TOWN OF ANDOVER, NEW HAMPSHIRE
MASTER PLAN



Adopted October 22, 2013 by unanimous vote of the Andover Planning Board

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I. Introduction

This master plan is a guide to the future character, physical landscape, growth, and development of Andover. It describes how, why, where, and when future development should occur across Andover's landscape. It guides town officials when they are making decisions on ordinances, capital improvements, budgets, zoning and subdivision matters, and other issues related to managing growth and landscape change in Andover.

The master plan provides an opportunity for community members and leaders to look ahead, establish visions and directions, set goals, and map out plans for the future. It documents the basis for and describes where, how, and at what pace the Andover community desires to develop physically, economically, and socially. The master plan is a blueprint for Andover's future, and it is also a reference document. It contains maps, charts, and supporting text to present the recommendations of the planning board for future land use and offers guidelines for community decision-makers on matters related to land use change and development.

The plan contains a summary of recommended strategic actions. It acts as a continuing reminder of what the citizens of Andover would like to accomplish to manage landscape change within the next 10 years or so. The plan is intended to be a living document that should be reviewed and

updated as conditions change within our town, and as need may arise for drafting optional reserved chapters. [1]

Definitions

Concise definitions for important terms are necessary for unambiguous understanding of the Master Plan and its recommendation. In general, definitions are presented when they are first used in the Land Use chapter. The definitions in the Land Use chapter apply to the entire document, although the terms may be used before that.

Plan Organization

The Master Plan chapters are ordered as they are in New Hampshire law. The Plan includes the chapters required by law (Vision and Land Use) as well as a chapter on Implementation and a chapter on Cultural and Historic Resources. Because this Master Plan is intended to be a living document, which can be amended and expanded as the need arises, all other optional chapters mentioned in state statute are included in the table of contents, with the statutory text as a placeholder in the document. These reserved optional chapters include: transportation; community facilities; economic development; natural resources; natural hazards; recreation; utility and public service; regional concern; neighborhood plan; community design; housing, and energy.

1. State Law

New Hampshire statutes relating to master plans are contained in Appendix I. The statutes define the purpose and function of a master plan as follows (bold type identifies key words and phrases):

"RSA 674:2 Master Plan: Purpose and Description.

I. The purpose of the master plan is to set down as clearly and practically as possible the best and **most appropriate future development** of the area under the jurisdiction of the planning board, to **aid the board in designing ordinances** that result in preserving and enhancing the unique quality of life and culture of New Hampshire, and to guide the board in the performance of its other duties in a manner that achieves the **principles of smart growth, sound planning, and wise resource protection.**

II. The master plan shall be **a set of statements and land use and development principles** for the municipality with such accompanying maps, diagrams, charts, and descriptions as to give legal standing to the implementation ordinances and other measures of the planning board. Each section of the master plan shall be consistent with the others in its implementation of the vision section.

The master plan shall include, at a minimum, the following required sections:

(a) A **vision section** that serves to direct the other sections of the plan. This section shall contain a **set of statements, which articulate the desires of the citizens affected by the master**

[1] Introductory paragraphs adapted from Preparing a Master Plan for Your Community, Southern New Hampshire Planning Commission, June 2004

plan, not only for their locality but also for the region and the whole state. It shall contain **a set of guiding principles and priorities to implement that vision.**

(b) A **land use section** upon which all the following sections shall be based. This section shall **translate the vision statements into physical terms**. Based on a study of population, economic activity, and natural, historic, and cultural resources, it shall show **existing conditions** and the **proposed location, extent, and intensity of future land use**."

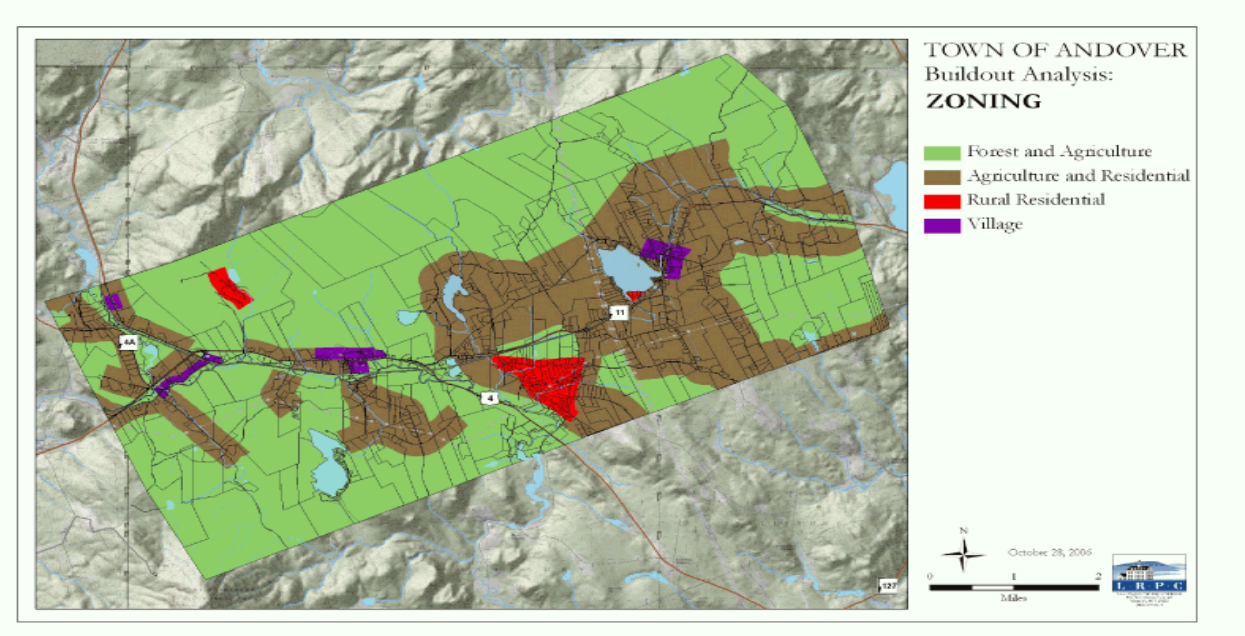
2. Previous Master Plans

This is Andover's third master plan. The first one, adopted by the Planning Board in 1974, was the foundation for the first Andover Zoning Ordinance, adopted by the 1974 Town Meeting. The second master plan was adopted by the Planning Board in 1992 after four years of preparation. Appendix II contains a table of goals from previous master plans.

3. Current Land Use Regulations

No substantive changes were made to the zoning ordinance or other land use regulations as a result of the 1992 Master Plan. Today, Andover has a Zoning Ordinance that looks much the same as the original adopted in 1974. A table of the permitted uses and special exceptions in the current zoning ordinance, unchanged since 1974, can be found in Appendix III. Over time, amendments have been adopted to regulate citing of cell towers, the Federal Flood Insurance Program, the provision for site plan review and others. The Planning Board has adopted Subdivision Regulations. See Appendix IV for the text of Andover's current ordinances and regulations. Map I shows the boundaries of current zoning districts.

Map I: Town of Andover Current Zoning Districts



II. Vision

A. Process summary

1. Committee formation and early work

The Master Plan Update Committee ("the Committee") was called together in 2004 by the Planning Board, and the 2005 Town Meeting appropriated funds for Master Plan update work. Committee members were recruited from a broad array of organizations, institutions, and businesses in Andover (Appendix V).

To get the process started, the committee held an informal brainstorming session to develop ideas for important issues facing Andover. This list of 52 "issues" was then organized in February 2005 into subject areas and prioritized in a general way by the committee (Appendix VI). The list framed the content for the community survey and the Master Plan.

In 2006 the Lakes Region Planning Commission completed a build-out analysis (report with several maps) for the town using geographic information system software. This analysis, based on current zoning regulations, assessor's records, and landscape physical constraints to development such as wetlands and steep slopes, estimated the number of remaining buildable lots in Andover, and the resulting housing and population density if these were built on (Appendix VII). The results show that, under current zoning, there is potential for almost 4,500 additional residential dwelling units in Andover, mostly in the sparsely settled Forest and Agriculture (FA) zone and in the Agricultural Residential (AR) zone.

2. Town-wide Survey

During May 2007 the Master Plan Update Committee, with the assistance of the University of New Hampshire Cooperative Extension service (UNH), conducted a Web-based Town-wide Survey followed by a town-wide visioning session. To increase survey response, an insert was placed in the *Andover Beacon* newspaper requesting residents to fill out the survey either online or on paper. The *Beacon* is a free newspaper distributed monthly to all Andover households. 226 responses were received, from the approximately 1038 households in Andover.[2] A spreadsheet with the complete results of the survey and a summary of the results prepared by UNH can be found in Appendix VIII. Two significant results are that residents strongly value Andover's rural atmosphere and they favor the establishment of commercial and light industrial activities as permitted uses in designated zones. They also favor small, local, home-based businesses - especially ones related to agriculture. Table 1 presents the major survey results, as reported by UNH.

Table 1: Survey Results Summary[3]

Category	Survey Result
Growth	Over half of the respondents indicated that they have no opinion or are not sure how they feel about the current rate of growth.
Housing	Overall, respondents would prefer to see single-family homes (61%) and senior housing (56%) over duplexes (32%), multi-family homes (13%) and apartment buildings (8%).
Housing	Cluster housing, which refers to several single-family units built on a small lot with shared common space, appears to be a more popular development strategy among older residents than younger residents. In spite of these results, respondents overall do not favor cluster development (55%). [Note: 35% were in favor]
Industry	The majority of respondents **favor** the development of home-based businesses (86%) and agriculture-related businesses (93%) such as farms, greenhouses, farm stands, etc.
Industry	They also would like to see more: – Light industry (e.g. high tech) (61%) – Wind farms (59%) – Saw mills/wood processing (51%)
Commercial	Overall, respondents would like to see **more** small and local businesses (retail shops, bed & breakfasts, local restaurants, auto repair, etc. (average 80% in favor)
Commercial	However, overall, respondents **do not favor** retail and restaurant chains, malls, professional office parks, hotels/motels and recreational businesses (such as ATV track, campground, amusement park etc.) (Average 75% disagree).

[2] Number of housing units in Andover from the 2000 census
[3] From "Overview of Master Plan Survey Findings", UNH Cooperative Extension Service, May 23, 2007

Category	Survey Result
Major Finding	From all the different aspects of Andover presented in the survey, the most valued by the respondents was the rural atmosphere (61%).
Major Finding	64% of respondents indicated that they would like to see clusters of industrial and commercial development in specific permitted zones.
Major Finding	Natural amenities (12%), friendly atmosphere (10%) and quality of public schools (7%) are also clearly valued.

3.Visioning Session

On May 23, 2007, as soon as the town-wide survey results had been compiled, a town-wide visioning session was held at the Andover Elementary/Middle School, facilitated by UNH. The visioning session, attended by 34 Andover residents, included three breakout groups: Housing, land use, and zoning; Recreation, natural, and cultural resources, and; Business and industry, facilities, infrastructure, services, and transportation.

As reported by the UNH facilitation team, Key points from the housing, land use and zoning group included:

- Liberalize the rules regarding duplexes, housing, senior housing in the village district
- Revisit the minimum lot sizes for the 4 zones (V, RR, AR, FA) – educate land owners about conservation and land use
- Consider cluster housing

Key points from the recreation, natural and cultural resources group included:

- The following landscape features should be conserved: open space, wetlands, recreation opportunities, and agriculture
- Environmental quality should be preserved, including: clean air, clean water, and noise free surroundings
- Maintain a good relationship with Proctor Academy for continued sharing of facilities

Key points from the business and industry, facilities, infrastructure, services, and transportation group included:

- Do more practical planning to eliminate mistakes/impacts
- Create business friendly zoning
- Rethink zoning so that it is consistent with community's vision for growth and development
- Consider housing options/alternatives (affordable/seniors and youth)
- There is need for access to a place where the community can convene
- Diversify industrial base and target appropriate businesses to town

- Capitalize on town's position as being "on the way" between existing business and tourism centers

E. Vision Statement Preparation

In June 2007 the Master Plan Committee met to consider the results of the survey and visioning session. A vision statement for this master plan containing ten guiding principles was developed during the meeting by a consensus of committee members present, after review and discussion of the survey and visioning session results. The ten guiding principles were subsequently verified and validated by an independent comparison to the survey and visioning session documentation at a Committee meeting in June 2008 (Appendix IX).

Throughout the master plan update process, the *Andover Beacon* has published articles informing residents of progress, results of committee work, and encouraging people to participate. This has been extremely valuable in keeping folks in touch with what has been a long process. *Beacon* articles on the master plan update are in Appendix X.

B. Guiding Principles

The ten guiding principles below were distilled by the Master Plan Committee as described above, from the records of visioning activities described in the process summary above. The bold text identifies the key words and concepts in each guiding principle.

1. **Maintain Andover's small town, rural character** with village centers and generally open spaces elsewhere. Desired location and size of village areas should be identified.
2. **Encourage commercial activity that builds on the regional recreation and tourism economy** that emphasizes Andover's location in the Lakes Region, near summer and winter recreation places including Highland Lake and Ragged Mountain ski area.
3. **Promote and preserve farming and forestry** where small-scale agriculture is encouraged and forests are managed for forest products while protecting natural resources. Examples might be farmer's markets, sugar houses, small sawmills, firewood harvest and sale, hayfields, orchards, and specialty farms.
4. **Create specific zones where small-scale light industry and commercial activities are not only allowed, but encouraged**.
5. **Preserve views, especially along Andover's major highways** – US Routes 4, 4A, and NH Route 11 – including both the near-field views (by maintaining buffers between roads and buildings) and the far-field views (such as Mt. Kearsarge, wooded hills and ridges, and Ragged Mtn.)
6. **Conserve natural resources – farm and forest lands, water resources, and wildlife habitat.**
7. **Provide choices in housing types** – single family, duplex, townhouses, senior housing, including opportunity for open space lot configuration.
8. **Preserve Andover's historical places and assets.**
9. **Coordinate with Proctor Academy on our respective plans for the future** to preserve the many mutual benefits of Proctor's presence in Andover.

10. **Develop community infrastructure.** A community center could serve as a gathering place for civic, cultural, and social events. Other village infrastructure could include water supply and possibly wastewater. Strategic planning for infrastructure should not be limited to village areas.

C. Priorities

This section contains the essence of the community's vision for Andover's future landscape and recommended priorities to attain that vision. Each guiding principle is explained in a few paragraphs, followed by a list of priorities for actions to implement it. These priorities represent a compilation and summary of the information contained in the visioning process described in section 1, as interpreted and amplified during Committee discussions. Based on these priorities, Chapter III (Land Use) describes ideas for Andover's future landscape. The Master Plan Update Committee met at least one a month between June 2007 and November 2009.

1. Maintain Andover's small town, rural character – village centers with generally open spaces elsewhere.

Small town, rural character is the attribute most valued by people who live in Andover today. The importance of maintaining rural character has been a consistent theme through three master plans and more than thirty years of Andover's recent history. It is somewhat difficult to define just what rural character is, but in general it includes compact, walkable village areas with shops and services, and open space in between - farms or forests with scattered houses and outbuildings that are not too visible. On the social side, it includes a "sense of community" where there is opportunity for personal involvement in school activities, civic and cultural events, and town or village-oriented social occasions.

What is a Village Area? It is a compact area of small retail shops and service vendors, residences, multi-family units, schools, places of public assembly such as town halls or churches, and similar activities. It is generally a walkable area where a person might be able to find goods and services and living arrangements, all within walking distance of each other. Andover has three significant village areas: Andover Village, East Andover Village, and Cilleyville. Andover Village is a well-developed village area. In 2008, a person can get gas at the convenience store, then park, go to a bank, go to a doctor, get a cup of coffee, have a pizza for lunch, mail letters, register a car at the town office, and drop a child off at school or karate lessons, all by walking around. East Andover Village is not as well developed. A person can get coffee, buy basic groceries, mail a letter and go to church by walking around, but it's not as compact or complete as Andover Village. Cilleyville, on the other hand, does not show much village character today; it is primarily a residential area. West Andover, a fourth village area identified in the zoning ordinance, has no village characteristics in 2008.

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Specific Priorities

- In general, the village character of the three significant village areas should be enhanced, and the open, rural character of other areas should be maintained, especially avoiding

strip development along main roads. Businesses and services should be small and accessible.

- Permitted uses in the village districts should be reviewed and modified to maintain and enhance the village character. The language of the current zoning ordinance that includes uses permitted in other districts in the village area should be changed so that only appropriate village uses are allowed in village areas.
- Permitted housing types in the village should be reviewed to assure a balanced mix of affordable housing for young and old, rich and poor, including seniors and young families with children.
- New development in village areas should not overwhelm the rural and historical character of the town. New buildings should be on the same scale as existing buildings, with compatible style.

2. Encourage commercial activity that builds on the regional recreation and tourism economy.

Within Andover the Blackwater River, Highland Lake, Bradley Lake, as well as smaller ponds and streams offer summer recreation including swimming, kayaking, fishing, and canoeing. The Sunapee-Ragged-Kearsarge Greenway trail network offers hiking and the Northern Rail Trail sees increasing recreational use in all seasons. Andover is near four-season recreation and tourism activities. Lake Winnipesaukee, Newfound Lake, and Lake Sunapee are all less than an hour away, as are Cardigan and Sunapee State Parks. Winslow State Park on Mt. Kearsarge is a mere 15 minutes away. Also nearby, Ragged Mountain Resort occupies the north side of Ragged Mountain in Danbury, with summer golf and winter skiing among other recreational opportunities. Gunstock ski area is also an easy drive from Andover.

Businesses related to recreation and tourism, compatible with small town character, include such activities as family restaurants and cafes, bed-and-breakfasts, farmers markets, community supported agriculture, maple sugaring, gift and craft shops, pick-your-own produce farms, and similar cottage industries and home-based businesses. These kinds of activities should primarily be located in designated village and commercial areas, but may also be scattered about the rural landscape in areas of low density mixed residential, forest, and agricultural uses. It is important that businesses in these mixed-use areas be operated in a manner that preserves the open-space character of the landscape, as well as the quality of life for residential neighbors.

Priorities

- When operated as home-based businesses, small businesses and retail shops should be allowed as mixed uses with agricultural, forestry, and low-density residential uses.
- Performance specifications should be incorporated into the zoning ordinance to insure that these home-based business activities remain in the “small business” category and are compatible with neighboring residential and agricultural uses.

- Noise and traffic issues are of particular concern. As a business grows in a mixed-use area, noise and traffic must not exceed levels that are customary to the location and compatible with adjacent uses.
- It is possible for a small commercial business to change into an activity more closely related to an industrial use. In this case performance specifications should require that the use be relocated from a mixed-use area to an industrial area.
- The definitions of commercial activity and home-based business should be refined so that they are compatible with this guiding principle.

3. Promote and preserve farming and forestry

Farms and forests form the landscape that is the heart of Andover's rural character. Former NH Commissioner of Agriculture, Markets and Food Steve Taylor stated:

> "Land kept open by agricultural activity is essential to the distinctive New Hampshire landscape, with its close positioning of fields and pastures to forests and the built environment. Vistas afforded by our meadows are essential to our enjoyment of what we call 'rural character', and the seasonal rhythms of farming are very much embedded in our culture and traditions."

Sixty one percent of town-wide survey respondents identified rural atmosphere as the thing they liked best about living in Andover. Ninety three percent of survey respondents wanted to see agricultural-related businesses in town and fifty one percent wanted to see saw mills and wood processing activities. Another eighty-six percent wanted to see "home-based businesses".

In light of the strong support of residents for farming, forestry, and related small-scale businesses, it is very important not only to preserve existing farming and forestry activities, but also to encourage and promote future farming and forestry activities. Land used for the production of forest products can be difficult to identify because the interval between harvests can be long and forest management plans are not necessarily prepared.

Unfragmented blocks of undeveloped land are important to wildlife[4]. It is important to conserve not just currently identified farms and forests but also land that contains the soils classified as prime or of statewide importance for farming in the Natural Resources Conservation Service soil surveys.

Priorities

- Large forested areas with limited road access should be preserved as unfragmented forest blocks.
- Conservation easements should be encouraged, continuing the work of the Andover Conservation Commission, the Ausbon Sargent Land Preservation Trust, the Society for the Protection of NH Forests, and other organizations involved in the conservation of natural resources.

[4]

- Farming and forestry should be encouraged and protected through supportive zoning and subdivision ordinances.
- Innovative land use controls in "Innovative Land Use Planning Techniques: A Handbook for Sustainable Development" should be reviewed to determine which provisions are appropriate for implementation in Andover's zoning and subdivision ordinances to preserve and promote farming and forestry. [4]
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- Andover should complete the "Is Your Town Farm Friendly Checklist" (Appendix XI) and take actions indicated by the survey results to increase the support of farming.
- The establishment of formal procedures by which the Town can monitor compliance with State of New Hampshire performance standards for forestry and agriculture.
- The establishment of an agricultural commission should be explored.[5]
- The Natural Resources Inventory[6] and Natural Resources Co-Occurrence Map[7] prepared by the Andover Conservation Commission should be used to identify, refine, and prioritize areas for preservation of farming and forestry.
- Encourage conservation of prime agriculture soils and soils of statewide importance for farming and forestry.

4. Create specific zones for small-scale light industry and commercial activities

Andover should have a good mix of local employment opportunities; not just a "bedroom community". This can be facilitated by creating specific zones for small-scale light industry and for commercial activities where these uses can be planned for and encouraged.

Priorities

- Appropriate areas should be identified and zoned for small-scale light industrial use. Light industrial uses should be encouraged in these areas, although other uses such as farming, residential, village, and commercial uses should also be allowed as permitted uses.
- Appropriate areas should be identified and zoned for commercial use. Commercial uses should be encouraged in these areas, and uses other than light industrial should also be allowed as permitted uses.
- Performance standards for light industrial activities should be adopted to minimize visibility from main highways and prevent conflicts with adjacent uses.
- Performance standards for commercial activities should be adopted to avoid strip development.
- Adequate buffers should be provided between light industrial zones and areas with mostly residential character so that traffic, noise, lighting, and similar factors do not infringe on residential use.

[4] Innovative Land Use Planning Techniques: A Handbook for Sustainable Development, 2008.
[5] UNH Cooperative Extension Service, "Creating an Agricultural Commission in Your Hometown"
[6] Andover Conservation Commission, draft" Natural Resources Inventory" (on CD)
[7] Andover Conservation Commission, "Natural Resources Co-Occurrence Map" (in Conservation Plan)

- Performance standards for visual screens and lighting should be adopted to reduce the visual impact of industrial and commercial activities and to preserve the visual aspects of rural atmosphere

5. Preserve views, especially along Andover's major highways

Special vistas, views, and scenic areas contribute significantly to Andover's quality of life, add to the value of property, and enhance the desirability and livability of our community. Andover's developed areas and roadways, especially the well-travelled state roads including NH Route 11, US Route 4, and US Route 4-A, afford excellent views of the rugged hills and mountains that ring its boundaries. Forested hillsides and ridgelines with little or no visual evidence of human presence are a vital element of Andover's rural character. While many of these views are of steep, inaccessible terrain that is unlikely to be developed, there may be future pressure to build on some hillsides and ridgelines because these locations offer home sites with attractive views. Performance standards can minimize the visual impact of new development in viewable locations.

Near-field views – the scenery that is close by as a person drives along Andover's main highways – are also important. To preserve rural character, a sense of openness – fields and woods – adjacent to roads and highways should be preserved.

Priorities

- A survey should be conducted to identify viewable hillsides, ridgelines, and other scenic resources from Andover roadways and public places, especially the main highways. The Special Places Survey conducted by the conservation commission in 2006 (Appendix XII) should be included in the survey.
- A View Protected Overlay District should be considered to preserve the views identified in the survey.
- Performance standards to minimize the visual impact of roads, cleared areas, and structures should be adopted for the district based on model ordinances in "Innovative Land Use Planning Techniques: A Handbook for Sustainable Development."
- Properties in the View Protection Overlay District should be considered for inclusion in the Conservation Commission's plans and priorities for acquisition of easements and development rights, if they are not already included.
- Performance standards should be incorporated into land use ordinances to maintain a sense of rural openness in near-field views, especially along Andover's main highways.

6. Conserve natural resources

The natural setting and resources of Andover have defined the town since its beginnings. The rugged swath of town north of NH Route 11 is dominated by Ragged Mountain with the Taunton Hill-Tucker Mountain ridges extending eastward. The southwestern part of town is dominated by Mount Kearsarge. These mountains and the lower hills to the southeast have limited past development to lowlands in the middle of town, leaving large tracts of forested land elsewhere. Transecting the town in the central lowlands of Sucker Brook and the Blackwater River is land that is easier to develop with roads, rail lines, and housing settlements. Because of the overall

terrain, the Quabbin to Cardigan Conservation Collaborative[8], the Wildlife Action Plan[9], the Colby-Sawyer College Institute for Community Environment (Appendix XIII) and others have designated much of Andover as a high priority area for conservation on a regional scope.

Many natural features have contributed toward this regional high priority designation. These include unfragmented land that enhances the natural habitats of a diverse wildlife population and mature forests, prime wetlands, high-quality surface and ground water, and the presence of several threatened species of plants, birds, and amphibians. Details of Andover's natural resources are in the draft Natural Resources Inventory and the Conservation Plan prepared by the Conservation Commission (Appendix XIV).

The overriding factor in preserving our natural resources should be sustainability. Can we sustain repeated timber harvests every 10-12 years? Will we have enough potable water for the next generation? Can we maintain diverse habitats and open space for wildlife, recreation, air quality, and regeneration of the human spirit in a high quality environment? Our natural resources contribute greatly to our overall quality of life and prosperity, as well as to Andover's valued rural character.

Priorities

- Consider the .establishment of a natural resources protection overlay district with appropriate density restrictions, performance standards, and open space preservation requirements to sustain the high resource value of areas identified as of high value areas.
- Use the most current innovative land use techniques as an alternative to 2-acre zoning.
- Consider adopting land use regulations that encourage developers to set aside undeveloped 'green' or conservation land in exchange for greater density in locations favorable for development, and other innovative land use controls such as those in the Innovative Land Use Planning Techniques handbook.
- Protect the public water supply area of Bradley Lake through education, public posting of protective restrictions, enforcement of the restrictions, and the encouragement of conservation easements in the Bradley Lake watershed.
- Acquire conservation easements or adopt other land use controls so that the undeveloped western shore and tributary watershed of Bradley Lake remains undeveloped.
- Consider establishment of an aquifer protection overlay district to protect the quality and quantity of potable ground water for future public water supply.
- Identify valuable aquatic resources and consider requiring appropriately sized, vegetated buffers for them. There should be greater buffers for prime wetlands and other more valuable aquatic resources.
- Consider creating a hazardous area zone that would highlight potential flood prone areas (refer to town FEMA maps) and potential rockslide, landslide, or erosion hazard areas.
- Strictly enforce the existing subdivision regulation requirement that development is limited to lands with slopes less than 15% and new public road construction is limited to slopes of 10% or less. Consider adopting these performance specifications in the zoning ordinance.

[8] http://www.spnhf.org/landconservation/q2c.asp
[9] NHF&G Wildlife Action Plan, 2007 and http://www.wildlife.state.nh.us/Wildlife/wildlife_plan.htm

- Consider the recommendations of the Conservation Commission's draft Natural Resources Inventory when developing land use regulations and ordinances.

7. Provide choices in housing types

Andover's housing stock is primarily single-family homes on individual lots with a mix of accessory apartment buildings scattered about town, containing multiple housing units, although none were originally built as multiple-unit housing.

Different incomes and age groups are dependent on a mix of housing alternatives, including senior housing. Recent state law (RSA 674:58-61) requires communities to provide reasonable opportunity for workforce housing. This may be accomplished in part by land use regulations that achieve a balanced mix of housing opportunities both for purchase and for rent by allowing accessory dwelling units on a lot, as well as manufactured and multifamily housing. Other considerations to accomplish the goal of diversity in housing options which are affordable to residents include proximity of more than a few housing units to services such as transportation and infrastructure such as municipal water and sewer.

Housing unit density on the landscape, which is the number of housing units allowed per acre of suitable land, is a major consideration in providing choices in housing types. The cost of land purchase represents a significant portion of housing costs in New Hampshire. New housing could be directed to appropriate areas for greater density while maintaining low or very low housing density in areas that have significant value for other characteristics such as natural resources or views. For new development, conservation subdivision is one tool to trade a greater density in parts of a parcel or tract of land where it makes most sense for little or no development in other parts of the parcel. Providing opportunity for increased density has the added advantage of reducing sprawl and providing affordable housing choices.

High-density mixed-use development, characterized by the integration of different housing types with other uses such as institutional, offices, or commercial, should be encouraged in the village areas. Promoting his type of development in village areas can produce a diverse and convenient community area with the added benefit of reducing traffic. By integrating different uses - residences, offices, public, institutional, and shopping in a compact village area, many daily vehicle trips can be eliminated or reduced in length. It is also easier to construct and operate public utilities for water and sewer in compact village areas. Such utilities can benefit the creation of diverse, affordable housing stock, as well as the reduction of water pollution from the landscape

Outside village areas, the promotion of low density mixed use that includes residences, farming, and home-based businesses, together with conservation subdivision can produce attractive and marketable neighborhoods. These make it easier for builders to preserve environmentally sensitive land such as wetlands and forests by allowing lots to be grouped on certain portions of a site, so that other areas of the site may remain as undisturbed open space.

Priorities

- The town should continue to provide opportunity for a variety of housing types, similar to the current Andover housing stock.
- The Planning Board should review how Andover's land use regulations meet the Workforce Housing statute (RSA 674:58-61), and make appropriate changes.

- Senior housing should be encouraged.
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- Evaluate and encourage high-density, mixed-use development in village areas, including opportunities for increased density residential and small business development in areas identified for future expansion of municipal water and sewer.
- Educate town residents on innovative land use practices, including conservation subdivision.
- Adopt new ordinance language that permits and encourages higher densities in appropriate areas, and mixed uses to make compact development possible and successful while continuing to maintain rural character and the small-town feel so valued by residents.

8. Preserve Andover's historical places and assets

Without our many older homes, barns, educational and commercial buildings, Andover would look like any other suburban bedroom community. We have 418 structures built before 1945, of which 210 were built in the 1800s and earlier (Appendix XV). In addition, the cellar holes of structures long gone are further links to our past.

Home sites alone are only a part of our treasured rural landscape. Our barns, outbuildings, cellar holes, stonewalls, archaeological sites, bridges, and cemeteries are integral parts of the rural atmosphere.

Many communities in New Hampshire have taken steps to preserve their past, ranging from historic districts with restrictions on changes to historic structures to less restrictive demolition control ordinances that mandate a public process before historic structures are removed. At present, however, Andover has little or no mechanisms to prevent the potential destruction of a part of our heritage.

Andover has places of historical importance that should be preserved, along with their setting on the landscape. These include: the cluster of the Andover Congregational Church, the Highland Lake Grange Hall, the East Andover School, and the church cemetery in East Andover Village; the Potter Place Railroad Station, Emon's Store, Freight Shed, and Potter graveyard vicinity; and the Taunton Hill and Upper Flaghole Road vicinities with antique farmhouses and open fields. These are further described in Chapter XI.

Remnants of Andover's rich history of settlement, farming, local water-powered industry, railroads, and others exist throughout town. Since 1982, the Andover Historical Society has been an active force for understanding and preserving Andover's history.

Priorities

- The town should support conservation and preservation of historic structures, cellar holes, stonewalls, archaeological sites, bridges, and cemeteries as land use changes.
- Owners of historically important buildings should be encouraged to preserve historical architectural features.
- The Town should consider building on the work of the Historical Society, by conducting a full inventory of historical structures, cellar holes, stonewalls, archaeological sites, bridges and cemeteries.

- Land use ordinances should incorporate a review of identified historic features as a part of subdivision and site plan review.
- The town should consider the desirability of adopting a demolition control ordinance for identified historic structures.

9. Partner with Proctor to integrate their plans for the future with the town's plans

The Academy was founded in 1848 for the purpose of serving students and townspeople of Andover. Proctor's purpose is in harmony with the ten guiding principles in this Master Plan.

Proctor Academy is an important entity in the Andover community. By a wide margin, it is the town's largest employer. It is also the town's largest landowner and largest property tax payer. In 2009, 24 percent of Andover's high school students are enrolled at Proctor. The Academy cooperates with the Andover Elementary/Middle School in many educational programs, provides cultural and recreational opportunities for local citizens on campus and in its woodlands, and has made major contributions to town projects such as the village district water tank, the village sidewalk and skateboard park. The town provides safety services for the Proctor campus, a quality public school for grades 1-8 available to children of Proctor employees, and opportunities for Proctor students to participate in community service projects.

A joint Town/Proctor committee has met three times yearly since 2002. The town members are from the board of selectmen, the school board and the budget committee plus two representatives of the general public. The committee was established to create a working line of communication between the town and the school, to try to solve problems that might arise between the two entities and to seek out ways for them to help each other.

Some NH towns have educational zones for their schools or colleges. Such a zone was suggested for the Proctor campus at the town-wide visioning session. Proctor has grown well under Andover's existing zoning, and there is no obvious need now for such a district. Possible expansion of the village district does not appear to conflict with any planned future growth of the Proctor campus.

For many reasons (ridgeline aesthetics, maintenance of a healthy logging industry, access for hunting, fishing, hiking, skiing), the town has a strong interest in the continued existence of Proctor's big acreage woodland properties. These woodlands cover much of the southerly and easterly slopes of Ragged Mountain where other land is under conservation easement, an important key to the preservation of this extensive forest.

Priorities

- The joint Town/Proctor committee should continue to serve, as it is an important mechanism for communication and coordination between Proctor and the town.
- Proctor and the town should jointly explore formal mechanisms to conserve Proctor's extensive holdings of undeveloped land as unfragmented forest.
- Any proposed expansion of Andover Village District should be coordinated with Proctor to ensure continuation of complementary goals and planning by the town and Proctor.

10. Develop community infrastructure

The majority of respondents to the town-wide survey agree that Andover provides sufficient support and/or resources for town infrastructure including the transfer station, road maintenance, recycling, cemeteries, and building code enforcement. Fifty percent believe sufficient support and/or resources are provided for public water supply and for zoning regulation and enforcement.

Rural character, the characteristic of Andover most valued by survey respondents, depends strongly on the existence of compact, walkable village areas and low housing density and less intense land use elsewhere. Andover has three viable village areas in current zoning: Andover Village, East Andover Village, and Cilleyville. In addition, the area known as the Plains, bounded generally by Currier Road, Switch Road, and Plains Road, has become a more dense residential area due to the smaller, one acre lot size permitted by the zoning ordinance since its adoption in 1974 (the same lot size permitted in village areas).

Strategic planning for infrastructure for the villages and the Plains, including sewer, water, and public roads, is an important companion element to the development of new or revised land use ordinances and regulations, to ensure the orderly development of Andover's landscape in harmony with this Master Plan.

Andover Village is the only area of town currently served by a public water system. The system is owned and operated by the Andover Village District. Proctor Academy, which is served by District water system, operates a community septic system and associated sewers and pump station to serve its campus. Further development and increased area of Andover Village would best be served by expansion of the District water system. The development of a small community sewer system would allow more effective use of land in Andover village.

Efficient use of land in village districts, and especially in the expanded Andover Village and Cilleyville areas, will require coordinated layout and construction of future streets and planning for how they will intersect with existing highways and roads, taking into consideration current parcel boundaries.

The need for a community center was expressed at the visioning session. The school has served the functions of a community center in the past, at least as far as providing an accessible public facility for various community events, activities, and functions. As Andover grows, the need for such a community center facility will grow. If the school is to perform this function in addition to its education functions, the town should commit to support required facilities in cooperation with the school board.

Priorities

- The Town should create a plan for expanding the physical extent of Andover Village, East Andover Village, and Cilleyville.
- The Town, Proctor Academy, and the Andover Village (water) District should begin strategic and capital improvement planning for future public water supply in Andover Village.
- The Town should investigate and conduct strategic planning for the possibility of community septic systems to serve all or portions of expanded village areas. Proctor Academy should be a partner in the planning, as there may be mutual benefit to joint operation of sewers for Proctor and Andover Village.

- The Town should conduct strategic planning for future layout of village areas, including street improvements and any new streets in village areas and the Plains.
- The Town should form a space needs committee to develop a strategic plan for a town community center. Proctor Academy should be consulted during the planning.
- The Town should conduct strategic planning to evaluate the need and desirability of municipal water and sewer utilities in East Andover Village, Cilleyville, and the Plains.

III. Land Use

The Land Use chapter is the heart of the Master Plan. In this chapter are the statements and maps that give the Planning Board specific direction and advice for designing zoning and other land use ordinances and regulations that will accomplish the ideas set down in the Vision chapter. According to RSA 674:2, the land use chapter translates the vision statements into physical terms. It must show existing conditions and the proposed location, extent, and intensity of future land use based on consideration of all ten of the guiding principles.

A. Definitions

In order to translate the Guiding Principles of the Vision chapter into "proposed location, extent, and intensity of future land use" some definitions are needed. These definitions apply to the entire Master Plan. The Vision Section, utilizing the visioning session and the master plan survey, is the prime basis for definition and takes precedence to resolve any conflicts. The most important terms are listed below.

Commercial: Land on which the main use is a business use that sells goods or services directly to the public or that performs administrative functions such as an office.

Farm: A farm has crops or animals (as described in state law RSA 21:34-a) either for family use, or for sale or trade to others. A farm may be any size and need not generate income. The important thing is that farming is practiced on the property.

Forest: Land that is primarily covered by trees of varying maturity and may produce or is kept to produce forest products – cord wood, saw logs, maple syrup, pulp wood, wood chips, and the like. Forests do not usually have a residence associated with them. Harvest of forest products need not be frequent or regular, and the income from harvest can be negligible. The important thing is that forestry is practiced and forest products are occasionally harvested. The Society for the Protection of NH Forests recommends 20 contiguous acres as the minimum size for effective forest management.[10]

Home-based Business: A business, commercial activity, or light manufacturing activity where the primary office or work space is located on the same parcel as the owner's residence and where household members operate the business and the use is secondary to the residential use of the premises. This is different than a home occupation as defined in the 2009 zoning ordinance.

[10] http://research.yale.edu/gisf/assets/pdf/ppf/SPNHF.pdf. and SPNHF.pdf

Institutional: Land on which the main use is municipal, educational, religious, or nonprofit / benevolent. Examples include fire and police stations, schools, churches, cemeteries, and town offices.

Light Industrial: Light manufacturing, assembling, fabrication, warehousing, wholesaling and service activities to other businesses that may generate impacts on surrounding uses, and some nuisance or environmental impacts. Impacts can be effectively mitigated by buffers and performance standards. The main use is a business that does not sell goods or services directly to the public. Light manufacturing activity generally uses moderate amounts of partially processed materials to produce items of higher value, as opposed to heavy manufacturing such as ship building, steel making, or automobile manufacture

Lot (parcel): A tract of land on the Andover tax maps that is separately assessed for property tax purposes. The words lot, parcel, and tract are used interchangeably.

Mixed Use: In mixed use zoning, multiple types of uses are permitted in one zone with appropriate performance standards and land use controls to avoid conflicts among uses, nuisances, and to assure that public health and welfare is protected. Traditional zoning, by contrast, is intended to separate conflicting land uses from each other into separate zones or districts to avoid nuisances and promote public health and welfare. For example, areas could be zoned residential, commercial, industrial, or agricultural and these uses would be permitted in each area, respectively. Mixed use has been commonly applied to urban and village settings with offices and residential apartments on upper floors and commercial businesses on the ground floor. This same idea can be applied in a more rural setting where, for example, farming, residences, and home-based businesses are allowed as permitted uses in a low density mixed-use district.

Residential Unit: Means the same as housing unit. The US Census definition of a housing unit is "… a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live, sleep, and eat separately from any other persons in the building and which have direct access from the outside of the building or through a common hall. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements."

Rural Residential: is an area of moderate density residential use and mixed use. It will have many characteristics similar to the village areas, but buildings will be more dispersed and most lots would be larger. The area would include single family residences, two family residences, residences with in home businesses, small scale retail stores, service shops, small farms, bed and breakfast establishments, auto repair shops, churches, and small scale office buildings, parks, and playgrounds. The rural residential area would have a rural appearance with some space between buildings. To maintain small scale in commercial development, a maximum square footage for any building should be established. 3000 square feet has been suggested as a possible maximum size to be in scale with residences and current activity in the area.

Views: The land, water, and other environmental elements which are visible from a fixed vantage point. These are areas identified by residents as being of particular scenic or historic value and are potential conservation priorities[11].

[11] Definition adapted from Wikipedia, the free online encyclopedia.

Village: A compact area of small retail shops and service vendors, residences, multi-family units, schools, places of public assembly such as town halls or churches, and similar activities. It is generally a walkable area where a person might be able to find goods, services and living arrangements all within walking distance of each other.

B. Existing Land Use[12]

The type and intensity of existing land uses have a strong influence on future development patterns. It is important to understand how land and other resources are currently used before recommendations can be developed regarding future land uses. Several factors have influenced Andover's current land use patterns, including natural resource constraints, the transportation network, agricultural and forestry practices, and the development of commerce and industry. Another significant factor is the influence of the Andover Zoning Ordinance, which has been in place without significant change since the adoption of zoning in 1974. This section examines current land use patterns.

1. Land Use History

Both natural and man-made features influence growth and development in a town. The major physical and topographic features, such as the existence of flat or gently-sloping land, steep slopes, rivers, wooded and open spaces, etc. are the primary factors that influence the initial as well as the subsequent development of land. Secondary factors usually consist of man-made features such as roads, railroads, utilities, and major commercial, industrial, or recreational facilities, which attract and/or stimulate new or expanded development.

In Andover, topography, water, and transportation corridors have played a significant role in the town's development. Much of the development has occurred along the transportation corridor shared by Route 11 and the former Northern Railroad. Early, pre-railroad settlement of hillside farms on Beech Hill, Taunton Hill, Tucker Mountain, Raccoon Hill, Chase Hill, Flaghole and elsewhere created a network of town roads which exists to this day. A number of these farms still remain, and residential development has largely taken place over time along this road network. In fact, since the passage of Andover's first zoning ordinance in 1974 only a few new roads have been created for residential subdivisions.

2. Existing Land Use Analysis

Aerial photography (National Agricultural Imagery Program-NAIP 2008) available from the Geographically Referenced Analysis and Information Transfer[13] (NH GRANIT) was overlain with the tax map using the Geographic Information Systems (GIS) computer software. Polygons on a map were then drawn in GIS legends on separate layers according to the land use categories described below. The polygons were created and classified using visual interpretation of the photographs, onsite observation, and personal knowledge of the Master Plan Update Committee, with the assistance of Lakes Region Planning Commission. Where a location had a residence with both a farm and a home-based business, it was classified as a residence with farm.

[12] A similar chapter in Peterborough's master plan was used as a general template for this chapter. We gratefully acknowledge the Town of Peterborough.

[13] http://www.granit.unh.edu/. This site is updated on an ongoing basis. It includes maps and supporting tables.

3. Land Use Categories

The following categories were used to create the existing land use map. The methodology used to create this map is in Appendix XVI.

- **Residential – Single Unit**

  A single residential unit on a lot. It includes cleared areas near buildings.

- **Residential with farm**

  One or more residential units on a lot with farming activity being conducted by residents. It does not include lots with only a residence and small personal gardens. It includes cleared areas near buildings, and areas where farming is conducted.

- **Farm without residential**

  Land actively used for farming that does not have an associated residence on the lot. An associated residence is one lived in by the persons conducting the farming.

- **Residential with home-based business**

  One or more residential units on a lot with a home-based business.

- **Residential – Multiple Unit**

  More than one residential unit on a lot.

- **Cleared**

  Land that is cleared but not in farm use. Examples are gravel pits, fields that are inactive but cut over, and land under construction for development.

- **Commercial**

  Land on which the main use is commercial It includes the cleared area near buildings.

- **Forest**

  Land which appears forested on the aerial photos (NAIP, 2008). It does not include wetlands.

- **Institutional**

  Land on which the main use is institutional. It includes the cleared area near buildings.

- **Light Industrial**

  Land on which the main use is light industrial**.** It includes the cleared area near buildings.

- **Transitional from Brush to Forest**

  Previously cleared land that is not actively maintained and appears on the aerial photos to be reverting to forest. Examples are abandoned fields and clear-cut logged areas.

- **Wetlands**

  Land that is classified as wetland on the National Wetlands Inventory, May 2001.

The land use analysis results can be seen on the maps at the end of this Chapter. Map II shows all land use categories together. Map III shows residential – single and multiple units, with farm and with home-based business. Map IV shows nonresidential including commercial, farm

without residential, institutional and light industrial. Map V shows a visual depiction of residential density. These maps are intended to make it easier to see where uses occur and where future land use possibilities may logically follow. Map VI shows the building constraints due to steep slopes, wetlands and currently protected land. Map VII show buildable lots based on current zoning. All maps were developed by the Lakes Region Regional Planning Commission.

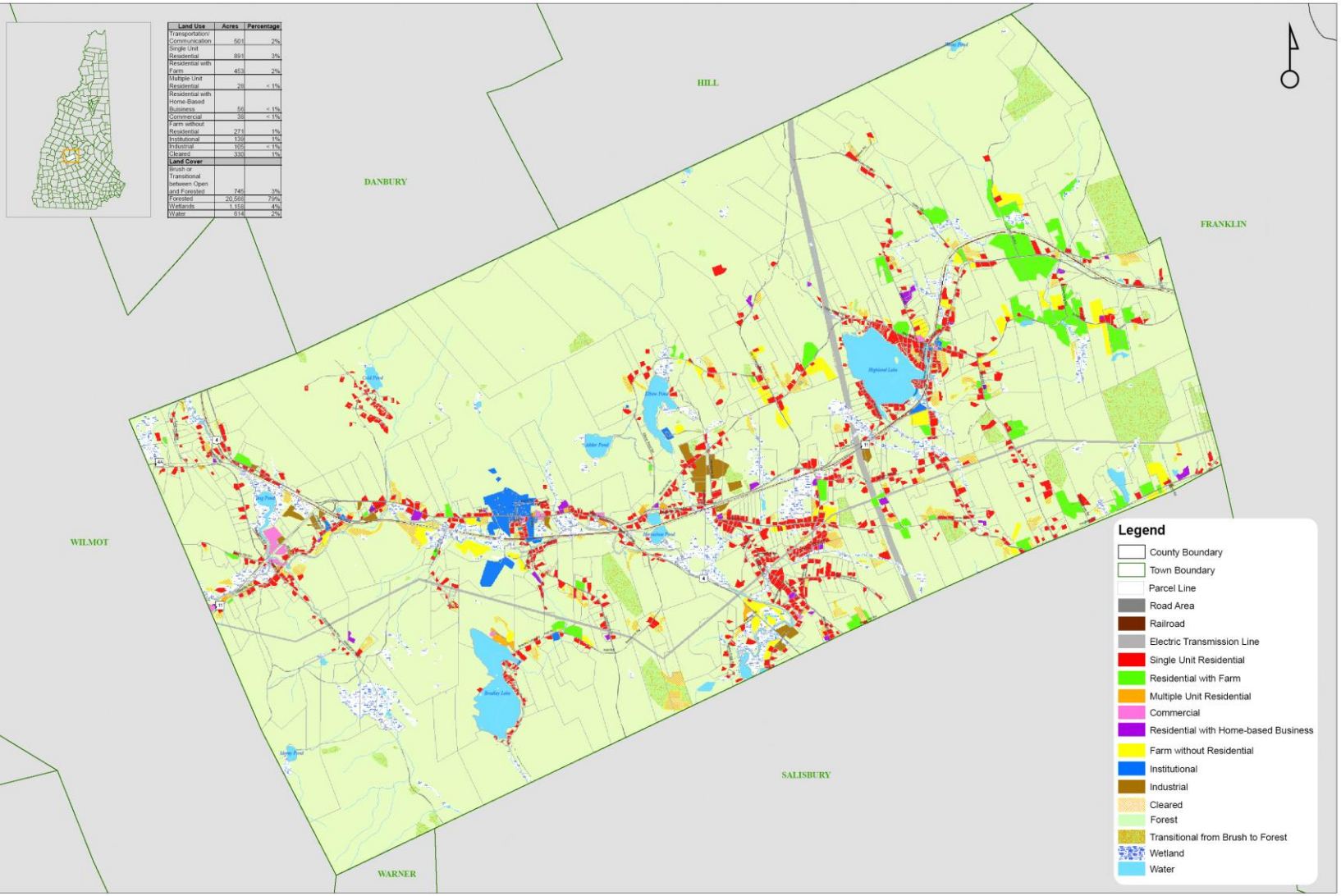
Examination of the existing land use maps reveals several characteristics of land use patterns in Andover. The characteristics were identified by the committee, as listed below:

- Development has taken place primarily along existing roads
- Farms are distributed throughout Andover, although the majority of farms are in the eastern part of town.
- Residences are distributed throughout town.
- Light industrial uses are clustered in specific areas: near Monticello Drive; near the intersection of Plains Road and Route 4; near the westerly junction of routes 4 and 11.
- A large number of wetlands are adjacent to developed areas
- There is virtually no development on the west side of Bradley Lake, the town's public water supply
- In general, there is little to no development at higher elevations
- The Plains area (one acre zoning) has a higher residential density compared to other areas of the town.
- Little multiple unit residential use is evident, but it is distributed throughout town
- Commercial use is limited except along route 11 in the far west of Andover.

MAP II

Land Use/Land Cover

Andover, NH



Land Use	Acres	Percentage
Transportation/ Communication	501	2%
Single Unit Residential	891	3%
Residential with Farm	453	2%
Multiple Unit Residential	28	< 1%
Residential with Home-Based Business	56	< 1%
Commercial	38	< 1%
Farm without Residential	271	1%
Institutional	139	1%
Industrial	105	< 1%
Cleared	333	1%
Land Cover		
Brush or Transitional between Open and Forested	745	3%
Forested	20,566	79%
Wetlands	1,158	4%
Water	614	2%

Political boundaries and physical features provided through NH GRANIT at Complex Systems Research Center (CSRC). Neither LRPC nor CSRC make any claim to the validity or reliability or to any implied uses of these data.
Land Use interpretation by LRPC in conjunction with the Andover Master Plan Committee, 2009 based on interpretation of USDA/NAIP aerial photography (2008) and local knowledge. Parcels, 2008.

For planning purposes only.

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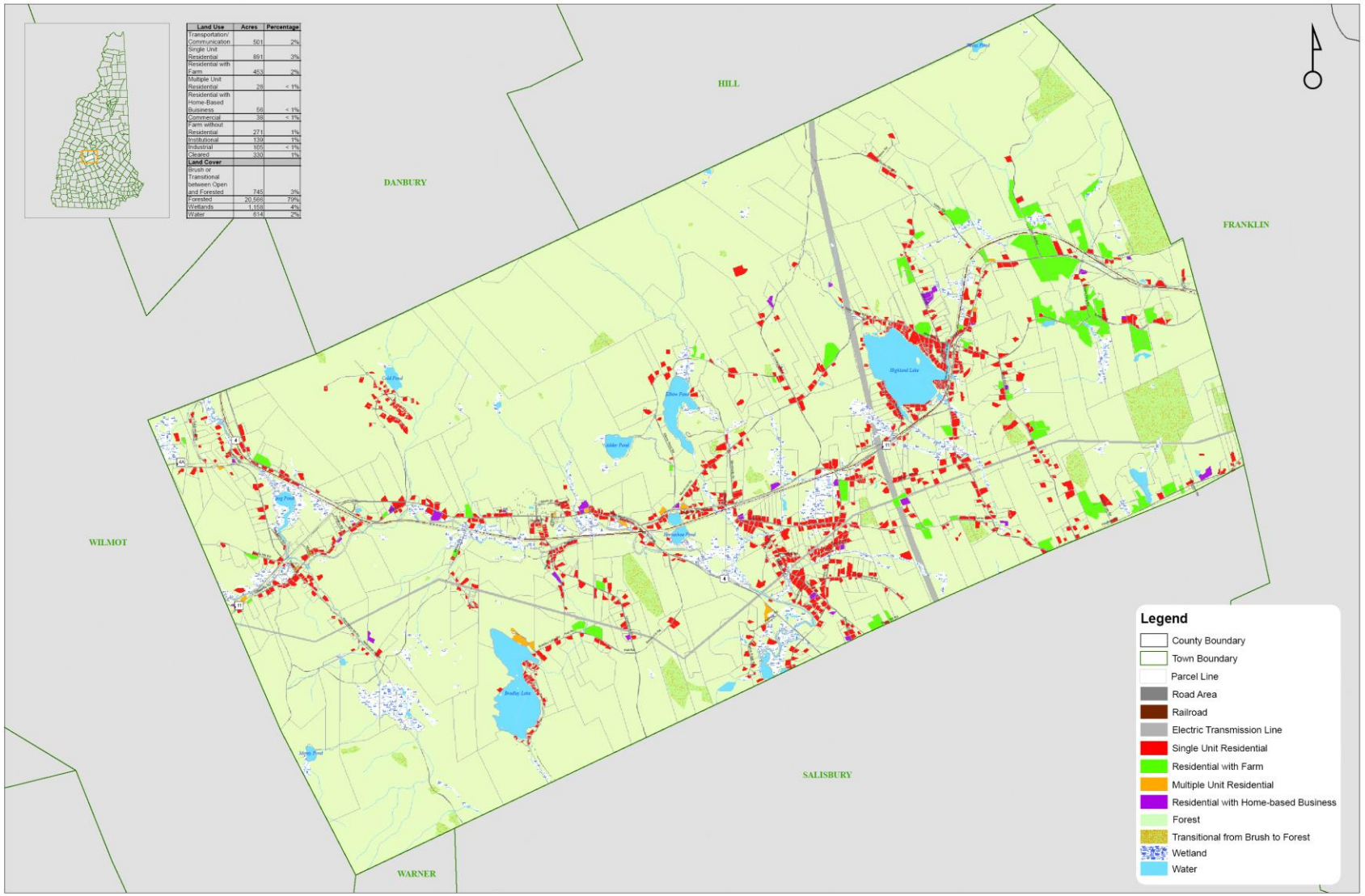
Lakes Region Planning Commission
103 Main St. Ste. #3
Meredith, NH 03253
603.279.8171

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Map III: Residential – Single and Multiple Units, with Farm and Home-based Business

Residential Land Use & Land Cover

Andover, NH



Land Use	Acres	Percentage
Transportation/ Communication	501	2%
Single Unit Residential	891	3%
Residential with Farm	453	2%
Multiple Unit Residential	28	< 1%
Residential with Home-Based Business	66	< 1%
Commercial	38	< 1%
Farm without Residential	271	1%
Institutional	139	1%
Industrial	105	< 1%
Cleared	330	1%
Land Cover		
Brush or Transitional between Open and Forested	745	3%
Forested	20,569	79%
Wetlands	1,158	4%
Water	614	2%

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Land Use interpretation by LRPC in conjunction with the Andover Master Plan Committee, 2009 based on interpretation of USDA/NAIP aerial photography (2008) and local knowledge. Parcels, 2008.

For planning purposes only.

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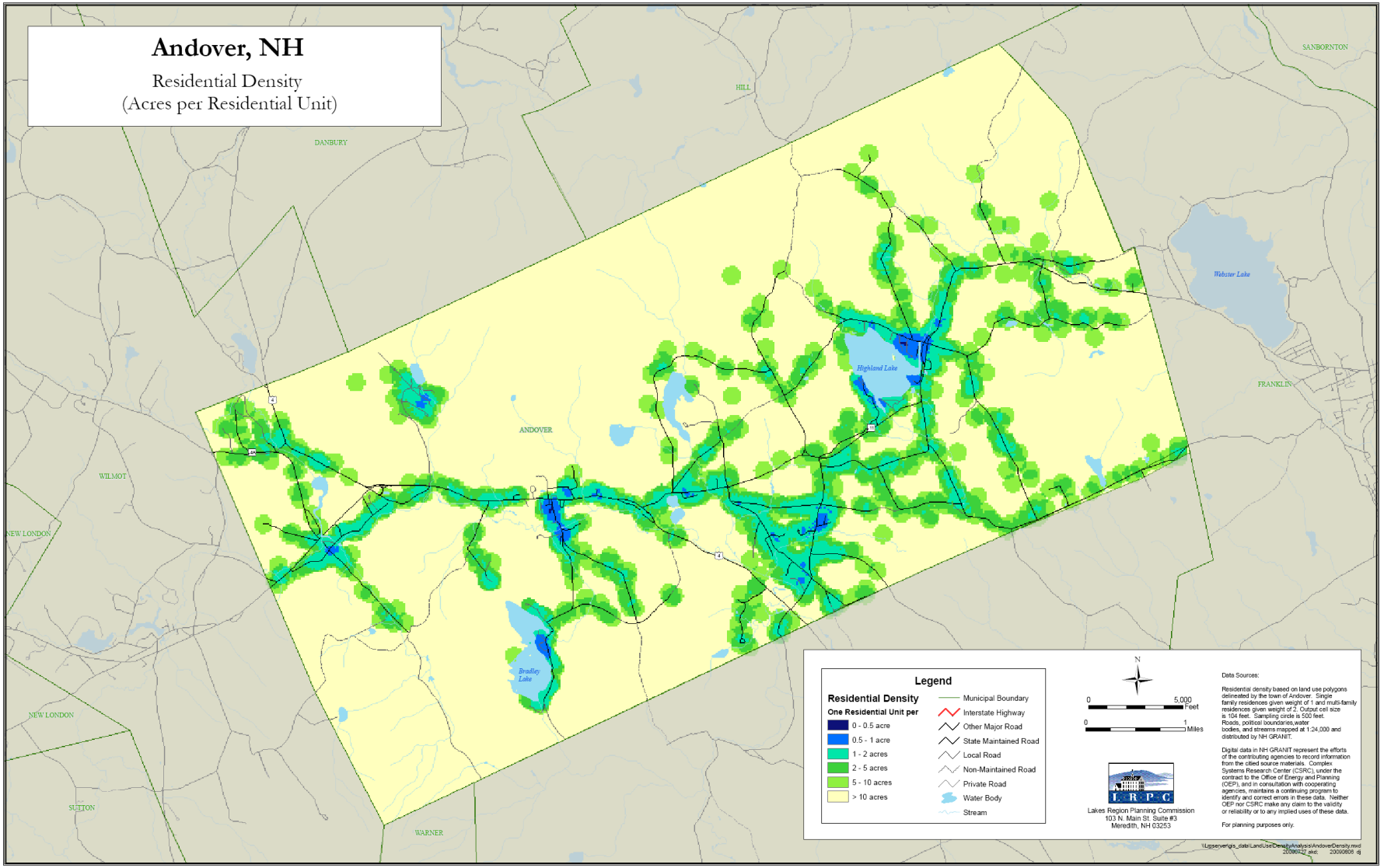
Lakes Region Planning Commission
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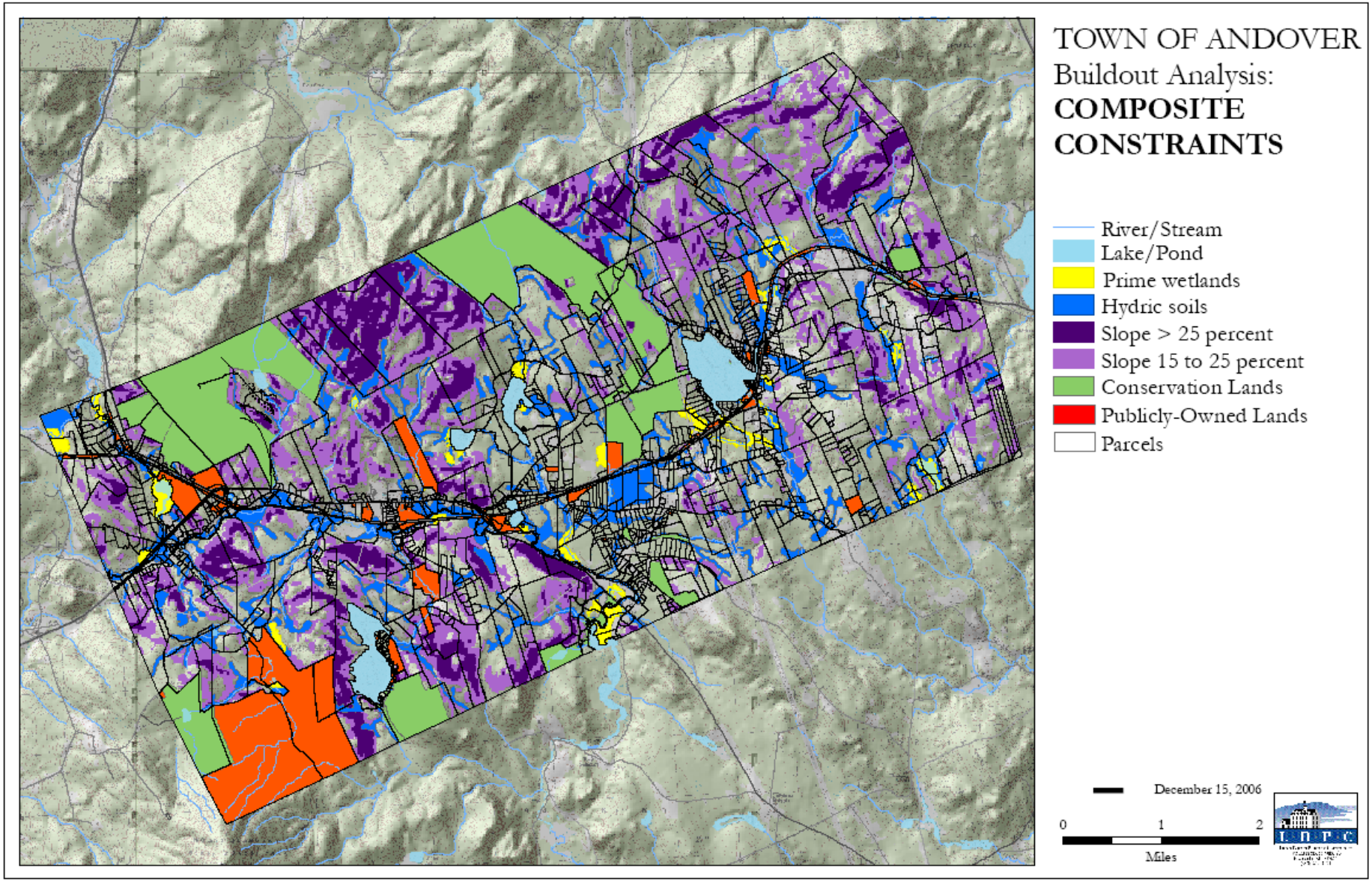
Map IV: Non Residential including Commercial, Farm without Residential, Institutional and Light Industrial

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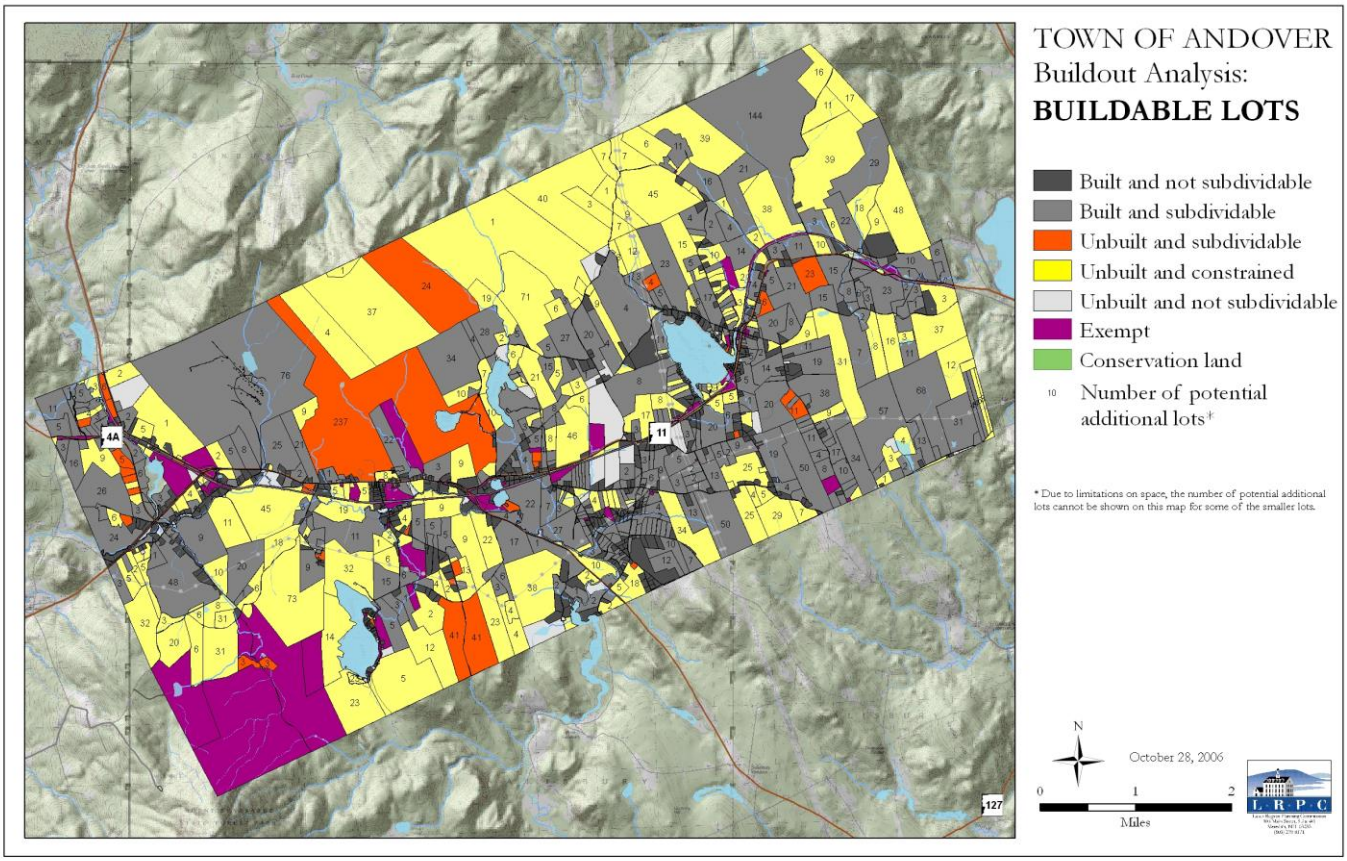
MAP V: Residential Density


Andover, NH
Residential Density
(Acres per Residential Unit)
DANBURY
HILL
SANBORNTON
Webster Lake
Highland Lake
FRANKLIN
ANDOVER
WILMOT
NEW LONDON
NEW LONDON
SUTTON
WARNER
Bradley Lake
Legend
Residential Density
One Residential Unit per
0 - 0.5 acre
0.5 - 1 acre
1 - 2 acres
2 - 5 acres
5 - 10 acres
> 10 acres
Municipal Boundary
Interstate Highway
Other Major Road
State Maintained Road
Local Road
Non-Maintained Road
Private Road
Water Body
Stream
N
0
5,000
Feet
0
1
Miles
L·R·P·C
Lakes Region Planning Commission
103 N. Main St. Suite #3
Meredith, NH 03253
Data Sources:
Residential density based on land use polygons delineated by the town of Andover. Single family residences given weight of 1 and multi-family residences given weight of 2. Output cell size is 104 feet. Sampling circle is 500 feet.
Roads, political boundaries,water bodies, and streams mapped at 1:24,000 and distributed by NH GRANIT.
Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Complex Systems Research Center (CSRC), under the contract to the Office of Energy and Planning (OEP), and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. Neither OEP nor CSRC make any claim to the validity or reliability or to any implied uses of these data.
For planning purposes only.

MAP VI: Building Constraints Due to Steep Slopes, Wetlands and Currently Protected Land


TOWN OF ANDOVER
Buildout Analysis:
COMPOSITE
CONSTRAINTS
River/Stream
Lake/Pond
Prime wetlands
Hydric soils
Slope > 25 percent
Slope 15 to 25 percent
Conservation Lands
Publicly-Owned Lands
Parcels
December 15, 2006
0
1
2
Miles

Map VII: Buildable Lots under Current Zoning

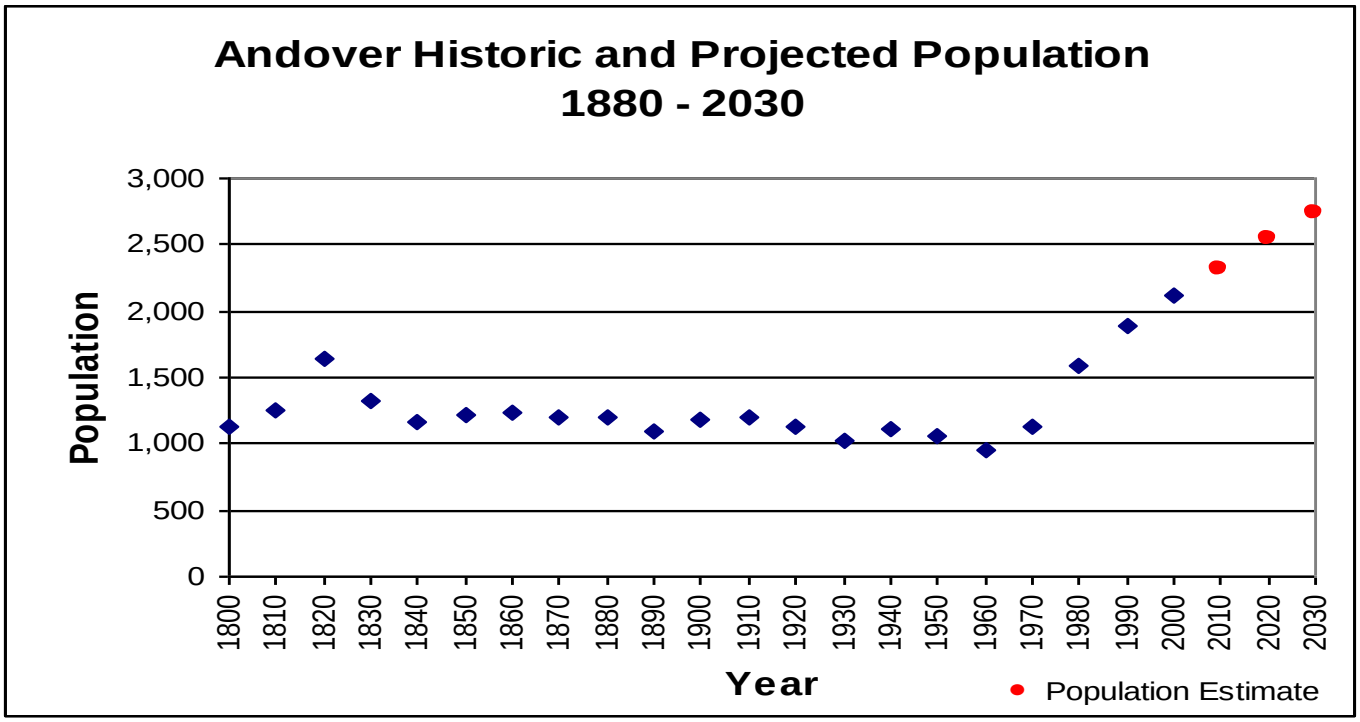


C. Future Land Use

The identification of appropriate spaces for future growth and development in Andover resulted from the guiding principles articulated in the Vision Chapter, a review of land constraints by the Master Plan Update Committee, a public input session where a draft future land use map was presented and discussed, and local knowledge of past successes and challenges administering the current zoning ordinance adopted in 1974. The guiding principles articulated in the Vision Section are supportive of a development pattern that transitions from densely settled to progressively less dense and intensive land development as distance increases from village centers and major highways.

The town of Andover has experienced strong population growth since 1970, as depicted below in Table II. The NH Office of Energy and Planning projects continued population growth through 2030. From 1970 to 1980 the population grew by nearly 40 percent. The projected rate of growth is approximately 7 to 9 percent per decade from 2010 to 2030. The planning challenge for a small community such as Andover is to accommodate and provide services for what equates to 200 or more new residents and the associated services per decade.

Table II



Source: NH Office of Energy and Planning

This chapter describes and illustrates the location and extent of candidate areas identified for future residential, commercial, and light industrial land use. The central themes are 1) to provide reasonable opportunities to accommodate future growth and development; and 2) to accommodate appropriate development within the context of conserving natural, cultural, social, and historic resources. Many similarities exist between Andover's existing zoning ordinance and the proposed future development plan. The most significant change is the identification of areas designated for commercial and light industrial uses. Both commercial and industrial uses have been permitted over time in Andover, however not always in the most appropriate places. While ideal locations, without any potential impacts, did not present themselves for these uses, it is generally held that appropriate development guidelines and enforcement of those guidelines can successfully minimize the major concerns associated with future commercial and light industrial development (such as noise, traffic, surface or groundwater contamination). Specific planning tools and implementation strategies are also outlined in this section to aid the town in achieving a balance between development and resource protection and the values articulated in the Vision Chapter.

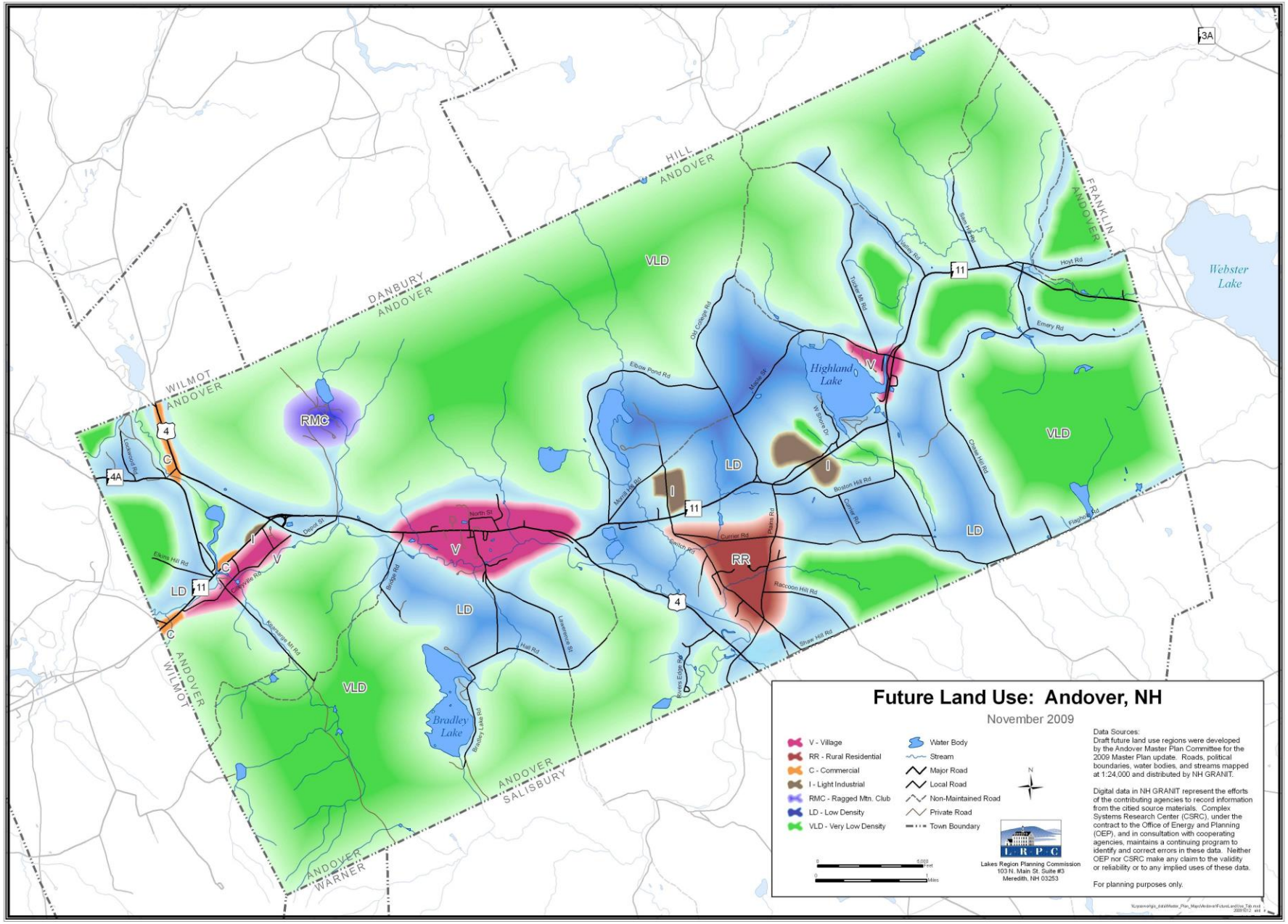
Potential locations for future land use are approximated on the Future Land Use Map and considerations are described in further detail in the descriptions of the envisioned residential, commercial, and industrial areas that follow. It should be noted that the Future Land Use Map is

a planning tool and not intended to be parcel specific. The Planning Board, when considering zoning changes based on the Future Land Use Map should specify specific zoning boundaries.

The overall land area in each of the potential zones illustrated on the Future Land Use Map is described below to: 1) illustrate the amount of land considered by the Master Plan Update Committee by land use type and; 2) for comparison purposes with the existing zoning districts and land use.

Table III: Comparison of Existing Zoning to Future Land Use

Current Zoning	Acres	Percent of Total Land	Future Land Use	Acres	Percent of Total Land
(FA) Forest and Agriculture	16,543	63%	Very Low Density	16,588	63%
(AR) Agriculture and Residential	8,906	34%	Low Density	8,111	31%
(RR) Rural Residential	480	1.8%	Rural Residential	480	1.8%
(V) Village	342	1.3%	Village	823	3.1%
			Commercial	83	0.3%
			Industrial	186	0.7%
Total Area / Percent of Total	**26,271**	**100%**		**26,271**	**100%**



MAP VIII: Future Land Use

1. Villages

Villages represent an opportunity for the co-existence of small retail shops and service vendors, residences, multi-family units, schools, places of public assembly such as town halls or churches, and municipal services. Ideally villages are areas where a person can find goods, services, and living arrangements within walking distance of each other. The prominent villages in Andover today are Potter Place (Cilleyville), East Andover, and Andover Village. Both Cilleyville and Andover Village are appropriate areas for expanded future residential and commercial growth.

As depicted in Table III, currently 342 acres or approximately 1.3 percent of the total land area in Andover is zoned Village. The Village areas identified on the Future Land Use Map represent 823 acres or approximately 3.1 percent of the land area in Andover. Future development should be supported by an appropriate level of infrastructure that enhances efficient and safe movement of vehicles, bicycles, and pedestrians. These areas of higher density mixed use may require the future expansion of municipal water and sewer service.

2. Other Residential Areas

The Plains is a predominantly residential area in south central Andover, roughly bounded by NH Route 11, Switch Road, and Plains Road. The existence of mixed residential and commercial uses provides a similarity to the composition of other villages in Andover. The Plains however is considered a more rural residential area characterized by narrow connecting streets without sidewalks, small farms, and scattered manufactured housing. The Master Plan Update Committee prepared a definition for this Rural Residential area that considered existing land use and the promotion of the same in the future. Permitted uses outlined in the Andover Zoning Ordinance should be reviewed and recommended changes developed for this area that encourage the same type of development that exists today to be allowed by right in the future.



Ragged Mountain Fish and Game Club is a private residential area where development is governed by restrictive covenants. These covenants have historically presented the need for Zoning Board of Adjustment approval in order for new development to proceed because conflicts with zoning regulations require formal Zoning Board of Adjustment (ZBA) review. It is recommended for this area that unnecessary ZBA review should be eliminated through appropriate zoning revisions.

3. Low-Density Mixed Use

The land immediately adjacent to the villages, the Plains rural residential area, and major town and state roads is ideally suited for mixed use characterized by low density, residences, farms, and forests, with compatible home-based businesses allowed if performance standards are met. This is comparable in many ways to the existing Agricultural and Residential zone. While low density is desirable, higher densities may be allowed as appropriate, where important features of the site are preserved. This may be achieved through "feature-based density" in the zoning ordinance, a method where the developable area is determined after adjusting for the physical

features to be preserved on site.[14] Feature-based density may also serve to promote the development of a range of building lot sizes and prices, which is supportive of the community's desire to promote workforce housing. Supporting documentation of sufficient detail about the environmental, cultural, historic and scenic features selected for protection must be developed to aid the Planning Board and subdivision applicants in determining the appropriate buildable area.

Unfragmented blocks of natural land cover exist in the areas identified for low density mixed-use in blocks ranging from ten to 500 acres. Unfragmented blocks of land are essential for certain animal habitats. Care should be taken to maintain connective wooded and wetland corridors and larger unfragmented blocks when possible. Permitted uses should include the promotion of farming and forestry.

4. Very Low-Density Areas

Very low density mixed use areas include the remote areas of town that are currently heavily forested with little or no development. The reason for a very low-density area is to maintain large forest blocks. Currently, approximately 88 percent of the land area in Andover or 23,196 acres is forested. The areas beyond those identified for low density mixed use contain unfragmented forest blocks of more than 2,500 acres. In these very low-density areas the community's special resources should be protected through a conservation subdivision design process, in which applicants for new subdivisions are required to prepare and submit detailed site inventory maps that pinpoint the exact locations of environmental, cultural, historic, and scenic features on their properties.[15]

While other planning tools exist, conservation subdivision can assist Andover in achieving the desired balance of residential development while retaining its rural character and promoting agriculture, preserving open space (including unfragmented forest blocks), and conserving natural resources. Conservation subdivisions work by allowing the same number of overall residences outlined in the zoning ordinance (based on lot size), on parcels generally 40 acres or larger. The difference between conservation subdivision and conventional subdivision is that the houses are located together on a portion of the parcel, whereas in conventional lot by lot subdivisions houses are spread more or less evenly throughout the subdivision. As a first step in the subdivision review process, the identification of site-specific resources to be protected allows homes to be appropriately located outside protected areas. Often a percentage (40-80 percent) of the parcel is permanently protected as open space. These protected open spaces can include outdoor recreation and agricultural uses and should be purposefully linked to adjacent open or conservation areas.

Conservation subdivision can lower public infrastructure development and maintenance costs in addition to protecting community-defined resources of importance. An added benefit is that conservation subdivision is easier to administer than other more complicated regulations for transferring development rights to other parcels. Conservation subdivision is most effective when used in conjunction with a comprehensive resource conservation and community development plan.[16]

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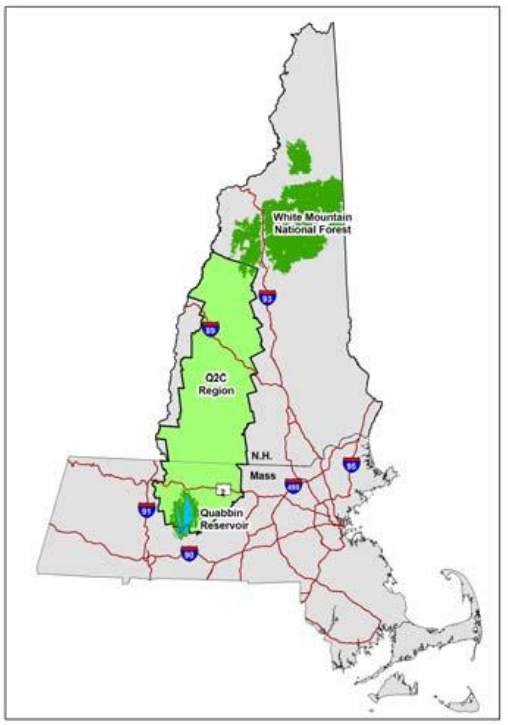
[14] Innovative Land Use Planning Techniques: A Handbook for Sustainable Development, NH Department of Environmental Services, October, 2008.
[15] Growing Greener: Putting Conservation into Local Plans and Ordinances, Randall Arendt, 1999.
[16] Innovative Land Use Planning Techniques: A Handbook for Sustainable Development, NH Department of Environmental Services, October, 2008.

Within the very low density areas are significant slopes, ridgelines, and views. Consideration should be given to their identification, prioritization, and protection. Views impact the look and feel of the community both when passing through the town and from within the community as well. Since Andover has three major highways transecting the town, NH Route 11 and US Routes 4 and 4A, the most evident views and impressions of town are ones experienced from these roads. The most dominating views are those of Ragged Mountain and Mount Kearsarge. Many additional scenic, rural views can be experienced close by, such scenes as open fields with turkeys or Canadian geese feeding, historic rambling farms and barns, stone walls and cemeteries. A view analysis should be conducted locally that supports the aesthetic aspects and rationale for ridgeline and steep slope protection.

On a regional scale, Andover is situated within a two-state collaborative for forest and habitat conservation, an effort which began in 2003 called the Quabbin to Cardigan Initiative (Q2C). Approximately two million acres in size, the Q2C indicates "private forests are undergoing widespread subdivision into smaller tracts; some areas are already experiencing significant development and unsustainable timber harvesting. If present trends continue with no parallel effort to conserve large forest ownerships while they are still relatively intact, the result will be the irreversible fragmentation of the region's forests, and degradation of its exceptional habitat, watershed, recreational and economic values."[17] The northern and southwestern unfragmented forest blocks in Andover are more than 25,000 acres each when considering adjoining communities. The ecological significance of this connected region should be taken into consideration when developing local land use regulations and practices. The encouragement of active and sustainable large tract agriculture and forestry is compatible with regional preservation goals.

5. Commercial

Currently there are no areas in Andover specifically zoned for commercial use. In a commercial area the main use is a business that sells goods or services directly to the public or that performs administrative functions such as an office. Examples (2008) include: Green's Garage, Pro Claim Insurance, New Horizons Hair Salon, R.P. Johnson Building Supplies, Circle K fuel and convenience store, Jake's, S&P Auto Repair, Constant Quilter, and Country Pine rustic lawn furniture. While commercial opportunities exist in mixed use zones, there is a pocket of commercial activity that has developed over time, and which makes sense to continue, in the area on NH Route 11 east of the US Route 4A – NH Route 11 intersection. Additionally, there are areas within the community that are appropriate for future commercial development. These include the area from NH Route 11 at the Wilmot / Andover town line west to Cilleyville Road and from the northern reaches of the wetland around Bog Pond north on US Route 4 to the Wilmot-Andover town line.



[17] http://www.q2cpartnership.org/docs/fact-sheet.pdf, viewed October 15, 2009.

Combined, these commercial uses occupy less than one percent of the total land area in Andover. The Future Land Use Map identifies additional acreage for commercial development along with expanded village areas that would allow a mix of commercial and residential development opportunities.

6. Light Industrial

Light industrial is a business activity - manufacturing, assembling and fabrication, warehousing, wholesale, repair, and service activities to other businesses or similar activity - that does not primarily sell goods or services directly to the general public. Current examples (2008) include Continental Machine, CWS Fence, State highway patrol shed, Dalbello Sports, NH Electric Cooperative maintenance facility, and the Andover town transfer station. Commercial and light industrial activities are generally compatible, and commercial uses could appropriately be allowed in light industrial areas.

There currently are no areas zoned for light industrial uses, although there are areas of town that contain pockets of industry which include:

- The area in the vicinity of Monticello Drive
- The area along NH Route 11 between the junction with US Route 4A and the junction with US Route 4.
- The area in the vicinity of the junction of Bay Road, US Route 4, and Plains Road
- The area in the vicinity of Continental Machine

These areas were explored in detail to assess the potential for future expansion of light industry. Natural resources maps were over laid on these areas to determine the existence of steep slopes (greater than 25 percent), wetlands, surface waters, and conservation lands which would limit future development potential. During the master plan update process, the concept of a light industrial zone generated a great deal of discussion. Identified in the community survey as a land use that should be fostered in appropriately zoned areas, light industrial uses were also associated with increased truck traffic, incompatibility with residential uses, and other potential problems as the master plan update was discussed. Through public input the importance of scale, location, impact, and enforcement surfaced as points of agreement regarding the identification of appropriate locations in Andover to permit light industry.

- **Location** – Access to major highways, minimal environmental constraints, and the location of existing industry were carefully considered.
- **Impact** – The area surrounding existing industry was viewed as inappropriate for future expansion in several instances largely due to poor initial siting and adverse impacts on natural resources or adjacent uses. The Monticello Drive area is one such example where industrial use was permitted over an aquifer. While an “ideal” location did not surface, impacts were considered manageable through performance standards and overlay zones such as an aquifer overlay.
- **Scale** – The size of future light industry operations should be appropriate for the town of Andover. Existing industry in Andover was cited for comparison. The size of the zone where light industry is permitted is important as well. Currently industrial uses

occupy approximately 105 acres of land in Andover, less than one percent of the total land area in town. Areas identified for future light industry comprise approximately 186 acres of which a portion is occupied by industry today.

- **Enforcement** – Past experiences have led to the conclusion that increased or enhanced enforcement is needed in Andover, especially for conditions established by the Zoning and Planning Boards when an approval is granted.

D. Conclusions and Recommendations

Through the master plan update process which engaged the public in determining an appropriate future land use plan for the town of Andover, specific recommendations were developed that are considered keys to the success of the plan. Several of the recommendations are considered requisites for the recommended zoning changes that are suggested in the Future Land Use Map and others represent supporting recommendations that can be developed over time. These two types of recommendations are outlined below under the headings of near term and supporting recommendations. The Master Plan Update Committee placed the near term recommendations in priority order as follows:

Prioritized Near Term Recommendations

1. The Planning Board should formally adopt the work of the Master Plan Update Committee following the adoption method outlined in RSA 675:6-7 that requires a public hearing, Board vote, plan certification by the Planning Board members, and a copy of the plan filed with the town clerk. March Town Meeting 2012 represents an opportune time for a final plan to be presented to the town's people.

2. The Planning Board should develop an action plan and implementation schedule addressing each Guiding Principle recommendation outlined in the Vision Chapter and the near term and supporting recommendations articulated here. The implementation plan and schedule would specify actions, time frames, and responsible parties for all recommendations. The action plan may include a process to monitor and gauge the progress of implementing this master plan.

3. The Natural Resources Inventory developed by the Andover Conservation Commission contains a wealth of information in the form of maps that should be reviewed and used by the Planning Board to further refine the proposed zones identified in the Future Land Use Map. The purpose of this review is to identify specific resources in addition to steep slopes, conservation lands, wetlands, and surface waters, that may be impacted in the proposed zones and to recommend revisions to the proposed areas or to develop mitigation and protection strategies to minimize adverse impacts. The use of overlays is recommended to aid the review process. Overlays should include at a minimum wildlife habitat, aquifers/groundwater resources, prime farmland and farmland of statewide importance.

4. A recurring theme expressed in the master plan update process was the perception that the level of current **enforcement** of the zoning ordinance, of planning and zoning board conditions, and of the building code is inadequate. The Board of Selectmen may wish to consider a meeting with the Zoning and Planning Boards and other concerned citizens to discuss opportunities to fund an appropriate level of enforcement based on community needs. Community enforcement needs should be established prior to the creation of new zoning ordinances and in consideration of the community values identified in the vision section and articulated in this future land use plan. One opportunity for small communities is sharing of code enforcement officer time with nearby communities which have similar needs that fall short of a full-time enforcement officer. Exploring how Zoning and Planning Board conditions of approval are addressed from the start of a land development process to project completion may be helpful in fully assessing the community's enforcement needs. Often for larger projects quality assurance takes the form a consulting engineer hired by the town, the cost of which is passed to a project owner. For smaller projects this responsibility may be a function of a code enforcement officer. Eligible costs associated with the administration of a development application process should be considered as outlined in RSA 676:4(g). The Planning and Zoning Board application fee schedules should be reviewed and updated to reflect true administration costs.

5. **Performance standards** for light industrial activities should be adopted to minimize visibility from main highways and prevent conflicts with adjacent uses. While performance standards exist in the Andover Zoning Ordinance, these should be reviewed and updated to address specific concerns associated with the creation of commercial and light industrial zones. Additional consideration should be given to standards not currently addressed that include but are not limited to: trip generation, air quality, vibration, glare, waste disposal, landscaping, wetland protection, stormwater infiltration, radioactivity, electromagnetic interference, and impervious site coverage. Similarly, performance standards for commercial uses and for home-based business uses should be adopted.

6. **Conservation subdivision** is a planning tool that can aid Andover in achieving the goal of maintaining unfragmented blocks of land in very low-density areas of town. This planning tool is most effective when used within the context of a comprehensive effort to preserve resources. The identification of site-specific resources to be conserved is guided by a predetermined list of important resources within the community. A community's natural resources inventory provides supporting documentation in the identification of resources to be conserved.

7. Higher density is often associated with housing affordability as the value of land can represent a significant portion of housing costs. The town of Andover should consider the villages as possible candidates to meet, in part, the statutory requirement to provide "reasonable and realistic opportunities for the development of **workforce housing**, including rental multifamily housing" as

outlined in RSA 674:59. An assessment of the existing housing stock was beyond the scope of this update, but may be required to evaluate if workforce housing needs are being met within the community and the greater labor market area. The current state workforce housing statute is effective in January 2010.

8. Stratified drift aquifers are valuable sources of community and individual drinking water. These aquifers are particularly susceptible to pollution because they consist of permeable material that allows the potential for pollutant infiltration. The town should establish or review and update as appropriate **protection of wellhead areas** by prohibiting the uses identified in NH RSA 485-C:12, as amended. Additionally, consideration should be given to the development of an **aquifer overlay zone** designed to protect groundwater resources. The overlay would establish best management practices for uses allowed within the aquifer zone. This would be especially important prior to the establishment of an industrial zone in the area Monticello Drive. Supporting documentation for the protection of ground water and surface water resources are found in Section 2.5 of the Innovative Land Use Planning Techniques: A Handbook for Sustainable Development.

Supporting Recommendations

- The town should conduct **strategic planning** for future layout of village areas, including street improvements and infrastructure. Funding sources and implementation timelines should be tracked through the Capital Improvement Plan process.
- The Planning Board may wish to consider **Pedestrian Oriented Development** (POD) through revisions to Site Plan and Subdivision Regulations and supporting language in the Zoning Ordinance. The purpose of POD is to provide guidance to new development that promotes pedestrian circulation on site and between adjacent sites as development occurs. In addition to promoting pedestrian connectivity, well defined POD considers appropriately scaled landscaping, safety, and other functions and features that promote walkability and are associated with good economic, human, and social health.
- Proctor Academy actively participated in the development of guiding principle number nine articulated in the Vision Section. **Continued dialog between the town and the Academy** regarding long-term planning projects that affect Andover Village is beneficial.
- Continue the development of **steep slope and ridgeline protection** ordinances.
- Consideration should be given to the development of **additional master plan chapters** such as those outlined in NH RSA 674:2. Based on input provided in the development of the vision and land use chapters, appropriate chapters for consideration may include: community facilities, energy, housing, transportation, and implementation.

- Conducting a **views analysis** is a way to prioritize prominent views to be preserved from key vantage points in the community. This type of assessment can be conducted by community volunteers with some guidance provided by the regional planning commission. An example of a process outcome is the viewshed analysis conducted in the town of Alton, NH which is supportive of the preservation of rural character.
- Agriculture as defined in the NH statutes includes forestry in addition to raising crops and animals and is described as important to the economic, social, and cultural fabric of New Hampshire. Land values often challenge these traditional industries by providing economic incentive to subdivide for other land use types. Agriculture is an important aspect of Andover's character in nearly all zones within the town whether rural or residential. Incentives to maintain the viability of working farms through the development of **agricultural incentive zoning** as outlined in Section 1.7 of the Innovative Land Use Planning Techniques: A Handbook for Sustainable Development should be considered.

VII) Natural Resources

Andover's natural resources have remained relatively unspoiled by development. The town is still considered rural with most residential development skirting a road network that was established more than a century ago. The once forested town was substantially cleared by aggressive logging and conversion to agriculture during the nineteenth century only to become largely forested again today. To retain rural character, Andover's natural, historic, scenic, and agricultural resources need to be protected and sustainably used. Conservation planning can have a positive influence on the protection of important resources and can help achieve a balance between sustainability of resources and development.

A Natural Resources Inventory (NRI) is a description and catalogue of the land, water, wildlife, forest, natural communities, agricultural, and soil resources, as well as lands that have been permanently conserved for the benefit of future generations. Natural resources are not always blatantly evident. Clean water, fresh air, scenic views, and dark night-time skies revealing stars, planets, and the aurora borealis are some less obvious but important natural resources. Our natural resources, many of which have been relatively unchanged by development, are a significant component of Andover's rural character. Over time, some resources have been used (sand and gravel), endangered or damaged (water quality), or improved (forest quality).

A detailed NRI has been written for Andover following the guidelines provided in **Natural Resource Inventories: A Guide for New Hampshire Communities and Conservation Groups**.[18] Andover's natural resource inventory is condensed in Appendix XIV. Thematic data from many sources have been compiled in maps and tables by GRANIT (Geographically Referenced Analysis and Information Transfer) from the University of New Hampshire's Complex Systems Research Center in Durham using a common scale and format. The result of their efforts for Andover can be viewed using the NH GIS Data & Metadata website http://www.granit.unh.edu/data/data101/distributionpolicy.html and the NH GRANIT Data

[18]Auger, P., McIntyre. J., 2001, revised by A.J. Lindley Stone, 2007, **Natural Resource Inventories; A Guide for New Hampshire Communities and Conservation Groups,** University of New Hampshire Cooperative Extension, Durham, 132 p.

Mapper website http://mapper.granit.unh.edu/viewer.jsp. The New Hampshire Wildlife Action Plan (WAP), 2007, also has many themed maps for Andover and a series of habitat pamphlets have been published with more to be released soon.[19] The analyses are not necessarily accurate or up to date for site-specific information. For site-specific use, additional mapping should be undertaken to refine these maps and the supporting database for each. This chapter and the supporting NRI should be regularly updated as new information becomes available and conditions change.

The NRI can provide an impartial, scientific base for planning. Ultimately, Andover should try to keep its natural resources and habitats intact for the benefit of various living species, including humans. One of the goals of Proctor Academy stated in 2008 is to live sustainably, which is defined as meeting the present generation's needs without compromising the ability to meet the needs of future generations. This broad goal should be incorporated into Andover's master plan as a unifying principle for natural resources management and protection.

Four important initiatives of regional significance have been completed by multiple public and private agencies using maps and data stored in GRANIT. These initiatives are noted in the NRI because they encompass Andover. These resource initiatives include the Quabbin to Cardigan Collaborative completed in 2004[20], the Wildlife Action Plan (WAP)[21], the New Hampshire Forest Land Base Study in 2000[22], and the Colby-Sawyer College Institute for Community Environment conservation study prepared for Ausbon Sargent Land Preservation Trust (ASLPT) completed in 2005[23]. Natural resources considered important for preservation by these outside groups should be considered important by residents of Andover.

Andover encompasses a total of 26,271.5 acres, or 41 square miles. A forest of mixed tree species covers 88 percent of the town. More specifically, hemlock-hardwood-pine forest covers approximately 21,000 acres, hardwood-conifer forest covers 500 acres, lowland spruce-fir covers 700 acres, grassland covers 600 acres, forest floodplain another 1,000 acres, wet meadow-shrub wetland 600 acres, and peatland only 100 acres, each rounded to the nearest hundred.

Twenty-five percent of all economic activity in New Hampshire is dependent on undeveloped land. This land costs the average town only half the taxes actually collected on it in municipal budget expenditures.[24] Much of this undeveloped land is in Current Use (RSA 79-A); generally, a minimum of 10 acres is needed for consideration. Land in Current Use as of April 2009, amounted to 65% (17,109.7 acres). If land is removed from current use, a penalty tax is assessed, in Andover half of the tax goes into a conservation fund. Conservation land is land that

[19] New Hampshire Fish & Game Department, 2008, 2009, **Wildlife Action Plan Habitat Stewardship Series: Appalachian Oak-Pine Forests, Floodplain Forests, Grasslands, Lowland Spruce-Fir Forests, Marsh and Shrub Wetlands, Peatlands, Shrublands, Vernal Pools,** Concord, NH, each 6 pages, http://www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/habitat_brochures.html.

[20] http://www.spnhf.org/landconservation/q2c.asp.
[21] New Hampshire Fish & Game Department, 2005 revised 2007, **Wildlife Action Plan**. Concord, www.wildlife.state.nh.us.
[22] http://research.yale.edu/gisf/assets/pdf/ppf/SPNHF.pdf.
[23] http://www.colby-sawyer.edu/academic/ces/curriculum/thirdyearprojects/2005thirdyear/Index.html.
[24] Dornin, Chris, **The Ongoing Case for Current Use**, Forest Notes, Summer 2008, Society for the Protection of New Hampshire Forests, pp. 10-15.

is restricted from development in perpetuity by deed. Land in conservation easement is taxed at current use rates, which vary according to forest versus field and whether recreational use by the public is allowed.

Unfragmented lands are large tracts of land that have few or no roads, without regard to ownership boundaries. These areas include a mix of forest, open water, wetlands, riparian areas and farmland that provide a habitat that can support a diversity of mammals, birds, fish, reptiles, amphibians, insects, and plants. The Master Plan can be a valuable tool in implementing a broad-scale approach to wildlife habitat protection by providing an overall strategy for maintaining unfragmented blocks of habitat which are essential to healthy wildlife populations. Many large blocks of unfragmented land are still intact in Andover including the largest block incorporating land of Ragged Mountain Fish & Game Club, Proctor Academy, the Newman easement, and others spanning the northern part of town, and state-owned land on the flanks of Kearsarge Mountain.

Andover is approximately 88 percent forested, much of which is on hillsides having steep slopes and shallow soils that are difficult or unsuited for development. Andover's forests provide valuable habitat for wildlife. The land surface in forests absorbs rainwater, increases groundwater infiltration and buffers surface waters from sedimentation and contamination. Trees cool summer temperatures by 10 degrees or more, break winter winds, and filter dust and pollutants from the air. Healthy forests host scenic recreational trails and hunting grounds that attract tourists and are of value to residents. Well managed forests can provide a sustainable supply of maple syrup, home firewood, commercial wood products, and jobs. Forests also constitute a major storage of carbon not only in the trees themselves, but in the forest soils as well. Most importantly, forests provide us with biodiversity. Dense softwood stands are particularly important for the survival of deer and moose in the winter. Oak, hickory and beech forests provide food and cover for these animals and orchard trees, particularly apples, provide a winter food source for mammals and birds. Dead and dying trees provide shelter and nesting sites for birds. Andover's largest managed tree farm with 2,700 acres is managed by Proctor Academy.

The US Department of Agriculture Natural Resource Conservation Service (NRCS) recognizes four classes of important farmland soil—prime, unique, of statewide importance, and of local importance,[25] three of which have been mapped in Andover. Consistent with the guiding principles, undeveloped prime farmland and farmland of statewide importance in Andover should be accurately delineated, and measures should be put in place to encourage its use for agriculture. No one technique alone is sufficient to succeed in farmland preservation. Generally, coordinated financial incentives and land use regulations are needed.[26]

Metamorphosed sedimentary and igneous rocks form the backbone of Andover. These rocks have been folded and faulted several times. Rock formations trend to the northeast and dip to the

[25] U.S. Department of Agriculture, Natural Resources Conservation Service, 2002, **New Hampshire Soil Attribute Data Dictionary,** 34 p., http://www.nh.nrcs.usda.gov/Soil_Data/soil_data_documents/datadict.pdf

[26] New Hampshire Department of Environmental Services, 2008, **Innovative Land Use Planning Techniques: A Handbook for Sustainable Development**, p. 104, http://des.nh.gov/organization/divisions/water/wmb/repp/innovative_land_use.htm.

southeast. During continental glaciation, sand and gravel were deposited in low lying areas, whereas glacial till overlies the hillsides. Many till soils have a characteristic hardpan layer at shallow depth. Water wells are more productive in the sand and gravel deposits and bedrock fractures than from the till areas. Because the low lying areas were more favorable for development, provided easier transportation routes, and had a reliable source of water, the low lying areas have had the most development and pressure for competing resource use.

Andover's water resources, concentrated in low lying areas include lakes, streams, floodplains, and wetlands, all of which are important for a variety of reasons: groundwater for wells, flood mitigation, moderation of stormwater runoff, sediment and pollution removal, microclimate moderation, wildlife diversity, and recreation. The Comprehensive Shoreland Protection Act (2008)[27] was established to protect the important land-water interface and buffers are recommended along all streams. Undeveloped floodplains naturally protect residents from flood damage. Wetlands, vernal pools, and their surrounding terrestrial areas are critical for the survival some species. Because pristine wetlands are such a valuable natural resource, the designation of specific prime wetlands was adopted by Andover in 1989.

Groundwater replenishes dug and well points used by most of the residences in Andover. Several public water supplies, mandated for places serving more than 15 service connections or 25 people[28] are also used, for example in the Andover Village District, which receives its water from Bradley Lake, as well as the Andover Congregational Church, Continental Machine,Circle K Convenience Store in Potter Place and others. The importance of a reliable, potable water supply cannot be overemphasized. Groundwater quality can be impaired by landfills, commercial and industrial wastes, agricultural fertilizers, human and animal sewage, and road salt. Impervious surfaces can also be detrimental to recharge and quality of groundwater and surface waters.

The New Hampshire Electric Cooperative supplies most of Andover's electrical energy. Proctor Academy is now generating power from its biomass furnace using wood chips derived nearby. Active and passive solar energy, wood, and fossil fuels provide additional energy.

Air quality is generally good to excellent except for extremely humid summer days and temporary blankets of wood smoke in the valleys during calm or temperature inversion conditions in colder weather. Acidity in the air moisture coming from the Midwest is attributed to dieback in New Hampshire forests, especially for higher elevation conifers. Air quality is measured hourly in Concord.[29] Nighttime outdoor light pollution is minimal, the greatest being from the Blackwater ski area during night skiing and snowmaking.

Much of Andover's outdoor recreation and tourism are based upon its natural resources.[30] The Blackwater ski area at Proctor Academy hosts regional ski competitions. The Andover Outing Club (AOC) offers alpine and Nordic skiing and ski jumping. Snowmobiling and hiking

[27] http://www.gencourt.state.nh.us/rsa/html/nhtoc/nhtoc-l-483-b.htm.
[28] http://www.gencourt.state.nh.us/rsa/html/L/485/485-1-a.htm.
[29] http://www2.des.state.nh.us/airdata/.
[30] http://www.colby-sawyer.edu/academic/ces/curriculum/thirdyearprojects/2005thirdyear/Index.html.

are supported by an extensive trail system. The Andover Snowmobile Club, the Sunapee-Ragged-Kearsarge Greenway, and Proctor Academy maintain many of these trails. The Friends of the Northern Rail Trail have resurfaced much of the former railroad bed for walkers, bikers, horses, skiers, strollers, wagons, tricyles, and wheelchairs. Ice skating outdoors is limited by an early snowfall and limited shoveling, but Proctor Academy allows skating in their hockey rink at designated times. The Recreation Committee has organized many activities over the years. They have sponsored soccer, baseball, swimming, basketball, softball, tennis, kayaking, and other opportunities depending upon the availability of willing adult instructors and equipment. A Horseshoe Club has been active during summer evenings in the Monticello Drive area. The skateboard park has many children and teenagers practicing daily, weather permitting.

The Andover Conservation Commission has established several priority areas for potential preservation that are aligned closely with those of the Ausbon Sargent Land Preservation Trust (ASLPT) and the Society for the Protection of New Hampshire Forests (SPNF). The priorities were chosen as relatively broad categories in areas at risk for development for the future of Andover's well being, sustainability, and overall rural character. These include:

- drinking water resources,
- ecologically important areas, including wildlife habitats and unfragmented land,
- agricultural land, including prime farmland and farmland soils of statewide importance,
- forest resources, and
- scenic resources identified informally by Andover residents.

In 2007 Professor Laura Alexander from Colby Sawyer College was retained to map these priorities using GIS technology with input from the Conservation Commission. Additional information can be found in Appendix XIV. Maps in the NRI and others available from GRANIT should be used in making land use decisions.

Natural resource protection should be supported in planning and zoning regulations for land use controls—the regulatory component as guided by the Master Plan. To address the need for guidance and technical assistance on innovative land use controls authorized by RSA 674:21, DES and its partners, the NH Association of Regional Planning Commissions, the NH Office of Energy and Planning, and the NH Local Government Center, produced the **Innovative Land Use Planning Techniques: A Handbook for Sustainable Development** in October, 2008.[31] Four general categories formed the guiding principles of this document: prosperity, sustainability, livability, and mobility. Regulations on innovative land use controls must be supported by the Master Plan.

[31] New Hampshire Department of Environmental Services, 2008, **Innovative Land Use Planning Techniques: A Handbook for Sustainable Development,**
http://des.nh.gov/organization/divisions/water/wmb/repp/innovative_land_use.htm

XI) Historical and Cultural Resources

1. Introduction

The character and feeling of a community are derived partly from its historical development and growth. Through public input while the Master Plan was being developed, the residents of Andover have a desire that evidence of the community's past be preserved so that succeeding generations can understand how the community's past has shaped the present and the future.

Older buildings provide much insight about the people who built them, how they lived and worked, and how the economic and physical circumstances of the times affected their lives. Surviving farmsteads can provide evidence of how the earlier yeomen worked the land to yield a living. The physical remains of early industrial works can show how the early settlers made use of available natural resources (primarily water power, timber supplies and mineral deposits) to develop employment opportunities and to create the villages and neighborhoods that we live in today.

2. A Brief Overview of Andover's History

The town that was to become Andover had its beginnings in 1751, when a tract of wilderness of some 40 square miles was granted to a group of soldiers (and others) who had participated in the successful English expedition in 1745 against the French fortress at Louisburg, Nova Scotia. In time this township became known as New Breton, in recognition of the Cape Breton region of Nova Scotia where Louisburg was located.

Initial settlements in this town were delayed for a number of years due to the continuing ravages of the French and Indian War in the area. But the war ended in 1760 with the English conquest of Canada, and in 1761 the first settler Joseph Fellows arrived and built a log cabin in the "Flaghole" district of the town. He was soon followed by others. By 1775 the population of the town had grown to 179, enough to send at least 23 men to fight in the Revolution.

In 1779 the inhabitants of New Breton successfully petitioned the New Hampshire government to be incorporated with the name of Andover. The reason for selecting this name has been lost to antiquity. It has been suggested that it might have been in reference to a worthy citizen's connection with Phillips Academy in Andover, Massachusetts that had been founded in the previous year of 1778.

In 1828 a portion of the eastern section of Andover of some eight square miles was taken from Andover to form a portion of the new town of Franklin. This 20% reduction in area resulted in a similar reduction in the town's population.

In 1847 the tracks of the Northern Railroad were laid through Andover, providing rail connections to Concord and Boston to the south, and White River Junction and Montreal to the north. Four stations were established in the town – East Andover, Andover Center, Potter Place and West Andover. The railroad became the basis and support for new forms of commerce and industry that provided expanded employment opportunities beyond the subsistence farming previously available.

3. Identification of Historic Resources in Andover

Many historic sites exist in Andover that provide testimony to the development of this community that stretches back over approximately 250 years. The following list of historic resources provides an indication of the types of historic resources that should be preserved for the future.

The locations of the places are keyed to the Map IX of Andover by means of bracketed numbers.

Map IX: Andover Historic Places
[Hand drawn map by Ed Hiller is missing]

3.1 East Andover Village

East Andover has an historic district listed on the U. S. Department of Interior's National Register of Historic Places [1]. This historic district includes:

- East Andover Congregational Church, 1796
- Highland Lake Grange Hall, 1850
- East Andover school building, 1903
- Old North Church Cemetery [C7]

Also located in this village are:

- Mill Brook, at the outlet of Highland Lake, that has provided water power for saw mills
  and other enterprises from the very beginning of the settlement [2]
- Busiel Hosiery Mill, dating from 1865 [3]
- Marston Knoll Cemetery, one of the oldest in Andover [C6]

Located above the village off of Emery Road is:

- Artist's Ledge—a promontorychosen by artist Mary Weston and others in the middle and late 19th Century as a vantage point for their paintings, because of its outstanding views out over East Andover village and Highland Lake. At present the site is sheltered by a grove of stately pine trees. [38]

3.2 Andover Center

Andover Center contains a number of historic buildings and other important evidence of Andover's history. In earlier times, the Center was known informally as Mouseum.

The village center, including the buildings along Main Street, Lawrence Street and North Street, has been extensively documented in preparation for nomination as a

historic district on the National Register of Historic Places. [4]

Two cemeteries are located in this village:

- the Old Center Cemetery [C2]
- the Proctor Cemetery [C4]

3.3 Taunton Hill District

This district was one of Andover's earliest settlement centers. Still extant are a number of notable historic buildings:

- Mesheck Weare house, 1782 [5]
- Captain James Tucker house, 1787 [6]
- Joseph Philbrick house, 1780s [7]
- Dr. Silas Merrill house, 1818 [8]
- John Bachelder place, c.1782 [9]
- Gov. Nahum Bachelder place, 1782 [10]
- Old Parsonage, 1782 [11]
- Taunton Hill schoolhouse, now a private dwelling [12]

Also located here are three cemeteries:

- Taunton Hill Cemetery [C15]
- Philbrick Family Cemetery [C16]
- Bachelder Family Cemetery [C5]

3.4 Potter Place

This village was an important transportation center where passengers and freight arriving by rail were transferred to coaches and other vehicles to continue their journey to New London, Lake Sunapee and other destinations off the rail line. A number of historic buildings contribute significantly to the historic character and charm of this village.

- Potter Place Railroad Station, dating from 1874, is one of the best preserved examples of 19th century station architecture, now owned and maintained by the Andover Historical Society. It is listed on the National Register of Historic Places. [13]

- Potter Place Railroad Freight House, dating from c.1900, owned by the Andover Historical Society. [14]

- Emons General Store and Post Office, constructed in 1912, owned by the Historical Society. [15]

- Potter Place Inn, in the early 1900s it was a boarding house known as the Blackwater Manor. [16]

- Also located here in a small graveyard across the tracks from the Railroad Station are the graves of Andover's famous black magician Richard Potter (c.1783-1835) and his wife Sally (c.1787-1836). [C19]

3.5 Cilleyville District

In early times the village of Cilleyville was a vibrant center of factories and industrial activity based on the water power generated by the Blackwater River.

Still to be seen are:

- Remnants of two dams (the first dating from c.1785) that harnessed this power [17]

- Cilleyville schoolhouse, now a private dwelling [18]

3.6 Flaghole and Chase Hill

- Andover's first settler, Joseph Fellows, built his log cabin in this district in 1761. Although his dwelling has not survived, the Town of Andover erected a monument marking the location [19].

- Nearby is the graveyard where some of the Fellows family are buried [C15].
- Also located in this area is Andover's only brick house, c.1790 [20] and sixteen other structures built prior to 1900.

3.7 Tucker Mountain District

This district was one of the earliest settlements in Andover. Places of historic significance include:

- Tucker Mountain Schoolhouse, built in 1837, owned and maintained by the Andover Historical Society, and listed on the National Register of Historic Places [21]

- Andover Poor Farm (Big Elm Farm), c.1802, purchased by the Town to care for the needy and indigents from 1830 to 1868, at which time the Merrimack County facility was established in Boscawen which took over this function [22]

- Cutting Greeley place (now Pieters), c.1790 [23]

3.8 Cilley Hill District

The Cilley Hill area in East Andover was one of the early settlements in town. Deacon Samuel Cilley settled there c.1796. As testimonials to these early settlers there remain:

- Cilley Family Graveyard containing the graves of many of the Cilley family [C18]

- Several extensive cellar holes and foundations [24]

3.9 Hame Shop

The Hame Shop on Bradley Lake Road gives vivid evidence of the importance of horses and the equipment that was used with them before the age of steam and petroleum power. (A hame is a significant component of a harness). [25]

3.10 Agricultural areas

Among the many working farms in Andover, two remain to testify to the agricultural heritage of our town, and deserve protection:

- The Hersey Farm in East Andover remains as a faithful exhibit of life in agricultural New England in the past centuries. The many out-buildings, the blacksmith shop, the summer milking parlor, the various barns for storing hay, silage, and other crops, the connected architecture to mitigate the rigors of the winter weather, all remain to tell the tale of earlier farm life. This farm is now listed on the National Register of Historic Places. A conservation easement has also been established on this farm that prohibits any future non-agricultural development of the property. [26]

- The Shaw Farm is another example of farm life and agricultural practice that can serve to educate coming generations about our past history. [27]

3.12 Covered Bridges

Covered bridges were quite common in the previous century, and Andover had 7, all constructed between 1870 and 1887. The concept was to provide shelter from rain and snow to preserve the bridge structure. Andover is fortunate to have two remaining:

- Bog Bridge, built in 1887, crosses Pleasant Brook in Cilleyville. It has recently undergone a major a restoration, and is listed on the National Register of Historic Places. [28]

- Keniston Bridge, built in 1882, crosses the Blackwater River in central Andover. It received major repairs in 1981. It is also listed on the National Register of Historic Places. [29]

3.13 Cemeteries

A number of historic cemeteries exist in Andover, ranging from small family graveyards to extensive burial grounds. The following is a partial list:

- Proctor Cemetery, Main Street [C1]
- Old Center Cemetery, Main Street [C2]
- Cilley Cemetery, Kearsarge Mountain Rd. [C3]
- Boston Hill Cemetery, Putney Rd. [C4]
- Bachelder Cemetery, Old College Rd. [C5]
- Marston Knoll Cemetery, Maple St. [C6]
- Old North Church Cemetery, East Andover village [C7]
- Fellows Cemetery, off Chase Hill Rd. [C8]
- Fuller Cemetery, off Brick House Rd. [C9]
- Rollins Cemetery, Flaghole Rd. [C10]
- Rowe Cemetery, Flaghole Rd. [C11]
- Cilley Hill Cemetery, Sam Hill Rd. [C12]
- Hobbs/Swett Cemetery, Elbow Pond Rd. [C13]
- Walker Cemetery, Chase Hill Rd. [C14]
- Taunton Hill Cemetery, Old College Rd. [C15]
- Philbrick Cemetery, Old College Rd. [C16]
- Durgin Cemetery, Pancake Rd. [C17]
- Potter Graveyard, Potter Place [C18]
- Lakeview/Lakeside Cemetery, Franklin Highway [C19]

3.14 Cellar Holes and Foundations

Many cellar holes and foundations attest to the earlier settlements and industrial activities in Andover. Each one has its own story to tell. Some are more significant than others and have been identified as worthy of special consideration and preservation. Included are:

- Winter Hill Ice Company foundations on Highland Lake shore, the largest ice house in
- New England [F1]
- The Graves Sawmill site on Mill Brook, East Andover, 1837 [F2]
- Mountain Brook Sawmill site on Kearsarge Mountain Road, pre-1827 [F3]
- Chandler farm foundations on Tucker Mountain [F4]
- Dawes farm foundations on Kearsarge Mountain Road [F5]
- Perkins farm foundations on Dawes Road [F6]
- Brown farm foundations on Beech Hill, 1790 [F7]
- Currier farm foundations on Apple Hill, (on West Salisbury Road) [F8]
- Dyer's Crossing schoolhouse foundations [F9]
- Beech Hill schoolhouse foundations [F10]
- Pyroligneous Acid Factory foundations on Lead Mine Road [F11]

4. Cultural Resources

A number of cultural resources in Andover provide opportunities for physical, mental and spiritual enrichment of the residents and visitors to our town. These resources are treasured by many as indispensable adjuncts of their world. Included here are many, but certainly not all, of these cultural resources.

- Proctor Academy [30]
- Andover Town Library [31]
- Bachelder Library [32]
- Masonic Hall, Cilleyville [33]
- East Andover Congregational Church [C1]
- Catholic Church [34]
- Northern Railroad Trail [35]
- Blackwater Park [36]
- Skateboard Park [37]

5. Scenic areas

A number of beautiful scenic views in Andover are seen by residents as essential features of the town. It is felt that these views should not be despoiled by disruptive or inappropriate intrusions. The following is a partial list of these important scenic views:

- Hersey Farm - view from Franklin Highway [V1]
- Halcyon Farms - views along Emery Road [V2]
- Ragged Mountain - view from Main Street [V3]
- Tucker Mountain - view from Franklin Highway [V4]
- Cilley Hill - view from Franklin Highway [V5]
- Mount Kearsarge - views from Main Street, Depot Street, etc. [V6]
- Highland Lake - view from upper Maple Street [V7]

Andover has designated a number of roads as "scenic", under the provisions of RSA 231:157. The importance of this designation is that no trees or stone walls along such designated roads can be destroyed or degraded by the Town or its agents except for substantiated reasons of public safety as presented at a public hearing. Andover has designated approximately nine miles of "scenic roads", which are listed below:

- Beech Hill Road
- Elbow Pond Road
- Emery Road
- Old College Road
- Maple Street
- Valley Road

6. **Past Preservation Activity**

In addition to the historic districts that have been established, many Andover property owners have been active in preserving the landscape through conservation easements. To date, approximately 3,126 acres in Andover have been placed under conservation easements.

The Northern Railroad right-of-way through the town has been preserved as a rail trail with significant volunteer work by the Friends of the Northern Rail Trail, and has been given protected status by the NH Division of Historic resources as eligible for listing on the National Register of Historic Places.

However, there are no significant restrictions on demolition or modification of structures of historical and/or scenic importance to the town. Although the town-wide survey stressed the importance of preserving the rural character of the town, plans have yet to be established to do so.

7. Goals and Implementation Strategies