable conservation area
- The Recreation Commission should add passive recreation opportunities within this neighborhood.
- The newly zoned Industrial-Commercial District on lot A-6 should eventually revert back to Residential-Agricultural use; otherwise, the area should be expanded to allow for other commercial activity.
- An office park district may benefit residents in the vicinity of Route 13 at the Milford town boundary.
- Development near the steep slopes and wetlands areas in this neighborhood should be limited and proper safeguards should be implemented to protect those natural features.

Neighborhood 2 Birch Hill/Melendy Pond

Location: the area east of Old Milford Road and Route 13, and North of Rocky Pond Road.

This area is all zoned Residential-Agricultural, and has been developed mostly within the past 10 years. This area has been one of the fastest growing in the 1990's, with four major subdivisions in the area totaling over 100 lots. Only four lots remain from these developments, but over 600 acres also remain vacant in the neighborhood. Just over one-quarter of this land has natural limiting features that make it unsuitable for development. Extensive wetlands exist south of Mill Brook Road near the corner of Hood Road and Route 13, which would present natural limitations to the commercial development of these lots. This wetland area is a bog that was once used to harvest peat moss.

The neighborhood contains over 600 acres of single-family residential lots, which is the second highest in Town. Over 30 acres are devoted to multi-family housing in the neighborhood, while no parcels are devoted to manufactured housing, commercial, or mixed-use activities.

Residents in this neighborhood enjoy the most recreational/conservation land in town, totaling over 400 acres. The majority of this land is located at Melendy Pond (B-55), including recreational lots leased to private individuals, and the Morrill Land on lot B-94. Other lots include D-25 and D-18-5, and additional public lands comprise over 11 acres.

Recommendations

- Lot B-24 may not be proper for commercial development.
- As additional development occurs in this area, developers should be required to purchase equipment and facilities to add to the recreational park on lot D-25.
- An additional neighborhood park would be beneficial to residents of this neighborhood.
- The Planning Board should encourage future connections to Hollis Lane or Dunbar Drive in order to produce a through road to Hollis or a connection to Rocky Pond Road. Another potential new road corridor may be from Overlook Lane to Adams Road in Milford. Both corridors would relieve some traffic through the Town Center and along Route 130. Rocky Pond Road and Hood Road represent existing corridors, which could be improved before new corridors are constructed to facilitate traffic flow.
- All future roads should be required to connect to existing rights-of-way.
- A school bus turn-around area is necessary along Rocky Pond Road.
- An office park district may benefit residents in the vicinity of Route 13 at the Milford town boundary.

Neighborhood 3 East-Central/Bear Hill

Location: the area east of NH Route 13, west of Old Milford Road, and north of Meetinghouse Hill Road.

Neighborhood 3 holds the most single-family residential land in town, and like neighborhood 2, has grown rapidly in recent years. This area is characterized by the Bear Hill Estates subdivision, which contains 54 lots, and Lakin Road, which contains 10 lots. No approved lots in the neighborhood remain unbuilt, but 622 acres remain vacant. However, many of these lots have no road frontage and nearly two-thirds are not suitable for development due to steep slopes or wetlands constraints. Two multi-family lots are also located in the area.

Some lots in this neighborhood are located in the Industrial-Commercial zone near the Route 13/Milford Street intersection. Land devoted to commercial uses comprises approximately 25 acres and includes developments such as Stoney Ledge, the Post Office, and Bourassa Real Estate.

Recreation/conservation land is extremely limited in this area. The Town ballpark, lot F-132, in the southern part of this neighborhood, is the major recreation area within Town.

The only town-owned land in the neighborhood is the ambulance bay on Main Street.

Recommendations

- The Town should target this neighborhood for future recreation/conservation land purchases. The extensive amounts of physical constraints to development make this neighborhood attractive for conservation purposes.
- Additional housing diversity is desirable in this neighborhood.
- The opportunity exists in this neighborhood to rezone some land to better define a "Town Center", which could help to define a sense of community and a central gathering place which was a key recommendation of the Community Profile. A Town Center zoning district may be appropriate here.
- A neighborhood park would benefit residents of this neighborhood, particularly in the Bear Hill area. Lot D-50 may be an appropriate location for such a park.
- The Town should preserve and protect the current character of the Town Center zone, part of that is located in the southern part of this neighborhood.

Neighborhood 4 Lake Potanipo/North Stream

Location: the area west of NH Route 13, East of Dupaw-Gould Road, south of North Mason Road, and North of Mason Road.

This area consists primarily of private recreational land such as the area surrounding Lake Potanipo and the nearby Camp Tevya. Approximately 174 acres of land is devoted to private recreation. The Camp owns all of the adjacent land to the east and north of Lake Potanipo, with old cottages on the southern boundary.

Nearly 200 acres in the neighborhood are devoted to single-family residential use, while three lots are used as multi-family and two lots hold manufactured housing off of Quimby Road. Field and Stream Trailer Park is located on Dupaw-Gould Road (lot E-29) and provides 53 hookups for seasonal residence.

Seven lots totaling 30 acres are currently used for commercial purposes, including Tapply & Son Lumber, Fine Lines Auto Body, and JRM Tool & Die. Quimby Road, the home of many commercial sites, is well designed as an ideal location for commercial and industrial uses with excellent access to Route 13, but doesn't produce traffic problems along Route 13. All of the commercially zoned land in this neighborhood has been developed, except for lot C-36-1 off of Route 13 comprising 2 acres.

There are fifteen vacant lots totaling nearly 590 acres in this neighborhood which are neither owned by the Camp, nor have an approved development. The only currently approved unbuilt subdivision is on lot E-12 off of Dupaw Gould Road (26 acres). Of the 587 acres available for development, one-third are constrained by steep slopes and wetlands. North Stream splits this neighborhood, and any chance for an east-west road through this neighborhood is limited because of this natural feature and its adjacent wetlands.

Town-owned property in the neighborhood includes lots C-11 and L-13 as well as the solid waste disposal facility on lot C-12. While limited, public recreation/conservation land includes the Max Cohen Memorial Grove as well as lots E-13 and C-11, totaling 11 acres in all.

Recommendations

- The Town should preserve and protect Lake Potanipo and its waters, which provides a wide variety of recreation facilities for residents, including boating and swimming. Brookline should also obtain easements and land around the lake for aesthetic, recreation and conservation purposes, as land becomes available. Future zoning changes should strengthen protection of the water.
- Lot E-25, which has frontage on Route 13, should take access from Rock Ramond Road rather than from Route 13, to reduce the number of curb cuts on Route 13, and to avoid a natural feature, Rock Ramond.
- A policy for parking at Lake Potanipo needs to be defined.

Neighborhood 5 Ben Farnsworth Rd. area/ Lancy Brook

Location: the area west of Dupaw-Gould Road, north of Mason Road, and south of North Mason Road.

Similar to neighborhood 1 (Hutchinson Hill), this area is comprised of a Class VI road, and mostly vacant land (nearly 800 acres). One-third of this land is undevelopable. Major subdivisions include Conneck Drive and McIntosh Road. One multi-family lot is located off Conneck Road, while lot E-3-1 at the Mason border on which Aero Properties resides is classified as mixed use. The town owns no land in this neighborhood.

Recommendations

- No development along the Class VI portion of Ben Farnsworth Road or the northern section of Dupaw-Gould Road should be permitted to occur until they are brought up to Class V.
- The Town should target this neighborhood for future recreation/conservation land purchases.

Neighborhood 6 Russell Hill

Location: the area south of Mason Road, west of Cleveland Hill Road, and north of West Hill Road.

Neighborhood 6 is split between single-family residential and vacant land, 425 and 530 acres respectively. It also contains the second highest amount of acreage which is approved but undeveloped. This may be due to the fact that this neighborhood has the lowest percentage (14) of land, which suffers from physical development constraints. One multi-family lot is located on West Hill Road, while lot J-3-1 has a manufactured housing unit and lot J-2 off Russell Hill Road is town conservation land.

Recommendations

- No development along the Class VI portion of Russell Hill Road should be permitted until it is brought up to Class V.
- The Town should consider acquiring and denote Bear's Den and promote it as an historic resource.

- Greater housing diversity is desirable in this neighborhood.

Neighborhood 7 South-Central/Potanipo Hill/Talbot Swamp

Location: the area east of Cleveland Hill Road, north of Averill Road, west of NH Route 13, and south of Mason Road.

Neighborhood 7 is one of the most diverse in Town. It contains the third-highest amount single-family residential land, the most approved undeveloped land, and the second highest amount of commercial land. It is the fourth lowest in terms of vacant land at approximately 450 acres; nearly one-third of this land is undevelopable. Developments in this area include Talbot-Taylor Estates, 24 lots; Elevations, 23 lots; and Muscatanipus Road, 6 lots. Two lots remain from Talbot-Taylor and eight from Elevations. An eight-lot subdivision, Woodland Acres, was recently approved off of Taylor Drive. Two lots are devoted to multi-family use in the neighborhood, while lots G-54 and J-11 provide over 4 acres of manufactured housing.

Conservation/recreation land in this area includes the Talbot-Taylor Wildlife Sanctuary, located on lot G-28. The other town-owned parcel is lot J-54 near Route 13 and Parker Road.

The Commercial-Industrial zone extends to the west of Route 13 and south of Mason Road, and includes portions of over nine lots in this area. Nearly 50 acres are classified as commercial. Commercial enterprises include: Gazebo Square, the Auto Depot, People's Heritage Bank, and Grant Plastics.

Recommendations

- The opportunity exists to expand the Commercial-Industrial zone so that entire lots can be located in the zone, rather than only the portions of the lot closest to Route 13.
- Lot G-27's access should be taken from Lorden Lane.
- Roads should be encouraged in this neighborhood, as there are many "interior" lots, which do not have frontage, and may be landlocked in the future.
- The Town should take steps to preserve the Talbot-Taylor Wildlife Sanctuary.

Neighborhood 8 Town Center

Location: the area east of NH Route 13, west of Main Street/ Route 130, north of Oak Hill Road, and south of Milford Street.

This neighborhood is nearly entirely developed, as it is one of the oldest neighborhoods in Town. It is probably the most diverse in Town. While 257 acres are devoted to single-family use, the third-highest amount of land (20 acres) is devoted to multi-family use primarily in the town center, on lots H-30-1, H-42, and K-1.

Neighborhood 8 contains the most commercial activity in Town, including Griffings Riverside, Bingham Lumber, and the Granite State Convenience Store.

There are only nine vacant lots remaining in this neighborhood, totaling 62 acres, which is the lowest total in Town.

Town-owned land includes the Town Hall, Library, Fire Station, Pine Grove Cemetery, Brookline Elementary School, and the land that the Historical Society Building is on.

Recreation facilities include the basketball court and baseball field at the School and private recreation on lots H-9, H-29, H-34, and H-36 near Bond Street. No public conservation land is available in this area.

Recommendations

- The Town should preserve and protect the Town Center area including non-residential uses and existing historic homes. The Town Center is located on Bond Street, Main Street and Springvale Avenue and Milford Street, and includes such structures as the Fire Station, Town Hall, Village Store, many historic homes, and the old Post Office. A Town Center zoning district may be appropriate here.

Neighborhood 9 South of Rocky Pond Rd./Stonehouse Brook

Location: the area south of Rocky Pond Rd., east of Main Street, and north of NH Route 130.

Neighborhood 9 is mostly vacant (just over 700 acres). However, over 30 percent of the available land has steep slopes and wetlands constraints. Most of the frontage along Route 130 has been developed, which prevents the lots not along this road from getting access. Approximately 265 acres is devoted to single-family use.

Two lots are classified as mixed use in this neighborhood: the Stone House Press (lot F-113-2) off of Old Milford Road near Steam Mill Hill Road and the Auction House on lot H-73-1, near the Hollis border. Although it is in the Residential-Agricultural zone, this commercial use operates with a variance.

The town owns three parcels on the Hollis border, while private recreation land is owned by the Beaver Brook Association on lot F-61. No publicly owned recreation/conservation land currently exists in this area.

Recommendations

- The opportunity exists for a road extending from Rocky Pond Road to NH Route 130, parallel to Main Street. The existing wood road in that area may represent a potential corridor.
- Rocky Pond Road should be improved as development occurs in that area.
- A school bus turn-around area is necessary along Rocky Pond Road.
- The Conservation Commission should target this neighborhood for future conservation land purchases to complement the Stone House resource and Beaver Brook Association land.
- Additional housing diversity is desirable in this neighborhood.

- An Office Park District or Light Industrial District may benefit residents in the vicinity of Route 130 at the Hollis border.

Neighborhood 10 Oak Hill/Nissitissit River

Location: south of NH Route 130, east of NH Route 13, south of Oak Hill Road and east of Bohanon Bridge Road.

This neighborhood is balanced between single-family residential (375 acres) and vacant land (377 acres). The Town's only approved Manufactured Housing District is located on Petersen Road, lot K-57, with lots K-57-3 and K-57-9 currently being used for that purpose. Three lots contain multi-family housing on Pepperell Road and Route 13 at Averill Road (K-34-1, K-61-1, K-81). Approved undeveloped lots total 28 acres, and are primarily on Petersen Road. Only 20 percent of available land is not suitable for development.

The Commercial-Industrial zone extends into this neighborhood. This includes all or part of three lots.

Recreation needs are served by the Oak Hill Road ballpark, a privately owned facility, and lots K-58, K-66-18, and K-66-20. Significant wetlands exist in this neighborhood, especially near the Nissitissit River. Much of the land in this area is owned by Beaver Brook and the Nissitissit River Land Trust, two conservation groups, which offer private recreational opportunities.

Recommendations

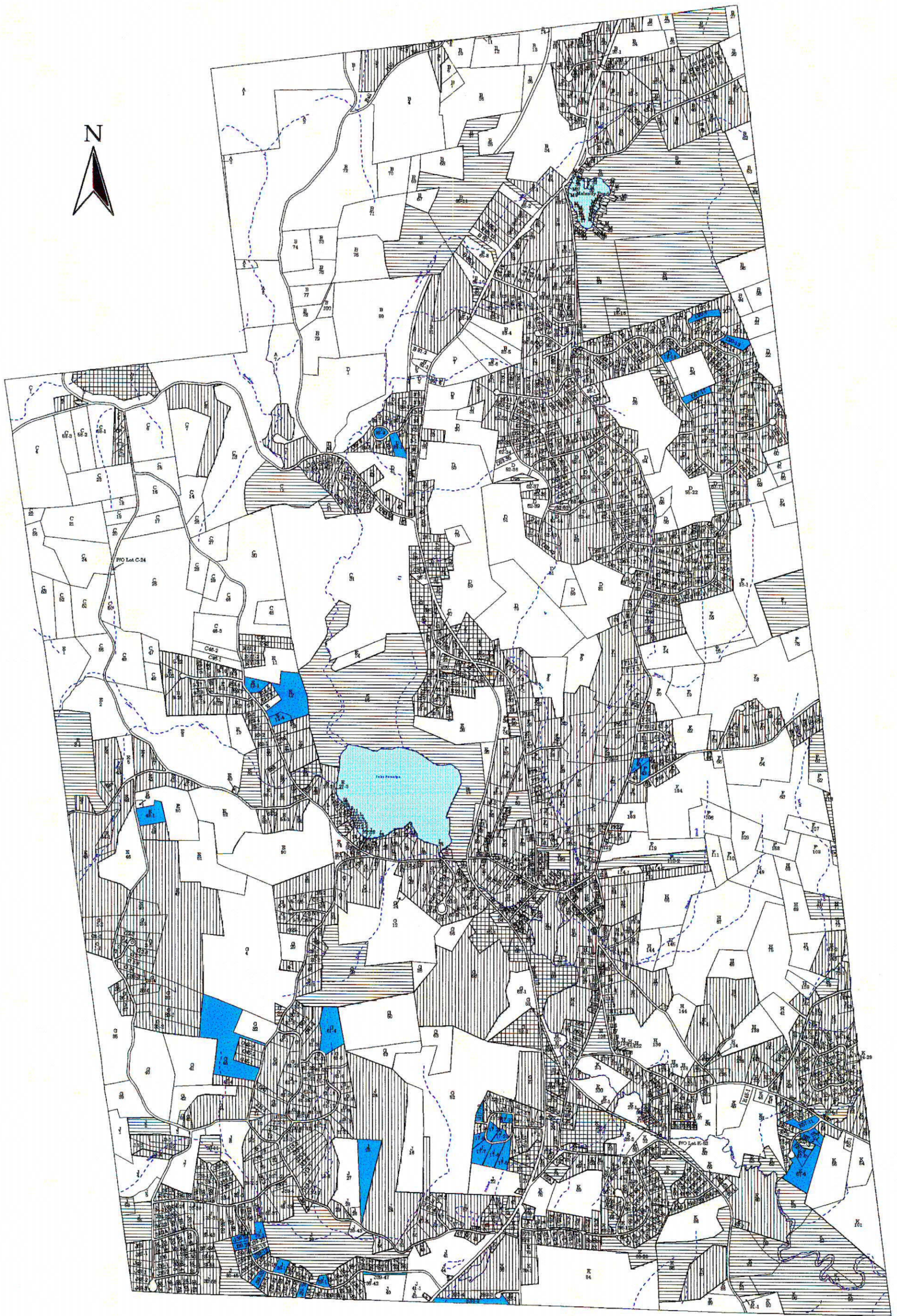
- The Conservation Commission should target this neighborhood for future recreation/conservation land purchases.
- The Nissitissit River Land Trust should continue to be used to protect land along the river.
- An Office Park District or Light Industrial District may benefit residents in the vicinity of Route 130 at the Hollis border.

Neighborhood 11 Wallace Brook




Location: the area south of Averill Road, south of West Hill Road, and west of NH Route 13.




This neighborhood is located in two zones, with all land within 500 feet of Route 13 being in the Industrial-Commercial zone, and the remainder being located in the Residential-Agricultural zone. The Wallace Brook Estates and the Laurelcree subdivisions account for much of the 293 acres of single-family land. A total of 17 acres remain approved but undeveloped, most of which is located in the Laurelcree subdivision. Of the 96 remaining vacant acres, nearly 30 percent are undevelopable.

Town-owned land includes lots J-39-45 and J-39-46. Over 100 acres of conservation land reside in the area, including lots J-39, J-35, J-58, and J-33-11.



Not to Scale

-  Existing Residential
-  Existing Commercial/Industrial
-  Existing Uses other than Residential or Commercial/Industrial

-  Vacant
-  Waterbodies
-  Approved/Undeveloped Residential Lots

Town of Brookline FUTURE LANDUSE MAP

Note: Full Scale version available
for review at Town Hall

Recommendations

- The Town should develop recreational areas in this neighborhood.
- Fresh Pond and its associated wetlands are a valuable Town asset, providing habitat to many animal species. This area should be preserved and protected by the Town.
- Additional housing diversity is desirable in this neighborhood.
- An Office Park District or Light Industrial District may benefit residents west of Route 13 at the Massachusetts state line.

FUTURE LAND USE

Table IX-8 shows development, which has received approval but as yet remains unbuilt. These lots have been added to the Town's existing land use map to create Map IX-5, which depicts the anticipated future land use of the town.

TABLE IX-8
APPROVED UNDEVELOPED LOTS
AS OF DECEMBER, 1997

<i>Subdivision</i>	<i># Lots Approved</i>	<i># Lots Remaining</i>	<i>Remaining Parcel #'s</i>
<i>Major subdivisions</i>			
Mountain Rd. Estates II & Birch Hill Estates II	60	4	D-18-13; D-20-13; D-20-6; D-57-17
Talbot Taylor Est.	23	2	G-61-4, -30
Elevations	23	7	J-17-5, -6, -7, -8, -10, -20, -21
Laurelcrest	44	15	J-39-11, -15, -18, -19, -20, -21, -22, -23, -24, -25, -30, -36, -43, -48, -49
<i>Approved 1997</i>			
Gavin Construction		6	F-18, 18-1, -2, -3, -4
One Line Realty		1	J-39-49
One Line Realty		1	J-39-48
Keith & Elaine Dunton		2	J-8-1
Robert & Beverly Petersen		2	K-56-1
Fresh Pond Realty	1	1	D-25-4
Cropp/Dupaw Realty Trust	(8 pending)		
Glendale Homes	(12 pending)		
David/Jeannemarie Janik	(3 pending)		
<i>Approved 1996</i>			
Ruth Gaudet	3	1	G-45
Woodland Acres	8	8	J-25, 25-1, -2, -3, -5, -6, -7, -8
Adamyk/Chapman	6	3	H-77-3, -4, -5
Geo. Nelson, Jr.	6	2	E-11, 11-5
<i>Approved pre-1996</i>			
Cropp/Dupaw Realty	6	4	E-12, 12-1, -4, -5
Marlene Young	2	1	E-48-1
Capt. Douglass Dr.	4	1	K-83-2
Coon	3	2	F-43, 43-2
Peterson Rd.	13	6	K-57-1, -2, -4, -5, -6, -11
Scabbard Mill	13	2	D-89-2, -9
TOTAL	227	68	

GENERAL RECOMMENDATIONS

1. Brookline should amend the Town's existing zoning ordinance to achieve the following:
 - a. Allow accessory units and cluster developments as a way of increasing housing diversity. These may also fit appropriately in the Town Center area.
 - c. Eliminate zoning that splits lots and zone along lot lines and visible features such as rivers and roads as much as possible. This will reduce confusion, and the workload of the Zoning Board of Adjustment.
2. The overall zoning ordinance should be reviewed and revised to create a coherent whole.
3. The Planning Board should develop and execute a process to determine what changes are required to be made to the Town's existing zoning ordinance regarding Commercial-Industrial zones in order to accommodate Commercial-Industrial growth in a manner that discourages "strip" zoning and encourages small commercial-industrial clusters.
4. The Town should ensure that existing land use regulations are enforceable
5. The Town should identify and sell small town-owned parcels of land which offer marginal public benefit and use the revenue to purchase a tract of land that will meet a top-priority need of the Town and its residents.
6. The Town should consider the development of Neighborhood Business Districts in appropriate areas.

