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Introduction

A master plan is a planning document that serves to guide the overall character, physical form, growth, and development of a community. It provides guidance to local officials when they are making decisions on budgets, ordinances, capital improvements, and zoning and subdivision matters. The master plan is a tool that can help officials deal responsibly with change and control growth in an orderly and constructive manner. Since a master plan serves as an official policy guide for a community, any ordinance pertaining to the use of land or the growth and development of the municipality should conform to the goals and policies of the plan.

Under state statutes, the preparation of a master plan is the official duty and responsibility of the planning board. The statutes (RSA 674:1) specifically require that the planning board will update and amend the master plan from time to time.

Since the last update to the master plan was adopted in August, 2001, the planning board established the master plan subcommittee in 2006 to review and update the plan for 2009. After several draft revisions and additional input from Antrim residents, the final version of the master plan was adopted by the planning board in July of 2010. This document is the result of many hours of work performed on behalf of the Planning Board and people of Antrim by a committee of citizen volunteers. The master plan was created by the citizens of Antrim, for the citizens of Antrim, to serve the citizens of Antrim. Therefore, the Antrim Planning Board would like to take this opportunity to recognize and express our gratitude for the professionalism and commitment the members of the master plan subcommittee have shown over the past two years in preparing this document. The master plan subcommittee members and other community members who contributed their personal time and talents to this project are:

- Missy Taylor, Chair
- Mary Allen
- Scott Burnside
- Diane Chauncey
- Bob Edwards
- Ron Haggett
- Bob Holmes
- Bradley Houseworth
- Joseph Koziell
- Ben Pratt
- Bill Prokop
- Andrew Robblee
- Steve Schacht
- Mary Schmidt
- Sandy Snow
- Paul Vasques
- Kathi Wasserloos
- C.R. Willeke

When asked what they liked about Antrim, survey respondents indicated that they liked Antrim's small town character and knowing their neighbors. It is through the dedication and commitment of citizen volunteers like those listed above that Antrim remains blessed with an abundance of social capital and will continue to provide our citizens with a safe and supportive community in which to raise their families.

Sincerely,

Brian Sawich
Chair, 2006 – 2007
Antrim Planning Board

Andrew Robblee
Chair, 2008 - 2009
Antrim Planning Board

A Vision for Antrim

The Visioning Process

RSA 674:2, which sets forth the purpose and description of a master plan, says that every master plan is required to have “*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 plan, not only for their locality but for the region and the whole state. It shall contain a set of guiding principles and priorities to implement that vision.*”

The community visioning process is the first of eight steps in the master planning process. This step involved engaging Antrim’s citizens and getting their input to develop community supported vision statements, goals and objectives. To solicit input from the citizens, the master plan committee developed a comprehensive survey which was mailed to the residents, available for pick up at the town hall, and available on the town’s website. The surveys were collected over an 8 week period and resulted in 232 responses. The Master Plan committee also retained the firm of Jeffrey H. Taylor and Associates who conducted a visioning session at the town hall on June 6th, 2006. This session was well attended with approximately 75 residents providing input on their vision for the future of Antrim. A second visioning session was held in August of 2006. In addition to the above outreach programs, the Master Plan Subcommittee also conducted several visioning sessions with community groups to solicit their members’ views on Antrim’s future. All of the information gathering sessions were very widely advertised, and gave residents ample opportunity to voice their opinion on what kind of town they want Antrim to be in the future.

Visioning Process Highlights

From the data received in the various visioning sessions and the community surveys, a few trends emerged that had strong support from the vast majority of the respondents.

1. When asked “What do you like about Antrim?” or “What community characteristics are important to you?” the top responses included the following:
 - a. Small town atmosphere – i.e. knowing your neighbors
 - b. Safety – i.e. low crime rate; good emergency services
 - c. People/community spirit – i.e. volunteerism/strong social capital
 - d. Rural character – i.e., open space; natural beauty; distinct villages/housing clusters.
 - e. Affordability – i.e. modest housing prices; low property taxes.
2. When asked for their top concerns, the residents’ responses tended to mirror what they like and want to protect about the quality of life in Antrim. The following are the concerns that were most frequently expressed:

- a. Concern about the loss of rural character and hope that the Open Space Committee recommendations be implemented.
- b. Worry that Antrim may lose its small town atmosphere, with the concomitant desire that “sprawl” be limited and planning and zoning controls and regulations be used to manage growth.
- c. The desire that the town codes be enforced for reasons of safety and to protect property values. For example, the issue of unregistered “junk” vehicles on property was cited by a number of residents.
- d. Increasing Main Street traffic and the lack of public transit was a concern for many, indicating both transportation and safety issues.
- e. High taxes and unaffordable housing was another concern expressed by the respondents.

Overall Community Vision

The following points are intended to reflect the vision of the citizens of Antrim regarding the overall growth and development of the town. They are the overarching characteristics that define the quality of life, citizenry and social fabric of the community. The citizens of Antrim want a town with the following characteristics:

Safe – A place where all people are reasonably free of fear of injury or loss of property. A place where help, when needed, is readily accessible.

Rural – A community that preserves its small town character through open landscapes and preservation of its historical and cultural resources.

Affordable– A community where the cost of living allows people of modest means to enjoy a reasonable quality of life.

Community spirit – A place where neighbors know and care for each other. A place with strong social institutions, citizen participation, and volunteerism.

A diverse economy – A town with a broad economic base that is not tied to any particular industry or business and with opportunities for earning a living within a supportive, modern infrastructure.

Pride in ownership – Home and business owners are vested in the long term success of the community. Local ownership of property creates a stable and committed citizenry that is invested in the town’s future.

Effective local government – A town government that listens and is responsive to its citizens and efficiently delivers services.

Sustainable – Effective planning and wise use of resources will ensure the long term viability of the community. A town whose future is secure.

Natural Resources and Conservation

Introduction

Southwestern New Hampshire is a rapidly growing region. Antrim, as a rural community within southwestern New Hampshire, is beginning to feel the pressure of residential growth as subdivisions spring up on a fairly regular basis, particularly in the northeastern portion of town.

Recent events in two neighboring towns exemplify the pressures and opportunities exerted on our town. Construction of a super Wal-Mart off Rte. 9 in Hillsborough was proposed in 2006 and subsequently approved by the Hillsborough Planning Board. Wal-Mart, however, ultimately decided not to go through with the project. In the summer of 2008, a developer proposed building a 63,000 square foot grocery store, 65 residential units, a 138,000 square foot big box store, a restaurant and two smaller retail units behind River's Edge Plaza off Route 202 in Hillsborough. Both projects are large and either would undoubtedly have a profound effect on commercial and residential growth and increased traffic in Antrim. To the west of Antrim, Stoddard taxpayers in 2006 approved a request to spend \$50,000 to help purchase the 1,617-acre Robb Reservoir conservation area south of Route 9. The area, which borders Antrim's western boundary, includes portions of the headwaters of the North Branch of the Contoocook River, which flows through northern Antrim.

So, within six miles of each other, plans are afoot to expand Hillsborough's commercial presence and a major conservation effort is underway to preserve hundreds of acres of open water and wetlands and 13 miles of stream corridors. In addition, the Nature Conservancy recently announced the preservation of 160 acres in Windsor just north of Loveren Mill Road.

A survey of Antrim residents in May, 2006, indicates a strong preference for maintaining the rural character of the town. Seventy-four percent of the respondents cited this as being the "most important" or "very important" characteristic of the town. Seventy-six percent felt preserving the small-town atmosphere was "most important" or "very important", and eighty-nine percent rated the overall quality of life in Antrim as "good", "very good", or "excellent".

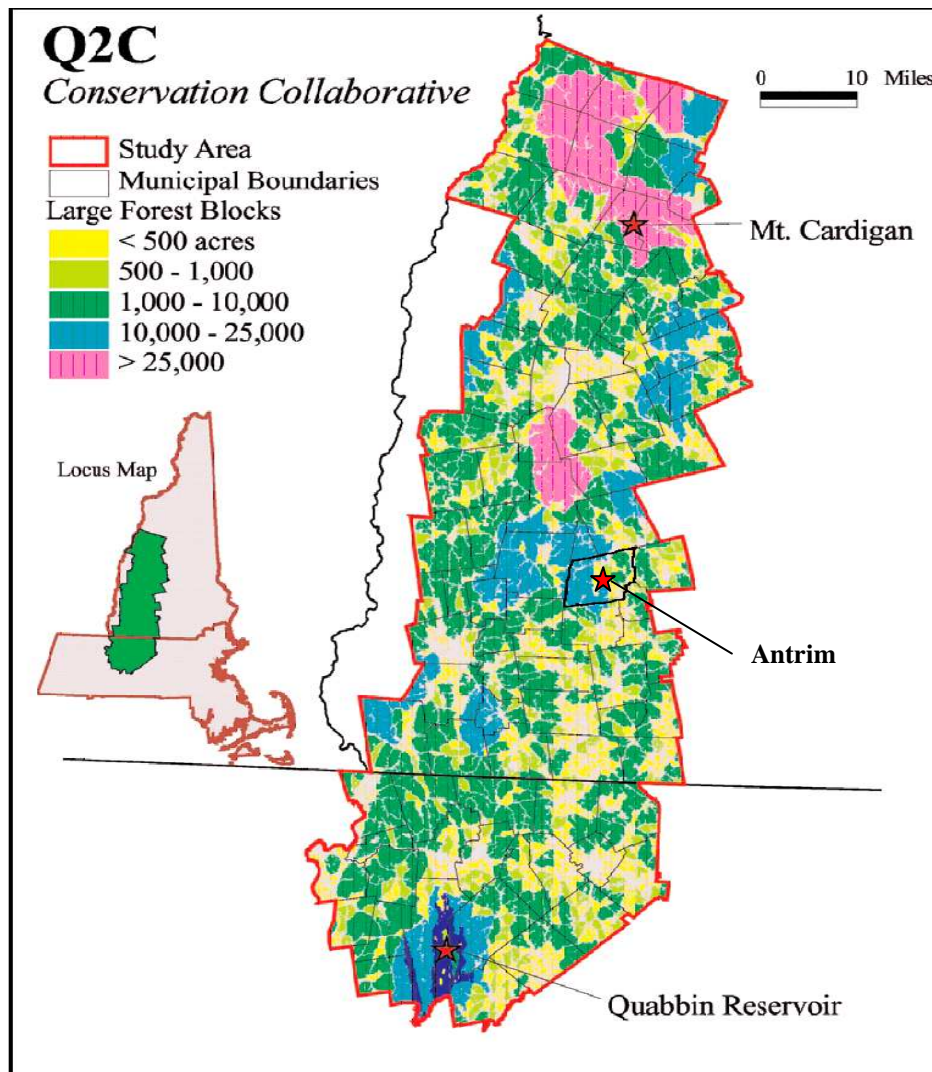
The survey also showed that about seventy-seven percent of respondents would prefer commercial growth and development to occur on Routes 202 and 9 or in and around downtown. Forty-three percent of respondents favored an industrial park. Development of big box stores such as Wal-Mart is opposed by more than 2 to 1 of the respondents (149 against; 68 in favor).

The question then is how to balance the desire of residents to maintain the small-town, rural feel of Antrim, while allowing for some commercial/industrial development and continuing to conserve and preserve the important natural and historic features of town which contribute to the small town and rural atmosphere. The purpose of this chapter is to

identify Antrim's natural resources and propose conservation efforts to preserve other critical areas.

Quabbin to Cardigan Conservation Collaborative

The **Quabbin to Cardigan Conservation Collaborative** ("Q2C") is a public/private effort to protect a broad corridor of interconnected conservation lands along the Monadnock Highlands, stretching more than 100 miles from the Quabbin Reservoir in central Massachusetts to New Hampshire's Mount Cardigan and beyond into the White Mountains. The region contains one of the largest remaining areas of intact contiguous forest in central New England, but intense new pressures threaten this unique landscape.



Antrim is one of the towns that possesses large forest blocks of 10,000 – 25,000 Acres. (Blue shaded area)

According to the Society for Protection of New Hampshire Forests, the Q2C is vital because the globalization of the forest products industry, growing development pressure

and sharply rising land values threaten the future of the region's unique landscape and way of life. In addition to the Society for Protection of New Hampshire Forests, 14 other prominent, private organizations and 8 regional, state, and federal agencies are involved, including the NH District of Forests and Lands, the NH Fish and Game Department, and the Southwest Regional Planning Commission.

The goal of this collaborative is to purchase land, place it under conservation easement, or otherwise protect it from development. Sellers must be willing sellers. No eminent domain will be exercised. The collaborative says a carefully focused, well-funded effort must begin now to permanently protect the region's forested landscape. The collaborative wants to preserve large forest blocks while they are still available.

The Q2C area is 3,000 square miles. Antrim is one of many towns that are part of this huge tract of land. It is approximately half way up the corridor. The corridor habitat supports many birds and animals that are in decline in other regions of the state and New England.

Much of the western and northern parts of Antrim, those large areas identified in the *Open Space Conservation Plan for Antrim* (see below) are ideal candidates for preservation. Because a large amount of land is already preserved in those areas, it makes good sense to conserve as much additional land there as possible.

Contrary to general belief, preserving land is not a waste of tax funds. Commercial/industrial development is a double-edged sword. It broadens the tax base but at the same time it puts an increased burden on that tax base with the inevitable population growth that goes with it and the need for increased infrastructure.

A 1999 study by the Society for Protection of New Hampshire Forests showed that open space generated 16% of New Hampshire's jobs, 35% of its state and local taxes, and 25% of New Hampshire's gross state product through activities such as forestry, tourism, hunting, fishing, recreation, vacation homes, and agriculture.

The forestry study compared the costs of open space land, commercial development, and residential development for 11 New Hampshire towns. For every tax dollar those towns earned, they spent \$1.08 on residential areas, \$.39 on commercial/industrial areas, and \$.52 on open space areas. That means open space costs about half of what it contributes to the town. In other words, trees don't call ambulances, send children to school, or demand sewer service.

Open Space Protection Priorities

Large areas of Antrim have been proposed for protection in the *Open Space Conservation Plan for Antrim* (2006). This includes all the unprotected land north of Route 9 to the Windsor and Hillsborough borders; all unprotected land west of Reed Carr Road, Craig Road, and Old Hancock Road; unprotected land near Campbell Pond, Turner Hill Road, and Knapp Road; some of the land bordering the Contoocook River; and other smaller

areas around town. See the map, Antrim Open Space Protection Priorities in the report in Appendix 2. The report was adopted at the town meeting in March, 2006.

Development Vs. Open Space

While many people may view open space or conserved land as being non-productive land, it turns out that open space land is a valuable asset. A 2000 study by state foresters and the U.S. Forest Service reports that each acre of open space land (not built up, excavated, or developed) provides \$1,500 of economic benefit to the state and communities annually (Resource Systems Group, 1999). People also prefer to live near natural or undeveloped areas. The forestry study shows that property adjacent to parks or open spaces is significantly more valuable than those as little as 2000 feet away.

While it would seem to make sense to develop commercial/industrial areas, a 1995 study of all New Hampshire towns found that in general, towns with the most open space have the lowest property tax bills, according to the Ad Hoc Associates, Salisbury, Vermont, in a report prepared for the Squam Lakes Association. The reason is that communities with more commercial area often create more jobs, and as a result require more residential development and community services to house, protect and educate workers and their families.

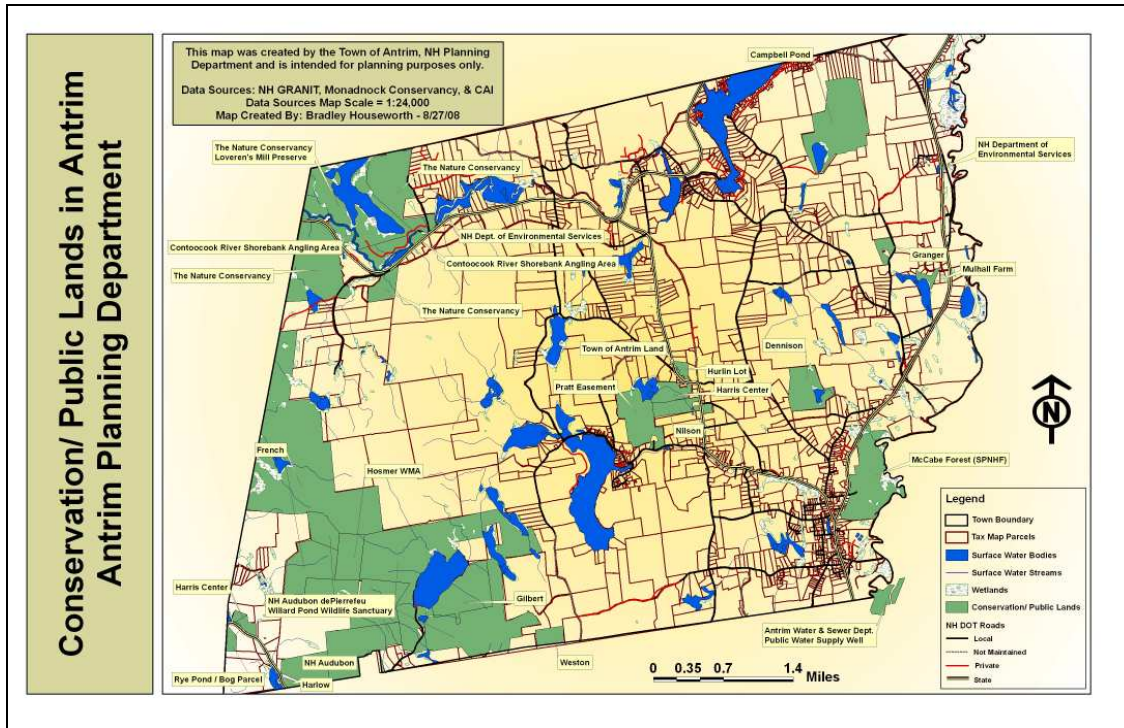
Important Statistics

Before examining what should be conserved and how it should be done, it is important to get a feel for what constitutes Antrim. The following statistics are drawn from Antrim's Open Space Committee report and the town's planning department.

Total Population, 2007 (NH Office of Energy and Planning estimate for 2007)	2,626	
Total Population, 1950	1,030	
Total Population, 1790 (First census taken)	528	
Total Acres of Land	23,367.60	
Total Square Miles of Land	36.50	
Total Acres of Conservation/Public Lands	4,927.66	
Total Square Miles of Conservation/Public Lands	7.50	
Percentage of Conservation/Public Lands of Total Land in Antrim		21%
Total Acres in Current Use	16,183.00	69%
Total Acres of Water	1,571.92	7%
Total Miles of Streams	88.00	
Total Acres of NWI wetlands (includes some surface water) (based on the National Wetland Inventory)	1,592.10	7%
Total Acres of High Yield Aquifer Lands		350.70

High Yield Aquifer Lands Permanently Preserved	Unknown
Municipal Well Head, in acres	121.00
Municipal Well Head Area Permanently Preserved, acres in Bennington	35.75

Trails & Protected Land



Map III-1. Conservation and Public Lands in Antrim, shown in green

Lily Pond, Ziegler/Hurlin Trail

This is a trail system that starts at the Meetinghouse Hill Cemetery and wends its way down the southern flank of Meetinghouse Hill. From the trailhead on Route 31, it continues across the highway and out the rear of the old Center Cemetery. From the Center Cemetery, the trail travels along a deeded trail easement along the stone wall. The trail formally terminates at Lily Pond. Land around the pond as well as at the rear of the Meetinghouse Cemetery is privately owned. The overall trail length is approximately 4,500 feet, with Route 31 transecting the trail at the halfway point. Consideration should be given to preserving the privately owned land.

McCabe Forest Trail

The McCabe Forest Trail is a trail system cared for by the Society for the Protection of New Hampshire Forests (SPNHF). It is a two-mile trail loop that leaves the parking lot off Route 202 and loops through the 192-acre McCabe Forest to the Contoocook River and back.



Trailhead of two sections of the McCabe Forest trails. The parking area is about 100 yards off Route 202 at the intersection of Elm Street.

DePierrefue-Willard Pond Wildlife Sanctuary (Bald Mountain) Trail System

This sanctuary and trail system is maintained by the New Hampshire Audubon Society. The 1,000+ acre sanctuary is the largest New Hampshire Audubon property, and along with additional easements, gifts and protected lands brings the protected lands around Willard Pond to more than 2,000 acres. Willard Pond is about 100 acres in size and is surrounded by Bald Mountain and Goodhue Hill. There are four substantial trails in the system, two of which go to the summits of Bald Mountain and Goodhue Hill.

Loverens Mill Cedar Swamp Preserve

The cedar swamp preserve is a 613 acre conservation project cooperatively developed and maintained by the Nature Conservancy and SPNHF. The preserve is located along Route 9 in an undeveloped section of the North Branch River. It contains several trails which transect portions of the property and lead to the nearly 50-acre boreal, cedar swamp.



Loverens Mill Cedar Swamp, protected by the Nature Conservancy, borders the North Branch of the Contoocook River in northwest Antrim. The white cedar swamp is approximately 4,000 years old and is considered quite rare.

Nature conservation partners have physically connected the preserve to a larger conservation project. This larger project is to include the 5,000-acre SPNHF-owned Pierce Reservation (in Stoddard and Windsor) and the Nature Conservancy's 1,693-acre Otter Brook Preserve.

Meadow Marsh

Meadow Marsh is a short trail (approximately one-half mile) on town property along the wetland areas at the north end of Gregg Lake on either side of Craig Road at the intersection of the former Hattie Brown Road.

Preserving Scenic Areas and Views

Antrim's scenic areas and views should be preserved. In the survey for the master plan, an overwhelming number of residents (102 to 31) wanted some sort of protection for the town's views.

New Hampshire's Office of Energy & Planning issued Technical Bulletin 10, *Preservation of Scenic Areas and Viewsheds*. (See Appendix 3). It recommends that a municipality identify its scenic areas and incorporate specific policies into the zoning and subdivision regulations to protect those areas.

The bulletin says "special vistas, views and scenic areas contribute significantly to the quality of life, add to the value of property, and enhance the desirability and livability of a community."

"When development occurs on or in the vicinity of a well recognized landmark or outstanding view, it can have a dramatic effect upon whether people still consider that place special," the bulletin says.

More than seventy-four percent of the respondents to the master plan survey felt that Antrim's rural character was either the most important characteristic or a very important characteristic for them.

"Rural character" may mean different things to different people. To some it may be the small town quality of Antrim, with its mix of homes and small, locally owned businesses. To others it may mean the surrounding farms, rivers, lakes, and forests. For most it probably is a combination of the two.

Certainly preserving scenic areas and views is a way of preserving that sense of rural character and quality. The bulletin points out that some of a town's most visually pleasing landscape is often privately owned. However, it says, "the public 'uses' the landscape visually." Protecting these resources, it says, provides a significant and tangible benefit. Antrim should consider encouraging the protection of its scenic views through conservation easements.

Topography

Antrim's Mountain and Hills

<u>Mountains</u>	<u>Elevation (ft.)</u>	<u>Hills</u>	<u>Elevation (ft)</u>
Bald Mountain	2,030	Goodhue Hill	1,620
Gibson Mountain	1,330	Holt Hill	1,370
Riley Mountain	1,440	Meetinghouse Hill	1,370
Robb Mountain	1,820	Patten Hill	1,390
Willard Mountain	1,920	Tuttle Hill	1,760
Windsor Mountain	1,450		

Source: *United States Geologic Survey*

The town of Antrim is quite hilly, with much of the town classified as having greater than 15% slopes. Antrim has two large rivers, the Contoocook and the North Branch of the Contoocook Rivers. The Contoocook River flows along the eastern boundary of Antrim. The North Branch flows easterly through the northern third of town. The majority of the steeper slopes occur in the western and northern sections of town.

Slope: Slope is a major factor when reviewing the town's available land for development. Slope is defined as the change in height over a horizontal distance i.e., 10 feet over 100 feet equals a 10% slope. The Antrim Town Slope Map shows four slope classes. These are:

Flat-Lying Slopes: These are slopes that would be described as flat to gentle slopes between 0% and 8%. These are generally the types of slopes that are most favorable to development because of the ease of site construction and development. Development in flat slope areas may be hindered by restrictions due to wetlands, poor soil/bedrock conditions, floodplains or Shoreline Protection areas.

Moderate Slopes: These are slopes that fall between 8% and 15%. These slope areas can be developed but at a greater cost. Costs due to steeper slopes are predominantly tied up in site design and initial construction.

Steep Slopes: These are slope areas that fall between 15% and 25%. These slopes cannot be developed without extraordinary means.

Excessively Steep Slopes: These are slopes that are greater than 25%. They are generally considered unfeasible for development, due to the costs of site work.

Important Timberlands

Much of Antrim's landscape is heavily wooded. A large portion of this is located in the Rural and Rural Conservation Zoning Districts of town. These two districts occupy over seventy percent of Antrim's land mass. There are hundreds of undeveloped acres in town

under single title ownership. These woodlands are viewed as a renewable resource and are logged on a regular basis. A typical woodlot cut frequency is between 25 and 50 years. What is important for the purposes of this document is the recognition of the potential environmental problems that can occur if care is not taken during woodlot harvesting.

Timber harvesting, if proper erosion control management practices are not utilized, can expose soils to severe erosion. Severe erosion can occur during the construction of skid roads, haul roads, landings, and the cutting of timber on steep slopes. Without proper erosion control mechanisms in place, severe soil erosion may also cause harmful and unlawful sedimentation of wetlands and water bodies, negatively impacting aquatic life by adding nutrient and sediment loads to nearby water bodies. There are techniques, known as “Best Management Practices” to control erosion during timber harvesting. The main goal of these practices is to control the water and reduce its effect on the exposed soils. This may be accomplished through the use of proper road ditching, construction of water bars and dips, and proper placement of culverts. Additional erosion control is accomplished through the utilization of silt fences and hay bales, which are placed between exposed soils and water bodies.

Significant Wildlife Areas

While much of Antrim is a habitat for wildlife, certain areas stand out for the abundance and diversity of wildlife. Some of the more notable mammals are: deer, moose, black bear, muskrat, woodchuck, porcupine, beaver, squirrel, chipmunk, mink, fisher, otter, skunk, weasel, raccoon, red fox, and coyote. There are also a wide variety of snakes, reptiles, birds and fishes. For a complete list of wildlife and plant life in the Contoocook and North Branch River corridors see Resources Assessment from the *Contoocook and North Branch Rivers Local Advisory Committee River Corridor Management Plan*, Appendix 4.

The Rural and Rural Conservation Districts are the districts that have been identified by their nature to be home to many of these creatures. The more diverse the wildlife species, the greater the need for diverse habitats. Some species require only small areas – less than an acre. Others need hundreds (or even thousands) of acres and some require a mix of different habitat types throughout the year. A diverse habitat is one that consists of a variety of landforms and vegetative cover, for example: open fields, woods, streams, marshes, ridges, and valleys. Significant habitats will typically be connected by migratory routes or wildlife corridors. Frequently, these are found along streams and rivers, ridgelines, large tracts of undeveloped woodlands, etc.

The large tracts of preserved land in the western and northwestern portion of Antrim are part of an even larger super sanctuary that provide animals that need large areas of land a chance to thrive.

A major threat to wildlife is scattered development that results in fragmentation of the habitat. Wildlife might then be “stranded” in areas not large enough to support them. The

establishment of the Rural Conservation District in 1989 was believed to help thwart intrusive and fragmented development. This again leads to the importance of sound, prudent zoning regulations.

Conclusion

Antrim needs to find a sensible balance between economic development and conservation efforts. However, preserving our most valuable lands and water bodies doesn't happen by accident. It takes hard work, funding, and townspeople dedicated to preserving the land.

There are various organizations that can help the town preserve some of its best land. Antrim's Conservation Commission and Open Space Committee are two obvious choices. Other organizations such as the Trust for Public Lands, the Nature Conservancy, the Harris Center, and the Society for Protection of New Hampshire Forests, to name just a few, can be willing partners in helping the town preserve much of its wilderness. But, as a spokesman for the Trust for Public Lands said, it will not work with a town which is not committed to preserving the land. In other words, it is up to the townspeople to want to preserve the land.

Waiting too long to try to preserve land means there will be less and less to choose from and what is available may be choked by residential or commercial/industrial development.

Recommendations

- Allow cluster development in all zones in Antrim, particularly in the rural and rural conservation zones. This will help promote land conservation where development may be inevitable.
- Actively work with the state and the other organizations involved in the Quabbin to Cardigan initiative to preserve the large, undeveloped areas of Antrim, particularly in the western portion of town. Once developed, these areas can never be recovered for open space.
- Work to carry out the recommendations of the Open Space Committee as adopted by Town Meeting, March 2006, and set forth in Appendix 2.

Energy Usage and Conservation

Antrim, like the rest of New Hampshire, is feeling the pinch when it comes to rising energy costs. Our appetite for more and more energy hits us in the pocketbook while damaging the environment.

There is no question that Antrim residents want to do something to reduce energy consumption not only to hold our costs down but to reduce the effects of global warming. Antrim was one of 164 towns in New Hampshire to adopt the New Hampshire Climate Change Resolution in 2007.

The resolution reads:

“Whereas, The protection of our forests, air and water quality, fisheries and other natural resources are important to the health and quality of life of our citizens; and

“Whereas, There is evidence that climate change is already impacting New Hampshire’s environment and natural resources, from increased intensity of storms, higher sea level, less snow cover, and more winter rain; and

“Whereas, New Hampshire state government has taken steps to lead by example by reducing energy use of state operations and committing to an overall state goal of using 25 percent renewable energy by 2025; and

“Whereas, The residents of many New Hampshire towns passed the New Hampshire Climate Change Resolution, calling for a national program to reduce U.S. greenhouse gas emissions while protecting the U.S. economy, to create a major national research initiative to foster rapid development of sustainable energy technologies, and encouraging towns to start local energy committees to seek ways to save energy, reduce emissions and save taxpayer dollars;

“Now, therefore, I John Lynch, Governor and the Executive Council of the State of New Hampshire, do hereby commend the New Hampshire Climate Change Resolution and local volunteers for bringing this issue to New Hampshire’s town meetings and community leaders.”

Credit for Information That Follows

Before proceeding further, it should be noted that much of the information and data that follows was gathered from the Regional Planning Commission’s master plan energy chapter for the Rockingham Planning Commission. It, in turn, relied heavily on the Intergovernmental Panel on Climate Change (IPCC) reports. The IPCC was formed in 1988 through the United Nations Environmental Programme and the World Meteorological Organization. The Regional Planning Commission says the IPCC’s latest report, released in 2007, “is well regarded as the single most comprehensive and unbiased report on climate change.” The Regional Planning Commission also said in its conclusion of the chapter, “...this chapter has been developed in a modular format to serve as a template for communities to amend and adopt into their master plan. It offered a background on the scientific data of global warming, depicted the baseline energy consumption trends of the region and summarized current programs. When this plan is combined with

community energy information and community goals it could serve as an action plan to guide communities towards reduction of energy use and greenhouse gas emissions.”

Impact of Global Warming on New Hampshire

Global warming is caused by the greenhouse effect. Just as a real greenhouse produces heat from the sun shining into it, the earth’s atmosphere allows solar radiation to be absorbed by the earth’s surface. When absorbed, the radiation is converted to heat and emitted as infrared radiation into the atmosphere. Some gases such as carbon dioxide, methane, chlorofluorocarbons, nitrous oxide, ozone, and water vapor absorb some of the infrared radiation which causes the earth’s atmosphere to heat up.

Scientists have taken ice cores in Antarctica which show the correlation between carbon dioxide and temperature changes for the past 400,000 years. As carbon dioxide levels increase, so do atmospheric temperatures; when they fall, temperatures also fall. Scientists have found that historically, carbon dioxide levels have varied between 180 parts per million by volume (ppmv) to 300 ppmv. According to the National Oceanic and Atmospheric Association (NOAA), estimates of atmospheric carbon dioxide reached 386 ppmv in 2007.

How has this affected New Hampshire? According to C.P. Wake at the University of New Hampshire’s Climate Change Research Center, in *Indicators of Climate Change in the Northeast*, 2005, there have been notable changes. The weather has become hotter, wetter, and more extreme.

- Average Northeast Temperature Change from 1899 to 2000: annual, up 1.8°; winter, up 2.8°; spring, up 1.9°; summer, up 1.7°; fall, up 0.7°.
- Total precipitation has increased 3.3 inches from 1899 to 2000 and the frequency of extreme precipitation events also has increased.
- Snowfall has decreased significantly in northern New England and northern New York from 1970 to 2000.
- Days with snow on the ground have decreased 16 days from 1970 to 2000.
- Ice-out of lakes occurs 9 days earlier in the northern/mountainous regions and 16 days earlier in the southern regions of New England from 1850 to 2000.
- Sea surface temperatures have increased 1.1° in the Gulf of Maine from 1880 to 2001.
- Relative sea level has increased 16 inches at New York City from 1856 to 2001.
- Growing season has increased by 8 days from 1899 to 2000.
- Lilac bloom dates are 4 days earlier and apple and grape bloom dates are 8 days earlier from 1965 to 2000.

How This Affects New Hampshire

Shorter, warmer winters mean fewer tourism dollars for skiing, snowmobiling, and ice fishing, according to Eric Steltzer, regional planner with the Rockingham Planning Commission. Its

master plan says, “agricultural industry will be affected by a longer growing season and habitat changes which will affect crop output. Specifically, maple syrup production is shown to begin 10 days earlier, end 10 days later and the syrup runs for approximately 3 days shorter compared to 40 years ago. The seacoast areas will be affected by sea level rises and the increase in storm intensity, causing insurance companies to pull their coverage for coastal areas... The health industry will be affected by increased respiratory and heat related illnesses.”

New Hampshire’s Power Usage

Global warming is not our only problem. Our energy usage has increased at an alarming rate. In 1990, the total energy consumption in New Hampshire was 264.6 trillion British Thermal Units (BTUs).¹ At that time the state population was 1,109,117, which means each resident consumed 239 million BTUs. By 2004, the state’s energy consumption had grown by 28.7% to 340.6 trillion BTUs, but the population grew by only 17.1%. The energy consumption per capita in 2004 rose to 262 million BTUs or a 9% increase from 1990 to 2004.

Breaking down energy usage by sectors, the commercial sector grew 73.8% from 1990 to 2004. Transportation grew 49.6% for the same period. The residential sector in 1994 consumed 29.8% of the state’s energy making it the state’s largest consumer sector. From 1994 to 2004, the residential consumer sector grew 26.4%. It was second only to the growth in transportation.

Petroleum products, including gasoline, propane, home heating oil, and diesel, are the primary fuel sources, providing 60% of the energy used between 1990 and 2004. The use of natural gas has increased dramatically over those 14 years. In 1990, the primary use for natural gas was for heating and accounted for only 5.5% of total energy consumption. By 2004 it had become the third largest fuel source, accounting for 18.9% of total energy consumed. In 1990 there were no natural gas power plants. By 2004 several natural gas plants came on line, producing 5.4 million megawatt hours, or 22.6% of all electricity generated in New Hampshire.

The Seabrook nuclear power plant is the largest in New England. It is the largest source of electricity in the state, producing 42.6% of the state’s needs. However, because Seabrook accounts for a lot of electrical output, 34.2% of its generation is exported out of New Hampshire. Renewable energy provided only 4% of the state’s energy needs in 2004. Coal usage in the U.S. as a whole accounts for 50% of the electricity generated. In New Hampshire, coal accounts for 17.1% of the generation.

Energy use patterns in New Hampshire are similar to the rest of New England. Per capita use for our state is 262 million BTUs, compared to 258 million BTUs for the rest of New England. However, New Hampshire fares better when compared to the rest of the U.S. which consumes 341 million BTUs per capita.

One of the key motivations in becoming more energy efficient is the rising price of fuel. Oil prices have risen drastically during the last quarter of 2007. The price of oil flirted with the \$100

¹ A BTU is defined as the amount of energy required to raise the temperature of one pound of water 1 degree Fahrenheit. To put it into perspective, burning a cord of wood produces roughly 20 million BTUs.

per barrel range in the last quarter of 2007. The table below provides a perspective on the growth of energy prices since 1990.

Fuel	Price in 1990	Price
No. 2 Oil (\$/gallon, excluding tax)	\$1.25	\$ 3.85, March 2008
Natural Gas (\$/1000 cubic feet)	\$7.80	\$ 19.01, July 2008
Propane (\$/gallon, excluding tax)	\$1.25	\$ 3.12, March 2008
Gasoline (\$/gallon, excluding tax)	\$0.95	\$ 3.59, Sept. 2008
Electricity (cents/kilowatt hour)	10.05¢	15.75¢, May 2008

Source: Energy Information Administration

New Hampshire's Carbon Dioxide Emissions

Global warming is tightly bound with carbon dioxide emissions (other gases, such as methane also play a role). However, carbon dioxide emissions are pervasive in our society. Between 1990 and 2004, carbon dioxide emissions in New Hampshire have increased by 33%. Historically, the transportation sector has been the number one emitter of carbon dioxide. However, between 2002 and 2004 emissions from the electric power sector increased sharply. The table below shows the trend for each sector.

Carbon Dioxide Emissions in Million Metric Tons²

Sector	1990	2004	Percent Increase
Residential	2.4	3.4	41%
Commercial	1.3	1.8	38%
Industrial	0.9	1.2	33%
Transportation	5.1	7.7	50%
Electric Power	4.8	7.8	63%
Total	14.6	21.8	49%

New Hampshire Regulations

The problems associated with the drastic increase in energy usage and the accompanying increase in greenhouse gas emissions have not gone unnoticed by the state. New Hampshire has a number of regulations that support and encourage energy conservation and use of renewable energy sources.

- RSA 672:1 III-a states: “Proper regulations encourage energy efficient patterns of development, the use of solar energy, including adequate access to direct sunlight for solar energy uses, and the use of other renewable forms of energy, and energy conservation. Therefore, zoning ordinances should not unreasonably limit installation of solar, wind, or other renewable energy systems or the building of

structures that facilitate the collection of renewable energy, except where necessary to protect the public health, safety, and welfare.”

- RSA 21-I:19-d allows a municipality to contract with a pre-qualified energy service company to make energy efficient upgrades to be financed through the energy service company and to be paid off over time through the energy savings. There are no upfront capital costs for the municipality. A performance contract also protects the municipality by requiring the company to meet a certain reduction in energy use. If the goal is not met, the company pays the difference in the energy bill.
- RSA 72:61-72 allows municipalities to offer a property tax exemption on solar, wind and woodheating energy systems. The systems include solar hot water, solar photovoltaic, wind turbine or central wood heating systems (not including stovetops or wood stoves). As of 2006, Antrim does not offer property tax exemptions for these renewable energy resources.
- RSA 53-E allows residents, businesses and municipalities to form a Community Choice Aggregate (CCA) to combine their electrical demand in order to receive a reduction in price.

Be Innovative in Our Thinking and Implementation

Antrim should look at the obvious forms of energy conservation, but it shouldn't be afraid to encourage innovative solutions for some of the larger projects. Below are three examples of how other municipalities solved energy problems while saving money and increasing energy efficiencies at the same time. It should be noted here that while the Town of Antrim believes that energy conservation should be everyone's concern and responsibility, the following section should not be viewed as suggesting a mandate to non-residential users or potential businesses. We believe that commercial and manufacturing concerns will know best how to mitigate their energy needs and will take responsible steps in that direction as needed, steps that may be encouraged through reasonable and flexible regulations of the town.

Epping Energy Efficiency Article 22

In early 2007, the voters in Epping, New Hampshire, approved Article 22 which requires new non-residential buildings to implement energy efficiency and production, energy conservation, and sustainable design principles. A point system was established and non-residential buildings must earn a certain number of points based on their square footage. For example, a building 5,000 square feet or less must earn 5 points. A building of 50,001 square feet or larger must earn 25 points. Use of wind, photovoltaic panels, fuel cell based co-generation, use of biomass and bio-synthetic oil co-generation are among the ways designers can earn points.

Clay Mitchell, town planner, said TD Banknorth originally came forward with a design for a bank that met the 5 points necessary for approval. However, later it returned with a new design which achieved 15 points – the highest yet proposed for a building. Among the design changes was a system for using gray water to flush toilets and a solar power array for generating electricity.

Another business which supplies bricks, stones and masonry supplies constructed a new 4,000 square foot showroom. It features windows sealed with foam insulation which is better than fiberglass; four furnaces that eliminate trying to heat the showroom from a distance with the attendant heat loss. The company also recycles the water used in cutting and finishing counter tops to help reduce water consumption and keep from polluting streams.

Some Epping residents felt the innovative energy provision might put a damper on development. However, Mitchell said that businesses are using it as a selling tool in promoting their businesses.

Waste Water Treatment Plant

Up until 2003, the wastewater treatment plant in Essex Junction, Vermont, used only half of its waste methane gas produced by its anaerobic digester to fire the boiler that heated the digester. The remaining methane was flared because methane is 20 times more effective at trapping heat than carbon dioxide.

The facility officials had been considering installing a combined heat and power (CHP) system and power it with methane from the digester. However, they weren't sure that sufficient digester temperatures could be maintained. Also, it was not clear that it would meet the governing board's 7-year payback period. The system also would be required to emit no more pollutants than flaring methane.

Funding was found through various organizations and governmental agencies. Northern Power designed micro-turbines that can run either on methane or natural gas. Before the co-generation was installed, the treatment plant paid out \$100,000 per year for electricity. After installation, electric costs dropped \$37,000. At first it was assumed the micro-turbines would operate a total for both of 40 hours per day. However, both have run for a total of 48 hours per day, saving 80,000 kwh of electricity per year.

Other benefits of the project include preventing carbon dioxide emissions of 600,000 pounds per year, using nearly 100% of its waste methane, compared to 50% before, and demonstrating the viability of methane-fired cogeneration at a small facility (Essex Junction has a daily average flow of 2 million gallons per day).

Gas-To-Energy Project

In Antioch Village, Illinois, a closed 51-acre landfill was authorized by the U.S. Environmental Protection Agency to be used as a source of methane gas. The gas will be used to heat and power the Antioch Community High School only half a mile away.

The landfill holds about 2 million tons of waste. With the help of grants and bonding, the \$1.9 million project will heat the 262,000 square foot school and generate 360 kw of power. The power and electricity will be generated by 12 Capstone MicroTurbines located on school property. Any additional electricity generated is to be sold back to the power company. Each microturbine produces 290,000 BTUs per hour at 550° F. The exhaust from the turbines is routed

through a waste heat recovery system. By varying flow and inlet fluid temperature a wide variety of needs can be met for hot water.

When waste heat recovery is not required, the exhaust can automatically be diverted around the exchanger, permitting electrical output only. Also, during months when the school is not in use, all of the heat from the waste heat recovery system is diverted to other area businesses or industries. Starting in 2003, the annual savings to the school in energy costs was estimated to be over \$100,000 annually.

Some of the other benefits of the project include:

- Low energy costs for the high school.
- Revenue from sale of electricity to the power company.
- Clean, complete combustion of waste methane gas.
- Waste heat for internal use in the high school.
- Reduced greenhouse gas emissions.

Biodiesel - An Alternative to Petroleum Diesel

Antrim should look into using biodiesel to power its diesel engines. Biodiesel is made from vegetable oils (commonly soy), animal fats or recycled waste grease. It can be used alone or it can be blended with petroleum diesel fuel. When used in its pure state it may cause damage to rubber parts. However when it is blended with petroleum fuel at a 20% rate of biodiesel to 80% regular diesel, no damage to engines will occur, according to the National Biodiesel Board.

The advantage of using a blend of biodiesel is that it will dramatically reduce emissions and lessen our dependency on foreign oil.

The table below shows the reduction of air pollution for pure biodiesel (B100) and a 20% blend of Biodiesel with 80% petroleum diesel (B20).

**Average Biodiesel Emissions Compared to Conventional Diesel,
According to EPA**

Emission Type	B100	B20
Regulated		
Total Unburned Hydrocarbons	-67%	-20%
Carbon Monoxide	-48%	-12%
Particulate Matter	-47%	-12%
Nox (various nitrous oxides)	+10%	+2% to -2%
Non-Regulated		
Sulfates	-100%	-20%
PAH (Polycyclic Aromatic Hydrocarbons)	-80%	-13%
nPAH (nitrated PAH's)	-90%	-50%
Ozone potential of speciated HC	-50%	-10%

According to the biodiesel website (www.biodiesel.org), “sulfur emissions are essentially eliminated with pure biodiesel.” Sulfur emissions are major components of acid rain. Also, the smog forming potential of biodiesel is less than that for regular diesel fuel.

Antrim looked into using biodiesel previously, but there was concern over whether it would gel up during winter. According to the [biodiesel.org](http://www.biodiesel.org) website, “biodiesel will gel in very cold temperatures, just as the common #2 diesel does....typical blends of 20% biodiesel are managed with the same fuel management techniques as #2 diesel.” Minnesota has been running a biodiesel program for several years, apparently with no problems due to cold temperatures.

Tests have also shown that B20 provides similar engine performance as regular diesel fuel. It was consumed at a similar rate as #2 diesel with horsepower, torque, and haulage rates equivalent to those engines using conventional diesel fuel.

Other municipalities, organizations and the state are using biodiesel including the City of Keene, Keene State College, the University of New Hampshire and the New Hampshire Department of Transportation. In addition, Rymes Heating Oils, Inc. provides biodiesel fuel.

Antrim should take another look at biodiesel fuel.

Perform Public and Private Energy Audits

In late 2007 Antrim formed an energy committee to look at energy usage and to find ways to eliminate wasted energy and improve efficiencies. The first task of the committee was to audit the energy usage in the town’s public buildings and vehicles. The committee also sold energy saving compact fluorescent bulbs at little or no cost to residents. The program was well received and almost all the bulbs were sold. The committee likely will offer a similar program in the future.

For individuals there are many ways to cut energy usage. Public Service of New Hampshire (PSNH) points out that “if every American home replaced their five most frequently used lights or the bulbs in them with ones that have earned the ENERGY STAR, each home would save about \$60 a year in energy costs, and together we’d save about \$6.5 billion each year in energy costs and prevent greenhouse gases equivalent to the emissions from more than eight million cars.”

Also consider having a professional energy audit performed on your house. Go to www.psnh.com for more information about what is involved in an energy audit of your home.

PSNH offers a free lighting catalog which lists many energy efficient products that customers can use to cut their electricity bill and save power at the same time. PSNH’s website offers ideas and products under its efficiency programs including:

- Energy Star Homes
- Home Energy Solutions
- Home Energy Assistance
- Energy Star Lighting
- Energy Star Appliances

- HEATSMART
- Renewable Rate
- Tax Incentives
- Tools and Calculators

Antrim’s Recent Conservation Measures

In 2003 and 2004, Antrim began looking seriously at ways to use electricity more efficiently. Working with Public Service of New Hampshire (PSNH), the town embarked on a street light replacement program to replace older inefficient lighting systems with newer more energy efficient systems. It also entered into another agreement with PSNH to determine what changes in power use could be made to make town buildings more efficient.

PSNH did a study of Antrim’s street lighting. It suggested the town convert from the Municipal Outdoor Lighting *Rate OL* to the Energy Efficient Outdoor Lighting *Rate EOL*. To make the conversion Antrim would change over existing street lights to either high efficiency high pressure sodium or all-metal halide. The study indicated the following:

	<u>Conversion Cost</u>	<u>Annual Savings</u>	<u>Simple Payback Period</u>
High Pressure Sodium	\$33,863	\$5,168	6.6 Years
Metal Halide	\$41,291	\$3,581	11.5 Years

In the second program called Pay-As-You-Save (PAYS), PSNH pays all of the costs associated with the purchase and installation of approved measures such as lighting, including LED exit signs, occupancy sensors, programmable thermostats and hot water insulation wraps. A PAYS Purchase and Installation Charge, calculated to be less than the monthly savings, is added to the town’s monthly electric bill until all costs are repaid.

The following chart shows how meaningful these savings are.

Facility	Project Cost	Antrim Cost-Share	Annual Savings (Conservative)	Payback (Years)
Sewer and Water Department	\$3,064.94	\$1,532.46	\$449.98	3.41
James Tuttle Library	\$2,005.20	\$1,002.59	\$349.15	2.87
Antrim Town Barn	\$1,314.10	\$657.04	\$423.44	1.55
Antrim Grapevine	\$702.21	\$351.08	\$265.14	1.32
North Branch Fire Station	\$934.84	\$467.42	\$402.24	1.16
Antrim Fire Station	\$3,277.20	\$1,638.57	\$649.40	2.52
Antrim Transfer Station	\$875.63	\$437.79	\$195.94	2.23

TOTAL	\$12,174.12	\$6,086.95	\$2,735.29	2.23
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It is interesting to note that the town’s electric costs have not increased since 2004 and that includes our share of the cost for the new lights, so the savings have been greater than originally anticipated above.

Cool Monadnock

Cool Monadnock is a three-year collaborative project for 36 southwest New Hampshire regional communities, including Antrim. Antioch New England Institute and Clean Air-Cool Planet will provide training, coordination and technical assistance to the region’s towns and cities. Cool Monadnock’s first goal is to “quickly accomplish a 10% reduction in GHG (greenhouse gases).”

Other goals are:

- “To achieve personal commitment and actions from a significant number of residents and businesses to reduce GHG emissions.”
- “To stimulate 300 communities throughout New Hampshire and New England in implementing significant community engagement approaches to reducing GHG.”
- “To create a model of regional collaboration that can be implemented in other regions in the northeast.”

Businesses, local governments, residents and students will partner together to develop effective strategies and actions to reduce greenhouse gases, save on energy costs and support public health. Cool Monadnock also works with Southwest Regional Planning Commission and other agencies to deal with climate change.

Cool Monadnock says that community-level action is very important because there is virtually no federal leadership for this issue. Towns throughout the U.S., it says, can play a major role in reducing green house gas emissions.

Areas that can be targeted to reduce emissions include land-use planning, transportation planning and mass transit, reducing local government energy use, local forestry, power generation, residential energy and solid waste. Communities working collaboratively can institute multi-town efforts to reduce greenhouse gases.

The organization’s task force “will prepare a regional climate action plan that identifies a range of actions to reduce GHG emissions that can be undertaken on both the regional and community levels.” One reason a regional approach is a sound idea is that some green house gas emissions activities such as transportation are regional in scope. Also, the organization points out that a collaborative effort can help towns achieve economies of scale such as in fluorescent light bulb change-out programs.

The lead partners include Antioch New England Institute (ANEI), a consulting and community outreach department of Antioch University New England. Cool Monadnock says “ANEI promotes a vibrant and sustainable environment, economy, and society by encouraging informed civic engagement. It provides training, programs and resources (U.S. and international) in leadership

development, place-based education, nonprofit management, environmental education and policy, smart growth and public administration.” Clean Air-Cool Planet is another lead partner. It is dedicated to finding and promoting solutions to global warming. It partners with campuses, companies, communities and science centers in the Northeast to help reduce their carbon output. It helps partners, constituents and other regional leaders to understand global warming and find ways of dealing with the problem. Christa Koehler, a former city planner for Keene, is a project co-director along with James Gruber, the Antioch New England Institute co-founder.

Cool Monadnock’s website has a wealth of information on its three-year project, including a calendar of events, using compact fluorescent bulbs, reaching out to students and social organizations to spread the word and get help with projects, etc. The website also has a page where everyone can see what the individual towns and cities in Cool Monadnock have done to date. See www.coolmonadnock.org.

Encourage Renewable Energy Resources

According to RSA 674:17(j), planning boards should “...encourage the installation and use of solar, wind, or other renewable energy systems.” RSA 674:36(k) also encourages “the installation and use of solar, wind, or other renewable energy systems and protect access to energy sources by the regulation of orientation of streets, lots, and buildings...and encouragement of the use of solar skyspace easements under RSA 477.”

Further information on ways to improve Antrim’s energy efficiency and conservation can be found in *New Hampshire Handbook on Energy Efficiency and Climate Change* by Clay Mitchell, Julia Dundorf and Wes Golomb. See Appendix 5. Also see www.carboncoalition.org.

Antrim should also consider offering property tax exemptions to encourage the use of solar, wind and wood heating energy systems. These systems include solar hot water, solar photovoltaic, wind turbine or central wood heating systems (not stovetops or woodstoves). Presently 62 towns and cities in New Hampshire offer tax exemptions on one or more of these systems.

Constructing Green Buildings

The U.S. Green Building Council addresses what can be done to reduce energy use during construction and post construction. It has developed the Leadership in Environment and Energy Design (LEED) criteria which is the benchmark for design, construction, and operation of environmentally friendly buildings. Its criteria apply to new construction, existing buildings, homes and schools.

Its rating system considers sustainable site, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and innovation and design process. The number of points a project receives determines the level of certification it receives. The ratings are: Certified (26-32 points); Silver (33-38 points); Gold (39-51 points); and Platinum (52-69 points).

Communities can adapt the system to encourage good practices and use of construction materials that are environmentally friendly. Note that this is similar to the Energy Efficiency program,

Article 22, adopted by Epping. (See section above about being innovative). Tied to this point system, communities use incentives such as tax breaks, reduced fees, expedited reviews, density increases, etc. The system can be tied to municipal, residential, and non-residential construction from new buildings and houses to additions and home improvements.

New Hampshire State Energy Plan

In 2002, the state drafted a 10-year state energy plan. The plan says the single most cost effective means to address energy concerns is to improve energy efficiency. It also is a guide for municipalities to use in addressing energy concerns. For more information, see www.nh.gov/oep/programs/energy/StateEnergyPlan.htm.

Other Resources for Planning and Implementation

There is a great deal of information, grants, software, organizations and tools available from the state and non-profit groups that can be tapped by Antrim for assistance.

- ICLEI – Local Governments for Sustainability offers software that can be used to inventory current energy use, set reduction targets, and provide plans for evaluating a community’s progress. It is called Clean Air and Climate Protection (CACP). It covers transportation, residential, commercial, and industrial energy use. The software can be downloaded from www.iclei.org.
- EPA Energy Star Program. The EPA provides Portfolio Manager software to perform energy audits. Communities are invited to join the campaign to reduce energy consumption by 10%. To date, the state, Dover, Rochester, Somersworth, and Nashua have signed on. See www.energystar.gov.
- RETSCREEN. It is similar to EPA’s software but offers cost analysis for system improvements. RETSCREEN is produced in Canada. It is used to determine the viability of clean energy products. It is in use by 129,000 people across the world. It is downloadable from www.retscreen.net
- Sierra Club Cool Cities. The project provides guidance on what can be done to reduce greenhouse emissions. Municipalities which adopt the U.S. Mayors Climate Protection Agreement can become members of cool cities. See www.coolcities.us.
- U.S. Mayors Climate Protection Agreement. Since being created in 2005, over 680 mayors from three Canadian provinces and municipalities in all 50 states have joined to reduce global warming. In New Hampshire, Dover, Hanover, Keene, Manchester, Nashua, Portsmouth and Rochester have adopted the resolution. See www.usmayors.org/climateprotection.
- Clean Air-Cool Planet helps communities institute programs to reduce greenhouse gas emissions. Some programs include community-owned wind turbines, performance contracting experiences, LED streetlights, etc. Located in Portsmouth, the non-profit organization provides a wide range of projects

and assistance, including help in starting up an energy committee. See www.cleanair-coolplanet.org.

- Performance Contracting. RSA 21-I:19-d allows a municipality to contract with an energy service company (ESCO) to make energy efficient upgrades to be financed through the ESCO and paid off over time through the energy savings. There are no up-front capital costs to the town. If the agreed-upon level of savings is not achieved, the ESCO must pay the difference in the energy bill.
- Community Choice Aggregation. Under RSA 53-E, residents, businesses and municipalities “aggregate” their electric load together to form a Community Choice Aggregate (CCA). The CCA is formed by the community or region’s legislative body or bodies to competitively bid for electricity, among other benefits.
- NH Carbon Challenge provides information about how individuals can cut greenhouse gas emissions. Communities can use their materials to create a residential campaign. Go to <http://carbonchallenge.sr.unh.edu/>.
- Systems Benefit Charge (SBC) was begun in 2002 by the Public Utility Commission. It is a charge on electric bills which fund two energy efficiency programs run by the utilities. One program is the Low Income Assistance Program which subsidizes costs for eligible households. The second program is the Energy Efficiency Program for residential and commercial customers. Another program for municipalities is the Smart Start program. It allows municipalities to upgrade lighting to more efficient lighting and pay for the upgrades through the energy savings. See www.nhsaves.com.
- Database of State Incentives for Renewable Energy (DSIRE). This is a collection of financial incentives and rules applicable to renewable energy projects for all the states and the federal government. It lists many different programs available to New Hampshire through the state, utilities and the federal government. It also covers NH Renewable Portfolio Standard and the U.S. Department of Energy’s Alternative Fuels. Go to www.dsireusa.org.
- The U.S. Department of Agriculture offers grants between \$75,000 and \$5 million through its High Energy Cost Grant Program. It is open to individuals and municipalities. Go to www.usda.gov/rus/electric/hecgp/overview.htm.
- New England Grassroots Environmental Fund is a nonprofit organization which offers small grants to fund grassroots environmental projects. Past projects include maps for conservation lands, creation of urban gardens and municipal energy efficiency programs. The fund is encouraging energy committees to seek funding. Its website is: www.grassrootsfund.org.

Conclusion

There are a wide variety of programs, potential funding and assistance available to New Hampshire municipalities to help them reduce greenhouse gas emissions, conserve energy and make the towns

as a whole more energy conscious. There is no question that the United States has, up to now, done very little to reduce our dependence on foreign oil, cut back harmful energy emissions, and make our society more aware of what the consequences are if we don't mend our ways.

Global warming is a real threat not only to the United States but to the world. Glaciers are melting away; the Arctic ice cap is shrinking which is threatening the polar bears' survival; oceans are rising; storms are becoming more intense. Scientists around the world are detecting a wide variety of changes. They are concerned that it could lead to large scale extinctions and changes to regions of the earth which can or cannot grow food. Coastlines will change as the ice caps melt and the oceans rise. There is even concern that continued warming ultimately could put an end to the Gulf Stream current which would have dire consequences for the world.

Antrim has created an energy committee – a positive first step in making our town more energy conscious and efficient. The committee alone is not enough. All Antrim residents, households, and businesses have to do their part. We should be driving more fuel efficient cars, replacing incandescent bulbs with energy-efficient bulbs and paying attention to Energy Star ratings when purchasing appliances and other products. All are important steps that residents can take to make Antrim more energy efficient while saving money in the process.

Recommendations

The Energy Committee has begun an energy audit for the public buildings in town to see where energy waste may be occurring and how to make them more efficient. Other steps the town can take include:

- Offer incentives in the form of property tax exemptions for residents or businesses who install renewable energy systems such as wind turbines and photovoltaic panels.
- Install the EPA Portfolio Manager software or the RETSCREEN software to manage the data from energy audits and to set goals for energy reduction over time.
- Thoroughly explore all the various programs listed in this document and any others that come to light so that the town can make intelligent choices about energy conservation and planning and take advantage of any grants or financial help that may be available.
- Conduct a feasibility study for creating a Community Choice Aggregate (CCA) to improve energy efficiency services, expand renewable energy and stabilize energy costs.
- Consider entering into a Performance Contract with an energy service company (ESCO).
- Establish point standards similar to those set up by the U.S. Green Building Council LEED certification to promote energy efficiency in future construction. Also, see the discussion above about Epping's modification of the point system to fit its own needs.

- Encourage smart growth principles such as mixed use, centralized development, higher density, and alternative transportation to reduce energy use.
- Reevaluate using biodiesel fuel for Antrim's diesel engines.

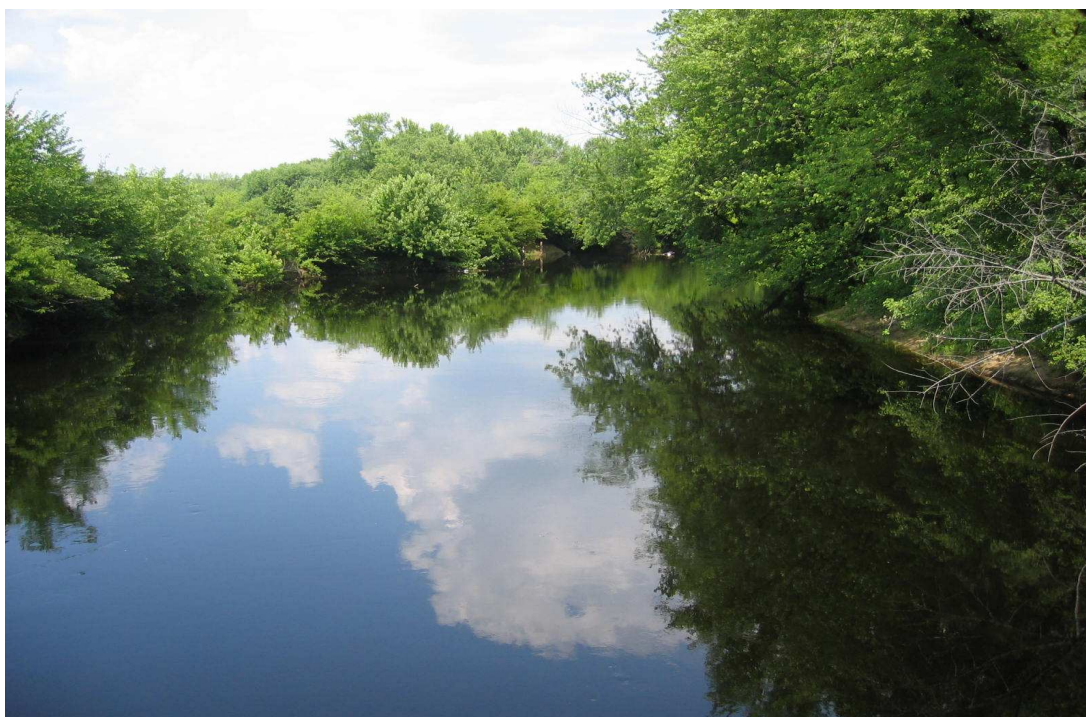
Water Resources

Introduction

Antrim has a diversity of water resources, from small wetlands and vernal pools to the two main rivers, the Contoocook and North Branch of the Contoocook. An overwhelming majority of townspeople want to preserve our small town's natural and rural character. Certainly our rural nature is closely tied to the rivers, lakes, and ponds. They punctuate the landscape to provide visual appeal. We also rely on them for a wide variety of recreational pursuits. They help support our common and rare plant life and provide food and cover for a large variety of fish, waterfowl, mammals, and amphibians. Without our water resources our town would not have the charm and appeal it now has. Pure, clean water is vital not only for our good health and well being but also for the generations who follow us.

Watersheds

Antrim has one main watershed, the Contoocook River, which is part of the Merrimack River Basin. Our watershed can be broken down into the Contoocook River, the North Branch of the Contoocook River, Great Brook and Cochran Brook.



The Contoocook River at the Antrim-Deering bridge in Antrim. A slow-moving river, it is a favorite for people who want to take a leisurely canoe trip or fishermen interested in casting for cold and warm water species of fish.

The State of New Hampshire has established a Rivers Management and Protection Program. The policy statement for the program, RSA 483:1, says that “New Hampshire’s rivers and streams comprise one of its most important natural resources, historically vital to New Hampshire’s commerce, industry, tourism, and the quality of life of New Hampshire people.”

Significantly, both the Contoocook and the North Branch of the Contoocook have been designated rural rivers under the Rivers Management and Protection Program. To be accepted into the program, a nominated river is reviewed by the Commissioner of the Department of Environmental Services. The river or segment of the river must contain or represent either a significant statewide or local example of one or more of the following:

- Scenic or recreational resource;
- Open space or natural resource;
- Fisheries, wildlife, vegetation, and rare species habitat;
- Cultural, historical, or archaeological resource;
- Hydrological or geological resource;
- Water quality;
- Scientific resource;
- Community resource.

The North Branch of the Contoocook, which has its origin in Stoddard, flows south then east into Antrim and eventually into the Contoocook River in Hillsborough. The Contoocook River forms the boundary of Antrim and Bennington as it flows to its confluence with the North Branch of the Contoocook.

Statutes designate rural rivers as “those rivers or segments adjacent to lands which are partially or predominantly used for agriculture, forest management and dispersed or clustered residential development. Some instream structures may exist, including low dams, diversion works and other minor modifications.”

A rural designation means that water quality must be Class B (the second highest water rating) or have the potential for restoration to that level. The RSA goes on to state that “Management of rural rivers and segments shall maintain and enhance the natural, scenic, and recreational values of the river and shall consider, protect and ensure the rights of riparian owners to use the river for agricultural, forest management, public water supply, and other purposes which are compatible with the instream public uses of the river and the management and protection of the resources for which the river or segment is designated.” For a more detailed discussion of the rivers’ characteristics and values, see the NH Department of Environmental Services nomination of the rivers for special protection under RSA 483, Appendix 6.

The regulations further state that no new dams shall be permitted and that no channel alterations shall be permitted which interfere with or alter the natural flow characteristics, except for certain reasons approved by the Commissioner. Also, a new solid waste storage or treatment facility...shall be set back a minimum of 250 feet from the normal high water mark and must be screened with a vegetative or natural barrier. Similar

restrictions apply to new solid waste landfills. The regulations also state that “any land application within the river corridor of septage, sludge, or solid waste...shall be set back a minimum of 250 feet of the high water mark.”



Unlike most of the Contoocook River in Antrim, the North Branch of the Contoocook is considerably rockier and flows through steeper terrain. Trout fishermen and kayakers regularly use this section at Loveren Mill Road. Portions of the river are rated Class IV and V white water. The entire river is cited by the Nationwide Rivers Inventory of the National Park Service as having three Outstandingly Remarkable Values.

In 1995 the Nationwide Rivers Inventory of the National Park Service recognized three Outstandingly Remarkable Values (ORVs) of Antrim's North Branch in the areas of recreation, history, and botany. To qualify for inclusion in the national inventory, a river corridor must possess unique, rare, and exemplary features that are significant within a broad eco region at a comparative regional or national scale. Very few rivers in New Hampshire are recognized for that many ORVs, placing the North Branch among the most valued rivers in the state. While the river and its immediate banks are somewhat protected, this protection does not extend beyond the actual river corridor, yet negative effects from businesses abutting this corridor could certainly affect the North Branch.

The ORV says the 16-mile stretch of river from Rye Pond in Stoddard to the confluence with the Contoocook in Hillsborough “contains an expert whitewater section rated as Class V (near Liberty Farm Road)...historically significant arch bridge is located in the segment. Three exemplary natural ecological communities are supported by the river including an Atlantic White Cedar Swamp, a Southern New England Level Bog and a Southern New England Acidic Seepage Swamp.”

The final designation for the North Branch is of a more general nature. The ORV says that “while no specific national evaluation guidelines have been developed for the ‘other similar values’ category, assessments of additional river-related values consistent with the foregoing guidance may be developed -- including, but not limited to, hydrology, paleontology and botany resources.”

A 26-mile stretch of the Contoocook River from Bennington to the West Hopkinton Dam is cited as having an Outstandingly Remarkable Value for its recreational features. Although some of the areas quoted in the ORV citation are downstream of Antrim, the languid flow through Antrim is a source of enjoyment for beginning or intermediate canoers or kayakers. The ORV also says this segment just downstream of Antrim, “includes some of the most significant white water canoeing in all of New England. Difficulty ranges up to Class IV with large rocks and obstructions adding to the river's turbulence. Segment includes noted areas such as S-turn (Class III-IV) and Freight Train Rapids (Class IV - V).”

For a river to be noted for its recreational opportunities, it must “have the potential to be popular enough to attract visitors from throughout or beyond the region of comparison or unique or rare within the region. Visitors are willing to travel long distances to use the river resources for recreational purposes. River-related opportunities could include, but are not limited to, sightseeing, wildlife observation, camping, photography, hiking, fishing and boating.

- Interpretive opportunities may be exceptional and attract, or have the potential to attract, visitors from outside the region of comparison.
- The river may provide, or have the potential to provide, settings for national or regional usage or competitive events.”

An historical designation means “the river or area within the river corridor contains a site(s) or feature(s) associated with a significant event, an important person, or a cultural activity of the past that was rare or one-of-a-kind in the region.”

For a more detailed list of the assets of the Contoocook and North Branch of the Contoocook Rivers, see the Resources Assessment from the Contoocook and North Branch Rivers Local Advisory Committee River Corridor Management Plan in Appendix 4.

Antrim should determine what steps can be taken to enhance these values. Can we make the rivers more accessible? Should we establish such development as roadside picnic areas to allow visitors and residents to more fully enjoy our water resources?

We must be very cautious when allowing commercial or industrial growth along our rivers, lakes, and ponds. Both the State of New Hampshire and the National Park Service have long recognized the Contoocook River and North Branch of the Contoocook River as having great values for those who live in Antrim and those who visit us. We know intuitively that a commercial venture on the banks of the Contoocook or North Branch would detract from the inherent appeal of that area, and could negatively impact water quality as storm water runs off impervious surfaces. We should look to more benign forms of development in these areas and establish future development areas away from our water resources, particularly when non-residential growth encroaches on a water source.

Other Water Resources

Like the two major rivers in town, Antrim’s lakes, ponds, and streams are important water, recreational, and scenic resources. It is vital that they be recognized for the value they provide to the town and in so doing, protected from overdevelopment and pollution.

Campbell Pond

It is approximately 17 acres in size. It is the former water supply and present backup water supply for Antrim.

Cochran Brook

It begins upstream of Campbell Pond, flows into the pond and then southeasterly about three miles to the Contoocook River.

Franklin Pierce Lake

Franklin Pierce Lake is approximately 519 acres in size. The southern third of the lake is in Antrim, while the main body and the Harriman Electric Power Dam are in the town of Hillsborough. It is a warm water fishery. Recreational uses include fishing, water skiing, boating, sailing, swimming and bird watching. Nesting loons have been observed at the west end of the lake, near the point where Pierce Lake Road ends. There is limited public access in Antrim to this lake.

Great Brook

The brook begins on the western hills (Tuttle, Holt, and Patten Hills, and Willard Mountain), flows into Gregg Lake and then flows easterly two miles into the village section of town and ultimately to the Contoocook River.

Gregg Lake

This lake is approximately 195 acres in size. It is a moderate warm water fishery. Recreational uses include fishing, picnicking, water skiing, boating, sailing, and bird watching. Public access is adjacent to the Antrim town beach.



Gregg Lake is the home of Antrim's town beach and a picnic area.

Lily Pond

This small pond is less than 10 acres in size. Hiking and bird/wildlife watching are the main recreational uses of the pond. Public access is by foot trail through a series of formal and informal easements.

Mill Pond

The Mill Pond in the center of town is less than 2 acres in size, and was created in Antrim's industrial past from the flow of Great Brook. The town owns the property and dam at its base on Summer Street. The Mill Pond is the site of Antrim's annual spring fishing derby.

Rye Pond

It is approximately 13 acres in size with portions of the pond in the towns of Antrim, Nelson, and Stoddard. It is a warm water fishery with limited public access.

Steele's Pond

It is approximately 36 acres in size. It provides the water source for a small hydro power plant, whose generated electricity is sold to Public Service of New Hampshire. Recreational activity at this pond is limited to fishing off the bridge and through the ice during the winter.



Steele's Pond is fed by the North Branch of the Contoocook and leads into Franklin Pierce Lake.

Willard Pond

This pond is more remote than most others in town. It is approximately 96 acres in size. It is an excellent cold water fishery. It is part of the dePierrefeu-Willard Pond Wildlife Sanctuary. Fly fishing, hiking, and bird watching are the main recreational uses of the sanctuary. Public access is provided for boats. No gasoline powered boats are allowed.



Willard Pond is considered by some trout fishermen as one of the best trout ponds in southern New Hampshire. It is one of the few bodies of water stocked with Tiger trout. Nesting loons also can be found at the pond, although they cannot be disturbed. Loons nest close to the water's edge and a wake from a boat could wash the eggs out of the nest.

Groundwater Systems

Bedrock, the solid rock that forms the earth's crust, can be exposed at the surface of land or be as much as 100 feet underground, according to the U.S. Geological Survey (USGS). Above the bedrock can be what are called unconsolidated deposits, which is material of various size particles that are free to move and have been accumulated, distributed, stratified and/or sorted by natural processes. Sand is an example of unconsolidated deposits. The natural processes that created these deposits could be glacial processes, stream and river flows and even slow settling in lakes and swamps. Wind and rain, which cause weathering, are also factors. The importance of these deposits is their ability to hold and transmit potentially large quantities of water.

Aquifers

An aquifer is a layer of porous or fractured material, such as soil, sand, gravel, bedrock, etc. that can be used as a water supply source. According to USGS, the potential of that material or formation to provide water is dependent on the size and number of the pore spaces in the material or fractures in the bedrock, the amount of water available in the

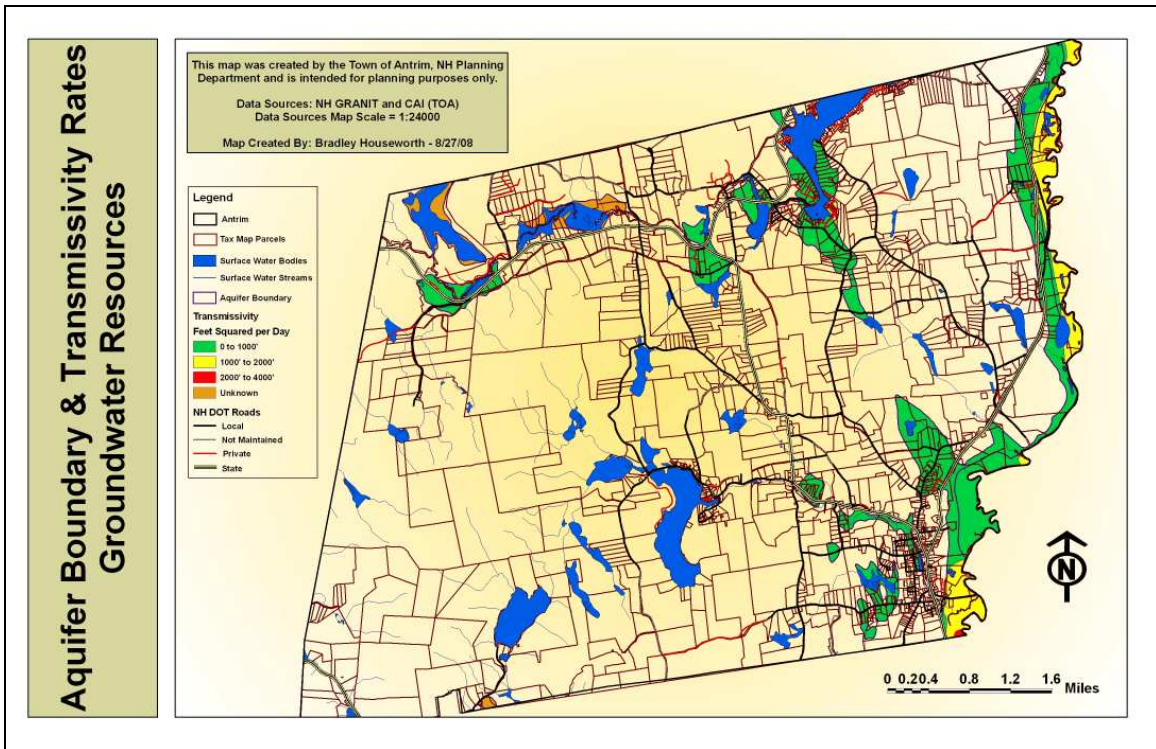
material type or thickness of the aquifer (saturated thickness), and the ability of the water to move through that material to a well (transmissivity).

There are two main types of aquifers: bedrock aquifers and stratified drift aquifers.

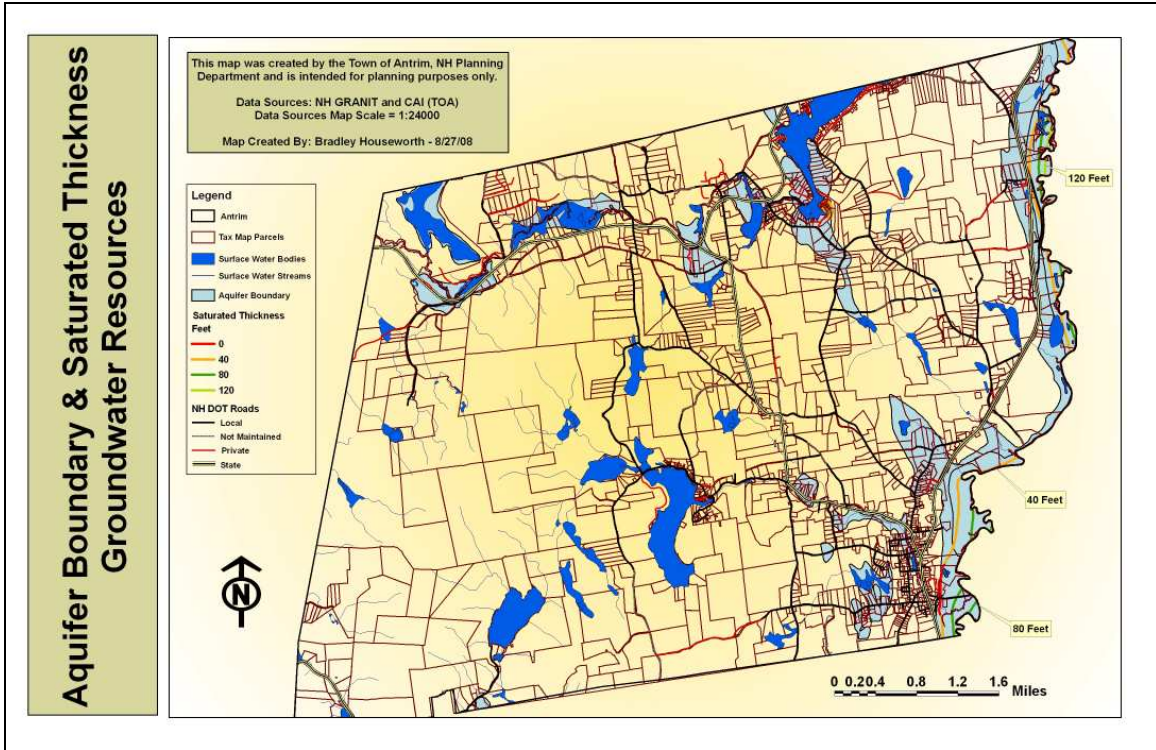
Bedrock aquifer is water that is stored in fractures, fissures, and cracks in the bedrock. Bedrock aquifers are usually suitable for supplying single-family homes, but not for supplying a community group.

A stratified drift aquifer, according to USGS, is “a coarse-grained sand or sand and gravel deposit that contains a usable supply of water.” Most of the deposits of stratified drift aquifers were created by melt water during the retreat of glaciers during the Pleistocene. The importance of stratified drift aquifers for water for human use is reflected in the fact that about 14 percent of New Hampshire is underlaid by stratified drift aquifers, according to the USGS.

According to the *New Hampshire DES Guide to Groundwater Protection*, most of the high yielding aquifer wells in the state are stratified drift aquifers. The guide says that from the state’s registered groundwater wells, 33 million gallons of water are extracted per day from stratified drift aquifers as opposed to only 4 million gallons per day from bedrock aquifer wells.



Map V-1: Stratified Drift Aquifer Boundary and Transmissivity Rates



Map V-2: Stratified Drift Aquifer and Saturated Thickness

The Importance of Groundwater

It is probably impossible to overstate the importance of groundwater to the town. In many areas, the groundwater and surface water are closely linked and a potential threat to one source is a threat to the other. Groundwater is important as drinking water and vitally important to fish, other aquatic and land species as well as for recreation. So maintaining pure groundwater also means maintaining pure surface water.

Antrim Community Wells

Address	System Active?	Population	Well Type	Well Depth	Yield
Route 9	A	500	BRW	485	75.00
White Birch Point Road	A	43	BRW	350	13.00
Breezy Point Rd, Route 9	A	33	BRW	580	34.00
Depot Street	A	865	GPW	118	215.00
Junction of Routes 9 & 31	I	28	SPR	8	0.00
Trillium trail, off Elm Ave	A	25	BRW	280	20.00
Rte 9, North Branch River	I	27	BRW	0	0.00
Brimstone Corner Road	A	300	BRW	800	8.00
Brimstone Corner Road	I	2	BRW	900	10.00
Brimstone Corner Road	A	250	BRW	940	9.00
100 Old N Branch Rd, Rte 9	A	27	BRW	338	40.00

Definitions

GPW = Gravel Pack Well

BRW= Bedrock Well

SPR = Spring

System Active?: A= Active; I= Inactive

Yield = Gallons/Minute

The following table from the *New Hampshire DES Guide to Groundwater Protection* shows potential contamination sources to water supplies.

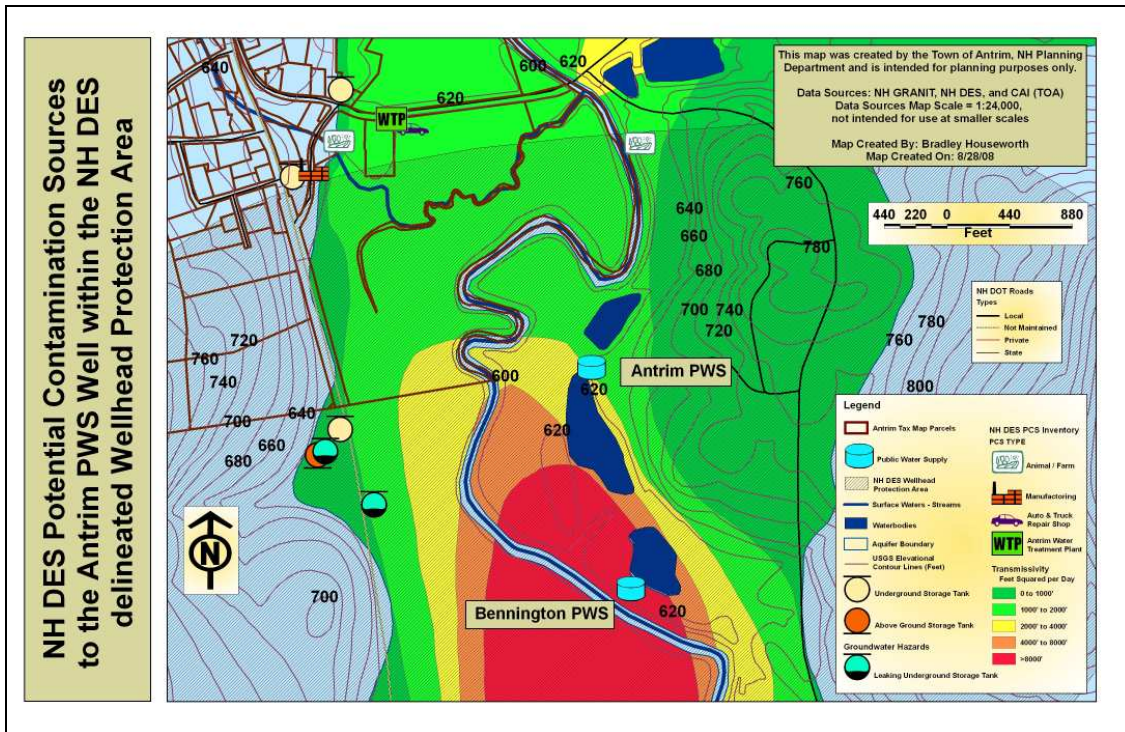
- Vehicle service and repair shops
- General service and repair shops
- Metalworking shops
- Manufacturing facilities
- Cleaning services
- Food processing plants
- Underground and above-ground storage tanks
- Transportation corridors
- Septic systems
- Laboratories and certain professional offices (medical, dental, veterinary)
- Salt storage and use
- Snow dumps
- Stormwater infiltration pond or leaching catch basins.
- Waste and scrap processing and storage
- Hazardous waste facilities
- Fueling and maintenance of earth moving and logging equipment
- Concrete, asphalt, and tar manufacture
- Cemeteries
- Agricultural chemicals

Some other hazardous materials found in the home are: gasoline, motor oil, other automotive fluids, auto batteries, paint, paint thinner, other solvents, pesticides, cleaning products, and herbicides.

In some cases, land has become so polluted in some communities that it has no further value. Pierce Rigrod, a principal planner with the NH Department of Environmental Services, cited an example of one piece of land which was used to store 400 cars and became so polluted it could not be sold.

Some contaminants don't move far in groundwater. On the other hand, some, such as xylene, benzene, toluene and methyl tertiary-butyl ether (MTBE) dissolve easily in groundwater. In fact, MTBE, a gasoline additive, is especially potent, according to the NH DES guide. It says that just one gallon of gasoline containing 11 percent MTBE can contaminate six million gallons of drinking water to a level of 13 parts per billion – New Hampshire's drinking water standard. See the map of Antrim's aquifer and the relationship of its public water supply (PWS) well to potential contamination sources (PCSs) (including potential sources of MTBE contamination) identified in the NH DES 'Local Potential Contamination Source (PCS) Inventory.'

It also is worth noting that other contaminants such as degreasing solvents including trichloroethylene (TCE) tend to sink beneath the water table and can form small pools which are hard to locate in the aquifer. They can contaminate groundwater for decades.



Map V-3: NH DES Potential Contamination Sources (PCSs) to the Antrim PWS

Stormwater Management

Stormwater runoff is water from rain or melting snow that cannot be absorbed by the ground naturally. The water, from roofs, paved areas, bare soil and steep slopes, flows over the ground, absorbing pollutants, sediments, organic matter, animal wastes, pesticides, and fertilizers and drags litter along with it. Traditionally, management practices were designed to collect, detain, and divert water to the nearest surface water body or watercourse. This approach is inadequate.

Controlling stormwater runoff is critical not only for large development areas, but also for smaller sites which do not require permits from the U.S. Environmental Protection Agency (EPA) or New Hampshire Department of Environmental Services (DES). According to Section 2, § 2.1 on stormwater management included in *Innovative Land Use Planning Techniques: A Handbook for Sustainable Development* (October, 2008), "...small-scale developments can have serious, cumulative impacts on water quality. To mitigate these effects, communities are encouraged to adopt a local stormwater management ordinance instituting stormwater controls for projects of all sizes and during all phases of development." The handbook is a cooperative enterprise of several New Hampshire governmental agencies.

The handbook recommends that towns and cities adopt a zoning ordinance to address stormwater issues. See <http://des.nh.gov/Stormwater> for more information. A model zoning ordinance can be found in the stormwater chapter of the handbook.

Wetlands

New Hampshire recognized in 1967 that wetlands were a vital part of the environment when it began to regulate coastal wetlands. Two years later, the state included fresh water regulations. Wetlands can be divided into many different types: tidal marshes, mud flats, freshwater swamps, rivers, lakes, bogs, and wet meadows, to name a few. According to the *Environmental Fact Sheet* issued by New Hampshire's Wetlands Bureau, there are three characteristics used to define wetlands.

- **Hydrology** – the presence of water. Wetlands occur when water is present for extended periods during the growing season.
- **Hydric Soils** – In wetlands, the spaces between soil particles are filled by water for a long enough period to reverse the chemical reaction that can occur between oxygen and the soil's elements, giving the soil a darker color.
- **Vegetation** – Plants that can survive in low-oxygen soils and under-saturated conditions have a distinct advantage in wetlands. Plants that can only survive in a wetlands environment are known as indicator species because their presence definitively shows that the area is a wetland. An example is the cattail.

Wetlands are vital not only for recreation but as a critical habitat for certain species. They provide flood storage, may be used as water supplies, and provide sedimentation control. A swamp or marsh, according to the fact sheet, may be regarded as worthless for recreation or business but in reality is extremely valuable in that its removal may have immediate harmful effects on adjacent upland and lakes and streams.

Emergent vegetation such as lily pads, arrowweed, cattails and marsh grasses provide nursery habitat for many species. Many ducks nest in marsh grasses; young fish hide among lily pad and arrowweed stems to avoid predators; and frogs and salamanders leave clusters of eggs in the shallows.

Wetlands filter water by slowing it down and allowing sediments and some contaminants to settle out. Vegetation traps the sediments and their roots serve to ensure the underlying soil stability. Plants and microorganisms break down and recycle some materials that can be used by larger organisms.

Peterborough's 2003 Master Plan discusses the various wetlands found in this part of New Hampshire:

Marsh

Cattail marshes are a common type of wetland....They are shallow wetlands with mineral muck soils (not peat); the primary form of vegetation in them is cattails and emergent grasses. They vary in size from small pockets to large wetland complexes. Cattail marshes are highly-productive, natural communities that provide important ecological functions. The cattails themselves, for example, can regulate water levels by storing excess water in their roots and stalks. They also provide habitat for many types of birds and waterfowl, fish, muskrats, beavers, frogs, and both snapping turtles and painted turtles. They also are a great spot to hear spring peepers. Currently, the great productivity of cattail marshes is being threatened by an invasive

species, purple loosestrife (*Lythrum salicaria*), which is beginning to make headway in Peterborough, and the surrounding area.

Swamp

A swamp is often confused with marsh but is distinguished by the presence of trees and shrubs rather than open water. Swamps occur on saturated soils and are flooded for most, if not all, of the growing season. A red maple swamp is typical of our region. The brilliant fall foliage of red maples (also known as “swamp maples”) is indication of an underlying wetland. The vegetation in swamps is predominately dense forest or tall shrub thicket. Trees that can tolerate saturated soils are hemlock, spruce, red maple, yellow birch. Certain ferns, blueberries, spotted touch-me-nots, and skunk cabbage are common swamp plants. Swamps provide habitat for a wide variety of wildlife.

Bog

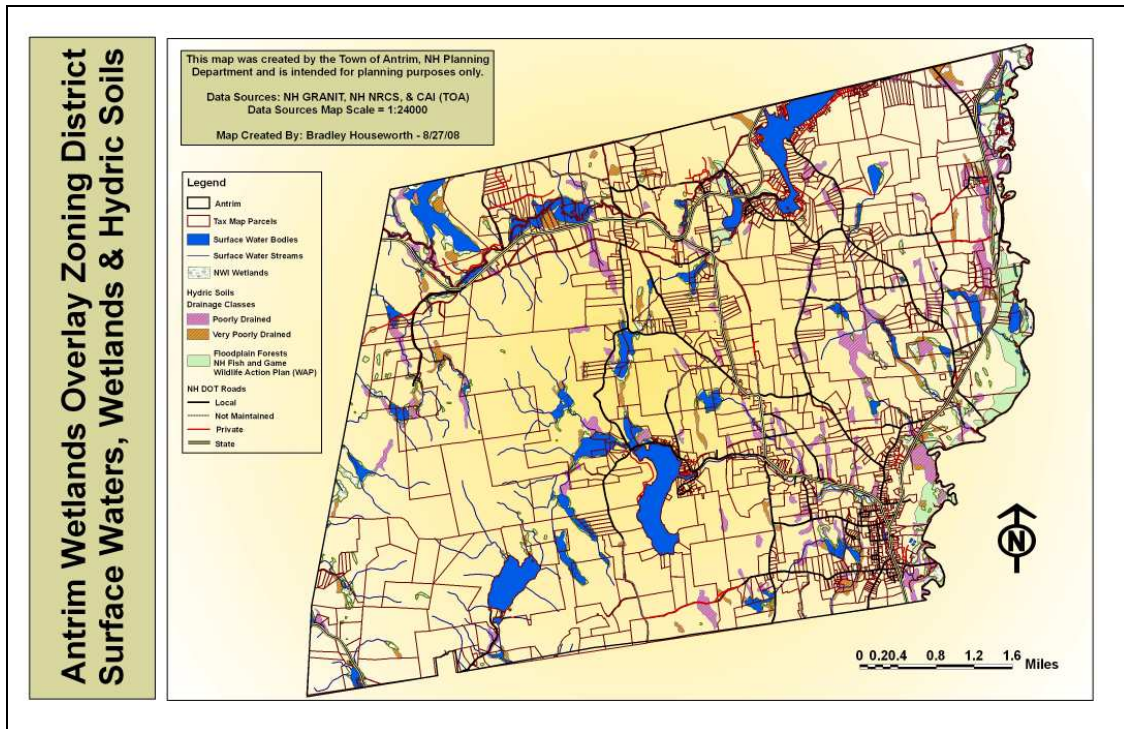
Bogs are characterized by substantial peat accumulation (> 40 cm), high water tables, and acidic-loving vegetation. There are no significant inflows or outflows of water from a bog. They are covered with a layer of floating vegetation adapted to wet, acidic, and nutrient-poor soils. Sphagnum moss is the dominant plant in bogs, along with some uncommon wildflowers, especially orchids. Bogs are a rich teaching tool about a glacier’s footprint, and about unique soils creating unique plant and animal communities.

Vernal Pool

Often mistaken for useless puddles or mud-spots in the woods, vernal pools are important, productive hatcheries for an abundance of species. They are temporary pools of ice and snowmelt that form in the late winter and spring and often disappear by late summer. Because they are temporary, they do not support fish, allowing many aquatic and amphibian species to lay their eggs and hatch the next generation in a predator-free wetland. Frogs, toads, and salamanders migrate to wetlands to lay their eggs in early spring. The chorus of spring peepers announces mating and egg-laying time, as well as the presence of a wetland. Eggs laid in vernal pools have the greatest odds of survival. Once hatched, many species return only to the pools where they were born, and can reproduce nowhere else. Vernal pools are easily lost through human disturbance. Few people know their importance as birthing pools for the intricate web of life; only a few towns have protective ordinances for vernal pools. Landowners unaware of the important ecological role of vernal pools often fill them in.

Wet Meadow

A meadow with certain ferns growing in it gives suggestion of wetland soils. A core sample of soil would reveal underlying soil types characteristic of a wetland.



Map V-4: Surface Waters, NWI Wetlands, & Hydric Soils in Antrim

Recreation

Ponds, rivers, and streams are focal points for a large number of recreational activities. Because Antrim has a wide variety of water bodies, from the rushing North Branch River, to the gently flowing Contoocook River and isolated Willard Pond, it supports a broad range of recreational opportunities.

Gregg Lake is the site of Antrim's town beach and picnic area. The North Branch River, Willard Pond, and Willard Pond Brook are stocked by the state with four species of trout. In 2005, more than 3,200 trout were stocked in these waters. But for those who are interested in warm water species, they can be found in the Contoocook River, Steele's Pond, Franklin Pierce Lake, and Gregg Lake. Large mouth and small mouth bass, northern pike, and pan fish can be found in these waters.

Those who prefer hiking near water have a number of different trails available such as those at Willard Pond, McCabe Forest, and Lily Pond.

For kayaking enthusiasts, the North Branch River offers Level IV and V rapids upriver of Liberty Farm Road. Those who prefer a more leisurely pace can canoe or kayak the Contoocook River.

Rivers, streams, and ponds are natural areas for wildlife viewing. Moose are drawn to water areas as are migratory birds, beavers, otters, muskrats and mink. Antrim's water

resources offer a great deal to the town from potable water to recreation. They represent one of the town's most valuable resources.

Conclusions

We must be very cautious about allowing commercial or industrial growth along our rivers or near our lakes and ponds. Both the State of New Hampshire and the National Park Service have long recognized the Contoocook River and North Branch of the Contoocook River as having great value for those who live in Antrim and those who visit us. Development diminishes the beauty of a water source. We know intuitively that a business with a high intensity of use on the banks of the Contoocook or North Branch would detract from the inherent appeal of that area. We should look to more benign forms of commercial development and establish industrial parks away from our water resources.

Antrim's aquifers are important sources of water. The most important aquifers have been identified and we should not allow commercial or industrial development to contaminate these areas. Any sources of potential pollution should be closely reviewed and monitored when located near any of the aquifers.

Antrim's two major highways, Route 202 and Route 9, gateways to the town, run side by side along the Contoocook and North Branch Rivers, respectively. On the western end of Route 9, the highway runs along the south bank of the North Branch River; to the east, at the border of Hillsborough, it travels near Franklin Pierce Lake. To preserve the viability of these important resources and to preserve the charm and rural character of the town, we should update our regulations to manage development in these sensitive and valuable areas.

We also should consider opening up access to our more highly prized waters. One proposal already on the table is to provide a trail along the north side of the North Branch River between Loveren Mill Road and Liberty Farm Road. Other water resources should be considered for wildlife viewing, photography, hiking, fishing, hunting, and scenic views.

Preserving and protecting all of Antrim's water sources will go a long way toward keeping Antrim a beautiful, small town where everyone can enjoy our rivers, lakes, ponds, and wetlands.

Recommendations

- Determine which water resources have inadequate public access and find ways to make them more accessible.
- Establish a stormwater zoning ordinance to control stormwater runoff in order to protect not only our rivers, lakes, ponds, and streams but also our subsurface waters.

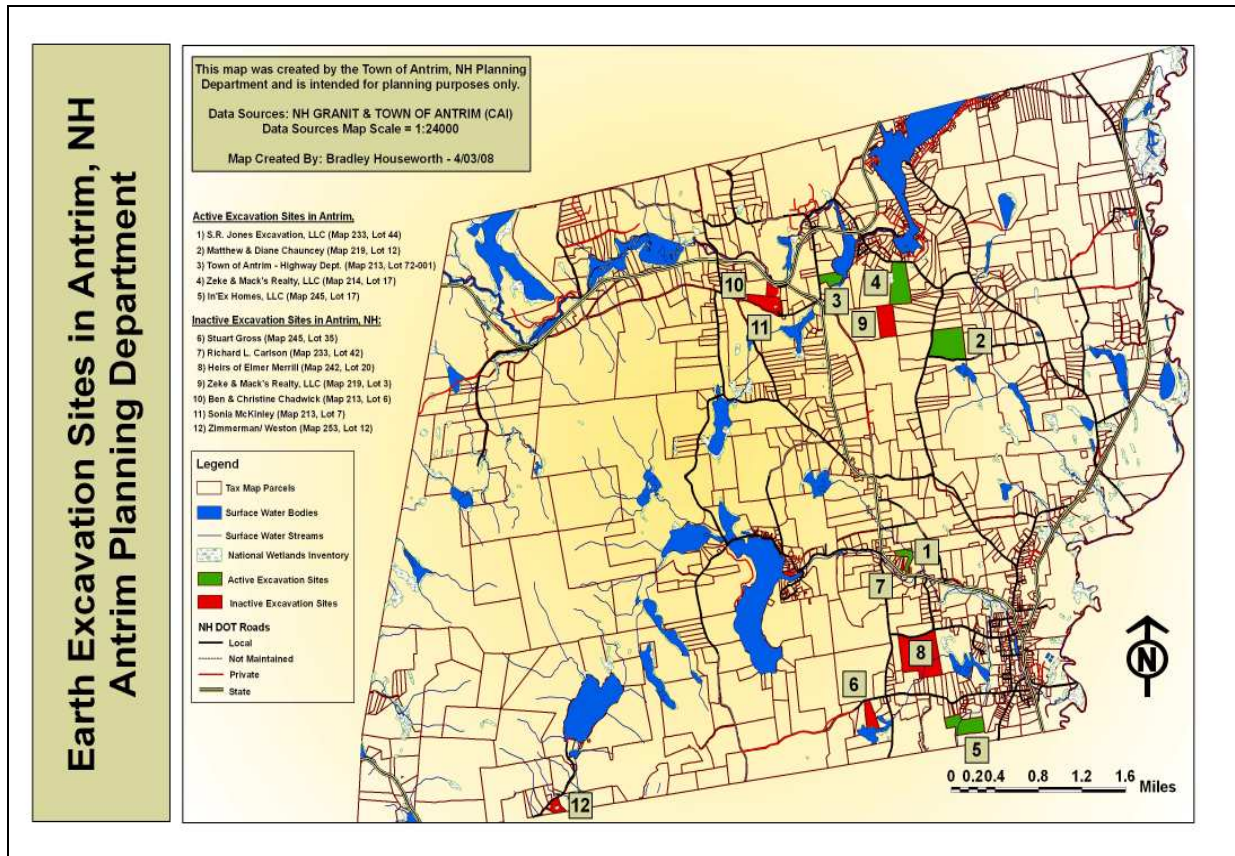
- Observe the spirit and regulations of the State of New Hampshire's Rivers Management and Protection Program and the National Park Service's Outstandingly Remarkable Values as they pertain to the Contoocook and North Branch Rivers.
- Determine if some of our water resources can be promoted as tourist attractions.
- Only allow commercial/industrial development within 500 feet of a water resource if the development complies with the State of New Hampshire Shoreland Protection Act and best management practices.
- Prevent vernal pools from being filled in or drained.
- Require vegetative buffers between developments and valuable surface water bodies.

Earth Excavation Sites

Introduction

Pursuant to RSAs 674:2, 155-E and 155-E:2.I.(d), the following information is provided regarding the locations and sources of earth excavation materials in Antrim. There are five earth excavation sites which are currently active within the Town of Antrim and one additional site which has filed a Notice of Intent for incidental excavation of a property for the construction of an 11,000 sq. ft. warehouse/storage facility. Seven other earth excavation sites have been operated over a period of years but have since been abandoned, closed, and/or reclaimed.

The 2001 Master Plan inaccurately listed nine active excavation sites and two inactive sites. Since that time, the Planning Board has undertaken a thorough review of the files to insure that all of the sites comply with RSA 155-E and the Town of Antrim's Earth Excavation & Reclamation Regulations, adopted October 15, 1992 and amended January 20, 2005. The results of the review identified twelve total earth excavation sites, in addition to the incidental excavation operation noted above. A map showing the location and status of the various earth excavation sites is provided below and is pictured in a larger format in the Appendix.



Map VI-1: Earth Excavation Sites in Antrim

Active Earth Excavation Sites

1) Tax Map 233 Lot 044. Location: 123 Clinton Road (Route 31) in the Rural Zoning District. Owner/Operator: S. R. Jones Excavation, LLC. The total acreage of the lot is 9.75 acres, with 1.5 acres reportedly being used for earth excavation operations. A quarter of an acre has been reportedly reclaimed. The landowner estimates that approximately 30,000 cubic yards remain on the site as of April 1, 2008. The material is mostly sand and gravel. No time frame has been established for removal of material or reclamation as activity is based on market demand. A five (5) year Town of Antrim Earth Excavation Permit was issued by the Planning Board for this operation, which Permit is valid through March 31, 2010.

2) Tax Map 219 Lot 012. Location: 119 Bridle Road (on the corner of Smith Road and Bridle Road) in the Rural Zoning District. Owners: Matthew & Diane Chauncey. Operator: Landsite Corp. The total acreage of the lot is 49 acres, with 5 acres reportedly being used for earth excavation operations of the total permitted excavation area of 11.6 acres. The existing excavation and reclamation plan calls for the 11.6 acres to be excavated and reclaimed in three (3) phases: Phase I, 3.3 acres; Phase II, 4.4 acres; Phase III, 4.2 acres. Reclamation is ongoing as new pit faces are opened and operations move from one phase to another. Six acres have been reportedly reclaimed to date. No time frame has been established and excavation is based on market demand. The operator estimates that approximately 61,395 cubic yards remain. A five year Town of Antrim Earth Excavation permit was issued by the Planning Board for this operation on August 18, 2005, which Permit is valid through August 18, 2010.

3) Tax Map 213 Lot 072-001. Location: On the east side of Old North Branch Road (between the intersections of Old North Branch Road with Route 9 and Route 31) in the Lakefront Residential and Rural Zoning Districts. Owner: Steele Pond Development, LLC. Operator: Town of Antrim - Highway Department. The total acreage of the lot is 14.1 acres, with 2 acres reportedly being used for earth excavation operations of the total permitted excavation area of 5 acres. There has been no reclamation of the site to date. The Town of Antrim is currently excavating sand from this site for use on public ways and proposes to remove approximately 140,000 cubic yards over a twenty plus (20+) year period. It is estimated that the removal will be completed by the year 2035. An application was filed with the Planning Board by Steele Pond Development, LLC to excavate and reclaim a portion of the site. The application was withdrawn pending negotiations with the town to develop the property over the long term. The town has entered into a mineral purchase agreement and leasing program with Steele Pond Development, LLC, which will turn full ownership of the property over to the town in 2013 for \$1. In accordance with RSA 155-E:2.IV, the Town of Antrim Highway Department has not been required to obtain a Town of Antrim Earth Excavation Permit from the Planning Board because the excavation is being performed exclusively for construction, reconstruction, and maintenance of town roads. However, RSA 155-E:2.IV does requires a pit agreement to be executed, which agreement has been drafted and signed by the Town of Antrim and the current owner, Steele Pond Development, LLC, and has been properly submitted to the Planning Board.

4) Tax Map 214 Lot 017. Location: On the south side of Elm Avenue (just east of 332 Elm Avenue) in the Rural Zoning District. Owner/Operator: Zeke & Mack's Realty, LLC (also known as Francestown Sand and Gravel). This site was formerly owned by Smith Harriman, now deceased. The total acreage of the lot is 36 acres, with 3.3 acres reportedly being used for earth excavation operations of the total permitted excavation area of 3.4 acres. One-fifth ($\frac{1}{5}$) of an acre has been reportedly reclaimed. The landowner estimates that approximately 291,496 cubic yards

remain on the site as of April 1, 2008. The material is mostly sand and gravel. No time frame has been established for removal of material or reclamation as activity is based on market demand. A five (5) year Town of Antrim Earth Excavation Permit was issued by the Planning Board for this operation, which Permit is valid through February 1, 2012.

5) Tax Map 245 Lot 017. Location: On the south side of Pleasant Street (just east of 80 Pleasant Street) in the Rural Zoning District. Owner: IN'EX Homes, LLC. Operator: Francestown Sand and Gravel. This property was formerly owned by the estate of Smith Harriman, who previously excavated sand, gravel, and clay from the property for many years. The total acreage of the lot is 29 acres, with 7.8 acres reportedly being used for earth excavation operations. Portions of the property have been naturally reclaimed by nature. The landowner estimates that approximately 50,000+ cubic yards remain on the site as of April 1, 2008. The material is mostly sand and gravel. No time frame has been established for removal of material or reclamation as activity is based on market demand. IN'EX Homes, LLC is excavating material from the site in preparation for a 6-Lot Residential Cluster Housing Subdivision. A five (5) year Town of Antrim Earth Excavation Permit was issued by the Planning Board for this operation, which Permit is valid through October 11, 2012.

Active Incidental Earth Excavation Sites

Tax Map 232 Lot 048. Location: 4 Contoocook Valley Avenue (off Route 202) in the Village Business District. Owners: Joseph and Katharine Koziell. Operator: Landsite Corp. The total acreage of the lot is 1.57 acres and a Notice of Intent to Excavate was filed with the Town of Antrim and State of New Hampshire to incidentally excavate approximately 3,000 cubic yards of material in order to erect an 11,000 square foot warehouse/ storage facility. No time frame has been established for removal of material as activity is based on market demand.

Inactive Earth Excavation Sites

6) Tax Map 245 Lot 035. Location: 250 Pleasant Street, in the Rural and Rural Conservation Zoning Districts. Owner/Operator: Stuart Gross. The total acreage of the lot is 14.3 acres. The original permit was granted in 1992 for a one (1) acre pit. A half-acre (½) site has been excavated and reclaimed. In 1998, a half-acre (½) site was active and the landowner estimated that approximately 20,000 cubic yards of material remained, with no time frame established for removal. The five (5) year Town of Antrim Earth Excavation Permit issued by the Planning Board for this operation expired on July 1, 2004. Therefore, this operation has lost its grandfathered status. A Notice of Intent to Excavate was submitted to the Town of Antrim for the period from April 1, 2005 through March 31, 2006 but was not signed by the Board of Selectmen because a new Earth Excavation Permit had not been obtained from the Planning Board. No Notice of Intent to Excavate has been submitted to the Town of Antrim since 2005-2006 and it is unknown if this site has been reclaimed.

7) Tax Map 233 Lot 043. Location: 127 Clinton Road, in the Rural Zoning District. Owners: Allison L. & Cynthia A. Gould (formerly owned by Mary I. Cuddihy). The total acreage of the lot is 2.29 acres. The operation has lost its grandfathered status and the excavation site has been reclaimed by nature according to an inspection conducted by Spencer Garrett, the Planning Board's agent hired to conduct earth excavation site inspections.

8) Tax Map 242 Lot 020. Location: On the south side of West Street (across the street from 107 West Street), in the Rural Zoning District. Owners: the heirs of Elmer W. Merrill. The total acreage of the lot is 60 acres, with material consisting mostly of sand. The 1991 application for grandfathered approval stated that only a half-acre (½) of the Merrill Pit was being worked and that there was very little material left. The operation has lost its grandfathered status and the excavation site has been reclaimed by nature, according to an inspection conducted by Spencer Garrett, the Planning Board’s agent hired to conduct earth excavation site inspections.

9) Tax Map 219 Lot 003. Location: Landlocked parcel near Elm Avenue (south of Map 214, Lot 17), located in the Rural Zoning District. Owner: Zeke & Mack’s Realty, LLC (also known as Francestown Sand and Gravel); formerly owned by Smith Harriman. The total acreage of the lot is 26 acres. Anecdotal information suggests that the site was excavated many years ago but there are no town records documenting this. The operation has lost its grandfathered status and the excavation site has been reclaimed by nature, according to an inspection conducted by Spencer Garrett, the Planning Board’s agent hired to conduct earth excavation site inspections. The current owners have no plans to operate an earth excavation site on this lot.

10) Tax Map 213 Lot 006. Location: On Brown Avenue (near the intersection of Route 9 and Route 31) in the Highway Business District. Owners: Ben & Christine Chadwick, Trustees of the Revocable Family Trust. The total acreage of the lot is 6.1 acres. The property was an excavation site but the designation of the property was changed from “Gravel” to “Agricultural/Retail” on March 4, 1999. The operation has lost its grandfathered status and it is currently unknown if the excavation site has been reclaimed by nature.

11) Tax Map 213 Lot 007. Location: On Brackett Road (just south of Map 213, Lot 6), in the Highway Business and Rural Zoning Districts. Owner: Sonja M. McKinley. The total acreage of the lot is 20 acres. The operation has lost its grandfathered status and the excavation site has been reclaimed by nature, according to an inspection conducted by Spencer Garrett, the Planning Board’s agent hired to conduct earth excavation site inspections.

12) Tax Map 253 Lot 012. Location: On Willard Pond Road (just east of 93 Willard Pond Road) in the Rural Conservation District. Owners: Charles E. Zimmerman and Ellena N. Weston. The total acreage of the lot is 7.5 acres. This is an abandoned excavation site. Mr. Zimmerman did apply to the Planning Board several years ago for a permit to renew excavation on a portion of the land but never provided the Board with the information required, in particular, a reclamation plan. Therefore, a Town of Antrim Earth Excavation Permit was not issued. Nor was a Notice of Intent to Excavate submitted to the Town of Antrim. The operation has lost its grandfathered status and it is currently unknown if the excavation site has been reclaimed by nature.

Opportunities for Earth Excavation Operations

There are few areas elsewhere in Antrim which may be suitable for earth excavation operations. Antrim’s zoning ordinances make no provisions for the permitting of new earth excavation sites. Therefore, an applicant wishing to open a new earth excavation operation is required to obtain a special exception from the Zoning Board of Adjustment in accordance with RSA 155-E:4, III.

An application for a special exception to operate an excavation site in the Rural District was denied by the Zoning Board of Adjustment in April of 2007. Advice of Town Counsel was

solicited regarding the following wording in RSA 155-E:4, III: “...excavation shall be deemed to be a use allowed by special exception as provided in RSA 674:33, IV, in any non-residential areas of the municipality...”. Town Counsel’s interpretation is that if there are residences in the area of a proposed excavation site, there may be grounds to deny an application to operate an excavation site. It is Town Counsel’s opinion that the only zoning districts in Antrim which permit an excavation site in accordance with RSA 155-E are the Village Business and Highway Business Districts. Counsel’s reasoning is outlined in the Upton & Hatfield letter dated April 9, 2007, at the conclusion of this chapter. For these reasons, it is recommended that the Planning Board determine which zoning districts should permit new earth excavation sites in Antrim, if any, as either a permitted use or as a special exception use with additional requirements. We note here that all existing excavation sites are in the Rural District.

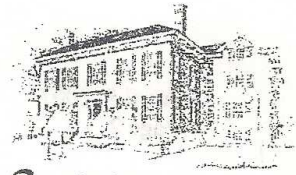
Due to natural events including glaciation and geomorphologic processes, many of the sand and gravel deposits within Antrim have been deposited on, above, or near aquifers and therefore earth excavation activities must be conducted in a manner to prevent and/or minimize potential disturbances and contamination of aquifers. The aquifers and groundwater resources provide important drinking water sources for various residents and are potential future sources for public water supply wells. Although RSA 674:2 allows towns to adopt a Water Resource Management Plan, Antrim has not yet done so. A regulation was adopted in 2005 which states that there shall be no earth excavation of materials within four (4) feet of the average high water table. In 2008, the Town of Antrim also formally adopted a new zoning ordinance, Article XI-B Aquifer and Wellhead Protection District, which further regulates potentially damaging uses from operating in areas identified as overlying an aquifer or within a NH DES designated wellhead protection area for a few existing public water supply wells in town. Earth excavation operations are not uses prohibited by the Aquifer and Wellhead Protection District, but it is recommended that the Planning Board draft regulations and ordinances which encourage those earth excavation operations within this district to be managed in a manner which prevents contamination of these vitally important groundwater resources.

Recommendations

- Determine in which zoning districts new earth excavation sites will be allowed, either by permitted use or as a special exception with conditions. In considering the districts, note that all existing earth excavation sites presently in operation are in the Rural District.
- Consider making revisions to the Town of Antrim’s Earth Excavation and Reclamation Regulations so that the regulations are less ambiguous. Specifically, the addition of more definitions are needed to help clarify various earth excavation activities (e.g., clearly define such terms as 'hours of operation', 'commercial', 'incidental excavation', 'minor topographical adjustment', 'normal landscaping', etc.). In addition, the current Town of Antrim Earth Excavation and Reclamation Regulations are essentially a concise version of the state statutes (RSA 155-E) and could be revised to be more specific and to clarify those areas of RSA 155-E which are considered gray areas and/or are often misinterpreted.
- Consider making revisions to the Town of Antrim’s Earth Excavation and Reclamation Regulations and/or Aquifer and Wellhead Protection zoning

ordinance in order to add specific language and restrictive regulations governing the operation of earth excavation sites in areas overlying an aquifer or within a NH DES identified wellhead protection area.

- Consider revising the current Town of Antrim Earth Excavation and Reclamation Inspection Checklists for both operating standards and reclamation standards, to ensure more thorough annual inspections of active earth excavation sites in Antrim.
- Conduct inspections of inactive earth excavation sites to determine if they are in fact inactive, reclaimed, and/or abandoned in such a manner that nature will reclaim them.
- Draft a Water Management Resource Plan to protect existing surface and subsurface water resources from potential contamination sources.



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Please respond to the Concord office

April 9, 2007

Bradley Houser, Planning Technician
Town of Antrim
P.O. Box 517
Antrim, NH 03440

RE: RSA 155-E:4, III

Dear Bradley:

This letter is intended as a follow-up to our recent telephone conversation regarding the proper interpretation and application of the provisions of RSA 155-E:4, III. That paragraph provides that when excavation is not permitted by a town's zoning ordinance or where the subject of excavations is not addressed, then "excavations shall be deemed to be a use allowed by special exception ... in any non-residential area of the municipality" The question presented is how does one define "non-residential area."

The statute does not resolve this question. However, given the context (zoning), I am persuaded that the best interpretation of the statute is that "area" should be viewed through the zoning ordinance's various zoning districts. Thus, a special exception would be available for excavation purposes within the Town's Village Business and Highway Business Districts. If it were otherwise, it is impossible to identify what attributes are necessary in order for an area to be defined as non-residential. Is it measured by virtue of density? Distance from residential properties? If so, should any consideration be given to the fact that the excavation material would need to be transported through residential areas? Indeed, wouldn't every excavation site be a "non-residential area," given the fact that there are no residences on the excavation site?

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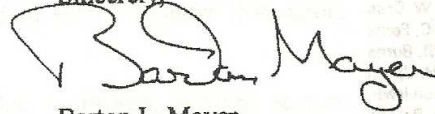
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The courts could construe the statute otherwise; but at this point, I believe that the most appropriate interpretation of the statute is by reference to the Town's zoning districts.

Sincerely,



Barton L. Mayer
bmayer@upton-hatfield.com

BLM/lm

This letter is intended as a follow-up to our recent telephone conversation regarding the proposed interpretation and application of the provisions of RSA 155:24, III. The paragraph provides that when excavation is not permitted by a town, zoning ordinance or where the subject of excavation is not addressed, excavation shall be deemed to be a use allowed by special exception in any non-residential area of the municipality. The question presented is how does one define "non-residential area."

The statute does not resolve the question. However, given the context (country), I am persuaded that the best interpretation of the statute is that "non-residential" would be defined through the zoning ordinance's various zoning districts. Thus, special exception would be available for excavation purposes within the Town's Village Farm and Lightly Residential District. If it were otherwise, it is impossible to identify what circumstances necessary in order for an area to be defined as non-residential. Is a business by which a family derives income from residential property? If so, should any consideration be given to the fact that the excavation itself would need to be transported through residential areas? Indeed, wouldn't every excavation site be a "non-residential area" given the fact that there are no residences on the excavation site?

Current Land Use

Introduction

In order to determine how future land use will take shape, the current land use patterns of a community need to be analyzed. Historic patterns will often indicate where future uses of the land will take place. It is important to understand the ways the land has been used in the past to be able to outline a future land use plan.

Transportation networks, current zoning regulations, economic patterns, and natural features all have an influence on how land is used. Current land use is a snapshot of what activities are occurring on the land. This differs from classifying areas by current zoning regulations. Areas that are zoned for a certain use may not be categorized the same when looking at actual land use. For instance, a lot that is zoned commercial but is standing vacant is classified as an undeveloped or an open space land use. Once converted from vacant to development, that space will then be considered commercial, residential or other appropriate land use categories.

Historically, Antrim, like many New Hampshire towns, was a farming community. Antrim was not left behind in the boon of the Industrial Revolution. Great Brook, with a dramatic drop in elevation of 40 feet in a length of 1,250 feet, was a perfect water supply for the water-powered mills of the time. By the late 1800's, over 20 mills lined Great Brook from Gregg Lake to the Contoocook River. This largely impacted how Antrim was developed. The downtown that exists today is a vestige of the old mill village. As community services, such as the meeting halls, churches, and schools developed in the village, the outlying areas remained rural, giving Antrim the classic New England town and country character.

Increased population growth, evolving household needs and changing social and economic trends all have had, and will continue to have, a direct impact on the landscape of the community. How a community allows its land to be developed has a direct impact on the character of the community, its aesthetics, the affordability of its housing, its transportation patterns and infrastructure and its tax base. Once the natural terrain is developed, reverting land back to its original state is very difficult. This is an important consideration in devising a land use plan. A well prepared land use plan will allow for new growth where it is appropriate while conserving critical environmental features, maintaining places of cultural and historical value, preserving scenic views and protecting neighborhoods. Zoning ordinances, subdivision and site plan regulations need to be written to reflect this vision of maintaining the rural character of the town while providing for new growth as embodied in this master plan.

Natural Features

Much of the land use in Antrim is determined by its landscape. Topography, water, wetland, and soil conditions all have influenced how the land is used. Traditionally, areas that have flatter or gentle sloping land, well-drained soils, and rivers have provided suitable land for development and agriculture. Steep slopes, poorly drained soils and wetland areas are generally prohibitive to such activities and such areas are usually left as undeveloped and possibly placed into conservation. It is easy to see how the current land use follows the same patterns as the underlying natural features.

Topography

Antrim has a varied topography. In the north and east sections, the stream valleys of the Contoocook River and its North Branch are relatively flat. In the western section of town, however, the land forms a ridgeline that extends from the Hancock town line in the south, northward to Route 9 and the North Branch of the Contoocook River. This ridgeline includes the hills of Bald Mountain, Robb Mountain, Willard Mountain, and Tuttle Hill. Also, east of Gregg Lake, there is a steep area that parallels Route 31 north of Antrim center and runs along the south shore of Franklin Pierce Lake.

Water Bodies

Antrim has several lakes and ponds including the significant waterbodies of Willard Pond, Gregg Lake, Steele's Pond, Campbell Pond, Rye Pond and Lily Pond and Franklin Pierce Lake (most of which is in Hillsborough). These are examined in more detail in Chapter V, Water Resources.

Current Land Use Types

The way land is used in Antrim is typical of many small New Hampshire towns. Commercial activity is concentrated along one of the major state roads running through the town, Route 202, while the outlying areas have remained predominantly rural. Land uses in Antrim generally fall into one or more of the following categories.

Residential: Residential land uses include structures and land that are used to provide housing for one or more households. This includes single and multi-family homes along with manufactured homes, apartment buildings, condominiums and seasonal homes. These are scattered throughout Antrim.

Conservation: Conservation lands include land that has been permanently set aside for conservation and that prohibits development. This can include land owned by the town, private conservation organizations and properties subject to conservation easements. Examples are state parks and forests and land conserved by the New Hampshire Audubon Society, The Nature Conservancy and the Society for the Protection of New Hampshire Forests (SPNHF).

Public/Institutional: This category includes establishments and facilities that are supported by and/or used exclusively by the public or non-profit organizations. This includes religious, charitable, fraternal, educational and governmental facilities. Public utilities are included in this category and include facilities such as water and sewage plants and energy plants. Examples include schools, both public and private, municipal buildings, fire stations, library, churches and cemeteries.

Undeveloped: All lands not being used for any of the above uses for any reason. Development may be constrained by physical conditions such as poorly drained soils or simple lack of demand for building in certain areas. This does not include lands that have been protected (see *Conservation Land* above).

Industrial: This includes land and/or facilities used for mining, construction, manufacturing, treatment, packaging, incidental storage, distribution, transportation, communication, electric, gas and sanitary services, and wholesale trade. Industrial uses can include the excavation of materials and lands classified as utilities.

Commercial: This category includes lands and facilities that supply goods and/or services to the general public. This includes restaurants, lodging, grocery stores, service stations and other retail and wholesale establishments. Professional and/or personal services such as financial institutions and medical offices are also considered commercial uses.

Development Patterns, 2002 -2008

Analyzing how Antrim has grown in the seven years from 2002-2008 since the last update of the master plan can help determine how to manage growth in the future. The following table illustrates the activity of the Planning Board during this period.

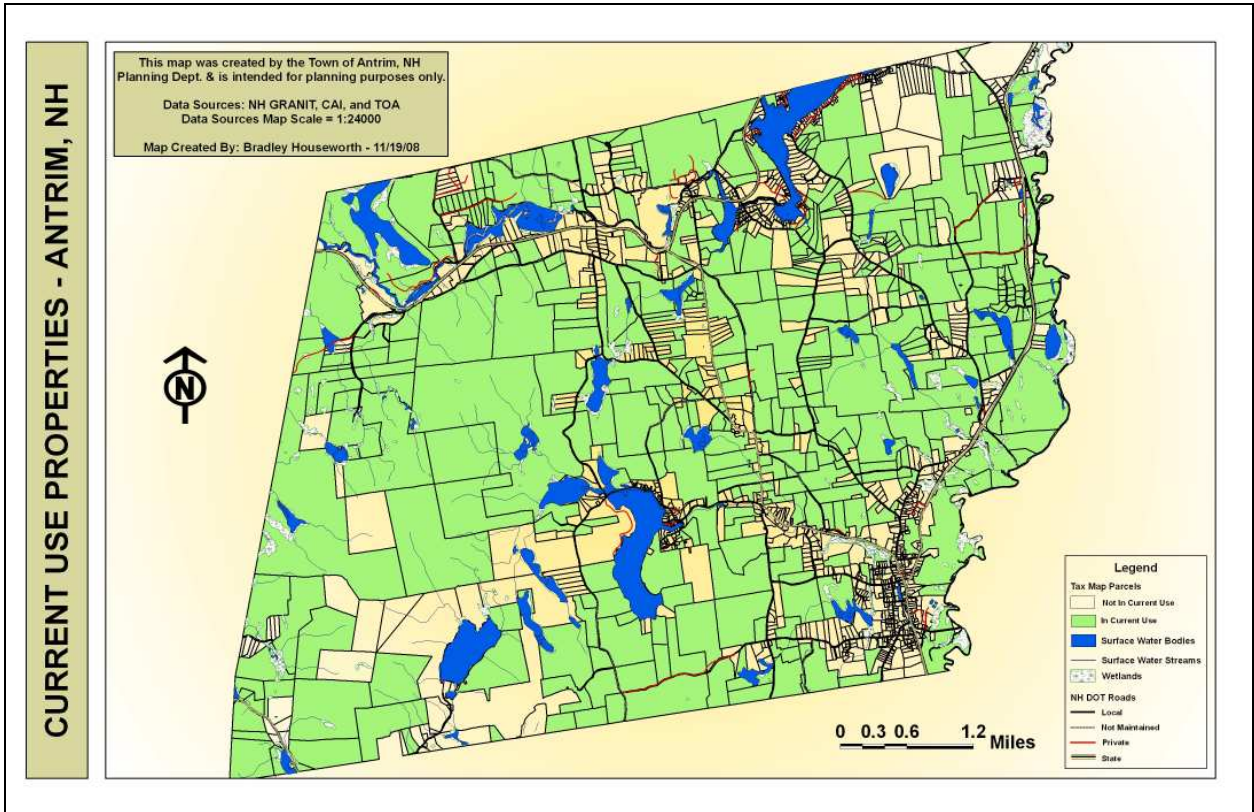
	2002*	2003*	2004	2005	2006	2007	2008
Site Plan Review: major				1		1	
Site Plan Review: minor						5	
Major Subdivision			1	3	4	2	1
Minor Subdivision			12	4	5	2	2
Conceptual Consultation				1	3	5	
Home-based business/occupation					5		1
Excavation Permit			2	1	2	1	
Total new building lots created				39			1

* Information for 2002 and 2003 unavailable

Source: Annual Town Reports, Town Staff

Current Use

Current use is a very popular method of preserving undeveloped land. It is a preferential tax program authorized by NH RSA 79-A, by which land is taxed on its potential to generate income in its existing or current use. Approximately 16,183 acres, 69% of the land in Antrim, is now in current use, as illustrated by the map below.



MapVII-1: Current Use Properties

Current Zoning Regulations

The power to regulate private property is one of the most powerful tools that a town has. In 1925, the New Hampshire State Legislature granted New Hampshire municipalities the ability to adopt zoning. Antrim first adopted zoning in 1989 and has continually updated its ordinances since then. The following is a summary of the major zoning ordinance changes that have taken place since the last master plan was adopted in 2001.

March 2003:

- The Shoreland Protection District Article was adopted to control the development of shorelines along lakes, ponds, rivers and streams in Antrim.

March 2004:

- Conversion Apartments were redefined to require owner residency of one of the dwelling units and to require that the changes to create the conversion apartment be in keeping with the architectural style of the building. Conversion apartments are no longer permitted in attached accessory structures.
- Supplemental regulations were adopted establishing specifications for the construction of duplex buildings.
- Accessory Living Units were defined and requirements for construction and usage were adopted.
- The Lakefront Residential District and Rural Conservation District were amended to allow accessory living units as a special exception use.

March 2005:

- A proposed amendment to allow condominiums and cluster housing as a use permitted by special exception in the Rural District was defeated.
- Amendments to delete the following were passed:
 - multifamily dwellings as a use permitted by special exception in the Rural District;
 - duplex dwellings as a permitted use and multifamily dwellings as a use permitted by special exception in the Rural Conservation District; and
 - duplex dwellings as a permitted use in the Lakefront Residential District but to allow them as a use permitted by special exception.
- The Lakefront Residential District minimum lot size was established as 130,000 square feet with frontage of 300 feet for a duplex.
- Article XIV, Supplemental Regulations, was amended to permit multifamily dwellings only on property served by municipal water and sewer systems.
- A citizens' petition to rezone a portion of Route 9 from Highway Business District to Residential was defeated.

March 2006:

- Another citizens' petition to rezone a portion of Route 9 from Highway Business District to Residential was again defeated.

March 2007:

- Various amendments were adopted, including:
 - establishing the set back for swimming pools to be the same as the set back for structures;
 - eliminating the mirror floor plan requirement of a duplex and disallowing interior egress between the units;

- establishing where on a property accessory living units may be built; and
- establishing the minimum lot size for duplex buildings with more than five (5) bedrooms in the Steep Slope and Wetland Districts.
- New criteria were adopted for home based businesses in order to ensure minimum impact on the surrounding neighborhood.

March 2008:

- An aquifer and wellhead protection district was adopted to preserve, maintain, and protect groundwater supply areas, drinking water sources and surface waters fed by groundwater from contamination.
- The Cluster Housing Development regulations were replaced with a new ordinance, Open Space Residential Development, to encourage flexibility in the design of residential land use.
- The language and criteria for home occupations was amended to make them consistent with those for home based businesses.
- The Sign Ordinance was amended to revise the definition of temporary signs and to clarify the permitted signs in the Village Business District and the Highway Business District.

Current Zoning Districts

Antrim today has twelve Zoning Districts to regulate land use within the town. The following is an overview of those districts. More detailed requirements can be found in the ordinances. The boundaries of the districts can be viewed on the current Zoning Map, available at the Town Hall.

Village Business District

The Village Business District is intended to be a district comprised mainly of small businesses, community and municipal buildings, other public and semi-public uses and residences.

Permitted uses include single family dwellings, duplex dwellings, multifamily dwellings, public and private schools, churches, public utilities, home-based businesses, retail businesses, convenience stores, restaurants, business and professional offices, veterinary clinics, banks and financial institutions, hospitals and nursing homes, motels, hotels, tourist homes, bed and breakfast establishments, funeral homes, social clubs, gasoline service stations, laundromats and dry cleaning establishments, wholesale, warehouse and storage facilities, laboratories, printing and publishing establishments, building materials and supply, recreational facilities, roadside stands, condominiums and cluster developments, elderly housing and light manufacturing.

Accessory uses permitted are any use accessory to a principal permitted use, signs, fences, parking and loading facilities, storage or parking of major recreation equipment and private swimming pools, tennis courts and greenhouses. Uses requiring a special exception are conversion apartments.

Minimum lot size is dependent on whether the property is served by public water and sewer. If it is, the minimum lot size for a single family detached dwelling is 20,000 square feet, with a minimum frontage of 100 feet and minimum depth of 100 feet. Single family dwelling lots without municipal water and sewer require a minimum lot size of 90,000 square feet with a minimum frontage of 200 feet and minimum depth of 200 feet. The maximum height for all buildings is 2 ½ stories or 35 feet, whichever is less.

Highway Business District

The Highway Business District was created to foster the development of commercial and light manufacturing uses, public and semi-public uses and residential uses in the Route 202 and Route 9 corridors and the area just north of Route 9 in the vicinity of North Branch Village.

The uses permitted in the Highway Business District are single family dwellings, duplex dwellings, multifamily dwellings, public and private schools, churches, public utilities, home-based businesses, retail businesses, convenience stores, restaurants, business and professional offices, veterinary clinics, kennels (boarding and/or breeding), banks and financial institutions, hospitals and nursing homes, motels, hotels, tourist homes, bed and breakfast establishments, funeral homes, social clubs, automotive sales, service and rentals, gasoline service stations, laundromats and dry cleaning establishments, wholesale, warehouse and storage facilities, motor freight truck terminals, bulk storage, warehousing truck repair facilities, outside parking for tractor-trailers and employees, truck, recreational vehicle, marine and heavy equipment sales and service, mini-warehouse/storage facilities, beverage and bottling distribution, laboratories, industrial parks, printing and publishing establishments, building materials and supply, recreational vehicle park, recreational facilities, farms and agricultural activities, roadside stands, condominiums and cluster housing developments, light manufacturing, farm employee housing and manufactured housing units.

Accessory uses permitted are any uses accessory to a principal permitted use, signs, fences, parking and loading areas, storage or parking of major recreation equipment and private swimming pools, tennis courts and greenhouses. Uses requiring a special exception are conversion apartments, elderly housing and manufactured housing parks.

Minimum lot size is dependent on whether the property is served by public water and sewer. If it is, the minimum lot size for a single family detached dwelling is 20,000 square feet, with a minimum frontage of 100 feet and minimum depth of 100 feet. Lots without municipal water and sewer require a minimum lot size of 90,000 square feet with a minimum frontage of 200 feet and minimum depth of 200 feet. The maximum height for all buildings is 2 ½ stories or 35 feet, whichever is less.

Residential District

The Residential District was established to provide a diversity of housing types to meet the needs of various ages and interest groups. The district essentially encompasses the residential portion of the town served by the municipal water and sewer system.

Permitted uses include single family dwellings, duplex dwellings, public utilities and home-based businesses. Accessory uses are any uses accessory to a principal permitted use, signs, fences, parking and loading facilities, storage or parking of major recreation equipment, private swimming pools, tennis courts and greenhouses and retail sales of antiques, arts and crafts, handiwork and garden produce when it is an accessory use to a residence. Uses requiring a special exception are multi-family dwellings, public and private schools, churches, social clubs, condominiums and cluster housing developments, conversion apartments, elderly housing and bed and breakfast establishments.

Minimum lot size is dependent on whether the property is served by public water and sewer. If it is, the minimum lot size for a single family detached dwelling is 20,000 square feet, with a minimum frontage of 100 feet and minimum depth of 100 feet. Single family dwelling lots without municipal water and sewer require a minimum lot size of 90,000 square feet with a minimum frontage of 200 feet and minimum depth of 200 feet. The maximum height for all buildings is 2 ½ stories or 35 feet, whichever is less.

Rural District

The Rural District is intended for rural residential dwellings complemented by other traditional rural and/or agricultural uses. The District also permits by special exception certain nonresidential uses that are compatible with the rural character of the District.

Permitted uses include single family dwellings, duplex dwellings, public and private schools, churches, public utilities, home-based businesses, kennels (boarding and/or breeding), public and private recreational facilities, farms and agricultural activities, roadside stands, farm employee housing and manufactured housing units.

Accessory uses permitted are any uses accessory to a principal permitted use, signs, fences, parking and loading facilities, storage or parking of major recreation equipment, private swimming pools, tennis courts and greenhouses and retail sales of antiques, arts and crafts, handiwork and garden produce when it is an accessory use to a residence. Uses requiring a special exception are restaurants, business and professional offices, veterinary clinics, hospitals and nursing homes, motels, hotels, tourist homes, bed and breakfast establishments, social clubs, building materials, recreational vehicle park, conversion apartments, elderly housing, manufactured housing parks and raising animals for their pelt or pelt ranches.

The minimum lot size for all uses except duplexes is 90,000 square feet with a minimum frontage of 200 feet and minimum depth of 200 feet. The maximum height for all buildings is 2 ½ stories or 35 feet, whichever is less.

Lakefront Residential District

The Lakefront Residential District was established in 1998 to protect the town's ponds and lakes from excessive density and to emphasize the protection of water quality and the adjacent shorelines and to maintain and ensure the privacy and tranquility of those who own shoreline or waterfront property. Included in the District are Gregg Lake, Franklin Pierce Lake, Willard Pond, Steele's Pond, Rye Pond and Campbell Pond, specifically the area within 500 feet of the high water mark of these water bodies, unless shown otherwise on the Zoning Map. It is also the intent of the District to provide housing and recreational opportunities for seasonal and year-round residents who prefer to live in single-family detached housing with access to these water bodies.

Permitted uses are single family dwellings and home occupations and home-based businesses. Accessory uses permitted are any uses accessory to a principal permitted use, signs, fences, parking and loading facilities, storage or parking of major recreation equipment and private swimming pools, tennis courts and greenhouses. Uses requiring a special exception are public and private recreational facilities, accessory living units and duplex dwellings.

The minimum lot size for all uses except duplexes is 90,000 square feet with a minimum lot width of 200 feet. The maximum height for all buildings is 2 ½ stories or 35 feet, whichever is less.

Rural Conservation District

The Rural Conservation District, adopted in 1989, is intended to protect, conserve and preserve the remote mountainous portions of Antrim from excessive development pressures and activities that would be detrimental to the unique environmental characteristics and qualities of the District and detract from the peaceful enjoyment and tranquility that this District affords local residents.

Permitted uses include single family dwellings, public and private schools, churches, public utilities, home-based businesses, kennels (boarding and/or breeding), public and private recreational facilities, farms and agricultural activities, roadside stands, stables and riding academies, farm employee housing and manufactured housing units.

Accessory uses permitted are any uses accessory to a principal permitted use, signs, fences, parking and loading facilities, storage or parking of major recreation equipment, private swimming pools, tennis courts and greenhouses and retail sales of antiques, arts and crafts, handiwork and garden produce when it is an accessory use to a residence. Uses requiring a special exception are bed and breakfast establishments, recreational vehicle park, manufactured housing parks, raising animals for their pelt or pelt ranches and accessory living units.

The minimum lot size for all uses is 130,000 square feet with a minimum frontage of 300 feet and minimum lot depth of 300 feet. The maximum height for all buildings is 2 ½ stories or 35 feet, whichever is less.

Overlay and Other Districts

Overlay districts are superimposed upon the above zoning districts so that the regulations pertaining to the overlay districts are in addition to the regulations of the underlying districts. The land within the town may be used if and to the extent that such use is permitted in both the underlying and the overlay district.

Steep Slopes District

The Steep Slopes District, adopted in 1989 and amended in 2007, is an overlay district, covering those areas in the Rural District and areas in other districts that are not served by public water and sewer. It includes all areas shown on the overlay map entitled "Town of Antrim Slopes Map" that show slopes in excess of fifteen percent (15%). The purpose of the District is to reduce damage to streams and lakes from erosion, storm water run-off caused by improper or excessive construction, or effluent from improperly sited sewage disposal systems; to preserve vegetative cover and wildlife habitat; to preserve scenic views; and to protect unique and unusual natural areas.

Permitted uses and uses allowed by special exception in the underlying district are allowed as long as the lot size meets certain requirements set forth as to minimum lot size depending on the percentage of the slope.

Wetlands District

The Wetlands District is also an overlay district covering all the districts of the Zoning Ordinances and includes all areas of wetlands identified by the use of soil surveys, examination of vegetation and/or shown on wetlands maps. The District was established in 1989 and amended in 2008 to guide the use of wetlands in Antrim, to aid in the protection of people and property from the danger of floods by preserving natural floodwater storage areas, and to encourage those uses that can be appropriately and safely located in wetlands areas.

Uses permitted in the underlying districts are only permitted subject to the provisions of the requirements of this article of the Zoning Ordinances. Permitted uses for wetlands are forestry, cultivation and harvesting of agricultural crops, wildlife refuges, parks, and recreation consistent with the intent of this article, open spaces, state approved wetland impoundments, construction of wells and water supply, dry hydrants and fire protection ponds. Detailed provisions govern various other requirements, including lot sizes and special uses.

Shoreland Protection District

The Shoreland Protection District was adopted in 2003 to establish standards for the subdivision, use, and development of shorelands adjacent to public waters for the purpose of minimizing the degradation of shorelands and assuring retention of the benefits provided by such shorelands. The District is also an overlay superimposed over the

conventional existing zoning districts and includes the protected shorelands adjacent to all public waters within Antrim.

Uses prohibited in the District are the establishment or expansion of salt storage yards, automotive junk yards and solid or hazardous waste facilities; the use of fertilizer, except limestone within 25 feet of the reference line of any property; bulk storage of chemicals, petroleum products or hazardous materials; sand and gravel excavations or the processing of excavated materials; and the dumping or disposal of snow and ice collected from roadways or parking areas outside the District. Detailed regulations include restrictions of other uses, provision for natural woodland buffers, the regulation of wastewater disposal systems, the control of and erosion and siltation, and the establishment of minimum lot requirements.

Aquifer and Wellhead Protection District

Adopted in 2008, the Aquifer and Wellhead Protection District was created to preserve, maintain and protect from contamination existing and potential groundwater supply areas, drinking water sources, and surface waters that are fed by groundwater by regulating land uses which could contribute pollutants. An overlay district, it includes all wellhead protection areas approved by the New Hampshire Department of Environmental Services for active water supply wells in Antrim and all stratified drift aquifers shown on the map entitled “Town of Antrim – Aquifer and Wellhead Protection District”, dated January 30, 2007.

All uses permitted or allowed by special exception in the underlying zoning district are permitted, unless they are Prohibited Uses or Conditional Uses under this zoning article. All uses must comply with the performance standards of the Ordinances.

Institutional District

The Institutional District was adopted in 1990 to provide for the orderly establishment of institutional uses in Antrim. It is an overlay of all those parts of Antrim north of Route 9 and east of a line 1000 feet west of Liberty Farm Road. Any use permitted in the underlying district is permitted. Other permitted uses are: hospitals, camps, shelter houses, conference centers, colleges and primary and secondary schools. The minimum lot size is 15 acres, with a minimum lot depth of 300 feet, a maximum building height of 35 feet or 2 ½ stories, whichever is less, and a maximum permanent resident density of 6 per acre.

Floodplain Development District

The Floodplain Development District was established to reduce the hazards on floods upon public health, safety and welfare; to protect areas from flooding caused by land development; to protect the public from the financial burden for flood control and relief; and to protect the quality of the floodplain to absorb, transmit and store runoff. It is intended to protect all lands designated as special flood hazard areas by the Federal Emergency Management Agency and its Flood Insurance Study and associated maps. An

“area of special flood hazard” is land in the floodplain subject to a one percent or greater chance of flooding in any given year. All proposed development in such an area requires a permit, subject to special requirements.

Specific Development Standards

Antrim’s zoning ordinances also set specific standards regulating the use of land that are intended to help guide development. These include regulations concerning home-based businesses, personal wireless service facilities, off-street parking, loading and unloading, non-conforming uses, signs, accessory living units, conversion apartments and so forth. Further detail can be found in the zoning ordinances.

Taxation of Land

The discussion above is a snapshot of how the land in Antrim is zoned. To see how it is actually used, an analysis has been done of the taxation of Antrim’s existing lots. Much of Antrim’s land is taxed as “residential vacant lot”, a category which includes lots of varying size, as demonstrated in the chart below.

Residential Vacant Lots		
	# of lots	Total Acreage
0 acres to < 2 acres	168	85.92
2 acres to < 5 acres	106	323.56
5 acres to < 10 acres	116	735.49
10 acres to < 20 acres	52	705.61
20 acres to < 30 acres	40	939.71
30 acres to < 40 acres	20	666.41
40 acres to < 50 acres	14	641.22
50 acres to < 75 acres	17	1,026.84
75 acres to < 100 acres	6	518.00
100 acres to < 150 acres	11	1,355.09
150 acres to < 200 acres	3	557.00
200 acres to < 300 acres	7	1,723.80
300 acres to 822 acres	4	2,239.70

Source: MuniSmart Tax Program for Antrim, September 30, 2008

The next largest category in terms of acreage is One Family Dwelling. The following chart illustrates the acreage for these 1007 lots.

One Family Dwellings		
	# of lots	Total Acreage
0 acres to < 2 acres	532	366.48
2 acres to < 5 acres	187	533.87
5 acres to < 10 acres	133	855.73
10 acres to < 20 acres	74	1,006.37
20 acres to < 30 acres	27	630.98
30 acres to < 40 acres	19	651.13
40 acres to < 50 acres	12	526.44

50 acres to < 75 acres	9	552.23
75 acres to < 100 acres	6	514.70
100 acres to < 150 acres	8	939.40

Source: MuniSmart Tax Program for Antrim, September 30, 2008

Both of the above charts illustrate that the potential for development of much greater density exists, subject to Antrim's zoning ordinances, the nature of the land, conservation easements and other restrictions.

The following chart summarizes how all the land use in Antrim is categorized for tax purposes. The town has a smattering of two-, three- and four-family dwellings, as well as 24 condominium units at 2 complexes. Elderly housing is provided by Antrim Village and 3 lots are identified as apartment buildings having 5 or more units. Commercial activity is concentrated in the downtown area and on Route 202, but note, however, that the municipal taxation matrix does not include home-based businesses and home occupations.

Tax Code	Description	# of Lots	Total Acres
100	Residential Vacant Lot*	564	11,518.46
101	One Family Dwelling	1,007	6,577.33
102	Two Family Dwelling	25	148.29
103	Three Family Dwelling	7	5.16
104	Four Family Dwelling	7	3.95
109	Single Family & Accessory Apt.	17	98.29
131	Condominium (Summit Avenue & Breezy Point)	24 units on 2 lots	3.5
140	Residential Outbuildings	32	696.83
150	Mobile Home	39	142.38
205	Multiple Houses	2	11.65
301	Service Garage	5	10.98
313	Auto Repair (Dugre)	1	8.59
328	Telephone	1	.22
332	Office Buildings	4	3.12
333	Apartment Building (5 or more units)	3	2.22
334	Bank Buildings	1	2.76
336	Commercial General (includes Maharishi Global Develop. Fund land, Old North Branch Rd., 318 acres)	11	351.79
347	Warehouse General	3	5.23
353	Inn/B&B/Cabins	1	2.40
356	Restaurant/Bars	2	.19
381	Small Retail Store	5	28.38
382	Supermarket	1	1.60
383	Building Supply/Lumber	1	5.10
387	Neighborhood Food Store	1	2.36
393	Store and Apartments	3	.90
397	Elderly Housing	1	5.35
411	Utility Water	1	.11
414	Utility Electric	1	.39
415	Utility Hydro	1	4.20
455	Light Manufacturing	3	7.22

511	Farm, Dairy	1	58.00
900	Exempt:		
	Town of Antrim	61	466.54
	Audubon Society	1	129.00
	Conval School District	1	9.50
	Cemeteries	1	20.90
	NH Fish & Game	1	30.00
	Steele Pond Development	1	14.10
901	Exempt: State	14	294.89
910	Exempt: Religious	3	2.74
920	Exempt: Fraternal	2	.24
930	Exempt: Non-profit Organization	21	1,501.85
940	Exempt: Voted Exemptions (Stone Church)	1	.64

**Of the 564 lots coded for tax purposes as Residential Vacant Lot, 396 are 2 acres or larger.*

Source: MuniSmart Tax Program for Antrim, September 30, 2008

Conclusion

Reviewing how Antrim's land is currently being used and how it has developed is useful in envisioning what Antrim's future may look like. While a sizeable amount of acreage has been permanently conserved, there is still much land available for development, which will have an impact on many aspects of the town. Town services, schools, transportation infrastructure, commercial growth, residential growth and conservation will all be affected. The town has the opportunity to manage the growth that is inevitable by making decisions on future land use. The recommendations contained within this master plan are an effort to help guide the future land use of the town, while preserving its rural quality and small town character, thus acknowledging its past and preparing for its future.

Future Land Use

Introduction

In the master plan update of 2001 it was suggested that setting clear development policies rather than specific objectives would be appropriate since future growth was not anticipated to be large. In 2009 we now know that growth is indeed accelerating and is projected to increase in the southern tier counties of the state in the future. In order to implement the citizens' vision that Antrim retain its rural and small town character, it requires that the Planning Board look at and plan for the specific needs required to control and support anticipated growth. We have seen this to be the case in the Planning Board actions with respect to subdivision and site plan review of applications. Specifically, questions have arisen regarding the issue of private versus town roads, the need for fire ponds and other fire protection devices, the ability of existing town roads to support the increase in traffic, and the capacity of existing town services to support new growth.

As the amount of available land suitable for development decreases and the price for such land increases, the task of balancing the desire to preserve open space and at the same time protect the rights of property owners requires that we examine new ways of accommodating development. Antrim's implementation of "Smart Growth Principles" in the planning process and the establishment of Open Space and Growth Committees are positive steps in this direction.

Antrim is not alone in trying to deal with these issues. Both at the state and regional levels there are a growing number of resources dedicated to promoting managed and conservation-friendly development while at the same time preparing local communities to deal with the impact that such growth brings.

Purpose of the Future Land Use Section

The purpose of the Future Land Use Section of the master plan is spelled out in RSA 674:2 II (b) which requires the master plan to include, "*A land use section ...[that addresses] the proposed location, extent, and intensity of future land use.*" While addressing future land use topics this section will provide guidance to the Planning Board for the establishment of ordinances and regulations that will guide development in Antrim as envisioned by its citizens.

The plan is intended to achieve the following results:

- i. Protect Antrim's valuable natural resource areas by directing future growth toward land that can accommodate it.
- ii. Provide adequate areas for light industrial, commercial, residential, and public service (infrastructure) growth.

- iii. Encourage the protection of open space in unfragmented forest lands, wildlife corridors, scenic and historic areas. (See Open Space Conservation Plan for Antrim, September 26, 2005, Appendix 2.)
- iv. Protect and preserve Antrim’s rural and small town character.
- v. Provide incentives to create a range of housing types for a range of household incomes.
- vi. Direct higher density development toward areas with existing infrastructure (highways, roads, utilities) in order to minimize the cost of providing public services.

Growth Trends

As much as many people might like our communities in New Hampshire to stay exactly the way they are, forecasts indicate that the population is likely to continue to increase, and the courts have indicated that each community has to accept its fair share of that growth. We can’t build walls around our communities to keep these new arrivals out, and growth can be a good thing. New members of our communities may bring new ideas, new energy, and volunteers for our local government and boards. Improperly managed growth, however, can change the nature and feel of a community.

Forecast for Antrim

The NH Office of Energy and Planning (OEP) reported that Antrim had a population of approximately 2,455 people in 2000 and estimates that Antrim’s population increased to 2,626 by 2007. It estimates that by 2030 that number will have increased by approximately 20% to 2,940. Similarly, it is likely that Antrim will receive additional non-residential (commercial/industrial) growth over the next twenty years. For planning purposes, it is assumed that Antrim could receive as little as 50,000 square feet of commercial and industrial space, or as much as 300,000 square feet or more of retail space over the next twenty years depending on local regulations and market forces.

Development Potential

TOTAL LAND AREA:		23,367 ACRES
	Minus: Wetlands	1,592.1 acres
	Steep Slopes (>15%)	10,170.0 acres
	Floodplain	2,539.0 acres
	Developed Land	3,962.0 acres
Total Undevelopable Land		18,263.1 acres
TOTAL LAND AVAILABLE FOR DEVELOPMENT:		5,103.9 ACRES

Apart from the actual number of acres of readily developable land remaining in town, the master plan needs to look at the type and density of development to determine the most effective use of this diminishing resource. This would include consideration of multi-family, open space cluster development, and townhouse units in addition to the traditional single family residence on two plus acres. The same consideration must also apply to commercial development in the Residential and Highway Business zones, as well as delineating new or expanded commercial areas and uses in all districts. Additionally we must also realize that almost all development parcels include some areas of wetlands or other features which would be desirable to preserve through conservation. This reinforces the need to consider higher density uses which must be incorporated into the Antrim Zoning Ordinances.

Future Land Use – The Citizens’ Vision

Results of Visioning Session

On August 24th, 2006 a future land use visioning session was conducted by Jeffrey H. Taylor and Associates, Inc. at the Town Hall. Common themes that emerged from the session were:

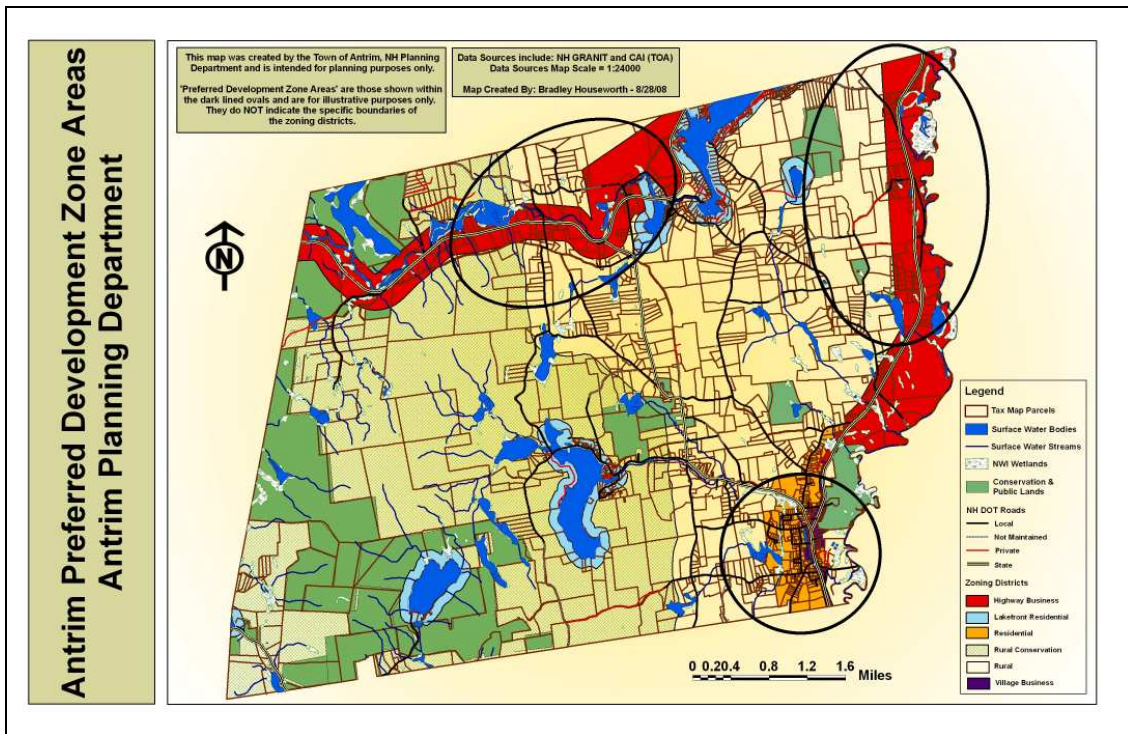
- i. For the town to pursue strategic conservation of open space based on the “Open Space Conservation Plan for Antrim”.
- ii. To focus on opportunities to integrate new development into the south village.
- iii. Establish “nodes” of development in the Route 9 and 202 corridors rather than “strip” development.
- iv. Restrict “Big Box” retail development (stores exceeding 25,000 square feet)
- v. Encourage development of affordable (workforce) rural housing without overwhelming existing infrastructure, or altering the rural character of the community.

Preferred Development Zones

It is recommended that the town consider implementing preferred development zones to encourage development in areas that can accommodate it. Three general areas in town have been identified for potential focused development in order to accomplish the following:

- i. Balance competing interests while maintaining the integrity of the citizens’ vision for Antrim.
- ii. Retain Antrim’s “rural/small town character” by controlling growth, and directing it to targeted “development zones”.
- iii. Keep Antrim affordable by encouraging commercial development that makes net positive contributions to the tax base.

- iv. Provide opportunities to create a new or expand the Tax Increment Finance (TIF) district.
- v. Create jobs/economic activity that enable our citizens to work in the town in which they live. This fosters a greater sense of community.
- vi. Create opportunities to build affordable “workforce” housing.
- vii. Develop ordinances to determine where commercial and residential development will occur.
- viii. Control growth in a sustainable manner that protects the town’s natural, cultural, scenic and historical resources.
- ix. Plan for the efficient delivery of town services.
- x. Assume a proactive posture so the town is not caught off guard when a major development is proposed.
- xi. Reduce uses and density of development in areas outside the preferred development zones.



Map VIII-1: Antrim Potential Preferred Development Zone Areas

Three “Preferred Development Zones”

The development and build out of a given area is driven largely by economic factors. As demand for land increases, the areas that get developed first are those with the lowest costs to acquire, build, and maintain, and which offer relatively higher operating efficiencies. Given the desire for the town to manage its destiny, the visioning session

identified three general areas that could be considered for development (i.e. commercial and residential) with adequate infrastructure to support a relatively dense build out and services for residents and workers. These are:

- i. The existing “South Village” which straddles Route 202 in the southeastern corner of the town and edges up against the Bennington town line.
- ii. The northeastern corner of the town along Route 202 and up against the Hillsborough town line.
- iii. An area along Route 9 in the northern part of town, where the land can support development.

Advantages

These three areas were identified because they have distinct characteristics that make them desirable locations for development.

- i. **Access to existing infrastructure:** Route 202 and Route 9 are major regional arteries for the state, and provide ready corridors for commerce and delivery of services. The South Village area is already developed with a variety of existing services and infrastructure. These three areas are heavily traveled, and serve as gateways to Antrim from the south, north, and west.
- ii. **Terrain:** Being in the Contoocook River Valley, the land is relatively unrestricted by steep slopes that dominate other areas of the town. This reduces the cost of building and maintaining infrastructure, and makes the delivery of services (fire, sewer, water, school buses, deliveries, utilities, etc.) more efficient. The terrain along Route 9 is more challenging and will naturally constrain development in this area. However, there are areas where the terrain allows building although the cost will be higher to the developer. Development in all areas of town is challenged by numerous wetlands.
- iii. **Existing Population Centers:** The South Village area is an existing population center and is approximately two miles from the Bennington village. At the northern end of Route 202 the Hillsborough town line is very convenient to the existing village of Hillsborough with its robust retailing and service sector. The Route 9 area is a bit more remote than the other two areas, but is convenient to the services offered in Hillsborough and an easy commute to Concord and Keene.
- iv. **Delivery and Access to Services:** Given the existing infrastructure and existence of nearby population centers the delivery of town services to businesses and residents in these areas is more efficient than in other parts of town. This minimizes the tax burden on the town’s citizens.

Disadvantages

Development in these general areas will be constrained by the following:

- i. **Wetlands:** Numerous wetlands exist in these areas that reduce the buildable land area. They also tend to break up large areas into smaller areas suitable for development.
- ii. **Aquifers and ground water:** Sustainable development requires that the town's water resources be protected. Development of the areas identified above will have an impact on water resources.
- iii. **Open space:** Concerns over preserving open space will compete with development of the Route 9 and Route 202 areas near Hillsborough as these areas are lightly developed today.
- iv. **Impact on current infrastructure:** The town will have to upgrade bridges, roads, and other infrastructure to absorb the increase in population in these areas.
- v. **Will of the current property owners:** Property owners in the targeted areas may refuse to sell or put restrictive covenants on their property that are counter to the vision set forth in the master plan.

Extent and Intensity of Development

RSA 674:2I sets forth the purpose of a master plan and directs the Planning Board to adopt "smart growth" principles in the performance of its duties ("*...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.*"). Development in the "Preferred Development Zones" would have the following characteristics of "smart growth" planning:

- i. **Mixed use neighborhoods** where residential, commercial and civic buildings are within close proximity to each other.
 - a. Shops, restaurants, offices, housing, and public facilities can be located at higher densities in Antrim's "South Village" and at the core of new neighborhoods.
- ii. **Different housing types:** single family homes, condominiums, accessory dwelling units, and live-work facilities are in the same neighborhood.
- iii. **Pedestrian friendly:** sidewalks, interconnected streets, parking in back or at the sides of commercial buildings, and slow traffic speeds.
- iv. **Access Management:** Adopt standards for the location and design of driveways and major entrances to minimize the impact on major roads of increased traffic, and mitigate "sprawl" development.
 - a. Residential driveway standards
 - b. Major entrance standards

- c. Street standards
- d. Parking standards
- v. **Commercial Development:** “Campus” style business parks and institutional development that gives workers access to services and housing. Encourage development that allows workers to walk to work. Encourage medium to large businesses occupying up to 25,000 square feet. Buildings should be close to sidewalks with parking in the rear or on the sides. Home occupations and home based businesses are allowed, but would be subject to reasonable restrictions due to the density of the settlement.
- vi. **Infrastructure:** Should consist of underground utilities, access to cell phone service, internet service, and interconnected roadways.
- vii. **Appearance:** Generous use of buffer zones and green space to mitigate sprawl.
- viii. **Density:** Allow higher density building combined with incentives to preserve open space.

Outside Preferred Development Zones (rural area development)

The bulk of the undeveloped land in Antrim is in the western portion of the town. This area is already subject to substantial conservation ownership or restrictive easements, and has few roads. The constraints on future development in this area arise from steep slopes, lack of infrastructure, and preservation of wetlands and wildlife habitats.

- i. Large areas of the rural land in Antrim are unsuited for high intensity uses such as homes, roads, and commercial buildings. Many of these areas have remained undeveloped due to their economic limitations but contribute to the quality of life enjoyed by the citizens of Antrim as open space.
- ii. Open Space Conservation Plan for Antrim (see Appendix 2): This plan identifies priority areas for conservation and recommends the use of conservation easements to permanently protect these areas. The major areas identified in the plan cover much of the part of the town west of Gregg Lake from the Hillsborough and Windsor town lines south to the Hancock town line.
- iii. Development of the rural areas of Antrim pits the desires of the citizens to protect the small town and rural character of Antrim against the interest and property rights of land holders. Therefore, care must be taken by the Planning Board when managing growth in this area so that the rights of the property owners are not excessively restricted. However, there are several tools the Planning Board may use to encourage the property owners and developers to use their property in a way that is consistent with the vision of the citizens as put forth in the master plan.

- a. **Conservation Easements:** Land under a conservation easement remains in private ownership and on the tax rolls but is prevented from being developed. Conservation easements can be acquired through purchase or donation from landowners.
- b. **Open Space Development:** This development tool involves the grouping of homes on one part of the property while the remaining land is left as open space. This space may be used for agriculture, recreation, or managed woodland. The open space is then permanently protected by a conservation easement. Adequate provisions for sewage disposal, water, and roadways must be made. This method is very successful in protecting land for open space and allows owners to retain the economic value of their land. Incentives for the developer may involve allowing more units to be built than would otherwise be available under traditional regulations.
- c. **Settlement Density:** The rural areas of Antrim vary as to their ability to support homes, roads, and septic systems. Since these areas are not generally serviced by public utilities, the impact of housing on the land should be minimized. This impact should be managed primarily by requiring appropriate minimum lot sizes and frontages in the rural and rural conservation districts. The Planning Board should review this requirement from time to time to ensure it adequately supports the intent of the citizens to protect the town's rural character.
- d. **Home Occupations and Home Based Business:** Since the rural areas of town generally do not have the infrastructure to support mid- to large scale commercial activity, it is important that these areas allow Home Occupations and Home Based Businesses. Small scale businesses bring vital local services to the citizens (business services, building trades, traditional crafts, law services, etc.), attract people with a long-term commitment to the town, and create a diversified economic base for commercial activity in town. However, these businesses are constrained by the need to remain fairly small and unobtrusive to the neighborhood. Reasonable restrictions should be developed to allow for the development of small to medium sized new businesses in the rural areas as well as the growth of existing businesses, while protecting the property rights of the residential owners. Agricultural based businesses and businesses that use the land in its open state will be encouraged.
- e. **Infrastructure Improvements:** In the rural areas the town should refrain from over-building roads and other infrastructure which will encourage the over development of these areas. The town should also be wary of accepting privately built roads as town roads in these areas as it will lead to fragmented assets that are expensive and inefficient to maintain and repair.

Population and Housing

Introduction

Antrim's population and housing growth over the past 30 years is low compared to the more rapid growth in much of the rest of southern New Hampshire. Since 1970, the town's population has increased by approximately 15% while the number of housing units has increased by 76%. However, when the 1970 institutional population of the now-defunct Hawthorne College is excluded, the population increase rises to fifty-six percent (56%). Population and housing trends and characteristics in Antrim are examined further in this chapter, including historic and future growth. These are two of the most important factors affecting community growth and development. The tables that follow present historic population changes in Antrim and the region. These trends and characteristics provide a basis for the analysis and recommendations in this master plan.

The information in this chapter is based primarily on the decennial US Census and the New Hampshire Office of Energy and Planning (NHOEP) in conjunction with other local and state studies, estimates, and reports. While the 2000 Census information may be somewhat outdated, it is the most comprehensive and standardized data available at this time. Wherever possible, more recent data from other sources has been utilized. When alternative up-to-date data or estimates are available, it is often only for larger geographical units, such as by county, aggregate statistical area, or state.

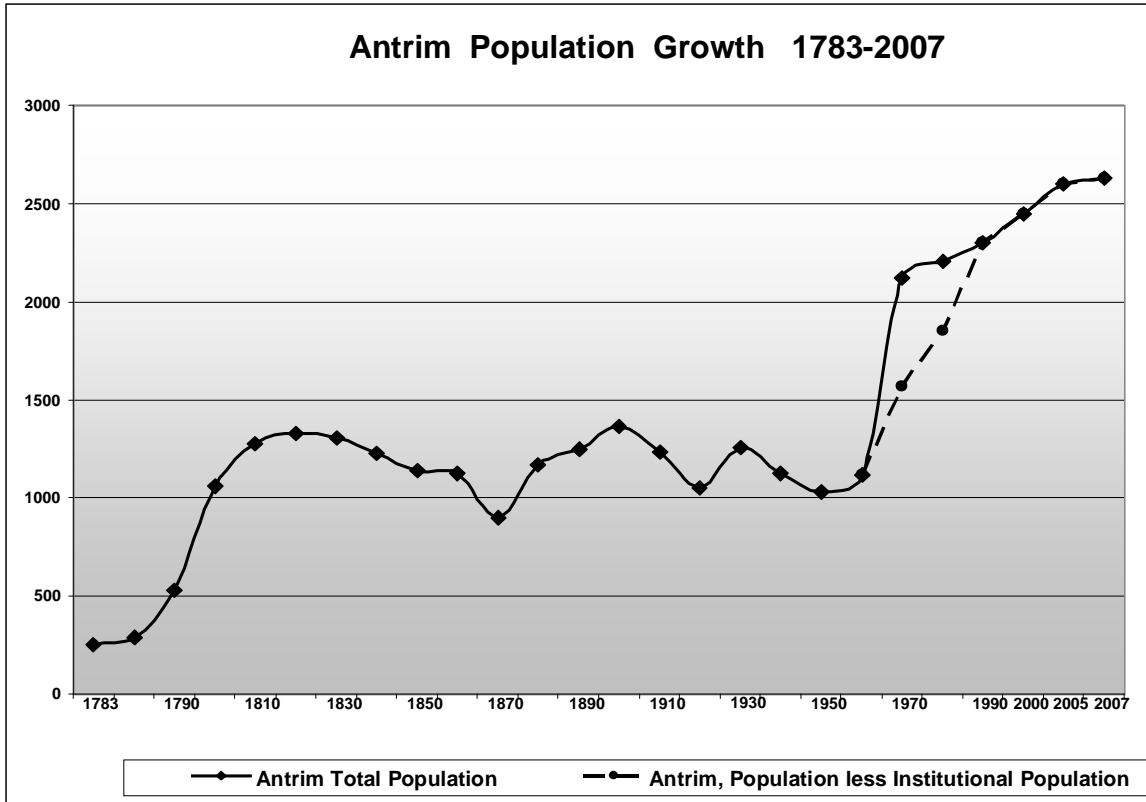
Population

The location of Antrim in relation to the rest of the southern portion of New Hampshire is a factor that has influenced population growth. Due in part to a somewhat more rural and peripheral location from the rest of this region, population growth in Antrim has been slower overall. Expected to contribute to Antrim's growth in the future, however, is its position on Routes 9 and 202. Based on recent historical trends, it is reasonable to expect that this growth will continue in southern New Hampshire, with Antrim and surrounding towns seeing an accelerated pace of growth as the area's more moderate housing prices attract buyers and as areas closer to the population centers of Manchester and Nashua become built out. In-migration from the Boston area is also a factor in population growth, as well as improvements to the state and federal road system, including the recent Hillsborough bypass and other improvements on Route 9.

Historical Trends

Antrim's population trends are illustrated in the charts and tables below. During the first part of the 20th century, population increased at a slow, steady pace. Then, from 1960 to 1970, the population jumped by 1001. Part of this is attributed to the building of Hawthorne College. Even adjusted for the institutional population of 552 attributed to the

college in the 1970 Census, the population increase of that decade of 449 remains Antrim's period of highest growth.



Source: US Census; NH Office of Energy & Planning

The next table shows recent population changes for Antrim, Hillsborough County and the State of New Hampshire. The 2007 NHOEP estimated population of the state was 1,315,000 persons. Based on these figures, the 2,626 estimated Antrim residents represent approximately 0.2 percent of the state population and approximately .65 percent of the Hillsborough County population of 401,397 people. Hillsborough County consists of 31 municipalities, including Nashua and Manchester.

Recent Population Changes for Antrim, Hillsborough County and New Hampshire

	1980	1990	2000	2007*	% Change 80-90	% Change 90-00	% Change 00-07
Antrim	2,208	2,360	2,449	2,626	6.9%	3.8%	7.2%
Hillsborough County	278,608	335,073	380,841	401,397	20.3%	13.7%	5.4%
New Hampshire	920,610	1,109,117	1,235,550	1,315,000	20.5%	11.14%	6.4%

Source: US Census; NH Office of Energy & Planning

In examining the growth of the population in the chart below, one must remember the impact of Hawthorne College, located in Antrim through the 1970s and 1980s, but now no longer in existence. Removing that institutional population from the analysis provides a clearer picture of Antrim's growth in those decades.

Antrim's Population Growth, Adjusted for Institutional Population

	1950	1960	1970	1980	1990	2000	2007
Antrim's Population	1,030	1,121	2,122	2,208	2,360	2,449	2,626
% change from previous period	-9%	8.8%	89.3%	4.1%	6.9%	3.8%	7.2%
Antrim's Population, less institutional population	1,030	1,121	1,570	1,853	2,360	2,449	2,604
% change from previous period, not including institutional population	-9%	8.8%	40.1%	18%	27.4%	3.8%	7.2%

Source: US Census; NH Office of Energy & Planning

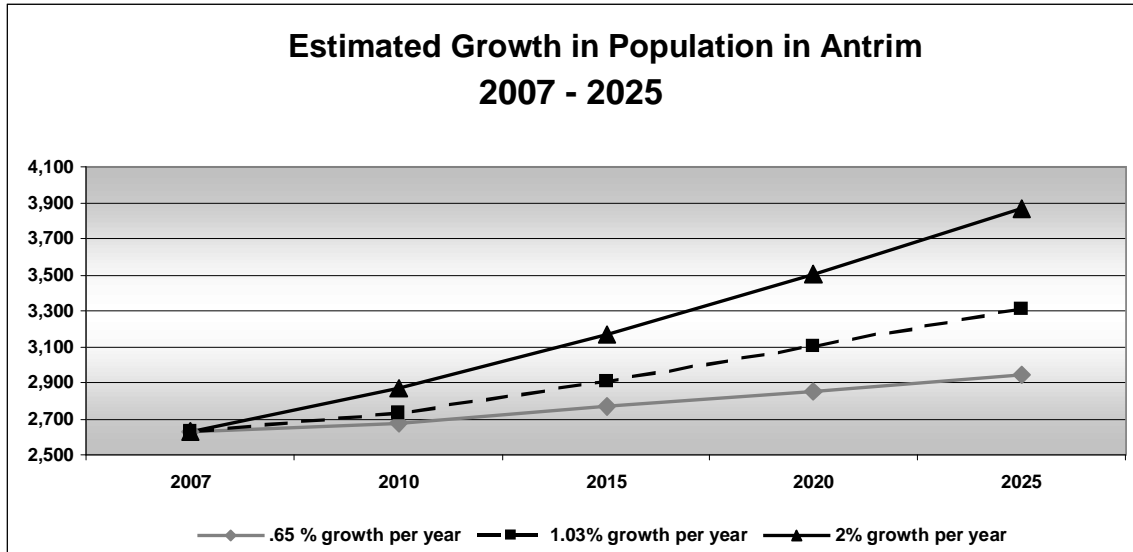
In the 1990s, regional growth moderated, due to the recession of the late 1980s and early 1990s. Economic resurgence in the later 1990s was accompanied by higher growth rates. For example, there were fairly steady increases in the annual average building permits issued in Antrim from the late 1990s into this decade. Total home sales also increased in the state and region. This growth is driven by new in-migration to the region, and natural increases in the existing population.

It is important to note that the population growth from 2000-2007 represents a 7.2% increase *over a seven year period*. Should the pace continue at this rate of 1.03% per year, the population would be 3,313 by 2025. Using a more moderate rate of .65% a year, the average annual growth rate for the 1990 to 2005 period, Antrim would have a population of 2,951 by 2025. Finally, if there were growth of 2% per year over a sustained period, Antrim's population would grow to 3,751 by 2025.

Estimated Future Population Growth, Varying Rates of Growth

	2005	2010	2015	2020	2025
Antrim's population, assuming .65% increase in growth per year	2,604	2,678	2,766	2,857	2,951
Antrim's population, assuming 1.03% increase in growth per year	2,604	2,730	2,912	3,106	3,313
Antrim's population, assuming 2% increase in growth per year	2,604	2,787	3,077	3,397	3,751

Source: NH Office of Energy & Planning

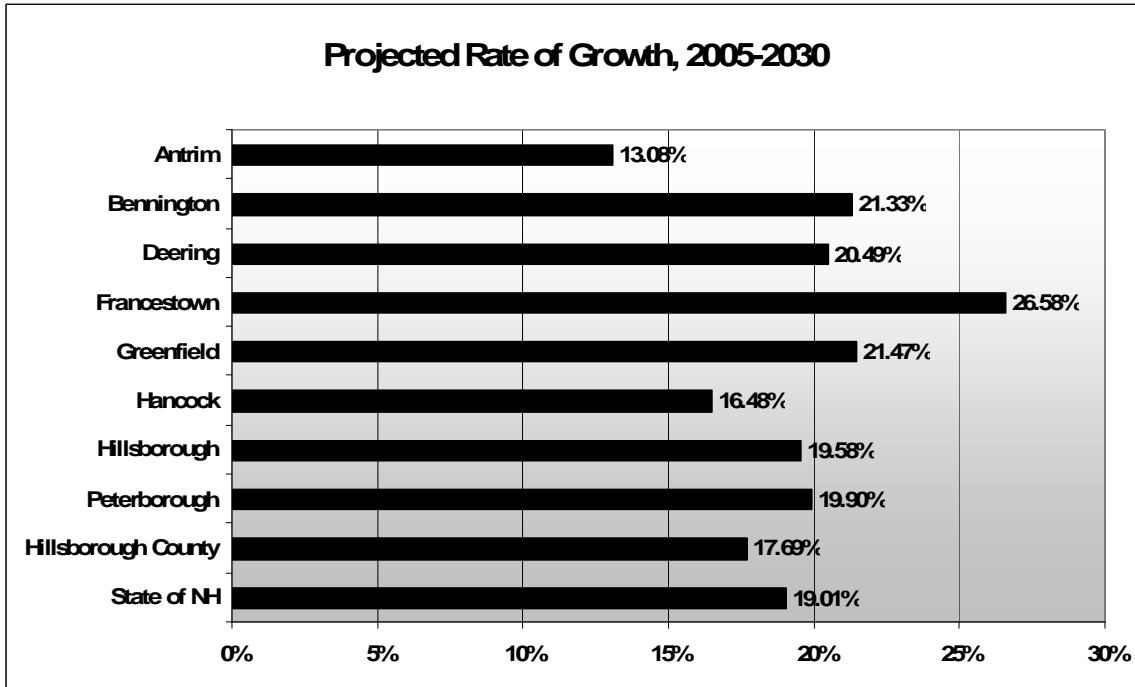


Source: NH Office of Energy & Planning

For comparison purposes, the following table and chart present the population projections by NHOEP for the neighboring towns as well as for Hillsborough County, and the State of New Hampshire. To be consistent, the NHOEP January 2007 estimates have been used for this comparison.

Population Projections for Antrim, surrounding towns, Hillsborough County and the State of NH						
	2005	2010	2015	2020	2025	2030
Antrim	2,600	2,680	2,750	2,810	2,880	2,940
Bennington	1,500	1,560	1,640	1,700	1,760	1,820
Deering	2,050	2,130	2,230	2,310	2,390	2,470
Francestown	1,580	1,660	1,750	1,830	1,920	2,000
Greenfield	1,770	1,850	1,930	2,010	2,080	2,150
Hancock	1,820	1,840	1,920	1,990	2,050	2,120
Hillsborough	5,670	5,900	6,150	6,360	6,570	6,780
Peterborough	6,130	6,390	6,670	6,890	7,120	7,350
Hillsborough County	402,790	417,280	432,820	446,590	460,410	474,040
State of New Hampshire	1,315,000	1,365,140	1,420,000	1,470,010	1,520,310	1,565,040

Source: NH Office of Energy & Planning



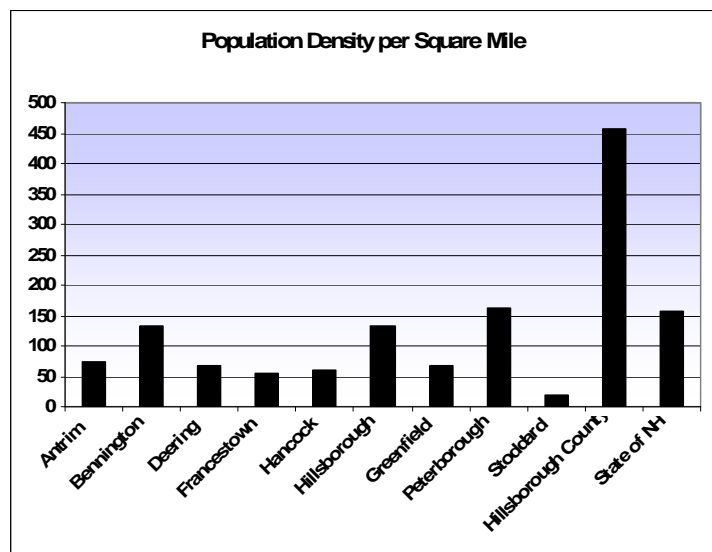
Source: NH Office of Energy & Planning

Population Density

Population densities (residential population per square mile of land) for Antrim and our surrounding towns, as well as for the Southwest Regional Planning Commission (SWRPC) region and the State of New Hampshire are presented below. Antrim's population density of 73.6 is much lower than that of Hillsborough County, but slightly higher than some of the neighboring towns. The area with the highest population density in Antrim is the downtown area. This was one of the original mill centers in town.

Population Density per square Mile, 2007 Population	
Antrim	73.6
Bennington	132.3
Deering	67.5
Francestown	52.9
Hancock	60.5
Stoddard	20.1
Hillsborough	132.2
Greenfield	67.3
Peterborough	162.8
Hillsborough County	457.6
State of NH	157.6

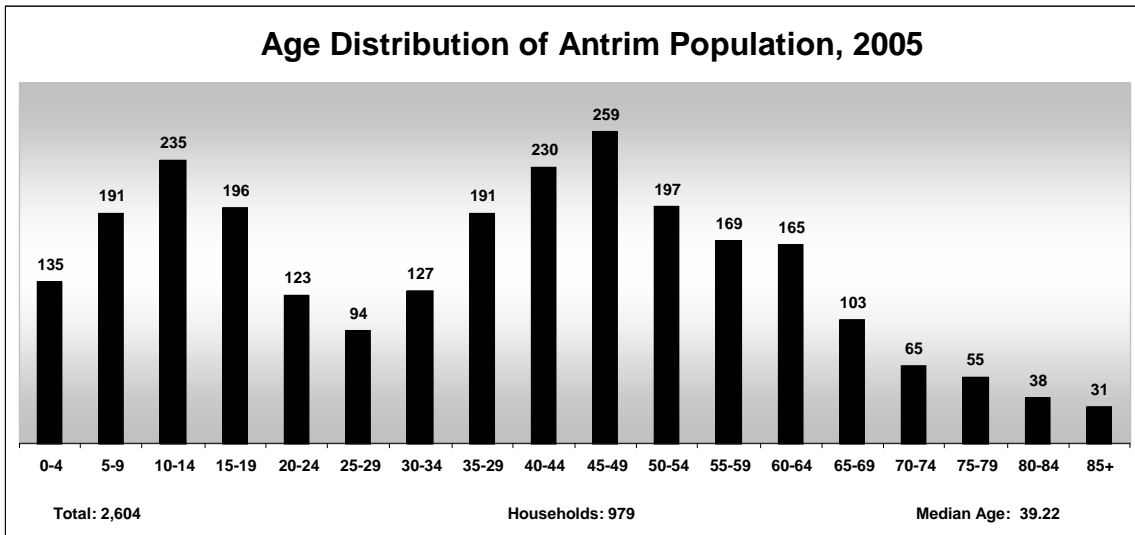
Source: NH Office of Energy & Planning



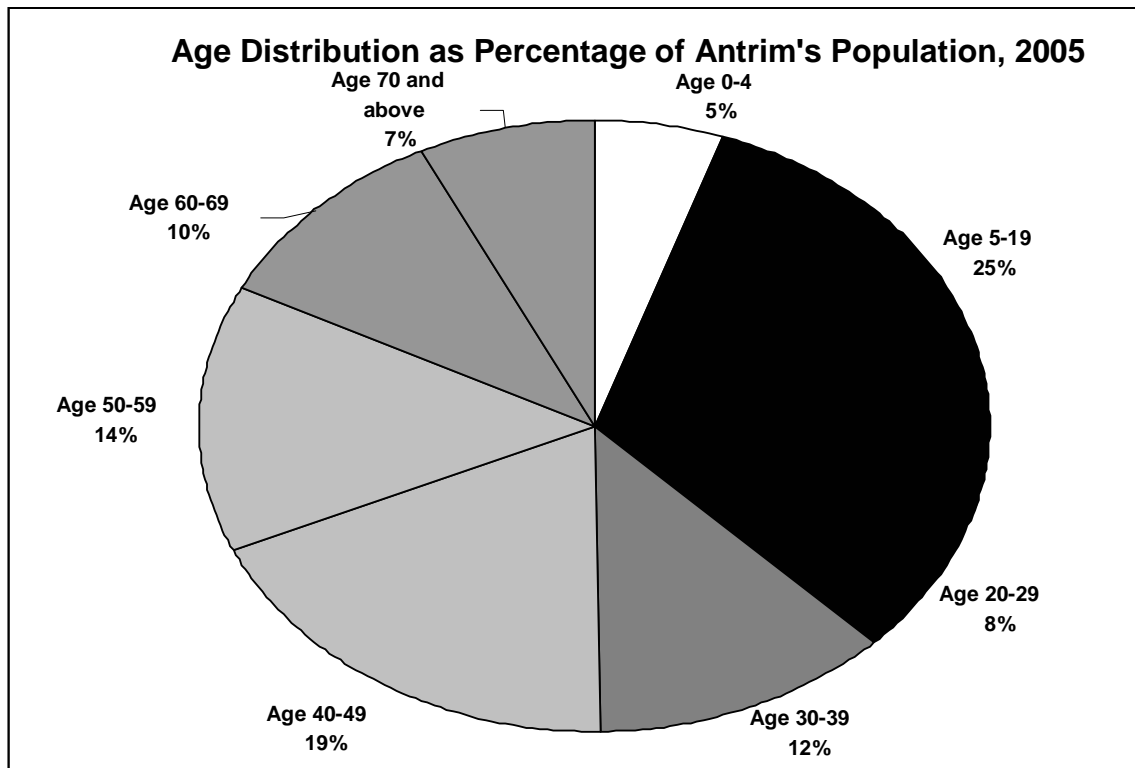
Source: NH Office of Energy & Planning

Age Distribution

Examining the population's age profile provides insight into future changes in population, and the future public service needs within town. Antrim's age distributions for 2000 and 2005 are depicted in the following tables, showing population distribution among 18 age cohorts tracked by the US Census.



Source: US Census; NH Office of Energy & Planning



Source: US Census; NH Office of Energy & Planning

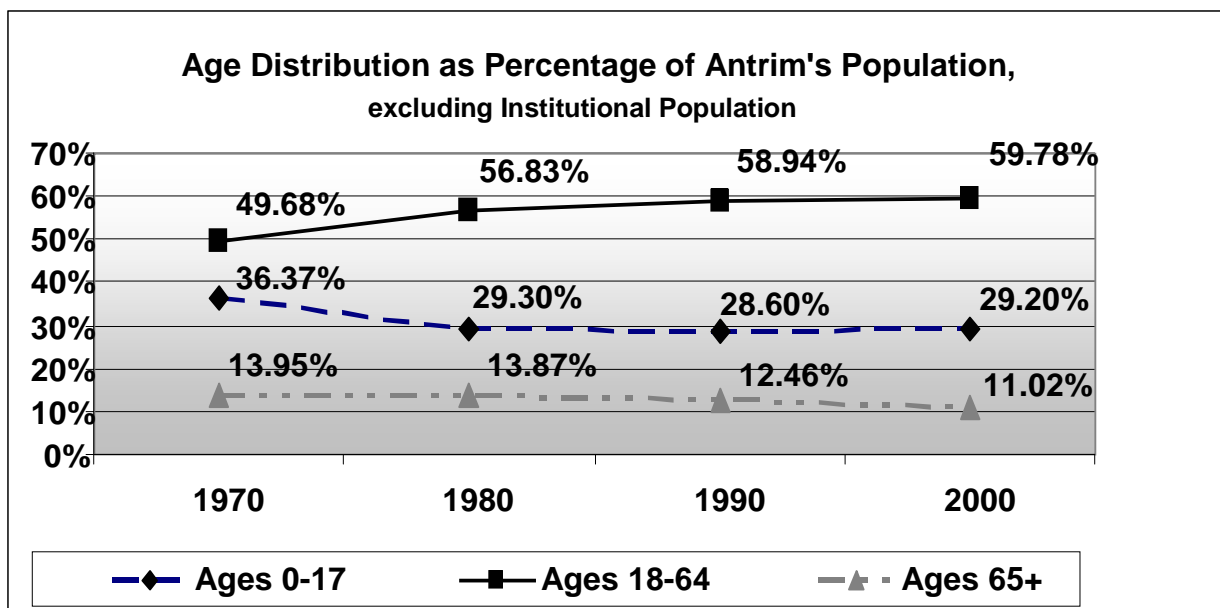
Antrim roughly resembles the region. There were slightly higher percentages of people 17 years or younger in Antrim, with 29.2 percent in Antrim versus 26.3 percent in the county and 25 percent in the state. The working age population of persons 17 to 64 years of age was smaller in Antrim than the region (59.6 percent versus 63 percent for both the county and the state). Smaller percentages in the 20 to mid-30 year old brackets may be due to a shortage of jobs or affordable housing. Defined as people 65 years or older, there were more senior citizens as a percentage of population in Antrim than the county (11 percent versus 10.6 percent) and fewer senior citizens than the state (12 percent).

Historical Aging Trends

Antrim's school age population has slowly declined over the past 35 years and stabilized just below 30% of the town's population. The percentage of the senior citizen population has slightly declined. The workforce population, the group ranging from 18-64, has steadily increased, which will have a significant impact on the town as this segment of the population ages and requires new services and facilities, both public and private.

Age Distribution of the Population, 1970-2000									
	0-17 years			18-64 years			65+ years		
	Antrim	Hillsb. County	NH	Antrim	Hillsb. County	NH	Antrim	Hillsb. County	NH
1970	571	79,628	254,211	1,332	121,687	405,058	219	22,626	78,412
1980	543	81,027	258,082	1,408	167,367	559,561	257	28,214	102,967
1990	675	86,198	278,755	1,391	215,446	705,468	294	34,429	125,029
2000	715	100,221	309,562	1,464	240,094	778,254	270	40,526	147,970

Source: US Census; NH Office of Energy & Planning



Source: US Census; NH Office of Energy & Planning

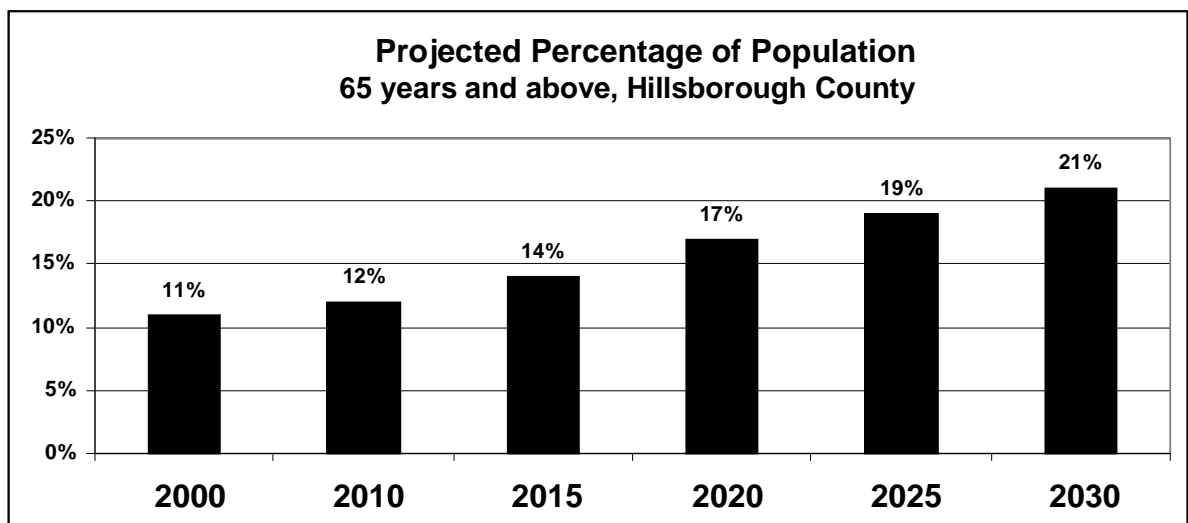
Median Age

According to the 2000 Census and subsequent estimates by NHOEP, the median age in New Hampshire is increasing. In Antrim, the median age was 37.4 in 2000. While updated data for Antrim is not available, the second chart below illustrates the median age of New Hampshire's population by county. It is expected that the median age in New Hampshire will continue to increase, which will have a significant impact of the type of services and facilities the town will need to provide for its residents. This will include smaller housing units, assisted living facilities, and transportation for those who can no longer drive. The third chart shows that the percentage of the population of those 65 and older in Hillsborough County is expected to steadily increase to 21% of the total population by 2030, mirroring a similar increase in the state as a whole to 28%.

Place	Median Age, 2000
Antrim	37.4
New Hampshire	37.1
United States	35.3

Source: 2000 US Census

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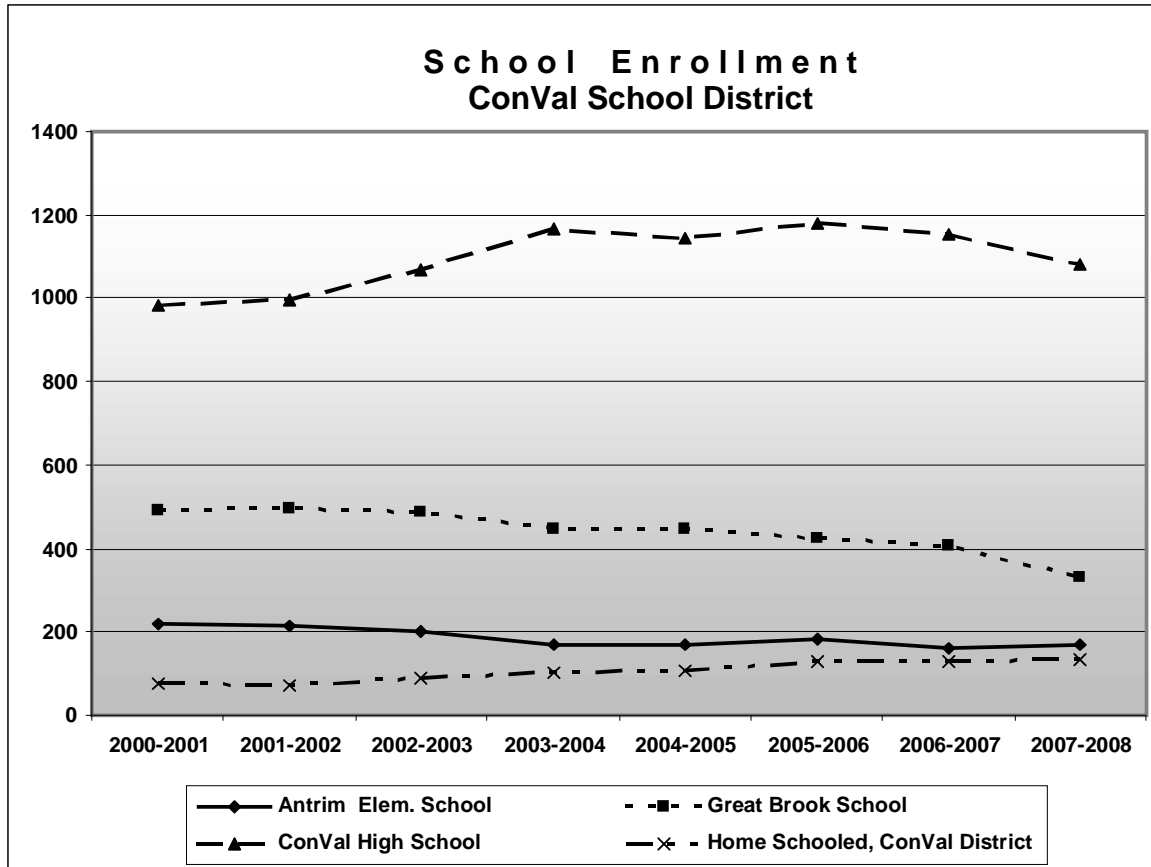
Source: NH Office of Energy & Planning

School Enrollment

The number of school age children is also an important factor in planning for the future of the town. The table below shows that the number of students enrolled in Antrim's Elementary School (students from Antrim) and Great Brook School (students from Antrim, Bennington, Hancock and Frankestown) has decreased, while the number of students at ConVal High School (students from all nine towns of the ConVal School District) and those students who are home-schooled has grown. If this trend continues as anticipated, this will mean a higher median age in Antrim and a greater percentage of older residents in the community.

School Enrollment 2000-2008				
	Antrim Elem. School	Great Brook School	ConVal High School	Home Schooled, Conval District
2000-2001	217	493	983	78
2001-2002	216	495	998	72
2002-2003	203	486	1,068	90
2003-2004	171	448	1,169	105
2004-2005	170	447	1,145	109
2005-2006	185	424	1,179	128
2006-2007	162	407	1,154	130
2007-2008	169	333	1,084	134

Source: ConVal School District



Source: Conval School District

Natural Increase and Migration

Over the last 15 years, migration of new residents into the community has come to represent a larger share of the total population increases. The chart below shows that both the death and birth rates have declined and people who have moved to Antrim in the 1990-2005 period represent more of the municipal population growth. If economic resurgence continues and more people migrate into the region, lower housing prices in more peripheral places such as Antrim may promote increased migration into town.

	1991-1995	1996-2000	2001-2007
Births	195	128	122
Deaths	105	86	100
<i>Natural Increase</i>	90	42	22
<i>(Out)/In Migration</i>	(78)	35	121
Population Gain	12	77	143

Source: NH Department of State, Division of Vital Records

Examining where Antrim’s new residents are coming from also illustrates the changing nature of the town. The master plan survey conducted in May of 2006 indicated that many of our residents have moved here from other New Hampshire communities. This accords with the data from the 2000 Census presented below. In addition, more and more are migrating to Antrim from outside New Hampshire. Still, there is a very small foreign born population.

Place of Birth		# of Antrim residents	% of Antrim residents
Native	New Hampshire	1,239	50.59%
	Other states	1,161	47.41%
	Born outside US*	12	.05%
Foreign Born **		37	1.5%

* Parents US natives, child born outside US; ** Born outside US to non-US natives

Source: 2000 US Census

Household Size

In 2000 there were 2.62 persons per household in Antrim according to the US Census. The following chart breaks down household size in Antrim, our neighboring towns, the state, and the United States. Antrim has slightly more people per household than most other local towns. The average family size in Antrim in 2000 was 3.17 persons. Local statistics may be influenced by the housing supply.

	Average Household Size, 2000	Average Family Size, 2000
Antrim	2.62	3.17
Bennington	2.54	3.18
Deering	2.52	2.95
Francestown	2.68	3.04
Hancock	2.46	2.94
Hillsborough	2.55	3.02
Stoddard	2.32	2.76
State of NH	2.53	3.03
United States	2.59	3.14

Source: 2000 US Census

In 1990, the average household size in Antrim was 2.69 persons, 1% higher than in 2000. In a similar manner, the average family size in 1990 was 3.22 persons, or 1.5% higher than it was in 2000. While the number of housing units remained essentially the same, the decrease in household size combined with an increase in population indicates that the number of households increased at a much faster pace than population growth. The following table demonstrates the increase or decrease in the number of housing units and households compared to the population increase.

Income

The next table shows the 2000 Census data for median household income for individual municipalities. The standard of living in New Hampshire is high, and southern New Hampshire overall has some of the highest levels of income in the state. Antrim's median household income is lower than that of the county and state, and while there was a significant increase of 23% in the 1990-2000 decade, Antrim did not experience the more rapid rate of growth in income as did some of the surrounding towns.

	Median Household Income 1990	Median Household Income 2000	% Increase from 1990-2000	Estimated Median Household Income 2007*
Antrim	\$37,246	\$45,677	23%	\$52,000
Bennington	\$34,375	\$46,150	34%	\$58,500
Deering	\$36,302	\$48,750	34%	\$61,800
Francestown	\$46,316	\$64,259	39%	\$78,870
Hancock	\$41,318	\$55,000	33%	\$69,700
Hillsboro	\$34,167	\$44,500	30%	\$40,400
Stoddard	\$31,705	\$37,639	19%	\$48,700
Hillsb. County	\$40,404	\$53,384	32%	\$67,667
New Hampshire	\$36,379	\$49,467	36%	\$62,369
United States	\$30,056	\$41,994	40%	\$50,233

Source: 2000 US Census; * www.city-data.com

Household income distributions in Antrim are shown in the next chart. Compared with the region, Antrim has more people in the lower income categories. Forty percent (40%) of households earned less than \$35,000 in 2000. The largest income category in Antrim in 2000 was the 27% of households earning \$50,000 to \$74,999. Antrim has an income curve skewed toward lower income categories.

Distribution of Antrim Households by Income		
Income	Number of Households	Percentage of Households
Under \$10,000	119	12.9%
\$10,000 to \$14,999	56	6.05%
\$15,000 to \$24,999	79	8.54%
\$25,000 to \$34,999	119	12.9%
\$35,000 to \$49,999	135	14.95%
\$50,000 to \$74,999	250	27.03%
\$75,000 to \$99,999	88	9.5%
\$100,000 to \$149,999	58	6.27%
\$150,000 to \$199,000	10	1.08%
\$200,000 or more	11	1.19%

Source: 2000 US Census

Poverty

New Hampshire consistently has one of the lowest poverty rates in the nation. The poverty line, defined as the minimum level of income needed to achieve an adequate standard of living, was \$17,050 for a family of four in 2000 or \$8,350 for an individual. According to the 2000 Census, the average number of individuals in New Hampshire experiencing conditions categorized as poverty was 6.5 percent. NHOEP reports that by 2007, the rate in New Hampshire increased 1% to 7.5%, with Hillsborough County at 6.3%. The state retains the lowest ranking among all 50 states for the percentage of persons in poverty. It is noteworthy that the New Hampshire income gap has been widening, with people in the lowest brackets typically earning disproportionately less than the upper brackets.

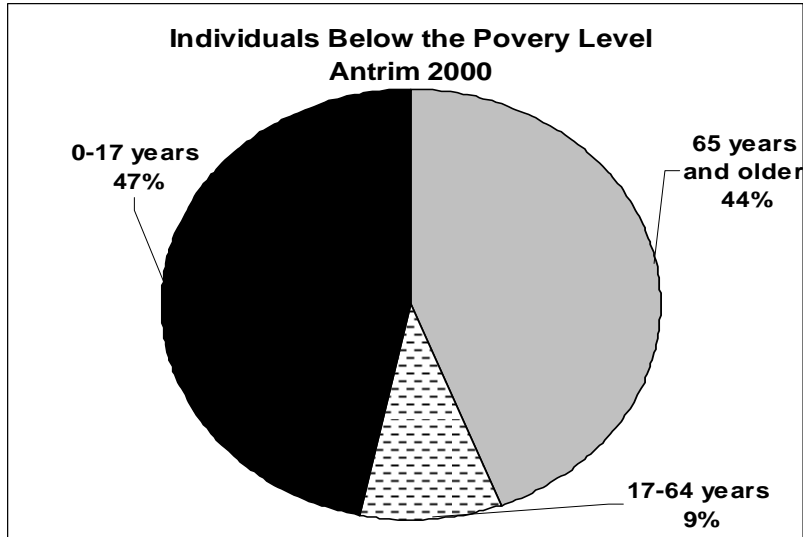
Antrim has one of the highest poverty rates in the area. The chart below presents data from the 2000 Census for Antrim, neighboring towns, the State of New Hampshire, and the United States.

Individuals Below the Poverty Level

	Population below the Poverty Level		
Antrim	11.5%	Hancock	3.8%
Bennington	7.9%	Hillsborough	9.8%
Deering	4.0%	Stoddard	8.6%
Fracestown	3.0%		
Hillsborough County	6.3%		
State of NH	6.5%		
United States	2.59%		

Source: 2000 US Census

Although incomes in Antrim have increased since 1990, just over 40 percent of Antrim households earned less than \$35,000 in 2000. Furthermore, it is likely that many of those in the lowest income categories are children or people who are of retirement age. Of the 277 Antrim individuals identified as living below the poverty level for the 2000 Census, 45.3% were 17 years old or younger, while another 32% were 65 years old or older.



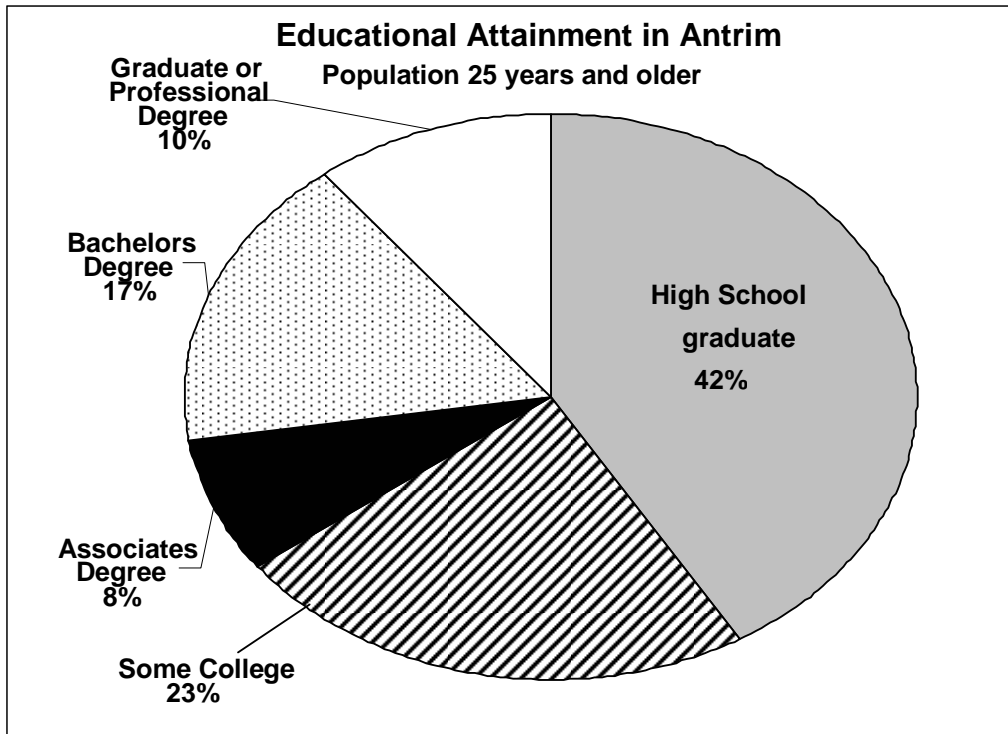
Source: 2000 US Census

Educational Attainment

Educational attainment levels in Antrim are lower than the Hillsborough County region, and lower than the state. Fewer residents of Antrim possess any college education. Antrim has a lower proportion of people with bachelor's degrees than the state overall.

Level of Educational Attainment							
	High School grad.	Some College	Associate Degree	Bachelors Degree	Graduate or Professional Degree	% High School Graduate or higher	% Bachelors Degree or higher
Antrim	560	314	106	230	141	84.9%	23.3%
Hillsb. County	69,165	8,925	22,849	50,475	25,328	87.0%	30.1%
State of NH	247,723	164,634	71,772	153,874	82,230	87.4%	28.7%

Source: 2000 US Census



Source: 2000 US Census

HOUSING

The number of housing units in Antrim grew steadily throughout the 1970s and 1980s, before leveling off in the housing slump of the early 1990s.

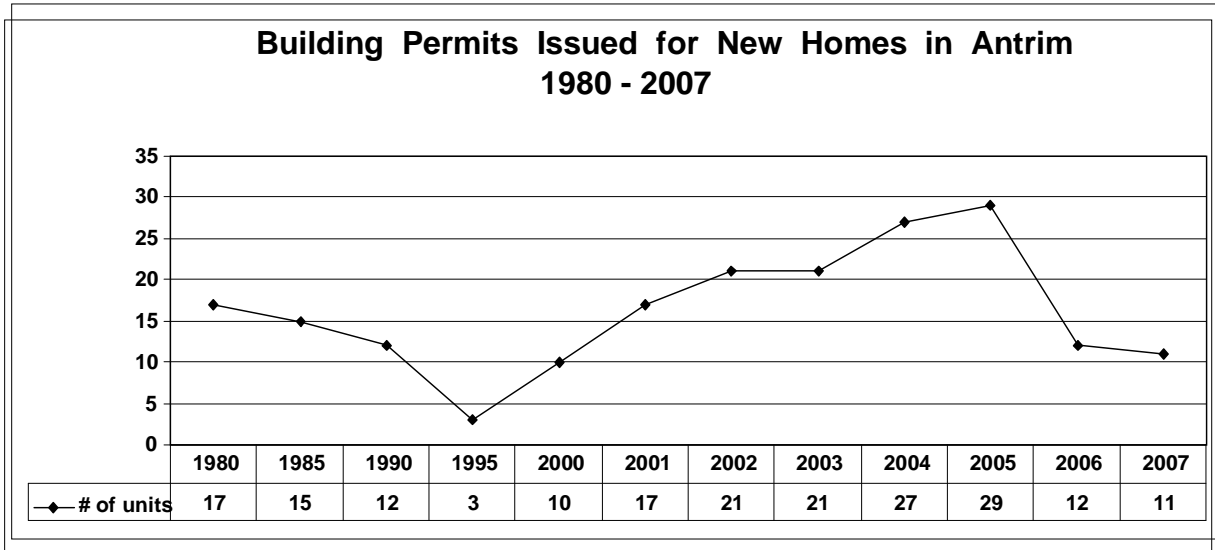
According to the 2000 Census, Antrim's housing supply remained stable over the 1990-2000 decade, with the percentage of mobile homes and the number of multi-family units slightly declining. Only single family homes increased in number.

Antrim's Housing Supply, 1990- 2000

Housing Unit Type	Number of Units 1990	% of Total Units 1990	Number of Units 2000	% of Total Units 2000
Single Family	846	73%	869	75%
Multi-Family	237	20%	235	20%
Mobile Home & Other	79	7%	56	5%
TOTAL	1,162		1,160	

Source: 2000 US Census

From 2001 to 2005, however, there was a sharp uptick in the number of building permits issued for new homes. The cooling of the economic climate has resulted in a sharp drop-off, but once the economy improves, many more applications for permits are expected as major subdivisions currently in existence come to fruition.



Source: Town of Antrim Building Department

Because of the number of pending subdivisions under way, the town expects building permits to continue to be issued in conformity with the rate established for this decade. Of course, how quickly building permits are issued for these proposed units will no doubt reflect the strength or weakness of the housing market.

Recent Antrim Subdivisions

Name of Subdivision	Permits already issued	# of housing units to be built	Location
Valley View	(permits already issued for 3)	3	Off Elm Avenue
Lauber		8	Off Elm Avenue
Knapton		8	Off Pierce Lake Rd
Cloud Court		6	Off Route 31
Torino		12	Off Route 202
Cloutier		5	Off West Street
Hardwick/Schnare		22	Off Route 202
TOTAL UNITS		64	
Other: Plan of the Maharishi Vedic School for 7 10,000 square foot buildings, housing 200-400 “residents”			

Source: Town of Antrim Planning Department

Persons per Housing Unit

The persons per housing unit figure is important in gauging population growth as it can be used with building activity to provide population estimates. As illustrated below,

Antrim's average persons per dwelling declined from 3.2 in 1970 to 2.62 in 2000. A declining persons per household ratio may be a function of factors such as a higher proportion who are elderly and live alone, as well as the declining size of families.

Household Size in Antrim (Persons/Household)				
1970	1980	1990	2000	%Change 1970-2000
3.2	2.7	2.7	2.62	-18.7%

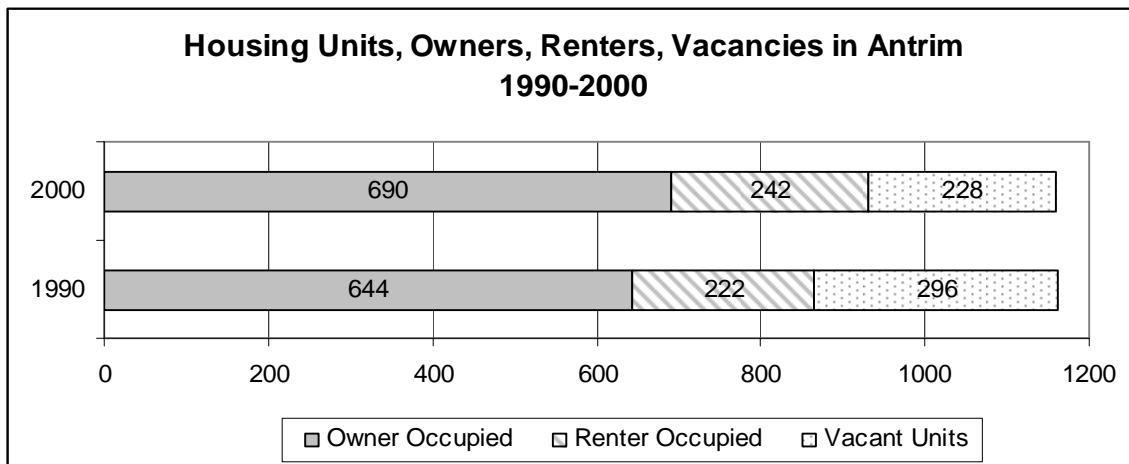
Source: 2000 US Census

Housing Tenure

Housing tenure refers to whether a housing unit is owned or rented by occupants. The table below presents housing tenure for Antrim. Of the 932 occupied housing units, 690, or 74 percent, are owner-occupied, and 26 percent are renter-occupied. Rental units are concentrated around the downtown area.

Housing Units in Antrim		
	1990	2000
Total Units	1,162	1160
Occupied Units	866	932
Owner Occupied	644	690
Renter Occupied	222	242
Vacant Units	296	228
Vacant for Sale	15	11
Vacant for Rent	27	4
Vacant Seasonal	216	207

Source: 2000 US Census



Source: 2000 US Census

Compared to New Hampshire and the United States and adjusting for those housing units that are vacant seasonally, Antrim has a very favorable rate of vacancy of about 2%. This also leads, however, to a very tight rental housing market. Antrim has 207 units categorized as seasonal, representing 17.8% of the housing stock, not a large share given our lakes and traditional “summer season”. We should note, however, that this is a fairly significant proportion of our total housing stock. These units could become year-round quickly and start demanding services year-round.

Occupancy & Vacancy Rates of Housing Stock

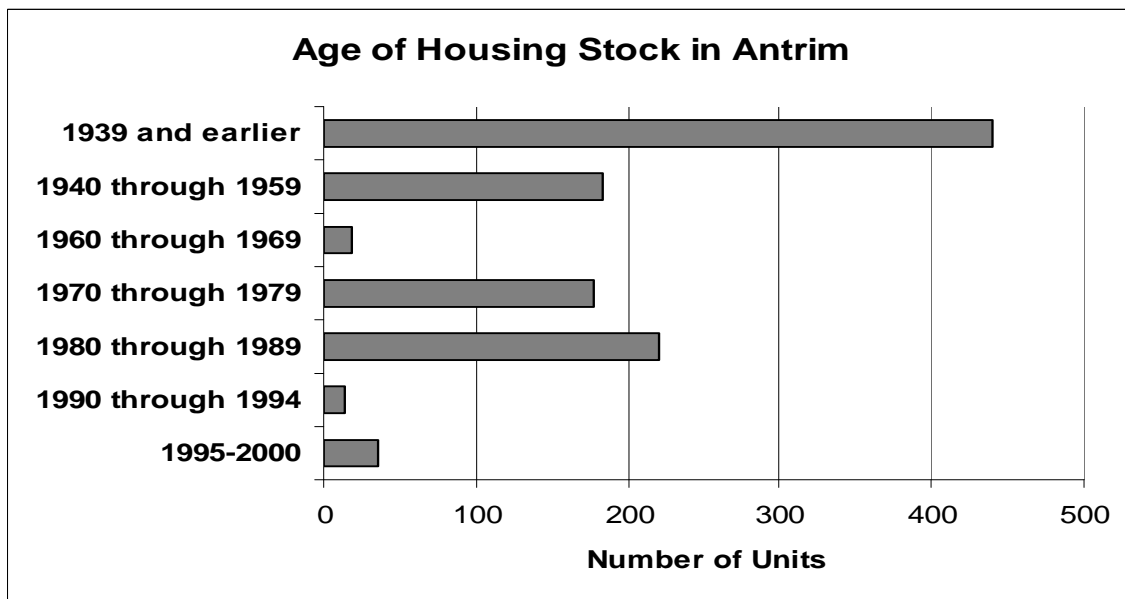
	Occupancy Rate 2000	Vacancy Rate 2000
Antrim	98.2%	1.8%
State of New Hampshire	86.8%	13.2%
United States	91%	9%

Source: 2000 US Census

Age of Housing

As the next table illustrates, 42.1% of the housing stock in Antrim was built between 1960-1980. The median year structures were built is 1960, which is older than the state average of 1974 for owner occupied units and 1963 for renter occupied units. This may be because Antrim has not yet experienced the rapid growth of residential housing that other parts of the New Hampshire have.

In Antrim, 37.9% of homes were built prior to the Second World War. Older homes may be architecturally significant and represent the heritage of the community, but they may also have been constructed according to less stringent building codes and safety requirements, and may include safety hazards such as the presence of lead based paint and asbestos.



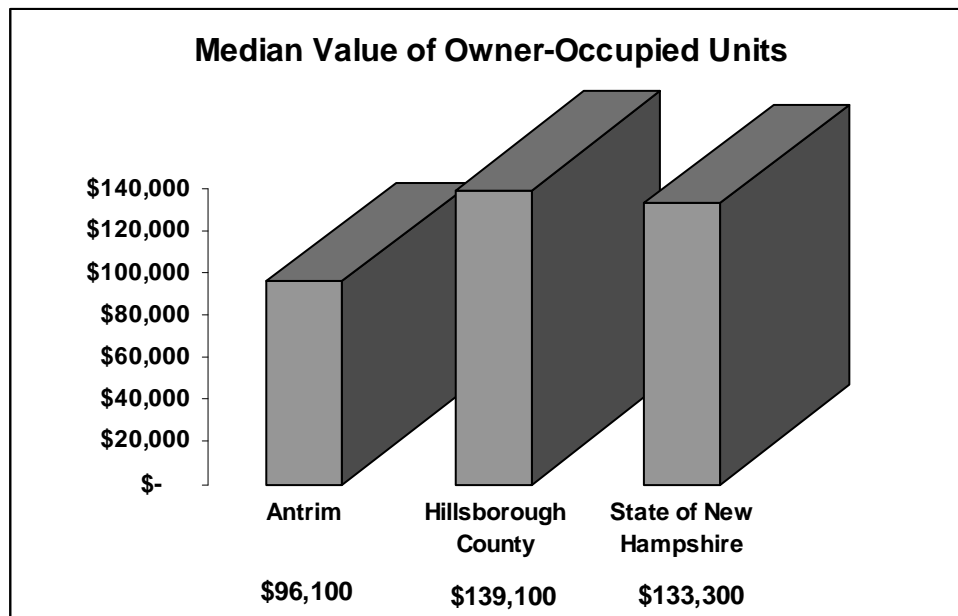
Source: 2000 US Census

Age of Housing Stock in Antrim		
Year Built	Units	% of Total
1995-2000	35	3.0%
1990 through 1994	14	1.2%
1980 through 1989	212	18.3%
1970 through 1979	177	15.3%
1960 through 1969	19	8.5%
1940 through 1959	183	15.8%
1939 and earlier	440	37.9%

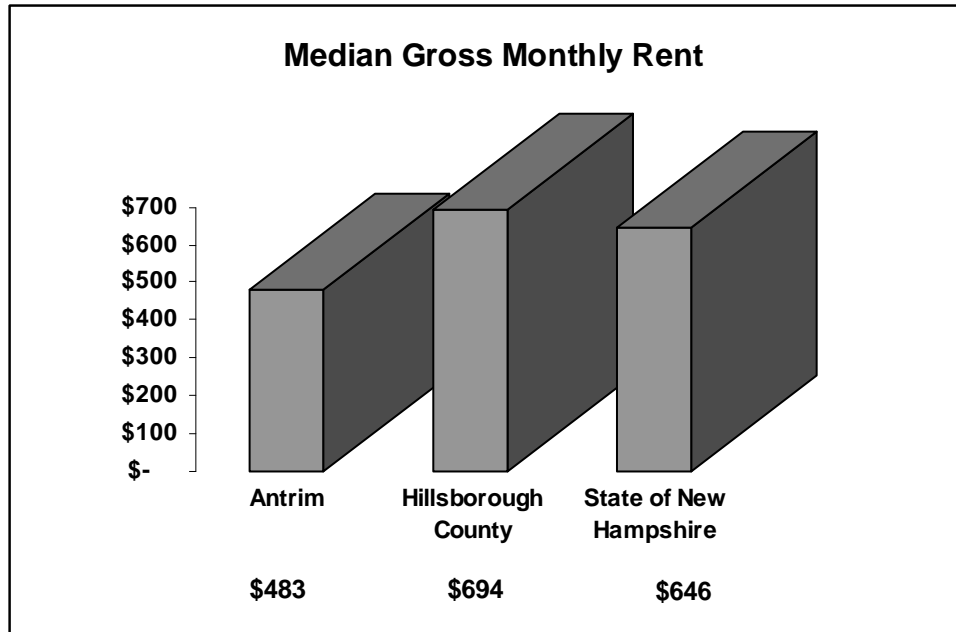
Source: 2000 US Census

Housing Costs

According to the 2000 Census, the median value of owner-occupied housing units in Antrim was \$96,100 and the median gross monthly rental was \$483. The following charts compare these housing costs to Hillsborough County and New Hampshire. On average, Antrim is still more affordable than the county or the state.



Source: New Hampshire Housing Finance Authority



Source: New Hampshire Housing Finance Authority

Renters in Antrim pay a slightly higher proportion of their income for housing than do homeowners. In 2000, the median household income for owner-occupied housing units in Antrim was \$51,012. Renters, on the other hand, had an annual income of \$25,096. In 2000, 32% of Antrim’s homeowners spent more than 30% of their income on housing costs, while 39% of renters spent over 30% of their income on housing. In 2007, the tax rate was 20.49 and the equalization ratio was 85.8 % for properties in Antrim.

Affordable Housing

The U.S. Department of Housing and Urban Development (HUD) calls housing cost - rent plus basic utilities or mortgage, tax and insurance payments - affordable when they account for no more than 30% of a household’s income. Households are deemed by HUD to have an affordability problem, or cost burden, if they pay more than 30% of income for housing; those paying over 50% are said to have a severe cost burden.

The Directory of Assisted Housing of the New Hampshire Housing Finance Authority lists 50 units in Antrim that are subsidized for the elderly: 40 at Antrim Village on Aiken Street and 10 at Great Brook Home on North Main and Grove Streets. In addition, 12 units are owned by the Contoocook Housing Trust, which develops and provides affordable housing opportunities, including rentals and small homeownership loans for families with modest incomes in the Contoocook Valley region. These 62 units, in total, represent 5.3% of Antrim’s housing stock. While the entire State of New Hampshire has a percentage of only 2.9% of subsidized housing, Antrim’s aging population may mean that more units of subsidized housing are needed in the future, particularly for the elderly.

Workforce Housing

In response to a shortage of housing that is affordable for working households, the New Hampshire Legislature recently passed a new law, effective July 1, 2009 that requires towns to provide the opportunity to developers to build workforce housing in more than half of their residential units, including rental multi-family housing. There must also be some place in town allowing multi-family dwellings with at least five (5) units. “Workforce housing” is defined to mean housing which is intended for sale and which is affordable to a household with an income of no more than 100 percent of the median income for a 4-person household for the metropolitan area or county in which the housing is located as published annually by the United States Department of Housing and Urban Development. “Workforce housing” also means rental housing which is affordable to a household with an income of no more than 60 percent of the median income for a 3-person household for the metropolitan area or county in which the housing is located as published annually by the United States Department of Housing and Urban Development. A municipality’s existing housing stock is allowed to be taken into consideration in determining its compliance with the new law.

Antrim, like many other small New Hampshire towns, will need to examine its existing housing stock and zoning ordinances to determine whether or not the town is in compliance with the new law. Some have speculated that this law may be used by a developer who proposes a workforce housing project but finds it isn’t feasible because of local zoning restrictions that increase his costs. If the town insists on the restrictions, then the developer could go to court and possibly win a ruling waiving some of the restrictions. The cost of litigation to the developer has been significantly mitigated by the provision in the law of an accelerated appeals mechanism. The developer can petition the superior court for review, and the court must conduct a hearing on the merits within six months. As a means of addressing exclusionary municipal land use regulations, the court will be able to order the “builder’s remedy,” allowing the developer to proceed without further local review in situations that call for such an award.

Land Use Implications

As Antrim’s population continues to grow, residential development will have a direct impact on the town, affecting both its residents and its businesses. An aging population may call for more cluster or condominium style housing units, as older families downsize and no longer want to maintain significantly sized properties. Older citizens may seek smaller housing units on one level that are less expensive and easier to maintain. As a corollary to this, Antrim’s older residents may wish to live in accessory units to single-family homes as an affordable way to remain in the community. Such housing may also provide affordable housing for young, single residents who are just entering the workforce and wish to remain in their hometown.

The town may also be called upon to provide additional services for an aging population, including transportation and social services. As we see increased commercial and retail activity both in neighboring towns and within Antrim in response to the growth of all

segments of the population, more affordable housing will be needed to house those who are employed in these establishments.

The demands of Antrim's population growth will have a major influence on land use and will have a significant impact on municipal services and the funds required for them. Through its zoning, the town and the planning board can attempt to provide housing opportunities for all income levels, as well as the businesses and services needed for the population, while maintaining the rural character of our community.

Recommendations

- Encourage the redevelopment of downtown properties such as the mill buildings to incorporate a mix of uses, including a variety of housing types and costs. More housing located in the downtown area on smaller lots can reduce housing costs, provide workers for local businesses, and reduce the cost of transportation to needed goods and services.
- Review the regulations concerning accessory units in owner-occupied single-family homes.
- Strive to provide affordable housing options within Antrim by providing incentives to housing developers that create workforce housing units, and examine other techniques.
- Examine Antrim's existing housing and zoning ordinances to determine if the town is in compliance with RSA 674:58, the new workforce housing law. If not, draft a new ordinance to assure compliance with the law.
- Work with developers to minimize the costs of living through quality housing design, energy efficient construction, proximity to transportation, and employment and reemployment options.
- Study the advisability of impact fees to generate adequate funds to cover the costs of the new infrastructure that new residential growth necessitates.
- Monitor the conversion of Antrim's many seasonal houses into year-round homes to ensure all are in compliance with building and safety requirements.
- As the percentage of the population comprised of those who are migrating into Antrim both from other New Hampshire towns and from other states increases, efforts should be made to reach out to these new residents in an effort to integrate them into our community, while also striving to maintain and preserve our heritage, history, and the things that make Antrim special.
- Study the causes of the relatively high rate of poverty in Antrim and work to reduce it. Continue support of social service programs such as The Grapevine and the before- and after-school programs.

Community Facilities

Introduction

Antrim's first master plan, adopted in 1985, praised the town's leadership for creating a community that "on the whole ... appears to be in good shape as far as the town's facilities go". That statement is still true twenty-two years later, thanks to the careful stewardship of town officials, taxpayers and local nonprofits. Much has been done in recent years to improve upon the network of buildings, roads, parks, and other infrastructure owned and maintained by the town. In addition, a number of key organizations have continued to grow or maintain their nonprofit services to this community.

When it comes to the town owned buildings or services, Antrim voters are frugal but they know the value of maintaining and upgrading public holdings. In the past nine years they have dug deep into their pockets to renovate the Antrim Town Hall and again for a much-needed addition to the James A. Tuttle Library.

Juggling the needs of town government with the needs of the taxpayer, especially in light of the long-unsettled court battle over public education funding, has called for new management measures. Since the Antrim master plan was updated in 2001, Antrim's town government has added two important tools to its fiscal methodology.

In 2005, the Antrim Planning Board created a subcommittee to handle its Capital Improvement Program (CIP). This group meets annually with department heads to map out plans for capital improvements for the ensuing six years. The resulting plans spread anticipated costs across the six year period, and provide a strategy for buying higher ticket items at a point when the town's indebtedness allows those purchases without a jolt to the tax bill. As this group continues its work, this long range planning will help the town monitor and anticipate its capital needs more efficiently, while reducing wide swings in the tax burden.

As a result of the initial CIP discussions, the town administrator explored, and the selectmen approved, a vehicle lease-purchase schedule for the fire, rescue, highway and recreation departments. This leasing plan will allow an orderly replacement of vehicles without the need for special warrant articles. In 2008, police vehicles were also put on a leasing schedule. Town meeting voters will continue to be asked to support a capital reserve fund for other vehicles and purchases not covered in the lease-purchase agreements.

Antrim, like most towns in New Hampshire, has been very self-sufficient in its first two centuries. While its community facilities appear satisfactory for the town with a population of 2,626 as of 2007, as estimated by the New Hampshire Office of Energy and Planning, the future could bring new stresses and rapid changes. Just as the town has adopted some new techniques for dealing with capital purchases, there may be new opportunities to join cooperative ventures with surrounding towns or nonprofit groups.

This could help improve services, equipment, and facilities with less cost to the taxpayers.

And finally, although the recent improvements to town buildings and other upgrades ought to serve this community well for many years, the future is never as clear as it appears. Unforeseen growth or other stresses could tax the community resources in ways Antrim's town government has not yet anticipated.

This purpose of this chapter of the master plan is to present:

- An inventory of town owned facilities and services, including assessments of the adequacy of the current level of service and comments gleaned from the 2005 and 2006 town surveys and the visioning sessions.
- An inventory of non-town facilities and services that contribute to the welfare of the town and the quality of life.
- Planning strategies and recommendations to improve town owned facilities.

Inventory of Town Owned Facilities & Needs Assessment

Town Hall

The Antrim Town Hall is one of the key historic buildings on Antrim's Main Street and the hub of the town's government operations. The two-story, brick building, built in 1894, was completely renovated in 2001-2002 without erasing its historic architectural features. Voters at the 2000 Town Meeting supported plans to spend \$937,141 on the project, which included installing a handicapped-accessible elevator to the second floor, electrical upgrades, new bathrooms, new office space for the town selectmen and town administrator, and new offices for the town clerk and tax collector, planning and zoning office, building inspector and other town personnel. The north end of the first floor was renovated for the Antrim Police Department.



Antrim Town Hall

The second floor, which is now fully handicapped accessible, including the stage area, is used by local groups. The space is home to the local community theater group, and is used on a rental basis by local recreation groups (e.g. marital arts, dancing, indoor gymnastics for preschoolers, etc.) and by private citizens.

In addition to the original bond, the town has spent about \$75,000 more on improvements to windows, and heating and air conditioning systems. Those upgrades have considerably reduced the fuel costs for the building.

After the creation of the Homeland Security Act, the town was required to establish an emergency command center. The Town Hall is the primary command post for Antrim and is served by a generator and phone systems that can operate independently from the power grid. Backup centers are maintained at the Antrim Fire Station on Route 31 and at the water and sewer department just off Depot Street. The emergency system meets all current federal emergency guidelines.

The town has also established an official website (www.antrimnh.org) to assist local residents and help newcomers find services. Please see the Cultural Resources chapter for a more complete description of the website.

Police Department

The Town of Antrim has a full-time police department, with staffing provided for five full-time officers, including its chief. As of 2008, there is also provision for two part-time officers to fill in when the full-time officers are on vacation or other leave, and 20 to 24 hours of administrative help per week to assist with the ever-increasing amount of paperwork.

The department's offices are located on the first floor of the Antrim Town Hall. All calls are dispatched from the Hillsborough Police Dispatch Center located in the Town of Hillsborough. Antrim officers responded to an average of 288 calls a month in 2007.

Equipment consists of three police vehicles, a 2003 Ford Crown Victoria police cruiser, a 2004 Ford Expedition, a 2007 Ford Crown Victoria and a 2004 Arctic Cat 4-wheeler and trailer. The police cars are on a leasing schedule, with a three year rotation. In addition, the department has a speed detector/traffic count trailer, purchased with the help of a federal grant in 2006.

The department has recently invested in new computer software to keep up with new technology and regulatory requirements for policing and safety.

In 2001, the Uniform Crime Report guideline for uniformed and civilian police forces in the Southwest Regional Planning Region was 1.54 officers per population of 1,000, which was on par with Antrim's staffing of four full-time officers at that time. However, this guideline no longer exists within the region. The FBI standard for staffing is one police officer for every 500 residents. With a 2007 population estimate of 2,626, that would mean 5.25 officers for Antrim.

The police station in the Antrim Town Hall, although much more secure now than prior to 2001, needs additional safety upgrades to comply with current regulations, as well as additional office space, a secure and accessible area for the storage of evidence and a segregated holding area for arrestees. One potential plan is to move the police station to the Main Street property that houses the now defunct gas station. The advantage of such a move would be additional room and security for the officers, while keeping the station in the downtown area where a police presence is most needed.

Fire Safety

Fire protection is provided by approximately 33 paid volunteer firefighters, a department that includes the fire chief and two deputy chiefs. Members of the department are paid \$10 an hour for the time they are on a call with additional stipends for the chief and other officers.

Antrim firefighters receive training through in-house programs, courses from the Meadowood fire service in Fitzwilliam, and training from a professional firefighting service. Most members of the Antrim department are certified Firefighter Level I, and several have received Career Level training.

The department maintains two fire stations. Company No. 1, housed in the main fire station on Clinton Road, north of the downtown area, has three equipment bays, a meeting room, kitchen, and a training area on the second floor. A free-standing garage next to the station also houses firefighting equipment. The main station has a generator, and can be used as a back-up command post in emergencies (the main command post is the Antrim Town Hall). Company No. 2, housed at the North Branch station on Route 9 near the intersection of Elm Avenue, has two equipment bays.

Equipment maintained by the fire companies includes:

- 1974 International Brush Truck
- 1979 GMC Pumper
- 1986 Chevy Tank Truck
- 1989 GMC Fire Truck
- 1994 1250 GPM Pumper
- 2003 Freightliner Hose Reel Truck
- 2005 Ferrara 6-man Cab Pumper
- Dunbar Utility Trailer

- 2002 Box-style Wheelcoach Ambulance
- 2006 Ford Box-style Ambulance

The fire companies recently were awarded a \$59,000 grant from Homeland Security for Scott Air Packs, which will be purchased with an additional \$4,000 contribution from the Fire Department. They have also been the recipient of a \$60,000 grant from FEMA-Homeland Security to update radios for the fire trucks, and to buy new turnout gear for all fire department volunteers. Company No. 1 recently added an equipment shed to its facility on Clinton Road.

Dispatching for fire service is handled by Southwestern New Hampshire Mutual Aid in Keene. Antrim firefighters are assisted and provide assistance to the other towns in the local Mutual Aid area.

Water used for firefighting has been recently mapped and cataloged by the New Hampshire Rural Fire Protection Initiative based in Laconia. Water is supplied by several pressurized hydrants in the downtown area, two pressurized hydrants in the North Branch area, dry hydrants at Lovern Mill Road and the junction of Elm Avenue and Bridle Road, public water sources (Steele Pond, Gregg Lake, the Contoocook River, Franklin Pierce Lake, and the downtown mill pond), and various private fire ponds and smaller streams.

The Antrim Fire Department responded to 108 calls in 2007, compared to 72 calls in 2000. In general, the department has equipment and staffing sufficient for current needs, but an off-and-on again worry is how to maintain the daytime staffing of volunteers who work in Antrim or nearby and who are available to answer emergency calls.

Ambulance Services

Rescue and ambulance service is provided by the Antrim Fire Department's ambulance squad, which also provides municipal service for the towns of Bennington and Stoddard. Antrim's ambulances also respond to Mutual Aid calls outside the three-town area. Members of the rescue and ambulance service are paid \$10 an hour for the time they are on a call with additional stipends for the chief and other officers.

The Antrim squad maintains two ambulances – a 2002 box-style Wheelcoach ambulance, and a 2006 Ford box-style ambulance. Both are housed at the Antrim Fire Department's Company No.1 station on Rte 31.

The ambulance service has recently become self-supporting. Although Antrim residents are not charged any out-of-pocket costs for ambulance calls, those calls for residents who have insurance coverage are billed to the resident's insurance company. Bennington and Stoddard residents also are billed for ambulance service. Residents in those towns are expected to pay for service not covered by insurance.

The ambulance squad is currently staffed by approximately 18 volunteers who are paid for the time they are on a call. Squad members are certified as Emergency Medical Technicians, EMT intermediates, or First Responders.

The squad responded to 382 calls from the three towns and Mutual Aid in 2007. Of these, 159 were for the town of Antrim, 102 for Bennington, 34 for Crotched Mountain Ski Area, 63 for Stoddard and 24 for Mutual Aid.

Highways and Roads

The Highway Department operates out of the Town Barn facility on Goodell Road. Equipment is housed in a 40-foot by 60-foot building constructed in 1978. The department has five full-time employees and the Road Agent who is part-time. The town

hires outside contractors for some services including supplemental snowplowing and paving. The Road Agent's pending retirement in 2009 has lead the town to begin an examination of the feasibility of establishing the position of Public Works Director, to oversee the Highway Department, waste disposal, water and sewer services, and the maintenance of town buildings, cemeteries, and other facilities.

There are approximately 66 miles of road in Antrim. About 48 miles are town-owned and about 16 miles are state highways. Of the 48 miles under the town's supervision, approximately half are paved and half are gravel.

Equipment maintained by the highway department includes:

- 2002 Ford F550 One-Ton Dump Truck
- 2004 Caterpillar Backhoe
- 2002 Hudson Trailer
- 2003 Snopr Trailer
- 2005 Bobcat Sidewalk Side Plow/Blower
- 2006 Caterpillar 930 Front Loader (lease-purchase agreement)
- 2006 Caterpillar 120H Grader (lease-purchase)
- Three (3) 2007 International 7400 dump trucks with live bodies,
one with all-wheel drive (lease-purchase)
- Two (2) 1997 York rakes
- 2001 Salt and Sand Spreader (for one-ton dump truck)
- Two (2) 1997 York Rakes
- 2008 Ford F550 Dump Truck
- Two (2) 2003 Scag Mowers
- 2003 Landscape Trailer
- 1996 GMC Pickup Truck

In 2006 the town spent \$5,000 on upgrading the town barn's electrical service. The labor for the project was supplied by town employees.

Finding a good source for sand and gravel was one of the goals stated for the highway department in the 2001 master plan. That problem and possible expansion plans for the highway department were addressed recently when the town entered into a 6-year lease for a 14.1-acre sand pit off Old North Branch Road. The pit is estimated to have roughly 200,000 yards of road-grade sand that could supply the needs of the town for 30-plus years. After the mineral-rights lease ends in 2013, the town will buy the property for \$1.

The lease-purchase of this sand pit also could ease the overcrowded conditions at the Town Barn on Goodell Road. Although planned upgrades will provide an adequate working situation for the foreseeable future, the Old North Branch Road property could be used for a garage or equipment storage in future years.

Solid Waste

The Antrim Recycling and Transfer Station (ARTS) was built on Goodell Road in 1992 after the State of New Hampshire mandated the closure of the open landfill that Antrim

shared with Bennington and Frankestown. Closing the old landfill in Bennington ended one of the few regional efforts in which Antrim has been involved.

ARTS is solely run and maintained by the Town of Antrim. The recycling-transfer center, which is located just behind the Town Barn, is open 18 hours a week (Saturday and two half-days). It is staffed by three part-time employees who sort recyclables, run the compactor and baler, and manage the shipment of recyclable materials to market.

In addition to the recycling building, a baler and other equipment, the ARTS center has the use of a 2000 Ford F750 one-ton dump truck

The market for recyclables is unpredictable, making it hard to anticipate revenues. Meanwhile the cost of disposing of non-recyclable waste has increased steadily. In the spring of 2006, in an effort to put some teeth into Antrim's mandatory recycling policy, the use of clear bags for non-recyclables became mandatory. Since clear bags became mandatory, the decrease in the non-recyclable waste stream has been significant.

In 2007 ARTS started accepting construction and demolition waste and moved metals collection to a new area. Plans are underway to move to "single stream" recycling in the near future. The current facility, which has recently undergone some needed upgrades, is considered adequate to serve the needs of Antrim residents for the next five years.



Recycling at ARTS

Water and Sewer

Outside the immediate downtown area, water supply and sewage disposal are provided by onsite dug or drilled wells and individual septic systems.

That is not the case in the downtown area, where rapid commercial development in the 1880s brought residential and business growth along Great Brook. To handle that development, the town established a public water supply system and created a water

precinct for the village area that was overseen by the precinct commissioners. The source for the town's water supply was Campbell Pond.

Times changed and so did pollution and drinking water regulations. In 1981, after the town built a sewage treatment plant off Depot Street, the old water precinct was dissolved and the Antrim Water and Sewer District was created to oversee both water supply and sewage treatment.

The Town of Bennington currently shares the sewage treatment facility with Antrim. Both towns have separate Water and Sewer Commissions that administer and manage each town's respective operations.

The Antrim Water and Sewer District has one full-time employee and some part-time help. The department has a 2001 Ford pickup truck and a 1994 trailer.

Public water system

The town's water system is supplied by a gravel-pack well located in the town of Bennington. The well pumps at a rate of 920,000 gallons a day and water is stored in a stand-pipe located on Nahor Hill off Pleasant Street. Currently, water use in Antrim is about 120,000 gallons per day, provided to 335 hook-ups.

The back-up water source is the Bennington town well, which is located adjacent to the Antrim well. That system was put into use in 2006 when water tests on the Antrim well turned up temporary problems.

The watershed around Campbell Pond, located off Elm Avenue and Pierce Lake Road, has been protected from development as a town-owned conservation management area. Although it is hard to imagine a circumstance where this open source of water would be used for drinking water again, it's still comforting to know that the town has an additional source of reservoir quality water available.

In addition to the town's water system, the campus of the now-defunct Hawthorne College has a private asset that should be noted. The former college, located in the North Branch section of town, had its own water tower, which once served the college buildings, including dorms and dining room. The property is now owned by the Maharishi Vedic Foundation.

Sewage treatment

The town's sewage treatment plant is located between the Contoocook River and Depot and Main streets. The facility includes the main pumping station and three lagoons. Currently, only two of the lagoons are in use. The plant serves 256 hook-ups in Antrim and 88 hook-ups in Bennington, and is operating at about 50 percent capacity.

Lagoon No. 1 was dredged in 1996 and the sludge from the lagoon was spread on several parcels in Antrim and Bennington. There are plans to dredge a section of that lagoon again soon. When Lagoon No. 1 was dredged in 1996, a new aeration system was

installed, making the system more efficient. For this reason, the third lagoon is not needed at this time.

James A. Tuttle Library

The James A. Tuttle Library is located on Main Street in the downtown area of town. The library is open 29 hours per week, and is staffed by one full-time librarian, one part-time assistant librarian and four part-time staff members. In 2007, the Tuttle Library circulated 20,988 items to library patrons or about 8 items per capita.

In addition to the collection of books, reference materials, videos and electronic information available, the library also offers computer and Internet access to the public free of charge. Programs include the children's Story-time program, slide shows, art exhibits, and live readings. Various town committees and groups also use the library for meeting space. The upstairs of the Library contains the collection of the Antrim Historical Society.

In 1998, the library received a grant that allowed it to automate circulation. The conversion took several years to complete and the system went into effect in 2007.

Plans to expand and renovate the library were approved by voters in March 2006. The \$946,000 project, which includes a 4,000-square-foot addition, was completed in 2008 and added a children's room, provided more stack space and additional public computer access areas, and improved the building's heating and air conditioning. The project also makes the building fully handicapped accessible. Parking was also upgraded for library patrons.



The new addition to Tuttle Library

Aiken Barn

The Aiken House and its free-standing barn, both located just south of the Tuttle Library, became town properties in the 1990s. After much debate, Antrim voters decided against repairing the dilapidated Aiken House and agreed to demolish the building and to use the lot for a library addition. The barn, which was already being used by The Grapevine resource center, was in better shape but needed a number of improvements.

The \$350,000 Aiken Barn project was supported by \$300,000 in Community Block Grant funds, and \$50,000 from Antrim taxpayers. The renovated building now has space for The Grapevine programs, additional meeting space for local groups (including the Scouts), and office space for local health agencies.

Parks and Recreation Department

Antrim has a recreation program, a five member Recreation Commission, a part-time recreation director and a part-time assistant. The department has an office next to the Antrim Memorial Gym, which is attached to the Antrim Elementary School.

The commissioners and the director are appointed by the selectmen. Compensation for the director and the assistant are covered under the town budget. Other non-payroll personnel, including soccer and basketball referees and trainers, are compensated by a revolving fund generated from program fees.

The Recreation Department oversees a number of programs, including archery, indoor walking, Pilates, toddler play time, youth chorus, dance classes, adult basketball and volleyball, tennis and swimming lessons, sporting programs and special events.

Indoor recreation programs are held at the Antrim Memorial Gym and the Antrim Town Hall. Outdoors programs are held at Shea Field, which the town has upgraded with new fencing and irrigation, and the Antrim town beach at Gregg Lake or other locations. Table X-1 in the Master Plan Appendix lists the recreation areas in town, the type of recreation offered and what group or organization oversees the facility.

The new community bus was added to the recreation department's offerings in 2006. The bus, a Ford Aerostar 14-passenger box van, was acquired under the town's new lease-purchase program. A schedule of trips to shopping centers, recreational events, and other outings is posted on the town's official website and on a display board at town hall. The Community Bus is also used for the Recreation Department's Summer Camp Program.

In town wide surveys, including the 2006 master plan survey and visioning sessions and the 1998 AntrimNext project, Antrim residents noted a need for more recreational offerings and facilities. Some of those suggestions included a skating rink, additional ball fields, more hiking and biking trails, a teen center and added programs for an aging population.

Discussions with Conval School District officials about better access and use of the Antrim Memorial Gym are ongoing and solutions may require additional expenditures from the town.

The department also oversees several parks in town, including the town beach and boat ramp at Gregg Lake. The beach has a bathhouse, rest rooms, volleyball area, picnic tables, lifeguard stand, floating raft, and a roped off swimming area. Because the bathhouse was constructed with federal funding, the town beach is open to all, not just Antrim residents.

Memorial Park and Bandstand

Antrim's centennial celebration of its Main Street in 1994 brought new emphasis to an overlooked asset, the historic mill pond behind the town hall. Dams along Great Brook helped fuel the village district's commercial development in the late 1800s, and the town owned dam and mill pond were a part of that drive.

But the years took a toll on the mill pond, dam, and adjacent tennis and basketball courts on Jameson Avenue. The mill pond had potential as a downtown park, but not without some serious restoration efforts.

Using a matching grant from the state's Department of Resources and Economic Development, the mill pond was dredged to remove a century's worth of accumulated silt and debris. Brush was removed using volunteer labor and the help of the inmates from state and county correctional facilities and the crumbling concrete footbridge connecting the east and west shores was replaced with an arched wooden bridge topped with light poles.

The crowning achievement was the erection of a bandstand, a larger version of the one that stood in the late 1800s near the junction of Routes 202 and 31. Volunteer labor built the bandstand in 1994 and soon a committee started hosting summer band concerts, which the Parks and Recreation Department currently oversees as "Antrim in the Evening". A few years later, a flagpole and memorial tablets commemorating military veterans were added.

The attractiveness and safety of the area was enhanced by the completion of the Summer Street dam and bridge project in 2006. In addition, a parking area was added near the basketball court. Recent improvements and additions have been made to the skateboard park and playground equipment has been added to the park. Security cameras have also been installed.

Future plans could include more landscaping, trails, playground equipment, and other amenities.



The Bandstand at Memorial Park

Cemeteries

There are six cemeteries in Antrim, and at least one small private burial site.

One of the largest cemeteries, Maplewood Cemetery on Concord Street is private and controlled by a separate board of trustees. This cemetery has additional room for burials, with an additional parcel of land adjacent to its north end for expansion. No public funds are used in the upkeep of this cemetery.

Five cemeteries in Antrim are considered abandoned. Under state law, an abandoned cemetery becomes the responsibility of the relatives of the deceased or the town that the cemetery is located in if none of the relatives are willing to step into the supervisory role. The latter is the case with the five cemeteries now under town supervision: Over East Cemetery on Elm Avenue; Meetinghouse Hill Cemetery on Meetinghouse Hill (an historic burial ground that was next to Antrim's first meeting house and that contains graves that date back to the 1700s); the Center Cemetery on Clinton Road; North Branch Cemetery on Cemetery Road and the small Whiting family cemetery on Route 202.

Town voters elect three cemetery trustees to oversee the five cemeteries. While there is additional space for burials in North Branch Cemetery, additional burials in the other five cemeteries are likely to be limited only to cremated remains. Access by heavy equipment is difficult in these locations.

Recently the 1827 burial site of two children in the Parker family came to the town's attention. Their gravestone is located on private property about 300 feet west of Route

202 near the state rest area. This small burial site and any others that may be found in town require a 25-foot buffer zone from any construction.

Inventory of Non-Town Facilities

U.S. Post Office

Antrim was lucky in the 1980s and 1990s when the U.S. Postal Service made strides to improve its facilities for handicapped access and loading docks. Many rural communities lost their centralized post offices, forcing residents to drive to the outskirts of town when a suitable site could not be found in the central core. In Antrim, a site was found just across Main Street from the former post office, which had been housed for decades in a first floor office space in the Antrim Town Hall.

The current post office is the only building thus far in Touchwood Square, and provides a centralized facility that's accessible to pedestrians and motorists. The Post Office leases the land and building.

Antrim Girls Shelter

Lutheran Social Services of Northern New England established the Antrim Girls Shelter in 1988 with the purchase of the historic George C. Duncan House, one of the graceful and intact Victorian-era homes on Antrim's Main Street.

The shelter provides a caring, but temporary, "safe haven" to girls between the ages of 11 and 17. The professional staff helps provide safety, structure and respite from abusive or fractured family relationships, chemical dependency, eating disorders and petty crime. During their stay, girls work to regain control of their behavior, catch up with school work and begin to heal.

The Antrim shelter is the only residence of its kind in New Hampshire for adolescent girls. In 1995, the shelter was certified as a special education school by the State of New Hampshire.

In 1990, the social service agency converted the attached barn into a schoolroom. In May 2005, Phase I of a major renovation project was launched to provide a better facility for the residents and staff while paying close attention to the architectural features of the historic building. The work was completed in 2006.



The Antrim Girls Shelter

Camp Chenoa, Swift Water Girl Scouts

The Swift Water Girl Scout Council owns and operates a resident camp on 300 acres on the western shore of Gregg Lake. The campus includes cabins, staff buildings, and all-season dining hall. Although the property is not open to the public on a regular basis, the facilities can be rented by local groups. The Girl Scout Council also provides some scholarship assistance to local campers.

Cable television and communication services

Antrim's current cable television provider is Comcast. The village section of town has cable television service, but most outlying areas are too sparsely settled to make it economically feasible to provide cable. Many residents in the more rural areas of Antrim have satellite television service.

Telephone service is provided by TDS Telecom which also offers Internet hook-ups.

Town officials are looking at ways to improve cable television and Internet access, especially high-speed Internet services and broadband. One of the goals is to provide wireless Internet (Wi-Fi) service in the downtown village area.

Health, Welfare and Housing

Medical office

Monadnock Community Hospital in Peterborough operates one of its three satellite medical offices in Antrim (the other two are in Jaffrey and New Ipswich). The Antrim Medical Group, which is located on Elm Street, is staffed by a doctor and a nurse practitioner affiliated with the hospital.

Dental office

Perry, Weigand, and Gurwell Family Dental Care has an office on Elm Street, in a building next to the Antrim Medical Group. Established in 1973, the practice now has 3 dentists and 17 staff members.

Home Healthcare, Hospice and Community Services

This agency is headquartered in Keene and serves both Cheshire and Hillsborough counties. It provides services ranging from nursing and physical therapy to medical social work and child-health clinics. In 2007, Home Healthcare served 46 persons in Antrim, compared to 97 persons in 2000. Much of the agency's costs are covered by Medicare, Medicaid, grants, and patient insurance and fees. The remainder is provided through contributions from participating towns. Antrim voters have pledged \$8,000 to support this agency for 2008.

Monadnock Family Services

Monadnock Family Services, which is based in Keene, provided mental health services to 89 Antrim residents in 2007. This agency relies on a number of funding sources, including insurance, and for local funding from towns served. Voters pledged \$3,280 to the agency for 2008.

St. Joseph Community Services

St. Joseph's provides congregate and home-delivered meals to senior citizens, and serves all of Hillsborough County. In 2007, this agency served 55 persons; in 2000 it served 50. Voters approved support in the amount of \$2,990 for 2008. In January 2009, St. Joseph's began serving hot mid-day meals Monday through Friday at the First Presbyterian Church on Main Street as part of its Community Dining Program.

Antrim Area Senior Center

In January 2009, a group of concerned citizens opened the Antrim Area Center at the First Presbyterian Church. Open Monday through Friday from 9 am to 3 pm, the Center offers seniors 60 and older a place to get warm, have coffee and morning snacks, play card and board games, help in community service projects and take occasional trips to

places of interest. The steering committee for the Center plans to add computer and exercise classes, speakers and other programs of interest to its offerings. Currently, the Center is run and funded completely by volunteers.

Avenue A Teen Center

Antrim's teen center is designed to provide teens, mainly in grades 8-12 from the Great Brook School towns, a place to meet, hang out, have fun, have access to resources, and find opportunities to engage in the community in positive ways. Staffed by a part-time coordinator, it is open four days a week on a "drop-in" basis. The center has a regulation pool table, foos ball, ping pong, and air hockey, as well as a graffiti wall, board games, and a stereo. There is space to do home work or just hang out and there is a computer for teen use. Drinks and snacks are on sale at very reasonable prices, the proceeds of which benefit the center. Funding comes from grants, fundraising and support from the Town of Antrim.

Antrim Village

Antrim Village is a 40-unit housing complex for seniors and disabled persons, located at 6 Aiken Street. The apartment complex, which includes a centralized community room and office, was built in 1982 and is managed by Boston Land Company Management Services Inc. The HUD Section 8 housing is available for senior citizens, ages 62 and older and disabled persons age 18 and older.

Great Brook Homes

Welcoming Light Inc., a nonprofit affiliate of Harbor Homes in Nashua, operates two sharing, independent living residences in Antrim. Both houses, located in the village area on Grove Street and North Main Street, are run as HUD Section 8 housing. Unlike Antrim Village, which is an apartment complex, the five adults in each Great Brook facility have private bedrooms and share the kitchen, bathrooms, living room, and other communal areas of the home.

Great Brook Homes' facility on Grove Street is a single-story structure and fully handicapped-accessible. The house on North Main Street has handicapped-accessible rooms on the ground floor only.

Welcoming Light employs a part-time manager for the homes but does not provide social services for the residents.

The Contoocook Housing Trust

The Contoocook Housing Trust is a nonprofit organization that provides affordable housing to low- and moderate-income individuals and families in the region. The trust owns and manages 13 multifamily dwellings in the towns of Hillsborough, Bennington, Antrim and Peterborough. Four of these buildings are in Antrim: 30 Main Street, 20 West

Street, 96 Main Street and 102 Main Street. Together they provide 12 housing units for local residents.

The housing trust is governed by a volunteer board of directors, which historically has included one or more Antrim residents. The trust employs a full-time executive director and two part-time maintenance people. Funding for the organization comes from the rental income and from support provided by local towns. Antrim contributed \$500 to the trust in 2007.

Recommendations

The Town of Antrim has been a good steward of its properties and town services, but several projects have been identified as priorities for the town's future well-being. This list is generated by both an assessment of the needs of individual town departments and the desires of Antrim residents, as expressed in surveys and visioning sessions. These include:

- **Establish a Community Center. Continue supporting the Avenue A, Antrim's teen center. Support the Antrim Area Senior Center.** Now that a teen center has been established, there are two more distinct groups whose needs could be served through a community center. Two-income family life means more before-school and after-school care is needed for younger children; an aging population requires a place to socialize and recreate. Currently, the town provides no support to the newly established Antrim Area Senior Center. The potential for a community center should be explored; the natural partner for this venture would be The Grapevine. Consideration should be given to supporting the Antrim Area Senior Center.
- **Increase Communications Infrastructure.** Establish a Wi-Fi district in the downtown area to support current businesses, and attract new ones.
- **Address Police Safety, Space Needs.** Explore and finalize plans for new office space for the Antrim Police Department. Keeping the police station in the heart of town, where officers can respond more quickly to problems at the schools and local businesses would be an asset.
- **Continue to consider the feasibility of having a Public Works Director.** As Antrim grows, the town should continue to explore the possibility of coordinating all its highway, waste disposal, water and sewer services, and building, cemetery and facility maintenance under a Public Works Director. Such a position would provide better coordination and efficiency among many of the services the Town offers its residents.
- **Increase the Number of Recreational Fields.** Town and school teams are having a tough time sharing the limited space on town-owned Shea Field on School Street. The Parks and Recreation Commission is continuing to study possible purchase of available land. Opportunities for adding recreational fields in town or the use of fields in other towns should also be explored, as well as the possibility of the use of any recreational facilities the Maharishi Academy may develop.
- **Increase Safety, Accessibility at Antrim Memorial Gym.** Town and school officials are addressing the need for more storage space and a better entrance to the gymnasium. The gym was recently refurbished by the school district, but the locker rooms, bathrooms, and storage space used by the town recreation

department was lost. One possible solution is a new entrance from the parking lot directly into the gym, plus a new storage closet and space for backpacks. Other issues, including access to bathrooms and locker space, will have to be addressed as well.

- **Study and address the recreation needs of all of Antrim residents.** In early, 2008, the town's Capital Improvements Committee (CIP) recommended that, in light of the multiple and sometimes costly requests of the Parks & Recreation Commission, a study be performed on Antrim's parks and recreation needs in light of the declining school enrollment and increasing senior population. The Committee thought commissioning a study of Antrim's needs would be very helpful in determining where work needed to be concentrated and where funding would do the most good.
- **Increase River Access for Recreation.** With the lease of the sand pit on Old North Branch Road, the town will have its first easy access to Steele Pond, a desirable area for fishing and boating. A modest project would be to establish a boat ramp and parking on the leased land. This access might be limited to kayaks and canoes at first, but can be expanded as the town's plans for that property take shape.
- **Enact Hazard Mitigation Recommendations.** The town's comprehensive Hazard Mitigation Plan has several capital improvement projects listed, including needed upgrades or replacement of town-owned bridges (please see plan on file at town offices for the full list). Resources and planning for these projects should be a priority for the town in the coming years, and matching federal and state grant money should be sought wherever possible.
- **Assess Feasibility of Water and Sewer Expansion.** Opportunities for business development outside the village district could hinge on the availability of water and sewer connections. At present, both systems are limited to the village area, so any expansion would have to be outside of the existing distribution system. A study would reveal the engineering hurdles and the price tag for expanding the systems and would be desirable in assessing the potential for additional growth of the system. This should be done in coordination with the Future Land Use Plan to encourage development, where desirable, but not sprawl.

Addendum

Education

The Town of Antrim is a member of the nine-town Contoocook Valley School District, created in 1968-1969. Joining Antrim in the district are the towns of Bennington, Dublin, Frankestown, Greenfield, Hancock, Peterborough, Sharon, and Temple. Administration is provided by School Administrative Unit 1 with offices at 106 Hancock Road (Route 202) in Peterborough. Local funding for education is based on assessments to the nine member towns based on average daily membership (50 percent), and equalized valuation of the town (50 percent).

The district maintains eight elementary school (all towns except for Sharon have an elementary school), two regional middle schools (Great Brook School in Antrim, serving Antrim, Bennington, Frankestown and Hancock; South Meadow School in Peterborough, serving Dublin, Greenfield, Peterborough, Sharon and Temple); and Contoocook Valley Regional High School, serving all nine district towns and housing the Applied Technology Center for Region 14 (which it shares with the Jaffrey-Rindge and Mascenic school districts).

All the school buildings, including the local elementary schools, are owned and maintained by the school district. The district also provides pupil transportation.

The official school enrollments for each year are calculated by the state on October 1st of each year. Antrim school children are included in the following enrollment data for 2008:

Antrim Elementary School:	169 students (all from Antrim households)
Great Brook School:	333 students (four towns, including Antrim)
Conval High School:	1,084 (nine towns, including Antrim)

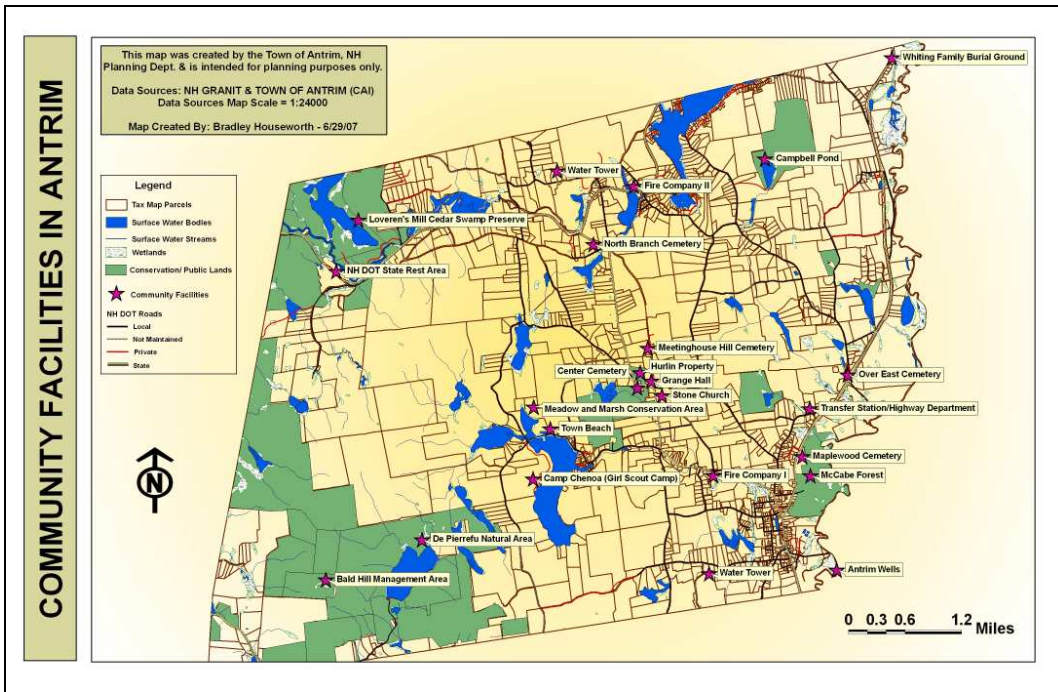
Both school facilities in Antrim, Antrim Elementary School and Great Brook School, have been renovated in recent years. Work on Antrim Elementary School and the elementary school in Peterborough were the latest to be approved by district voters in 2001. The local cost of the building projects is shared by taxpayers in the nine towns and the state government which picks up 55% of the construction costs.

Education funding has long been of serious concern in New Hampshire, given that the lion's share of a homeowner's tax bill goes to support schools. Two areas of concern for Antrim taxpayers are the local school funding formula for the Conval Regional School District and the state's obligation to school funding.

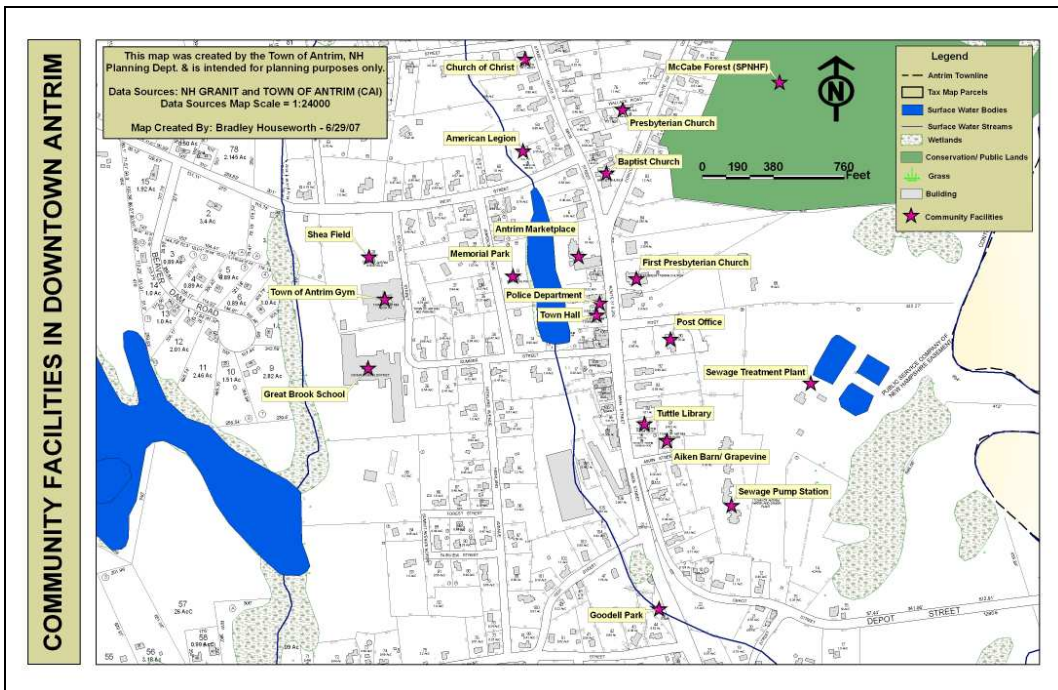
Master Plan Appendix Reference

The following items are included in the Master Plan Appendix:

- Map of Community Facilities in Antrim
- Map of Community Facilities in Downtown Antrim
- Table of Recreation Sites in Antrim



Map X-1: Community Facilities in Antrim



Map X-2: Community Facilities in Downtown Antrim

Table 10-1: Recreation Sites in Antrim

Name	Location	Map & Lot #	Use	Ownership	Acres
Willard Pond	Off Route 123, between Hancock & Stoddard	Map 248	Boating	State	100
Wetland Walkway	School Street	Map 103	Natural Area	School District	
Town Beach at Gregg Lake	Gregg Lake Road, Clinton Village	101-036	Boating, Swimming, Picnicking	Town of Antrim	1
Memorial Park	Jameson Avenue	103-013	Field Sports, Tennis, Basketball, Skating	Town of Antrim	7
Bald Mountain Management Area	Bald Mountain	248-001	Hunting	NH Fish & Game	74
DePierrefeu	Willard Pond	248-002,-003, -004, -005, -006, -007, -009; 249-007; 252-017; 253-007, -008, 254-002	Natural Area	Audubon Society	600
	Willard Pond - pending purchase, as of 9/30/08		Natural Area	Audubon Society	45
Hurlin Property	Antrim Center	227-007-001, 227-040	Conservation, Passive Recreation	Town of Antrim	26
Meadow Marsh Conservation Area	Gregg Lake	235-013, -015, -017, -018	Conservation, Passive Recreation	Town of Antrim	26
Hurlin-Willard Trail	Antrim Center		Hiking Trail	Town of Antrim	
Shea Field	School Street	103-029	Playgrounds	Town of Antrim	1
Goodell Park	Lower Village	104-045	Public Park	Town of Antrim	1/4
Town Gym	School Street	103-028	Basketball, Volleyball	Town of Antrim	
Teen Center	Antrim Center	104-106-01			
McCabe Forest	Downtown	243-001	Conservation, Recreation	Society of Protection of NH Forests (SPNHF)	
Hosmer Wildlife Management Area	West of Willard Pond	237-004	Conservation, Passive Recreation	NH Fish & Game	75
Middle School Gym	School Street			School District	
Loverens Mill Cedar Swamp Preserve	Route 9 North Branch	210-003	Conservation, Hiking	Nature Conservancy	600+, including Windsor acreage
Contoocook River					
Great Brook					

Historic and Cultural Resources

Introduction

A master plan tends to emphasize the future physical growth of the town. Woven into the fabric of the community, however, is the cultural element made up of individuals, groups, and institutions which work to make the community a better and more enjoyable place to live.

Antrim's History and the Historical Society

The Town of Antrim had its beginnings in the mid-18th century and, after the Revolutionary War, the population began to expand rapidly. For the next few years, the town remained a farming community of families of Scots-Irish ancestry. Four cemeteries that are no longer in use, but which are maintained by the town, provide a visual source of information about life in the early days. The oldest cemetery was established in 1785 next to the first meeting house on Meetinghouse Hill. That building no longer stands, but a plaque just south of the cemetery marks the site.



Former Town Hall, now the Antrim Grange on Route 31

In 1826, a new church was built at the base of Meetinghouse Hill on what is now Route 31, and the Center Cemetery was established across the road from the church. A year

later, the residents of East Antrim built a church and a cemetery on Elm Avenue, not far from Route 202. Part of the original meeting house was brought down to Route 31 and incorporated into a town hall. The building is now owned by the Grange. The Center and Over East churches have long since been destroyed, so the cemeteries and the Grange Hall are the main relics of Antrim's early settlement. A few residences from this period are still in use.

The Daughters of the American Revolution (DAR) were responsible for marking several places of historical interest, including the Town Pound on Old Pound Road. This is a small fenced-in area where lost animals were held, waiting for their owners to reclaim them. In 1922 the DAR, in response to a request made at Town Meeting, installed a marker at the top of Depot Street near the spot where Antrim's second family, the Aikens, lived. The plaque lists all the men of Antrim who met at James Aiken's home and marched to Lexington, Massachusetts, to fight in the first battle of the American Revolution in April, 1775. The memorial to that muster is on the property now owned by Edmond Hebert.

The Soldiers' Monument on the Antrim Baptist Church's common was given by the local Grand Army of the Republic (GAR) post in 1892 and commemorates soldiers of all American wars up to and including the Civil War. The church unanimously voted permission to place the monument at this site.

An 8-foot high, 15-ton boulder, moved from Gregg Lake Road to the James A. Tuttle Library lawn in 1922, displays a bronze tablet with the names of Antrim's soldiers who fought in World War I. In 1953, an all-out community effort resulted in the construction of the Antrim Memorial Gymnasium on School Street. Local businesses contributed generously and citizens worked in a variety of ways for many months to create a much-needed building, dedicated to the soldiers of World War II. The gymnasium is now jointly managed by the town and the Contoocook Valley Regional School District, but it should be remembered for its original purpose as a memorial building for community use.

The bandstand in Memorial Park off Jameson Avenue, erected in 1994, is a symbol of the architectural growth of Main Street that took place a century earlier. Next to the bandstand are memorial tablets, including a tablet with the names of Antrim's soldiers who fought in World War II, which was moved from the Memorial Gym. There are also tablets for the Korean and Vietnam soldiers. These were erected by the American Legion.

Goodell Company, a cutlery manufacturing firm, was the main source of employment in the town from 1875 through much of the 20th Century. The large brick factory buildings on South Main and Water Streets are the standing reminders of this period and are now used for several small businesses.

Antrim also boasts a building listed on the National Registry of Historic Places. The former Flint Estate, which was used as the administration building for the now-defunct Hawthorne College, was selected for the registry to acknowledge its historical value to the region. The building is once again a private home.

The town has a rich tradition of cultural arts. The Antrim Historical Society maintains a museum on the second floor of the James A. Tuttle Library, housing an extensive collection of artifacts, photographs, manuscripts, and print materials covering the town's 250 years history. The historical group also is planning to place a permanent marker off Route 202 near the Hillsborough town line on the site of a cabin occupied by Phillip Riley, Antrim's first settler.

Founded in 1984, the Antrim Historical Society is dedicated to:

- Researching and preserving Antrim's history, past and present.
- Presenting programs of historical interest.
- Accessing and cataloging archives and artifacts in the historical room at the James A. Tuttle Library.
- Providing historical assistance and resources for the schools.
- Preparing exhibits in conjunction with programs and community interest.


The society has presented various programs for the community concerning historical events and items of interest to Antrim residents.

The Limrik

Antrim has since 1990 maintained a quarterly journal - "For, by and about the people of Antrim" - *The Limrik*, published each March, June, September and December. Its mission is to provide a forum for creative expression as well as a running overview of what's going on in town: Town Meetings, selectmen's reports, coming events, church calendars and news, notable school and organizational unfoldings, recreation department activities, Antrim Players productions and the like. It is produced by a staff of volunteers - editors, business managers, artists and designers - and is delivered free of charge to every mail address in town, with expenses covered by selling ads as well as the gift of paper from the Monadnock Paper Mills. Issues average 28 pages. Although much material is written by editors, much is also written by the heads of organizations as well as by citizens who wish to celebrate something related to Antrim: a favorite mountain or river, an unusual trip (such as an incredible 48 hour round trip drive to Chicago and back), praise for notable achievements, reminders of events to look forward to, memories of recently-deceased friends, etc.

The Limrik, as an organization, is rigorously neutral in political matters, but encourages articles by citizens expressing their own views freely.

- Contributed by Lyman Gilmore, *The Limrik* managing editor



The Limrik

A Quarterly Journal

For, by and about the people of Antrim.

Vol. 18 #1
 Dec 2008


HISTORICAL SOCIETY WINTER PROGRAMS

Missy Taylor

The Antrim Historical Society invites everyone to join us at the Tuttle Library on Sunday, December 14 at 3 pm for a festive holiday celebration. Refreshments will be served and Kathie Brennan will entertain us with her guitar and singing and lead us in some carols as we celebrate a very busy and successful year for the Society. We have presented a series of interesting and well-attended programs this year, had a membership drive that tripled our numbers, and had a very successful Home & Harvest booth selling homemade apple crisp and historical publications. We hope you will join us as we celebrate the year and our move back into the Historical Society room upstairs at the newly renovated and expanded Library.

On Sunday, January 18, Jeff Warner will present "Songs of Old New Hampshire", the songs and stories that, in the

—continued on page 22



❄️ **HOLIDAY SPECIAL** ❄️

Tree Lighting, Sun Dec 7, featuring a visit from Santa, and a performance by our youth chorus: Memorial Park Bandstand and the Antrim Town Hall at 4:00 pm.

Window Painting, Sat Dec 6, Holiday Scene at Antrim Town Hall from 10-12 noon. Join Carole Storro and friends to enhance the beauty of our Town Hall with a winter holiday scene on the Main Street windows. Pre-register by calling 588-3121.

THE COWS COME HOME

Eric Tenney

When driving thru the countryside today, you see a lot of old pastures and fields with horses, cattle, and other domestic animals grazing. This sight brings back memories of how things used to be in the rural countryside fifty to one hundred years ago. Remember that in the middle 1800's as much as seventy per cent of the New England countryside was open land. Small farms dotted the countryside. By the end of the nineteenth century many of these

—continued on page 10

MEALS ON WHEELS OPENS NEW SITE IN ANTRIM

St. Joseph Community Services, Inc., the provider of Meals on Wheels and Community Dining throughout Hillsborough County, is happy to announce that in addition to our Antrim Village site we will be opening a new Meals on Wheels Community Dining site at the First Presbyterian Church, 73 Main Street. This is part of our ongoing effort to expand our services in the Antrim area.

The need for volunteers within the community to come in and make this a success is urgent. Please help us with this important community project. Contact Maria to volunteer at 603/424-9967.

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INSANITY AT THE TOP OF THE WORLD: MOUNTAIN CLIMBING TALES OF THOSE WHO SURVIVED AND THOSE WHO DIDN'T

Sandy Snow


I've always viewed mountain climbing as a sport for crack pots or adrenalin junkies. I'm not talking about those who hike up Mount Monadnock; I'm talking about those who challenge the peaks that scrape the top of the world in the Himalayas, Alps, and Andes.

There is so much working against you: unpredictable violent weather, snow-covered crevasses, rotten ice, deep powder snow, massive vertical ice cliffs, snow cliffs that could collapse at any moment, crippling frost bite and bad luck. The list goes on. But above all,

those who climb are trusting their lives with others who are just as certifiable.

However, there is something gripping about reading the exploits of these people from the safety of your favorite chair. Two non-fiction books were recommended to me by my nephew who likes the outdoors but confines his hikes to safer areas. The books are *Touching the Void* by Joe Simpson and *Into Thin Air* by Jon Krakauer, and both are available at the Tuttle Library.

—continued on page 14



Front page of the December, 2008, edition of *The Limrik*

The Grapevine

The Grapevine Family and Community Resource Center is located on 4 Aiken Street, behind the Tuttle Library in Antrim and serves the people of Antrim, Hancock, Bennington, Frankestown and nearby towns. The Grapevine is a member of Family Support NH, and received the 2006 Smith Award for "Excellence in service to families" in a statewide competition sponsored by the NH Children's Trust Fund.

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The Grapevine mission

The organization's mission is to promote family and community health and well-being through support, education, and the sharing of resources. Grapevine programs and services support:

- Parents and family members as the best teachers of their children;
- Children, so they will be healthy and ready to learn; and
- Our Community, as a healthy and supportive environment for all.

The Seed

In early 1996, a small group of townspeople got together and helped to form a play-and-learn group for young children and their parents. Families And Communities Together, a small nonprofit organization based in Greenfield, assisted the group in its efforts and successfully applied for a grant from the Health Care Fund Community Grant program to open a family and community resource center.



The Grapevine summer “camp” for young children

Taking Root

During the summer of 1997, The Grapevine moved from a small storefront to the Aiken House, owned by the town of Antrim. In March, 1998, the people of Antrim voted to apply for a Community Development Block Grant to renovate the Aiken House. That summer, a group of community members formed a trust to purchase the Aiken Street Barn for temporary use by The Grapevine. When it became clear that renovating the Aiken House was not feasible, the people of Antrim again supported The Grapevine at Town Meeting 2000 by voting to purchase the Aiken Street Barn. The barn was

remodeled in early 2003 and, in June, 2003, The Grapevine moved in. By this time, the original play-and-learn group had grown to three parent-child programs, a group for parents and infants, a parent-cooperative preschool, and other family support programs and resources.

Branching Out

Early in 2003, a group of citizens from Antrim, Hancock, Bennington and Frankestown began meeting together with The Grapevine to take a look at the health and well-being of people in our towns. The "4-Town Citizen Group" talked about how many people - especially our elders and our young people - are isolated and are not connected to the "center" of the community. We came to the conclusion that the first step in building community health and well-being is helping people to connect with each other, and with the community. In the fall of 2003, we organized free community suppers in each of the towns, which are still going strong. When the suppers were up and running, the 4-Town Citizen Group supported The Grapevine in developing a neighbor-helping-neighbor project, "The People's Service Exchange."

Also in 2003, The Grapevine convened a group of representatives from Antrim's organizations and government, including law enforcement, parks and recreation, the library, churches, the schools, scouts and civic groups. An early focus of the group, eventually named the Brown Bag Coalition, or BBC, was our youth, both the lack of childcare for young children of working families and the need to coordinate and expand community offerings for adolescents and teens. In August of 2005, the BBC opened the Before School Club at the Town Gym, in cooperation with Antrim Parks and Recreation. During the 2005-06 school year, 42 children of working families were enrolled. The BBC is now focusing its efforts on the youth center for adolescents and teens.

The 4-town Citizen Group re-convened in July, 2006, to re-examine the health and well-being of the community. "Aging in place," community transportation, and youth activities were identified as priority community issues. The group also convened the first 4-town meeting to identify transportation needs and resources in the community, and to begin developing a plan for local community transportation.

Programs, Resources and Services

Parent-Child Programs and Family Support

- **Better Beginnings Parent-Child Program** - for children 18 months through 5 years of age and their parents/caregivers, providing children's enrichment programs and parenting education and support - Monday, Tuesday and Thursday mornings.
- **Better Beginnings for Babies** - for infants from birth to 18 months and their parents, offers parenting education, support and early childhood enrichment through informal meeting and discussion - Friday mornings.
- **The Learning Vine** - a parent-initiated cooperative preschool program. Curriculum includes hands-on activities, problem solving and conflict resolution

- skills as the families explore community resources and integrate discoveries. Two mornings each week with both drop-off and cooperative options available.
- **Monday Afternoon Playtime** - offers parents and their children informal play time in our welcoming, well-equipped play areas.
 - **Parenting Education and Support** - offers parenting education workshops and discussions throughout the year. Written and video resources are available to families through a lending library.
 - **Home-based support and one-on-one parenting education** – by arrangement.
 - **Early Home Support** - home-based support for Medicaid-eligible young mothers and their infants, in collaboration with Home Healthcare Hospice and Community Services and The Family Center, with introductions for families to center-based programs.

Community Services, Resources, and Activities:

- **Information, Referral and Assistance** - for people in need of basic services and resources such as food, shelter, clothing, transportation, health and dental care, health insurance.
- **Access to basic services** - The Grapevine provides an office for Monadnock Family Services (child and family counseling), Southern NH Services (fuel and welfare assistance), A.C.C.E.S.S. (employment support for adults with disabilities, and school-to-work transition support for students with disabilities), Milford Area Mediation (family conflict and landlord/tenant dispute resolution), SW Community Services (homeless outreach) and Home Healthcare (NH Healthy Kids insurance).
- **Classes and Workshops** - parenting education, Safe Babysitting, CPR, nutrition, money management, and other topics.
- **Community Wood Bank** - free firewood to families and individuals who use wood as their primary heat source and cannot afford to buy it.
- **Community Suppers** - in Antrim, Hancock, Bennington and Frankestown: Free, every week. Transportation provided if needed by prearrangement.
- **Strong Living** - a community-based, volunteer-driven strength training class for older adults, developed by Tufts University.
- **The People's Service Exchange** - a neighbor-helping-neighbor network based on the "Time Dollars" model, which offers people from all walks of life a community-based, coordinated structure for trading services and skills with their neighbors, including transportation, tutoring, cooking, yard work, computer support, light carpentry, singing lessons, and much more.
- **Certified Visitation Site** - a local site for supervised visitations. For parents who do not have a visitation supervisor, the Grapevine offers the services of qualified staff when possible.
- **Before School Club** - before school care for Antrim Elementary and Great Brook School students, Monday through Friday, in cooperation with the Antrim Recreation Department.
- **Group meeting space** - Many local groups hold meetings and other gatherings at The Grapevine. To contact The Grapevine Family & Community Resource Center can call 588-2620, fax 588-7154, or mail to 4 Aiken Street, P.O. Box 637, Antrim.

The email address is *thegrapevine@conknet.com*. For further information, visit The Grapevine's web pages at *www.antrimnh.com*.

**- Contributed by Kristen Vance, Director,
The Grapevine Family & Community Resource Center**



Workers cut and split wood for the Community Wood Bank

Antrim Community Grange

The Antrim Community Grange celebrated its 125th birthday in 2008. Established in 1883, the grange, located at the intersection of Rte. 31 and Meeting House Hill Road, provides an astonishing number of activities.

The Antrim Grange has also offered a \$500 scholarship to a senior in high school or a college student who also is a resident of Antrim or Bennington.

In the summer and fall of 2006, the grange entered an exhibit in four fairs portraying the changing modes of transportation. It was designed by member Liz Robertson. It received the following recognition: Cheshire Fair, red ribbon; Hopkinton State Fair, blue ribbon; Hillsborough County Fair, blue ribbon and best exhibit trophy; and Deerfield Fair, red ribbon.

A Sampler of Recent Activities

- Line dancing with the Monadnock Mavericks.

- Sixth Annual Spotlight on Community Artists in which the public voted for their favorite artists. Winners were awarded \$50 each.
- Grange Youth Night at a Swampbats Baseball Game in Concord NH.
- Annual Community Awards Night.
- Spring Garden Mini Expo.
- Square Dance & Chocolate Celebration in honor of the 125th anniversary.

A list of its recent activities can be found in the Antrim Community section of the town's web site at www.antrimnh.org.



The Antrim Grange on Route 31

Antrim Players

The Antrim Players is a locally grown group of actors, singers, and dancers who attract a full-house for its performances. Tickets are affordable and performances are professional and very enjoyable.

The Antrim Players' history goes back to the middle of World War I - 1918, to be exact. A large group of local actors, dancers, and singers joined together to produce a show for the benefit of the Red Cross.



The Antrim Players in Dilemmas With Dinner

Since that inaugural, the Antrim Players has frequently put on a show or play for the benefit of a local organization. Tens of thousands of dollars have been raised by the Players for groups such as the American Legion, the Woman's Club, and school projects.

The Antrim Players were instrumental in generating money for improvement of the town hall auditorium on the second floor of the town hall. Seats, window dressings, stage curtains, and ceiling fans were part of the updating.

The community theater currently has a Children's Theater and the Antrim Players for actors of all ages. The Antrim Players tries to perform at least three shows a year.

Cub Scouts

Cub Scout Pack 2 has surged in recent years. Pack 2 serves boys from 1st grade to 5th grade from the towns of Antrim, Bennington, Hancock, and Hillsborough, currently totaling 27 youth members. Pack 2 is divided into four Dens: Tiger, Wolf, Bear and Webelos. Each den meets weekly at a different location, then meets as a "pack" once every 8 weeks or so.

Pack 2 has for many years been chartered by the Antrim chapter of the International Order of the Odd Fellows, but has met in the larger Bennington Fire Department and the Grapevine. Pack 2 participates in the Scouting for Food Program, takes an annual trip to a New England museum, goes on hikes, attends district camporees and takes part in a variety of other activities throughout the year.



Cub Scouts of Pack 2

The primary source of funding for the pack is the annual popcorn sale. Boy Scout Troop 2 and Pack 2's current situation is robust, having had substantial gains in the past few years, while Scouting participation nationwide is in decline as sports and other extracurricular activities play a larger part in children's lives. It is our hope that with the commitment of parent volunteers who wish to enrich their children's character as well as their activities, Scouting in Antrim will survive into the next century. For further information about the Cub Scouts, contact Cindy Norton, cubmaster.

- Contributed by Brian Beihl, committee chairman

Girl Scouts

The Girl Scout Mission: Girl Scouting builds girls of courage, confidence and character, who make the world a better place.

The Antrim community has long supported the efforts and energies of its Girl Scouts. Currently there are close to 100 girls and 25 adults registered in the Great Brook service area, composed of Antrim, Bennington, Francestown, and Hancock.

Programs are offered for girls of all interests and abilities, from kindergarten through high school. Girls meet regularly in age-appropriate troops and share in community events throughout the year.

Each Girl Scout program is designed to help build girls of courage, confidence, and character. Whether learning map and compass skills, sewing a skirt, organizing a

medieval fair, or just singing “Make New Friends” with a new troop, girls are challenged to learn and explore.

In addition, the Girl Scouts are committed to making the world a better place. Leaders, by their very presence, instill in their girls the value of community service. Throughout the year you will see girls working on service projects around town - sponsoring community suppers, helping with the food bank, collecting donations for the animal shelter, and marching in the Memorial Day parade.



Snowfest time

Antrim’s Girl Scouts are part of the Swift Water Council that serves over 14,000 girls and 4,000 adult volunteers in New Hampshire and Vermont. Antrim has been recognized in recent years as having one of the highest girl participation levels in the council. Several of our local leaders also have been awarded recognitions by the council for their service.

The council also operates a residence camp on Gregg Lake in Antrim. This camp runs summer programs for girls throughout the council and is used for troop camping and council events throughout the year.

Girl Scouts of the USA is the world’s preeminent organization dedicated solely to girls - all girls - where, in an accepting and nurturing environment, girls build character and skills for success in the real world. In partnership with committed adult volunteers, girls develop qualities that will serve them all their lives, such as leadership, strong values, social conscience, and conviction about their own potential and self-worth.

Founded in 1912 by Juliette Gordon Low, Girl Scouts' membership has grown from 18 members in Savannah, Georgia, to 3.6 million members throughout the United States, including U.S. territories, and in more than 90 countries through USA Girl Scouts Overseas.

– Contributed by Jeana White, Service Area Manager

Boy Scouts

Antrim's Boy Scout Troop 2 is one of the oldest troops in the Daniel Webster Council, having been chartered since 1933 and organized since 1919. Chartered by the Prescott - Myers - Olson American Legion Post #50, Troop 2 is currently housed in the Legion/Odd Fellows hall on West Street in Antrim, where it meets on the first floor and stores its equipment on the second floor. Phil Lang, our chartering organization representative, was involved in Antrim scouting for over 60 years. Troop 2 serves boys from Antrim, Bennington, Hancock, and Hillsborough.



Boy Scouts at Hermit Island, Maine

Troop 2 is an outdoor-oriented troop, trying to have one outing per month either camping, backpacking, canoeing, kayaking, or climbing. Its service projects include cooking for a community supper, coordinating the annual "Scouting for Food" collection effort and maintenance on the Lily Pond trail. The troop is funded by its annual wreath sale.

While the outdoor activities and service projects are integral components of the program, the Troop 2 Boy Scout program is most proud of the fact that it continues to follow the founding principles of the Boy Scout movement: building character. In its history, two Troop 2 Scouts have been awarded medals for meritorious service, one most recently in 2005, and past Scoutmaster Dick Jennison was recently awarded the highest honor in the Mt. Monadnock District for his over 30 years of service to Troop 2. For further information about the Boy Scouts, contact Brian Beihl.

– Contributed by Brian Beihl, committee chairman

Churches

Antrim's churches go back to the second town meeting in 1778 when town residents voted to raise \$32 for preaching. At present, Antrim has three active churches: the Antrim Baptist Church, located at the intersection of Routes 202 and 31, the First Presbyterian Church, just south of the Baptist Church, on Route 202, and the Antrim Church of Christ, just north of the Baptist Church on Route 31.

Antrim Baptist Church

The Antrim Baptist Church began with the meeting of five men and eight women at the home of Deacon Joseph Eaton in Greenfield, NH on December 17, 1805. At that time it was known as the Peterborough and Societyland Baptist Church. It soon found a home in Bennington, NH, in 1812. Working out of a barn the church again needed to expand and moved to Antrim in 1852, meeting in Woodbury Hall on Main St. Over the next few years there were a number of attempts to raise funds to build a proper church building, but they failed. Finally in 1871, under the leadership of Rev. William Hurlin, the present church structure was built at a cost of \$6,200. It was dedicated free of debt!



The Baptist Church as it appeared on its 100th anniversary

There was a strong desire by the congregation to have a home to offer the church pastor. So, in 1879 the parsonage at 6 Concord Street was built and offered to the pastor to use. For 34 years the congregation made do for church gatherings and times of fellowship with picnics, and meeting in the church sanctuary, but in 1905 on the eve of the church's centennial, the vestry, dining room, kitchen and pastor's study was dedicated - again free from debt!

There were a number of families in the church that saw to the financial needs of the church for many years. Governor David Goodell and family, the Abbotts and family, along with the Hurlins and family, made sure that the Baptist witness in Antrim stayed true. In fact, when Rev William Hurlin served as pastor in the early 1880's he was paid the grand sum of \$500 for the year of which \$400 came from just two families.

In 1924 the church membership undertook the goal of renovating the church sanctuary and installing an Esty Pipe Organ at a cost of \$9,000 (a considerable sum of money for those days!). The Reverend Ralph Tibbals served as pastor for 23 years throughout the Great Depression and the Second World War.



The Baptist Church today

In 1962 the church again decided to expand creating new Christian Education space in the basement of the church and adding an entrance to the Route 31 side of the church. Og Mandino, the famous author and speaker who lived in Antrim, always wanted a cross atop the church and after his untimely death, the current gold leaf cross was dedicated to his memory in 2000.

The expansion of the church continued in 2006 with the purchase of the John and Barbara Shea house to the left of the church on Route 31. This building served as the former Methodist Church until the beginning of the 1900's and then was converted to apartments. The Antrim Baptist Church has totally renovated the apartments and has plans to eventually connect the two buildings together for a much larger facility.

Long range plans for the church include the total renovation of the old carriage shed to the right of the church into offices and Food Pantry space. The church has grown under the current leadership of Pastors Charlie and Cheryl Boucher and it looks forward to further growth in the future by reaching out to the community with numerous children, youth, and adult ministries.

– **Contributed by Rev. Charles Boucher, pastor**

First Presbyterian Church of Antrim

The First Presbyterian Church of Antrim was the first church in Antrim. It was organized in 1788. The church says that while much of its worship service remains the same since its founding, the church continues to evolve, “adopting innovative worship, music and education elements over the years.” In addition to worship services, the church offers Sunday School for children in kindergarten through grade 6; school for junior and senior high school students, adult Bible studies, and vacation Bible school.

Its missions and outreach include:

- **World Hunger.** Presbyterians throughout the world join in the One Great Hour of Sharing program, which benefits local, national, and international hunger programs.
- **International Peace.** The Presbyterian Church supports a liaison to the United Nations and funds other projects which promote peace, whether civil rights or domestic abuse.
- **Fuel Assistance.** For those in the community who can't use our Community Wood Bank, the church provides emergency fuel assistance for needy families.

Its programs include:

- **Presbyterian Women's Guild** was founded in 1857. The Guild has done everything from rolling bandages for Civil War soldiers, through hosting the Washington's Birthday suppers for almost 90 years, to recently providing blankets for babies with AIDS. Its members meet monthly and include all women in the church.
- **The Revival Shop** is one of the newest programs of the church. It is a clothing consignment shop which provides high-quality, low-cost clothing to the community. Its profits go to other local charities, such as food banks, and to capital improvement projects within the church. Over 30 volunteers participate.

- **Salvation Army program** is administered by the church for the town of Antrim. Church members ring the bell for the familiar kettle at Christmas each year. Donations go to assist fire victims, purchase hearing aids and eye glasses, and other direct assistance.



The First Presbyterian Church of Antrim

Other programs include:

- Harvest and Lenten Luncheon Lecture Series;
- Alcoholics Anonymous;
- Antrim's Food Pantry assistance;
- Hosting St. Joseph's Community Dining program;
- Providing a place for the Antrim Area Senior Center.

Antrim Church of Christ

The Antrim Church of Christ has a very active congregation. Larry and Linda Warren returned to Antrim from Texas several years ago where Larry completed preacher's school. He has taken over the ministry at the Antrim church.

Currently the congregation meets for Sunday Bible Study and services at the Grapevine because the church is too difficult to heat during colder months. Wednesday Bible study is being held in various homes. The congregation's goal is to be able to use the church year round. With a growing congregation and some time, the congregation will attain that goal.

The Church of Christ is a non-denominational Bible-believing group. The Antrim congregation purchased the church building in the late 1970's. Attendance at the church has reached a high of 75. Currently there are about 25 members. Evangelism is the congregation's main goal.



The Antrim Church of Christ

Two things that make the Church of Christ stand out from other churches is its a capella music (singing without instrument accompaniment) and baptism by immersion once a person is old enough to believe. Larry Warren and the church have plans for the church building.

– Contributed by Rick Davis, congregant

American Legion

The American Legion Myers-Prescott-Olson Post No. 50 is one of the original American Legion Posts, chartered in 1919 as William Myers Post No. 50 in honor of William Myers, the first Antrim soldier killed in France on July 18, 1918. After World War II, the Post was re-chartered as Myers-Prescott Post No. 50 to honor Paul Prescott who was killed in a bombing raid over Germany on June 7, 1943. Again, in 1953 the post was re-chartered as Myers-Prescott-Olson Post No. 50 to honor Leland Olson, killed in Korea in March 1951.

Although this post is a small one, it makes its presence felt in the community by supplying flags and booklets on flag etiquette and Americanism to the schools, sponsoring the Boy Scout troop, providing a meeting place for the scouts, and presenting The American Legion School Award to an eighth grade student from Great Brook Middle

School each year at graduation. The post also has a color guard and firing squad that participates in parades, ceremonies, and veterans' funerals.

The American Legion meets the first Tuesday of each month (except during July and August) at 7:30 p.m. at the post home on West Street. Although it appreciates active members, it realizes how busy everyone is and has members who are unable to attend meetings but show their support on Memorial Day, at funerals, or other occasions when they are able.

– Contributed by Donald L. Paige, post adjutant

Project Lift

Literacy for Today, or Project Lift, as it is better known, provides free education services to people in the Hillsborough area who have not completed high school. The service began in 1992 and is funded through a variety of charitable sources. Since 1996, local towns have been requested to contribute funds, based on the number of students served in the previous year.

Lions Club of Antrim and Bennington

Since 1917, Lions clubs have offered people the opportunity to give something back to their communities. From involving members in projects as local as cleaning up an area park or as far-reaching as bringing sight to the world's blind, Lions clubs have always embraced those committed to building a brighter future for their community.

The 21 men and women in the Antrim and Bennington Lions Club concentrate on eyesight, Operation Santa (with funds raised at the annual Christmas tree sale). It also supports youth services and development and community outreach (TV for Antrim Village, community suppers, etc.).

Today, with more than approximately 45,000 clubs in 200 countries and geographical areas, Lions have expanded their focus to help meet the ever-increasing needs of our global community. Its programs are continually changing to meet new needs and greater demands, but its mission has never wavered: "We Serve."

Lions are recognized worldwide for their service to the blind and visually impaired. This service began when Helen Keller challenged the Lions to become "knights of the blind in the crusade against darkness" during the association's 1925 international convention. Today, in addition to its international SightFirst program, Lions extend their commitment to sight conservation through countless local efforts.

Lions are also involved in a variety of other activities to improve their communities and help people in need, such as assisting the hearing impaired, providing diabetes awareness and education materials, working on environmental projects, and developing youth programs.

Since Lions clubs were established, Lions have been dedicated to giving back to their communities. Lions clubs provide community parks, playgrounds, senior citizen programs, and medical care for those in need. Lions remain committed to improving the lives of those less fortunate—around the world and right at home.

The mission of Lions Opportunities for Youth is to provide the young people of the world with opportunities for achievement, learning, contribution and service, individually and collectively, through sponsorship of activities identified as best practices in the field of youth development. Lions Opportunities for Youth Committees are organized at the club, district, and multiple district levels. The committee includes chairpersons from all Lions youth programs.

Maharishi Vedic Medical College and Regional Peace Palace

For the past 12 years the campus of Maharishi Vedic School in Antrim has been the home for several non-profit educational and health-related programs offered by Maharishi Mahesh Yogi's worldwide organization. From 1996 to 2005, the 450-acre property, formerly Hawthorne College, was the site for the global organization's national administrative office - Maharishi Vedic Education Development Corporation (MVED). In May of 2005, the Antrim campus became the regional center offering all MVED's programs for personal development and improved quality of life to the entire New England area. The current plans are to expand the facilities on the property as well as its educational programs. Construction has started on the refurbishing of existing buildings and a boarding school for boys is to open in the fall of 2009.



Aerial View of Maharishi Peace Palace of Antrim

Also planned for the future for the Antrim campus is a four-year Maharishi Vedic Medical College which will offer training programs in prevention-oriented health care. The college will include an educational facility housing students, faculty, and staff. In addition, a Maharishi Vedic Health Center will be established that will provide health services. Initial plans are for 100,000 square feet of building space.

All buildings will be built according to the ancient principles of Vedic Architecture (Maharishi Sthapatya VedaSM), architecture in harmony with Natural Law.* Homes, offices, and communities designed and built according to Maharishi Sthapatya Veda support individual and collective health and good fortune (www.sthapatyaveda.com). Individuals who live and work in these Vedic buildings believe that they think more clearly and creatively, make better decisions, feel happier, and enjoy better health. Maharishi Vedic City in Iowa has been constructed following these principles (www.maharishivediccity.net).

Building plans also include a Maharishi Regional Peace Palace SM – a new home for MVED’s programs currently offered on the campus. These include the Transcendental Meditation® program, the world’s leading program for stress prevention, promotion of good health, and development of consciousness. Additional programs will be offered which support the balanced functioning of mind and body.

A Rich Cultural Heritage

Antrim’s cultural heritage is indeed a rich one. The groups we’ve highlighted above provide a smattering of the activities that go on in the town every year. The problem in attempting to provide a flavor of the groups which make our lives richer is that there are so many to choose from. For more information about groups we may not have covered, visit Antrim’s website for a phone number, a contact, and possible further information about that group. Go to www.antrimnh.org.

A striking fact about the listings on the web page of all the community groups within Antrim is the number of volunteers who spend thousands of hours collectively each year to make Antrim a better place in which to live and work.

Recommendations

- Undertake a survey of the town to determine which houses, structures and locations have historic significance but which are not now identified and, with the owner’s permission, post standardized plaques identifying the property with a brief description of why it is significant.
- Help entice tourism by creating a map or booklet of as many of Antrim’s significant locations as possible. The map might include historic houses, historic sites, churches, trails, wildlife and conservation areas, recreation areas, fishing access, canoeing and kayaking access, scenic roads, hills, mountains, etc. Descriptions of these areas could be included in a separate section as well as a proposed driving tour for visitors who

want to see these sites. Costs of the project could be offset by advertising. The map/booklet, which could be made available at retail establishments and town hall, could, if necessary, be sold at a nominal price.

- Determine if more space is needed for community activities. For example, is there a need for a community center as well as the current teen and senior centers? Determine if the facilities of the teen and senior centers are adequate for their needs.
- Consider creating a community gardening area where residents could grow flowers or vegetables. Also consider establishing a farmer's market where residents could sell fresh produce or home-made specialties.
- Explore the possibility with neighboring towns of establishing other cooperative organizations such as a 4-H Club or other community-oriented groups.

Economic Development

Introduction

Antrim is primarily rural in character, but there are several reasons why the town needs to carefully and thoughtfully promote economic development. For one, the lack of a diverse tax base burdens the residential taxpayer. As has already been noted, a study by the Society for the Protection of New Hampshire Forests has compared the costs of open space land, commercial development and residential development for eleven New Hampshire towns. For every tax dollar earned, these towns spent \$1.08 on residential areas, \$.52 on open space areas, and \$.39 on commercial/industrial areas. Secondly, both the surveys and the visioning sessions have clearly revealed the need and desire for more local services and businesses both for the use by our residents and for employment. Finally, the prospect of attracting economic development is currently sometimes more dependent on what neighboring towns and landowners do than on Antrim's own initiatives.

If commercial development expands in Hillsborough as is anticipated once the current economic climate improves, the spillover effects in Antrim will be substantial. The town needs to plan and prepare for this development. It is currently reviewing its zoning ordinances and districts, subdivision regulations and site plan review regulations to assist in the development of a plan that will maximize the use of the limited land area that can support commercial and industrial growth. Planning in such a fashion can help ensure that economic growth will be good for Antrim and will be done without having a major impact on the rural landscape so beloved by our residents.

Downtown

Significant economic growth will not come from the downtown area (Village Business District) with the exception of the Antrim Mills property. Originally the Goodell Mill and until 1989 the home of the Chicago Cutlery factory, the property remained vacant for most of the 1990s, until purchased by Frameworks, Inc., in late 1999. Frameworks moved its automotive lighting assembly and packing business into the expanded "Butler" (metal-frame) building at the rear of the property. The two oldest and most historic buildings remain largely vacant, with the exception of the owner's offices, several small businesses and the Antrim Teen Center. The property is once again on the market, offering a mixed-use mill complex of 62,158 square feet of space



Historic photo of the Goodell Mill Company, undated

in four buildings on 2.56 acres, with a .39 acre lot for parking across the street. The waterfront Great Brook building has a current variance for up to 28 residential units.

A number of the responses from the surveys and visioning sessions suggested further development of the Mill property. As of this writing, the future of this property is unclear.



Aerial view of Antrim Mills Property on Main Street

There is also potential to promote infill development (the use land within a built-up area for further construction) in the downtown area. Since the last master plan in 2001, several businesses have opened on Main Street, restoring Antrim's main commercial area to a bustling and lively downtown. The efforts of the committee members of Antrim's Tax Increment Finance (TIF) District have also assisted in the revitalization of downtown. In 2000 Antrim voters approved the creation of TIF with the objective of providing public facilities and infrastructure improvements that will help revitalize and beautify downtown Antrim as a commercial and cultural center. The district finances these improvements with new tax revenue from increases in property values. The first district-wide undertaking was the Facade Improvement Program. More than ten properties have taken advantage of free paint, matching grants and low-cost loans to make facade improvements. The district's next major focus was the Main Street Rehabilitation Project which brought new sidewalks, granite curbing, decorative lighting and other improvements to the downtown area. Other projects have included improvements to Memorial Park, additional parking in the downtown area, and an easement for the town to use at Touchwood Square. The TIF District expires in 2011. Voters must then decide whether to continue the district or whether to establish a new district elsewhere in town.



Bakery 42, Allen Chiropractic and Trends of Fashion, three of the new businesses on Main Street.

With municipal water and sewer available, many participants in the visioning sessions thought that expanding the downtown commercial district would help recreate the mixed use village that New England towns once embodied, enabling residents to walk to jobs, shops and services. If further expansion of the downtown is to be accomplished, Antrim will need to adjust the building and land use requirements and regulations that now exist in the Village Business District such as parking requirements and set-backs.



Edmonds Hardware, a fixture on Main Street since 1962

Highway Business District

Antrim adopted a Highway Business District in its Zoning Regulations to foster the development of commercial and light manufacturing uses, public and semi-public uses and residential uses along Route 202, Route 9, and the area just north of Route 9 in the vicinity of North Branch Village. Currently, there is a mix of business and residential

uses in these relatively heavily traveled corridors. In 2005 and 2006 citizen's petitions to rezone Route 9 from commercial to residential were defeated at town meeting. Another



Tenney Farm on Route 202 was started in 1775 by the Baldwin Family.

issue has been the boundaries of the zone, currently drawn at 1000 feet from the highway, rather than by lot line. Areas of preferred development instead of the 1000 foot strips have also been discussed. It is anticipated that more and more available land will be developed for residential use, leaving less available for commercial activity. The survey responses and visioning session, while firmly desiring to maintain Antrim's rural character and against big box stores, indicated a clear need for additional goods and services to be readily available, a need for employment closer to home and a desire for a firmer commercial base to help alleviate the residents' tax burden. The recommendations below are offered to assist Antrim in achieving a more desirable mix of commercial and residential uses. Below is a sample of responses to the survey:

What type of commercial development would you like to see in Antrim?

- | | |
|---|----------------------------|
| Like Keene's Colony Mill | Medical services complex |
| Small, non-polluting | Restaurants, deli |
| Intellectual, professional | Hospital |
| Light industry | Tourism, hotel |
| No national chains or flea market | Movie theater, video store |
| Financial services | Gift store |
| High tech | Gas stations |
| Temp agency, employment | Fitness facility, YMCA |
| Office park | More light manufacturing |
| Professional services, offices | Pharmacy |
| More small businesses with 5 – 10 employees | |

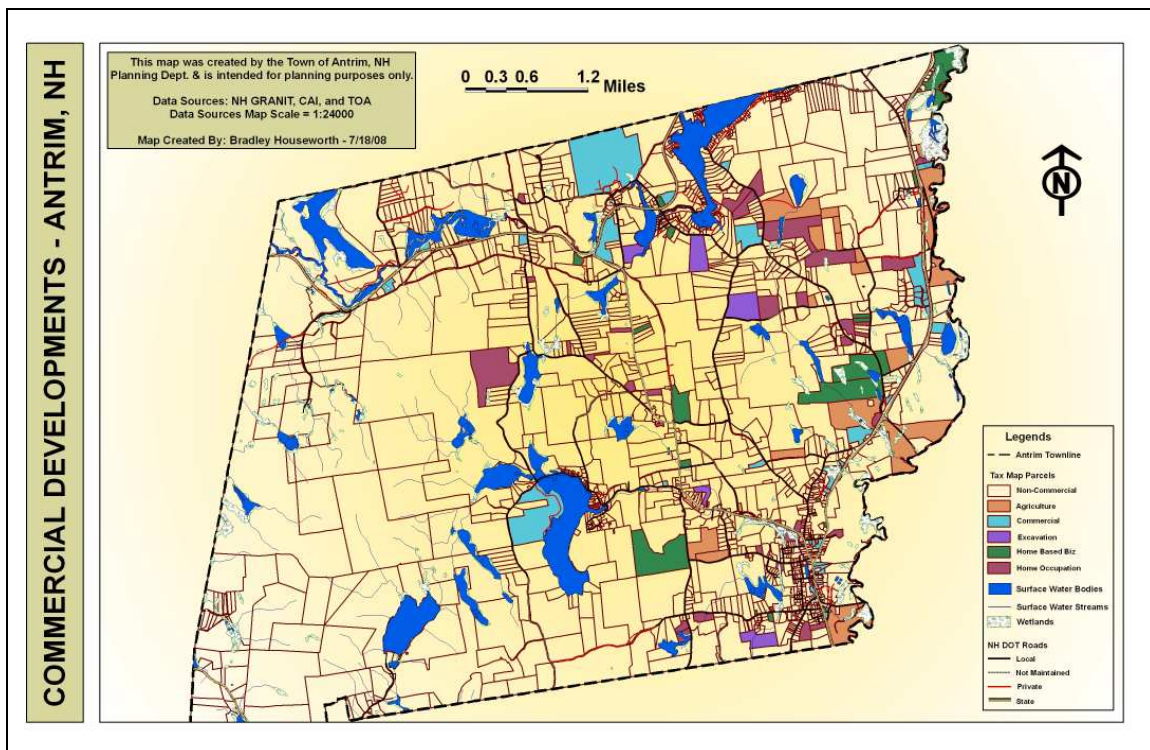
Source: Master Plan Survey Responses

Home Businesses

Another possibility for future development lies in the small business or “home business” sector as it has in the past. Today, Antrim has many small or home businesses located in the zoning districts other than the Business Districts, as detailed on Map XII-1. (See also the Directory of Antrim Businesses in the Appendix.) This Plan recognizes the importance of home occupations and home-based businesses and supports the continuation of relevant provisions for such uses in Antrim’s ordinances and regulations. In addition, all reasonable efforts to support existing businesses and attract new businesses are encouraged. Issues that residents have raised include the need for improved internet access, signage and an expedited application process.



The Wool Room, Pleasant Street



Map XII-1: Commercial Development in Antrim

The Labor Force

The New Hampshire Department of Employment Security indicates that Antrim contributes about 1,276 persons to the labor force, an increase of 1.6% over the decade from 1997 to 2007.

Annual Average	1997	2007
Civilian Labor Force	1,256	1,276
Employed	1,223	1,233
Unemployed	33	43
Unemployment Rate	2.6%	3.4%

Source: NH Employment Security

Antrim's major employers account for fewer than 25% of the jobs for Antrim's workers. Most commute out of town to work, traveling approximately 28.5 minutes to work.

Percent of Working Residents	
Working in community of residence	25%
Commuting to another NH community	71%
Commuting out-of-state	4%

Source: US Census Bureau

Commuting Patterns				
	% of residents commuting out-of-town	Most common commute to	% non-residents commuting into Antrim	Most common commute from
Antrim	75.1%	Peterborough	59%	Bennington

Source: US Census Bureau

Workers 16 years and over commuting to work	
Drove alone, car/truck/van	80.2%
Carpooled, car/truck/van	8.4%
Used public transportation	1.8%
Walked	3.6%
Other means	0.0%
Worked at home:	6.0%
Mean Travel Time to Work	28.5 minutes

Source: US Census Bureau

Antrim's Largest Employers			
Largest Businesses	Product/Service	Employees	Established
Frameworks	Manufacturer, automotive lighting	70	1999
Brailsford	Manufacturer, electric meters	25	2002
Town of Antrim	Municipal Services	22	1777
Landsite Corporation	Construction	12	1997
Antrim Marketplace	Convenience store/Grocer	10	2003
Edmunds Hardware	Hardware	9	1955
Antrim Lumber	Lumber sales	8	1960
Maharishi Vedic School	Educational	6	1996
MCE Catalog Ventures	Internet Marketing	6	1995
Laconia Savings Bank	Banking services	6	1990

Source: NH Employment Security

As discussed in the chapter on Population and Housing, Antrim lags behind the rest of Hillsborough County and the State of New Hampshire in educational attainment and income, and has a higher poverty rate than either the county or state. Its unemployment rate is also slightly higher. Antrim can help to encourage economic growth by striving to provide a skilled and educated workforce.

Unemployment Rates in 2007	
Antrim	3.4%
Hillsborough County	3.2%
New Hampshire	3.3%

Source: NH Employment Security

The number of those employed in goods producing industries and government has greatly increased in the last decade, while fewer are employed in the service industry.

Employment & Wages			
Annual Average Covered Employment		1997	2007
	Goods Producing Industries		
	Average Employment	24	65
	Average Weekly Wage	\$339	\$664
	Service Producing Industries		
	Average Employment	311	308
	Average Weekly Wage	\$324	\$439
	Total Private Industry		
	Average Employment	335	373
	Average Weekly Wage	\$325	\$479
	Government (Federal, State and Local)		
	Average Employment	31	62
	Average Weekly Wage	\$466	\$613

	Total, Private Industry plus Government		
	Average Employment	366	435
	Average Weekly Wage	\$337	\$498

Source: NH Employment Security

Future Economic Development

The 2001 master plan highlighted past economic contributors. In this updating of the plan, we would like to emphasize the future. The town should explore the true fiscal benefits of business development and work to promote a moderate and orderly rate of economic development consistent with Antrim’s small size and rural heritage, in order to diversify its tax base, to provide needed goods and services and to position itself in a proactive rather than reactive stance toward commercial and/or industrial development.

The town must continue to be active in improving its infrastructure and should assess its existing regulations to identify measures that could be taken to streamline the permitting process or create incentives to encourage appropriate economic development. Antrim also needs to involve business owners, the Chamber of Commerce, neighboring towns, and the Southwest Region Planning Commission in developing an economic niche for our community. The town should also explore public/private partnership programs to aid development and should explore ways to support the Chamber of Commerce in its efforts to promote the town through public events and marketing.

The southern tier of New Hampshire is projected to be the biggest growth area in the state over the next fifteen to twenty years. There are several reasons why we believe that some of that growth will affect Antrim. We need to be prepared for this potential growth.

- The state is improving the highways (Routes 202 and 9) that run through Antrim. These routes remain major commuter and truck routes, with increasing traffic anticipated in the coming years.
- Land for development in Antrim is still available and the “Commercial Build Out” possibilities in Antrim on Route 202 are vast, according to a study by Southwest Regional Planning District.
- There is a need for commercial businesses and services in our area for the benefit of the growing population. Antrim needs to be concerned that the town has affordable land that will attract and retain small businesses.
- Commercial/retail growth, especially in Hillsborough, is attracting new workers who want to live near their jobs. This growth will also attract new businesses who will service these stores.
- Antrim needs to be proactive in planning for its growth, and is committed to economic development that makes sense for the town. The revision of the master plan is another step toward this goal.

- Antrim is investing, and should continue to invest, in its infrastructure with the future in mind by examining our water and sewer needs, facilities and capacity, road infrastructure, telecommunications, and bridge needs.
- Antrim needs to continue to invest in creating a visual impact that will attract people to our town. This will also act as a vehicle to create more community involvement and in strengthening our community character.

The forces of growth and change continue to shape the state, the region, and our town. Our primary goal and our responsibility is to develop the blueprint of economic growth that will ensure that twenty years from now, Antrim is the town that its citizens want it to be and a town of which we all can be proud.

Recommendations

Recommendations for promoting Antrim’s economic development fall into four broad categories:

Objective 1: Planning

- Maintain an appropriate balance between economic development and the preservation of open space, natural resources and the environment. Increase our assessed valuation of commercial property from just over 1% as it is now, to at least 5% of the total assessed valuation.
- Establish an Economic Development Committee to promote and invite businesses that practice good environmental stewardship to consider Antrim as a place to locate.
- Market Antrim. Every community has unique attributes that make it a desirable place to work and live and Antrim has attributes in abundance. Antrim is in a prime location midway between Concord and Keene. The physical setting - our mountain, hills, lakes and rivers - is stunning. Recreational opportunities abound, both in town and nearby. The local school system provides a quality education. Our residents have a positive, can-do work ethic and a spirit of volunteerism that is unparalleled. Antrim has a great quality of life that can be used to promote economic development and tourism.
- Update the ordinances and regulations in the Village Business District to adopt “smart growth” principles that will encourage private investment in the downtown area.
- Work closely with the owner of Antrim Mills to develop the property into a true “mixed use” facility that will provide a means of low cost housing and economic development for the town.

- Consider designating appropriate areas for commercial development with mixed use if feasible, within preferred development districts. Review the Route 9 and 202 corridors in Antrim to determine the best land use for these major highway locations. Develop a selective location plan for development. Focus on the small to medium size building needs (1000-25,000 square ft.). Results of the survey and visioning sessions clearly indicated that the majority of residents of Antrim do not want big box stores in town.
- The Planning Board should review the definitions and regulations for “Commercial Office/Warehouse Space”. This will assist in attracting businesses to Antrim which are small to medium in size but are growing and have a need for additional space.
- Work with current landowners or developers in locating two to three small to medium sized locations suitable for industrial parks.
- Consider tax incentives and the possible establishment of a new TIF district for those areas that would encourage new businesses to locate in Antrim. Consider whether to renew the TIF district now in effect in the downtown area which will expire in 2011.
- In reviewing existing and new regulations, consider allowing new small businesses in the Rural District and mixed uses in the other districts and consider the impact of these regulations on existing businesses in these districts.

Objective 2: Infrastructure

- Pursue infrastructure improvements, particularly for bridges, roads, water, sewer, and communications, to be sure that we are keeping up with the growth and the technology of the 21st century. Coordinate our efforts with our neighboring towns.
- Explore the use of alternative energy sources including geothermal, solar, wood pellets, wind, and water power in providing long-term improvements in a sustainable fashion.
- Seek to provide high speed, broadband internet service for all areas of town, and work to provide wireless and cable television access for the entire town. Work jointly with the surrounding towns to get the most value for these services. Continue to remain apprised of all advancements in technology that would enhance the lives of Antrim’s citizens and be at the forefront of making these advancements accessible to all.
- Encourage local businesses to have an internet presence. Offer to expand the town’s website to assist in providing the necessary support and education to achieve this. Coordinate this effort with the Antrim Chamber of Commerce.

- Develop a long-term plan for supporting wireless communication and wireless cell towers in Antrim. After the plan is developed, determine what if any changes are needed to the zoning regulations. Pursue the cooperation of cell phone carriers in executing the plan.
- Consider requiring fiber optic cable be provided underground for all new and renovated developments.
- Establish a “wireless zone” in the downtown area.
- Develop an educational program in collaboration with area schools, colleges and professionals to provide educational business programs at low or no cost to Antrim residents.

Objective 3: Downtown Improvements

- Continue to improve and maintain the downtown area to demonstrate that Antrim is economically strong and proud of its image. Continue to offer the façade and landscape improvement plans to downtown businesses through the TIF program.
- Complete Phase II of the Transportation Enhancement Grant, making improvements to Route 202 to Elm Street and up Elm Street to North Main Street. This will complete the downtown sidewalk, traffic calming projects, and beautification plans throughout the entire downtown area.
- Maintain consistent signage and directional information in the downtown area.
- Continue the maintenance of the parks, buildings, and sidewalks.
- Develop further beautification programs for the town that tie the downtown elements together.

Objective 4: Economic Diversity

- Continue to identify buildings and/or land that are/is available for commercial development and keep a current inventory of them at Town Hall, updated quarterly.
- Become proactive in assisting people through the process of establishing a business in Antrim.
- Reexamine the “Special Exception” process to determine its adequacy as the approach to proper land use management in the town.
- Clearly define Antrim’s fit into the economic climate of the region and look to develop an attractive niche for local businesses.

Identifying early the needs and most workable strategies for economic development in Antrim will save both time and money. Then, instead of having to work harder, we will learn to work smarter for the needs of the community as a whole. We will not be competing with our neighbors but rather will be supporting each other in the growth of our region.



Tyler's Small Engine on Route 202

Traffic and Transportation

Introduction

In recent years, Antrim has begun to experience many of the stresses associated with an influx of both residential and commercial development in the community and the region. The Community Survey and Workshops conducted by the Master Plan Committee as part of this master plan update indicate that the community characteristics most valued by Antrim's residents are its rural character and small town atmosphere. Antrim's transportation system and its connections to the regional and state network provide access to the goods and services that residents and commerce require. It plays a large role in the development of the town, and in defining the town's character. As development continues, balancing the desires of residents to maintain our rural character with the increasing demand on the transportation system will be vital to Antrim's future.

With State Highway Routes 202 and 9 running through the town and with commercial development to the north in Hillsboro, concern has arisen among Antrim's residents regarding the level of traffic passing through town and the resulting impact on Main Street and other areas. During the visioning process, residents also indicated their love of Antrim's dirt roads and back roads. Concern has also been expressed in regard to transportation for various segments of the population, including teens, the handicapped, and seniors. Plans and proposals for future growth and development, as well as our aging population, may impact the transportation systems in various ways. This section is intended to plan for that future.



A viable thoroughfare and transportation system is the most significant public investment in the physical development of a town. The existing transportation network, which in the case of Antrim refers exclusively to the system of roads and highways, has a profound influence on the location and development of land use throughout the town. All land use activities require access to adequate transportation routes and are most likely to locate where access is the easiest and least costly. Land use changes have the potential to reduce existing traffic capacity, to increase delays and congestion on existing roadways, and to increase the footprint of roadway infrastructure necessary to accommodate the change in use. Likewise, transportation improvements have the potential to alter existing land use patterns by opening up once inaccessible areas, either by the construction of new roads or the upgrading of deficient roads.

Because of the financial commitment required for the improvement and maintenance of a road network and the direct relationship between land use patterns and traffic circulation, the identification and analysis of current transportation needs is crucial to the orderly accommodation of growth and development. This section of the master plan is intended to provide such an analysis. A corollary purpose of this document is to enable the town of Antrim to fully participate in all levels of transportation planning - local, regional, state, and federal.

The goal of this chapter is to examine how to meet the various transportation needs of Antrim's citizens and to ensure that the traffic and transportation infrastructure and systems in Antrim are safe, efficient, reliable and accessible while maintaining and enhancing the environment, the rural character, and the small town quality of life in Antrim.

Existing Transportation Facilities

There are approximately 66 miles of roads within Antrim, of which about 48 miles are municipally maintained roads. Of those 48 miles of municipally maintained roads, half are paved and half are unpaved. The remaining 16 miles of road are composed of State of New Hampshire roadways.

The major arteries of the road network in Antrim are US Route 202, posted as an east-west road in New Hampshire, but running through Antrim as a north-south corridor, and the State Highways: NH Route 9, NH Route 31, and NH Route 123.

In 1996 Antrim initiated a highway rehabilitation program to upgrade existing substandard town roadways. The goal of this plan is to prioritize and complete necessary road improvements over a number of years in order to avoid spikes in funding requests. The plan provides a solid framework for making budgeting decisions for roadway-related capital expenditures. It does not include general maintenance activities handled under the Highway Department budget.

Classification of Highways and Roads

The State Aid classification system, which is identified by RSA 229:5 and 229:231, establishes responsibility for construction, reconstruction, and maintenance as well as eligibility for use of State Aid funds. This classification system, more fully described in Appendix 10, also provides a basic hierarchy of roadways. The following is a description of the State Aid system:

Class I: Trunk Line Highways. Class I consists of all existing or proposed highways on the primary state highway system, excepting all portions of the highways within the compact sections of cities and towns. The state assumes full control and pays costs of construction, reconstruction and maintenance of its sections with the assistance of federal aid. Routes 9 and 202 are examples of Class I highways in Antrim.

Class II: State Aid Highways. Class II highways are all existing or proposed highways on the secondary state highway system, excepting portions of the highways within the compact sections of cities and towns, which are classified as Class IV highways. All sections improved to the state standards are maintained and reconstructed by the state. All other sections must be maintained by the city or town in which they are located until brought up to state standards. The same applies to bridges on Class II highways. Routes 31 and 123 are examples of Class II highways in Antrim.

Class III: Recreational Roads consist of all roads leading to, and within, state reservations designated by the Legislature. NHDOT assumes full control of reconstruction and maintenance. Antrim does not have any Class III roads.

Class III-a: New boating access highways from any existing highway to any public water in this state. All Class III-a highways are limited access facilities as defined in RSA 230:44. Antrim does not have any Class III-a roads.

Class IV: Town and City Streets consist of all highways within the compact sections of cities and towns listed in RSA 229:5. Extensions of Class I (excluding turnpikes and interstate portions) and Class II highways through these areas are included in the classification. Antrim is not included in the designated towns for this classification.

Class V: Rural Highways consist of all other traveled highways that the town has the duty to maintain regularly.

Class VI: Unmaintained Highways are all other existing public ways, including highways discontinued as open highways and made subject to gates and bars, and highways not maintained and repaired in suitable condition for travel thereon by the town for five (5) or more successive years. However, if a city or town accepts from the state a Class V highway established to provide a property owner or property owners with highway access to such property because of a taking under RSA 231:14, then notwithstanding RSA 229:5, VII, such a highway shall not lapse to Class VI status due to failure of the city or town to maintain and repair it for five (5) successive years, and the municipality's duty of maintenance shall not terminate, except with the written consent of the property owner or property owners.

Of the seven (7) possible state classifications, Antrim roads fall into four of these: Class I, Class II, Class V, and Class VI roads. Antrim's road system is typical of most New Hampshire towns, in that the most mileage is accounted for by Class V roads. The Class VI designation is frequently applied to roads that have been abandoned or discontinued, which often leads to confusion as to the ownership of the road. If a vote was taken at a town meeting to formally discontinue a road (or "throw it up"), that road is no longer a public way. It then belongs to the abutting landowners.

State and Federal Highways

NH Route 9 and US Route 202, while measuring only about 12 miles in length in Antrim, represent two significant travel corridors. Route 9 is officially designated as a “Major Arterial” Class I highway and is a principal highway for east-west travel through southern New Hampshire. Route 9 connects I-89 and I-93 to the east with I-91 to the west. In addition, Route 9 was designated in 1995 as part of the National Highway System, along with NH 101 and NH 12 south of Keene in the Monadnock region. The “Hillsborough Bypass” was completed in 2002, and more recently a major resurfacing of the highway from Hillsborough to Stoddard was completed in 2003. Traffic volumes and vehicular speed have increased since completion of these projects.

Antrim’s zoning along the 5.72 mile length of Route 9 falls into three categories for the 11.44 miles of frontage: commercial (8.04 miles); conservation (1.6 miles) and residential (1.8 miles). In Antrim, the highway is generally considered suitable for the safe conveyance of up to 20,000 vehicles per day. The traffic volumes on Route 9 through Antrim generally range from 4,500 to 6,000 vehicles per day (varying with the day of the week and location on Route 9). Therefore, the expected lifespan of the highway in its current configuration is several decades if its safety and capacity are well managed.

Route 202 traverses Antrim from north to south, and is a federal highway. It is classified as a Minor Arterial, funneling traffic to the “higher order” arterials of Routes, 9, 10 and 12. A Route 202 Corridor Study completed in 2002 by Southwest Regional Planning found that average daily traffic in Antrim on Route 202 ranges from a low of about 5,500 at the Antrim/Hillsborough town line to a peak of 8,057 south of NH 31. The corridor study also noted the generalized zoning acreage in Antrim’s Route 202 corridor: commercial: 1,571 acres; rural: 402 acres, residential: 163 acres, and other: 29 acres, for a total of 2,164 acres. This is in contrast to the other towns in the corridor, whose acreage in the Route 202 corridor is primarily rural and residential.

There has been much discussion regarding the impact that traffic has on Routes 9 and 202, and could have, on the town. Considering the importance of these highways to the regional and state transportation system, concern has been expressed as to the potential for “strip mall” or “sprawl” development to occur in the commercial zones along these highways. Many possibilities exist for Antrim to determine the way development proceeds along these routes including “clustering” commercial development in particular areas and the use of common driveways, wooded buffers, and other appropriate regulations.

Municipal Roads

The greatest amount of mileage in town consists of Class V, town-maintained roads. Approximately half of the Class V roads have a paved surface, and the other half a gravel surface. The road types with the least amount of mileage in Antrim are the Class VI roads, accounting for only about six miles of road. The pressures surrounding development on Class VI roads faced by many towns have not yet become serious issues in Antrim. The

ownership and condition of these roads can become contentious issues when there is pressure on the Planning Board and Selectmen to allow development on these roads.

Road Network by Mileage and State Classification

Class I	NH Route 9	5.72
	US Route 202	6.24
	Total Class I:	11.96
Class II	NH Route 31	4.60
	NH Route 123	.61
	Total Class II:	5.21
Class V		42.03
Class VI		6.37
Total Mileage, all class roads		65.57

Source: NHDOT Classified Road Mileage "RDF04", 1999

Functional Classification System

Every ten years, the New Hampshire Department of Transportation (NHDOT), working with the Regional Planning Agencies, updates the state’s functional classification maps for highways. A functional classification system identifies roads by the type of service provided and by the role of each highway within the state system based on standards developed by the US Department of Transportation. While the state aid classification system outlined above is the primary basis for determining jurisdiction, the following system is important for determining eligibility for federal funds.

The purpose of this system is to correlate the land planning and traffic planning functions of the master plan. Recognition of the principal function that a highway, road, or street is intended to serve can reduce potential conflicts between land use activities and traffic movements. For example, from a theoretical standpoint, residential development should not be permitted or encouraged to locate indiscriminately along major highways. The reason for this is obvious due to the opportunity for direct land use/traffic conflicts. The need for direct access to residential properties causes numerous left turn and crossover movements as well as ingress/egress movements, all of which slow and/or interrupt the smooth flow of traffic and, at the same time, substantially increase the potential for accidents to both pedestrians and vehicles.

According to this system, there are two categories of functional classes: Rural Areas and Urban Areas. In Antrim’s case, only the Rural categories apply. They are:

- Principal Arterial/ Controlled Access
- Other Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local Streets and Roads

Principle Arterial/Controlled Access

These highways consist of interstates and some primary state routes. They are designed to move large volumes of truck and car traffic through and between population centers without disturbing local traffic and land uses. Controlled Access is a designation adopted by NHDOT, the effect of which is to minimize the frequency of curb cuts, thereby controlling the amount of traffic crossing lanes and stopping on the road. Antrim has no roads that fall into this category.

Arterial Systems

These roads carry the largest amount of traffic into and through a region. They may have limited or controlled driveway access for the purpose of providing unimpeded traffic flow. These roads typically carry high volumes of traffic for medium to long distances and at medium speeds. NH Route 9 is classified as a principal arterial, and US Route 202 as a minor arterial.

The Collector System (Major and Minor)

The collector system provides land access, service, and traffic circulation within residential neighborhoods, commercial and industrial areas. It differs from the arterial system in that collector streets may penetrate residential neighborhoods, distributing trips (traffic) from the arterials through the area to their ultimate destination. Conversely, collector streets also collect traffic from local streets in residential neighborhoods and channel it to the arterial system. These roads typically carry medium volumes of traffic at low to medium speeds for relatively short distances. NH Route 31 and 123 are classified as major collectors.

Local Streets and Roads

This system includes all streets not classified in one of the higher systems. Its primary function is to provide direct access to abutting properties and access to higher order systems. It offers the lowest level of mobility, and through traffic is usually deliberately discouraged.

Scenic Roads

A major component of a town's rural character can be its unpaved and scenic roads. These roads help to retain a sense of history and rural quality that Antrim's residents have indicated a strong desire to maintain. RSA 231:157 allows towns by a vote at town meeting to designate any road other than a Class I or II highway as a Scenic Road. A municipality may rescind its designation of a scenic road using the same procedure.

The effect of designation as a scenic road is that, except in emergency situations, there shall be no tree cutting of trees with a circumference of 15 inches at 4 feet from the ground or alteration of stone walls by the town or a public utility within the right-of-way without a hearing, review, and the written approval of the Planning Board. This law does not affect the rights of individual property owners; nor does it affect land uses as permitted by local zoning.

In recognition of the fact that the state law is not very stringent, the statute was amended in 1991 to allow towns to adopt provisions other than what is spelled out in the law. These additional regulations could include giving protection to smaller trees or by inserting criteria for the Planning Board to use in deciding whether to grant permission.

Antrim has a number of roads that have been designated through Town Meeting as Scenic. At this time, the following roads in Antrim are so designated:

- | | |
|--|--|
| Bridle Road
(from Smith Road to Elm Avenue) | Old Hancock Road
(from Route 31 to Town Line) |
| Craig Road | Old Pound Road |
| Elm Avenue | Pierce Lake Road |
| Liberty Farm Road | Reed Carr Road |
| Meeting House Hill Road (to cemetery) | Smith Road |
| Miltimore Road | Turner Hill Road |
| Old Brimstone Corner Road | Whiton Road |
| Old Carr Road | |



Smith Road, designated as one of Antrim's Scenic Roads

Access Control

A related component of functional classification is level of access control. Access control manages the frequency of curb cuts along a highway. Curb cut densities are a principal determinant of safety and mobility on highways and preservation of functional classification relies in managing frequency of curb cuts. NHDOT has the authority to control access to and from state routes. There are three levels of access control:

Driveway Permits: All other access to state highways is managed through the state driveway permitting process. The principal criterion for permitting driveways is safety as a function of visibility, posted speed and functional classification with conventional distances of 400 feet on rural roads and 200 feet on urban roads.

Determinations for permitting are carried out by NHDOT Maintenance District personnel following application to NHDOT by property owners or developers.

Controlled Access: The points of access are predetermined and negotiated between NHDOT and the landowners. NHDOT purchases the frontage for the remainder of the property and delimits the access points. Very large properties may only be permitted one or two access points and be required to provide internal circulation.

Limited Access: The most restrictive type of access, it is designed for through traffic, and abutters or other persons have only a limited right of access.

The town may wish to consider developing a formal “Memorandum of Understanding” with NHDOT regarding any permitting of curb cuts along state highways. The memorandum could require applicants to include access management practices in the site development plans for land adjacent to state highways in town prior to the issuance of curb cut permits.

Existing Traffic Volume and Trends

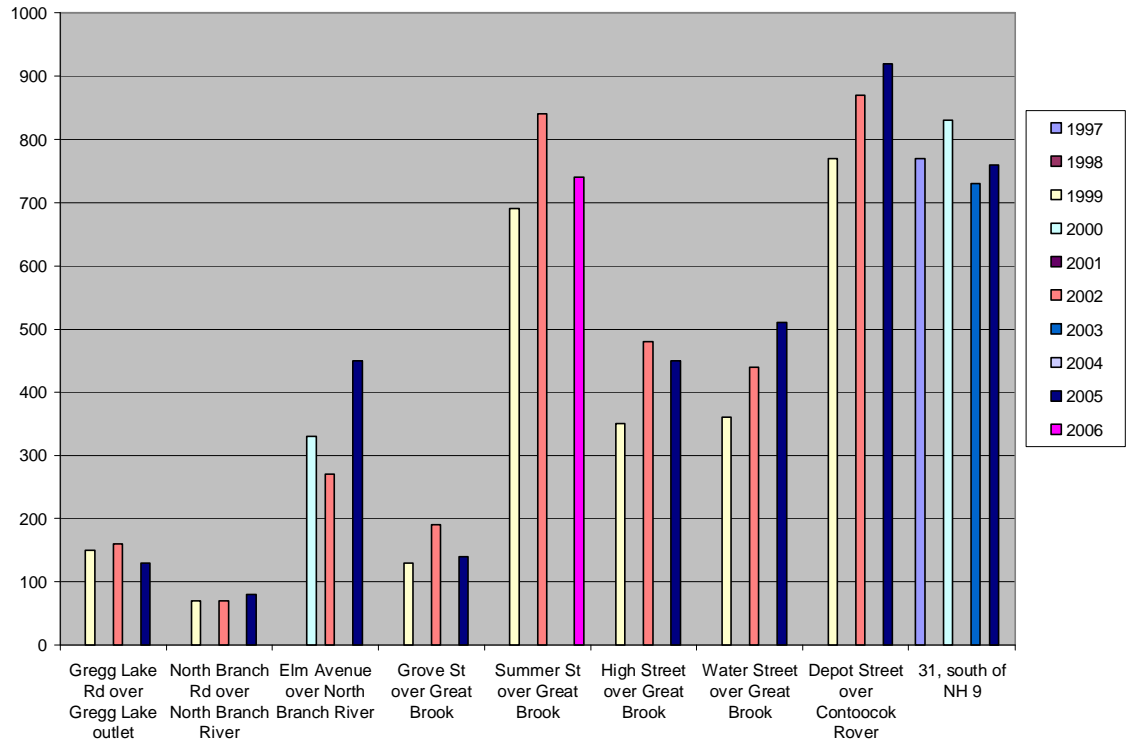
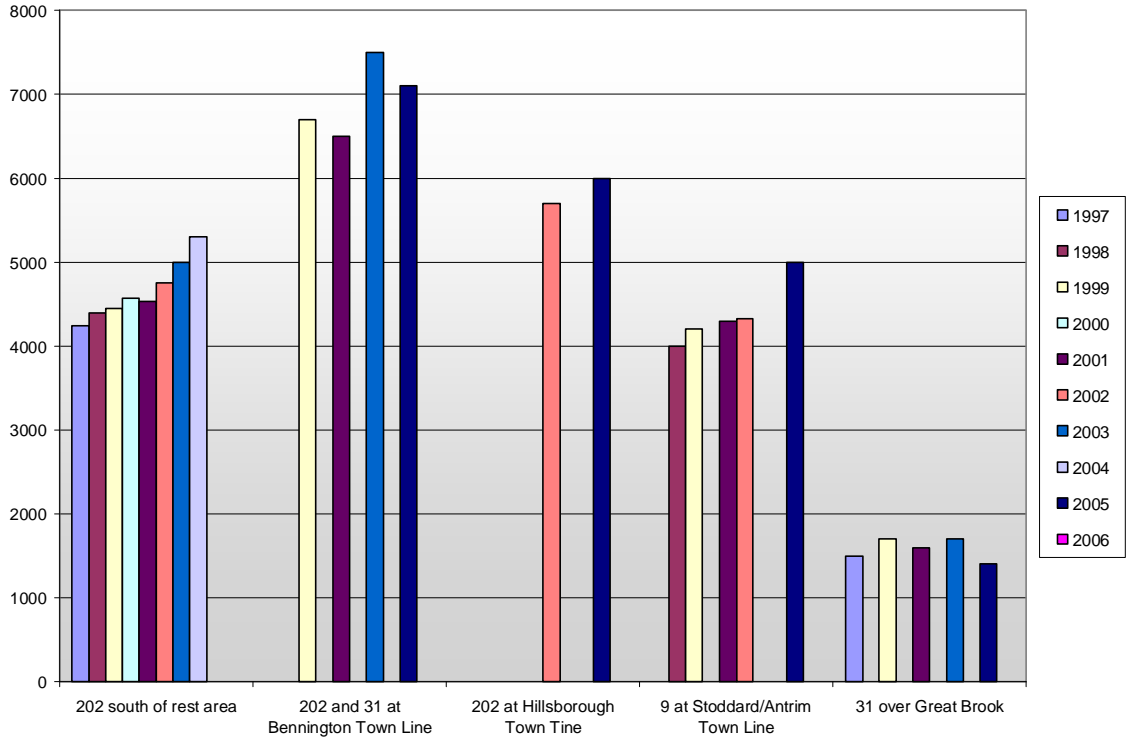
The gathering of information relative to traffic volumes helps the Planning Board identify not only how many vehicles a day are using the roads, and therefore impacting the infrastructure, but also where traffic is going. This knowledge is necessary in order to plan for future road improvements and new road construction. NHDOT collects average daily traffic counts (ADTs) around the state on a continual basis. Some traffic counting devices are permanently installed and provide figures based on a full year count, while others are set out on a rotating basis around the state for varying lengths of time, generally during the months of May to October, although counts are occasionally taken during other months. The permanent counters are placed only on state roads; the temporary counters are placed on state and local roads.

Traffic count data for Antrim roads are presented in the table below. Available information shows the average daily traffic at 16 locations within and on the borders of Antrim. The 2006 data is the most recent data collected for Antrim. Of these 16 locations, only the site on Route 202 south of the rest area is a permanent counter location. Note that counts were not taken every year so there are gaps in the information. Nine of the 16 locations are at various bridges around town; these counts began to be taken in 1992, too recent for any meaningful trend analysis to be developed.

According to this information, Routes 202 and 31 at the Bennington town line see the greatest amount of traffic. Three other sites in town follow closely. They are: Route 202 at the Hillsborough town line, Route 9 at the Stoddard town line, and Route 202 south of the rest area.

Antrim Daily Traffic Samples, 1997 - 2007											
Year:	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
US 202, south of Rest Area)	4241	4397	4446	4570	4532	4752	4997	5303	*	*	*
NH 31, south of NH 9	770	*	*	830	*	*	730	*	760	*	*
US 202 & NH 31, at Bennington TL	*	*	6700	*	6500	*	7500	*	7100	*	*
US 202 at Hillsborough TL	*	*	*	*	*	5700	*	*	6000	*	*
Gregg Lake Rd over Gregg Lake Outlet	*	*	150	*	*	160	*	*	130	*	*
North Branch Rd over North Branch River	*	*	70	*	*	70	*	*	80	*	*
Elm Ave over North Branch River	*	*	330	*	*	270	*	*	450	*	*
NH 31 over Great Brook	1500	*	1700	*	1600	*	1700	*	1400	*	*
Grove St over Great Brook	*	*	130	*	*	190	*	*	140	*	*
Summer St over Great Brook	*	*	690	*	*	840	*	*	*	740	*
High St over Great Brook	*	*	350	*	*	480	*	*	450	*	*
Water St over Great Brook	*	*	360	*	*	440	*	*	510	*	*
Depot St over Contoocook River	*	*	770	*	*	870	*	*	920	*	*

Source: NHDOT, Transportation Planning, 5/12/08



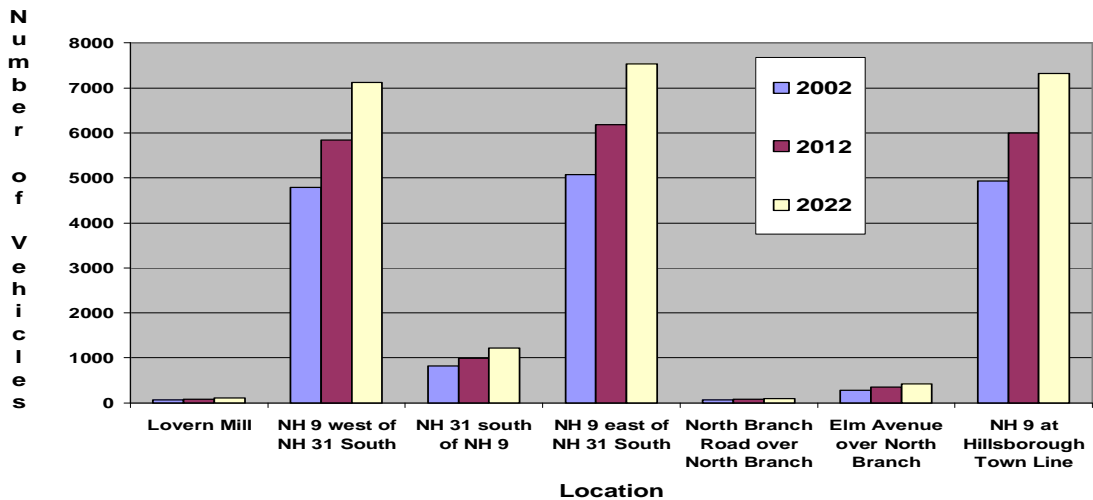
Future Traffic Growth

Data from Southwest Regional Planning Commission from its study of the Route 9 corridor further illustrates the growth in traffic in Antrim and projects traffic growth, assuming 2% annual growth.

Location	Average Saturday			Average Sunday			Average Weekday			Average Daily		
	2002	2012	2022	2002	2012	2002	2002	2012	2022	2002	2012	2022
	Observed	Projected		Observed	Projected		Observed	Projected		Observed	Projected	
Loveren Mill over North Branch	98	118	144	37	45	55	90	110	134	70	85	104
NH 9 west of NH 31 South	5,600	6,826	8,231	5,634	6,868	8,372	5,574	6,795	8,283	4,790	5,839	7,118
NH 31 south of NH 9	938	1,143	1,394	829	1,011	1,232	987	1,203	1,467	816	995	1,213
NH 9 east of NH 31 South	5,486	6,687	8,152	5,661	6,901	8,412	4,870	5,937	7,237	5,071	6,182	7,535
North Branch Road over North Branch	45	55	67	78	95	116	79	96	117	62	76	92
Elm Avenue over North Branch	309	377	459	336	410	499	339	413	504	285	347	423
NH 9 at Hillsborough Town Line	5,828	7,104	8,660	6,046	7,370	8,984	5,647	6,884	8,391	4,923	6,001	7,315

Source: Southwest Regional Planning Commission Route 9 Corridor Study

Average Daily Traffic, Projected to 2022



Traffic generators

The land uses within Antrim that generate traffic are predominantly residential. Antrim does have a concentration of retail/service activity in the downtown that generates traffic from within and outside of Antrim. Hawthorne College, which was a major traffic generator for the town, is no longer in operation. The current use of the campus as a School of Vedic Science does not generate the same level of traffic as previously. Frameworks, a company in the downtown employs 70 people who commute daily to Antrim. This is a large traffic generator at this time.

Existing Roadway Conditions

In order to adequately plan for future road improvements, it is necessary to first identify existing deficiencies in the transportation system. Deficiencies include such problem areas as roads with substandard width, inadequate or deteriorated bridges, poorly designed intersections, deteriorating road surface and shoulders, and poor drainage. The Antrim Highway Department follows a carefully planned schedule of road improvements and reconstruction. In effect now for about 10 years, the Road Construction Program has allocated funds at town meeting each year to completely rebuild a designated section of (paved) road. The goal of the department is to complete between a mile to a mile and a half of roadway each year. This program has been very successful and is nearing completion of its ultimate goal. At that point, of course, the program starts all over again, but this time beginning from a better starting point. As noted above, this program is intended only for the paved roads in Antrim; the gravel roads are maintained annually and, at this point in time, are not a source of concern for the department.

Bridges

Bridges present an ongoing maintenance and repair concern for all towns, oftentimes accounting for a large portion of local highway budgets. Bridges also present the potential for a number of safety hazards in instances where they are severely deteriorated, or are significantly narrower than the roads they serve. There are 23 bridges in Antrim: 7 are state-owned and the remaining 16 are town-owned. The following map shows the location of these bridges in Antrim and the table presents some of the information collected for bridges by NHDOT.

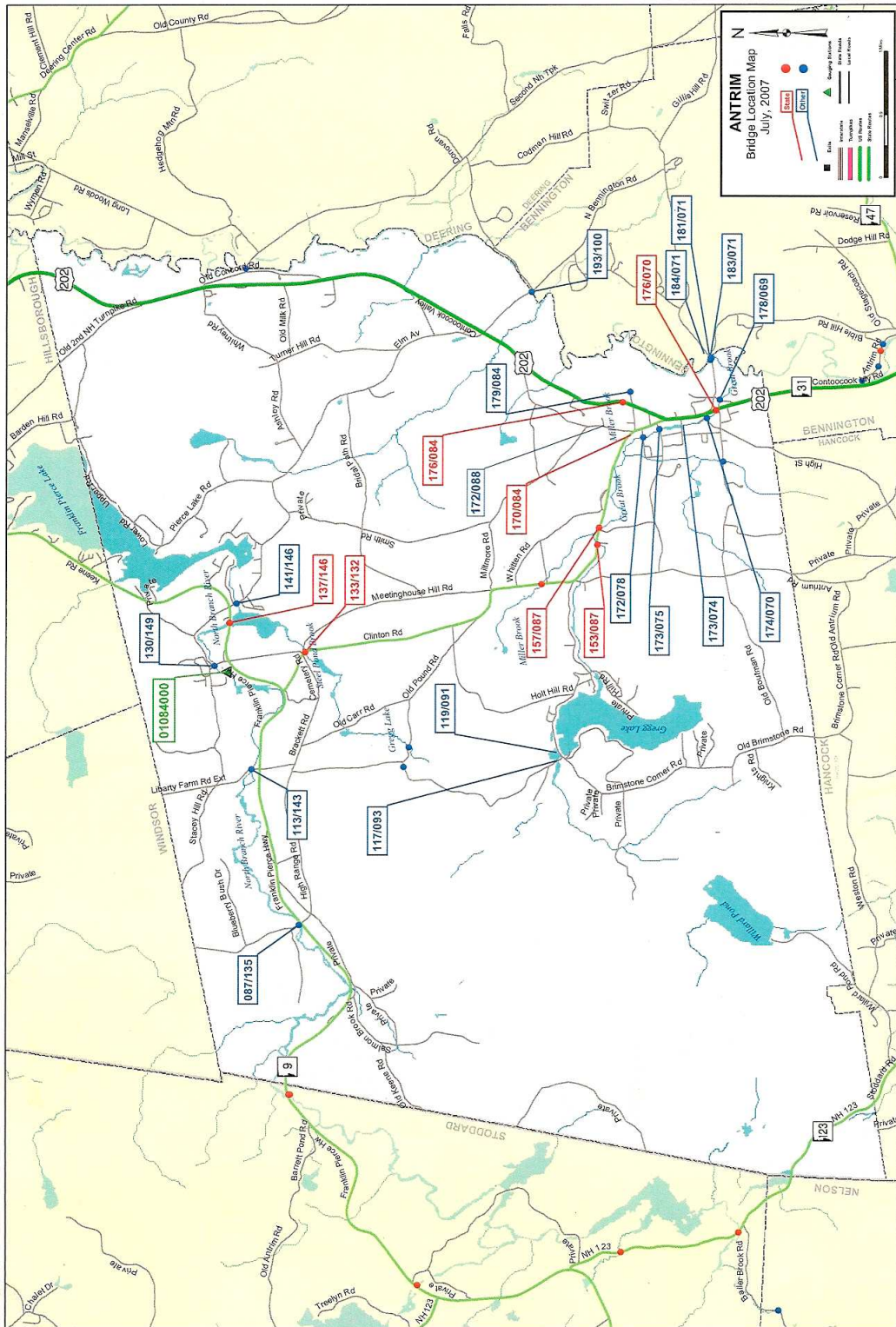
State owned and municipally owned bridges around the state are reviewed periodically by personnel from NHDOT. During these reviews, the bridges are evaluated based on federal standards and guidelines. Any bridge shown to have structural deficiencies or other specific identifiers is placed on the “Red List”. Every bridge on the Red List is inspected once (locally owned) or twice (state-owned) annually to monitor any changes that may make the bridge unsafe.

Antrim currently has three bridges that are red listed: the West Deering bridge over the Contoocook, the Old North Branch Road bridge, and one of the Depot Street bridges (Bridge Number 183/071). The oldest bridge in Antrim is on the Old North Branch Road,

and was built in 1910. The newest bridge in town is the Summer Street bridge, replaced in 2005 after extensive flooding in April 2004. All bridges have been inspected between 2003 and 2006. There are six bridges classified by NHDOT as being functionally obsolete (FO), which simply means that these bridges are carrying more traffic volume today than they were originally designed to carry

Bridge #	Location	Owner	Year Built	Length (in feet)
032/101	West Deering over Contoocook River	Owned jointly with Deering	1905	82
087/135	Loveren Mill Road	Town	1992	74
113/143	Liberty Farm Road	Town	1991	33
117/093	Craig Road	Town	1997	20
119/091	Gregg Lake Road (FO)	Town	1997	36
130/149	Old North Branch Road (FO)	Town	1910	47
	NH Route 31	State	1977	13
	NH Route 9	State	1951	69
141/146	Elm Avenue	Town	1984	64
	NH Route 31	State	1971	10
	NH Route 31	State	1915	12
	NH Route 31	State	1941	10
172/078	Grove Street (FO)	Town	1935	18
173/074	Summer Street	Town	2005	10
173/075	West Street	Town	1988	14
174/070	High Street	Town	1960	13
	US 202, NH 31	State	1947	13
	US 202	State	1939	18
178/069	Water Street	Town	1978	10
179/084	Elm Street	Town	1935	16
181/071	Depot Street (FO)	Town	1914	12
183/071	Depot Street (FO)	Town	1947	27
184/071	Depot Street (FO)	Owned jointly with Bennington	1946	77

Source: NHDOT



Map XIII-1, Bridge Locations in Antrim
 Source: NHDOT



The oldest bridge in Antrim, on Old North Branch Road

According to the NHDOT Bridge and Status Report dated December 1, 2008, the following is the current status of bridge projects in Antrim. Note that costs at the time of construction may exceed the estimate of the state.

Projects Authorized for Construction 2008:

- White Birch Point, bridge replacement. Current estimate: \$413,449.00; Town share: \$77,573.15. Complete, awaiting audit.
- North Main Street, bridge replacement. Current estimate: \$718,107.72; Town share: \$143,621.54. Under construction.

Projects Authorized for Construction 2009:

- Old North Branch Road, bridge replacement. Current estimate: \$348,460; Town share: \$69,692.00 Under design. Red listed.
- Depot Street over Contocook River, Phase I, bridge rehabilitation. Current estimate: \$108,645.00; Town share (including Bennington's share): \$21,719.00. Under design. Antrim-Bennington project. Red listed.
- West Deering Road over Contocook River, bridge rehabilitation. Current estimate: \$470,000.00. Town share (including Deering's share) \$94,000.00. Under design. Deering-Antrim project. Red listed.

Projects Authorized for Construction 2010:

- Water Street over Great Brook, bridge replacement. Current estimate: \$340,000.00; Town share: \$68,000.00. Under design.

Projects Authorized for Construction 2011:

- Depot Street over relief, bridge replacement. Current estimate: \$285,000.00; Town share: \$57,000.00. Under negotiations.
- Depot Street over Contoocook River overflow, bridge replacement. Current estimate: \$375,000.00; Town share: \$75,000.00. Under negotiations.

Projects Authorized for Construction 2012:

- Depot Street over Contoocook River Phase II, bridge rehabilitation. Current estimate: \$670,000.00; Town share: \$134,000.00.

Projects Authorized for Construction 2013:

- Craig Road over brook, bridge replacement. Current estimate: \$220,000.00; Town share: \$44,000.00. Under negotiations.

In a proactive effort to keep on top of bridge maintenance and repair, in January 2006, the town engaged the services of the engineering firm of Quantum Construction Consultants, LLC of Concord. The firm established a bridge inspection and repair program to identify and prioritize bridge repairs, which will assist the town in planning and funding bridge maintenance and repair in the future.



Summer Street Bridge

Hazardous Conditions/Accident Locations

Conditions that make for hazardous travel are typically related to design or physical features, such as steep grades, narrow roadways, sharp curves, etc. Discussion with the Police Chief indicates that for Route 9, speed is the major contributing factor for the accidents. According to the Antrim Road Agent, there are no particular design features of the local road network that account for or contribute to any particular hazards.

Antrim Fatal Crashes, 1995 - 2006		
Year	# of Fatalities	Location
1995	0	
1996	0	
1997	1	Route 9, Twin Bridges Area
1998	0	
1999	0	
2000	1	Route 31
2001	0	
2002	1	Route 9, near Stoddard Line
2003	3	Route 9: 9/10/03; Route 9: 11/11/03; Route 9: 12/8/03
2004	0	
2005	0	
2006	1	Route 9

Source: NH Department of Highway Safety

Accident Breakdown, January 2000 through March 2006						
Location	Injuries	Fatalities	OUI	Pedestrian	Bicyclists	# of Accidents
Clinton Rd	8			1		32
Concord Rd	2					8
Concord St	25	2	7	1		63
Depot St	3		1			10
Elm Ave	1			1	1	7
Keene Rd	25	1	6			65
Main St	14					45
Pleasant St	1		1			7
Route 202	8					20
Route 31	3					5
Route 9	7	1				20
Smith Rd	1		1			8
West St	1				1	
Total:	125	4	17	3	2	392

Source: Antrim Police Department

Alternative Modes of Transportation

The focus of this analysis has been on vehicular, private transportation. Pedestrian and bicycle traffic is limited in this region outside of the cities. Most roads were designed and built with little or no consideration for anything but vehicles; pedestrians and bicyclists must often share the road with cars and trucks in Antrim. In recent years there has been an increase in both pedestrian and bicycle traffic, and with it a recognition of the potential dangers of mixing these uses with vehicular traffic. These issues can be partly addressed at the local level by designing new transportation systems with attention to alternative modes of travel. With existing roads the problems are more difficult since the Road Agent is dealing with a circumscribed width in most cases; warning signs, speed limits, and education are three methods that can help ameliorate the conflicts.

The visioning process during this master plan update uncovered a desire on the part of a great many of Antrim's residents for improved pedestrian and bicycling paths and trails. Land use regulations should be reviewed to provide for paths and trails when new subdivisions are being planned and that the Recreation, Conservation and Open Space Committees actively pursue opportunities for creation and expansion of trails and paths.

Sidewalks

The only area of town with sidewalks is the downtown. In 2005-2006 sidewalks in the immediate downtown area were completely redone, with the help of a grant from the Federal Government Transportation Enhancement Fund. The town has recently been notified that it has received an additional Enhancement Fund grant to replace the sidewalks extending from Concord Road north to Elm Street and up Elm Street to North Main Street. In addition, the town received a grant in 2008 from the Safe Routes to School Program to finish the sidewalk on Highland Avenue, to create new crosswalks, for new signage and bike racks, and to educate the public.

Bike Paths

An abandoned railroad line is located just to the east of Antrim and is easily accessible from Route 202 in Bennington. The line runs adjacent to the Contoocook River through Deering to the paper mill in Bennington. For at least nine years, this railroad bed has been actively maintained as a multi-use recreational trail. The NH Department of Resources and Economic Development is responsible for overseeing the trail management. However, the local snowmobile club and conservation commission of Deering have been taking care of regular maintenance. This can be explored further to develop a recreational opportunity for the town.

Public Transportation

Public transportation plays a very small role in the overall transportation service network in Antrim. For Antrim residents there are limited transportation alternatives available at this time. The lack of public transportation services available are a concern to citizens. If

Antrim is going to rely on the bigger towns to provide the “shopping centers” for our residents, then we must find ways for the residents to be able to get to them. It is anticipated that, as the population ages, more and more residents will be unable to drive themselves to needed appointments and services.

In 2006, the town leased a “Community Bus” which is being used by the Recreation Department both for its programs and to provide limited bus service to Peterborough Plaza one day a week. The town should explore opportunities to expand usage of the bus to assist senior citizens and others in need of transportation.

A program called Rural Rides serves the towns of Antrim and Bennington; it is sponsored jointly by Home Healthcare, Hospice and Community Services, the American Red Cross, and residents of both towns. Red Cross volunteers from both towns provide door-to-door service for trips to medical appointments, shopping, and other personal business for people who have no access to private transportation. The service is primarily to Peterborough and Hillsborough. The Grapevine also assists those in need of transportation, matching those in need through their People’s Service Exchange.

Several years ago, the “Under One Roof” Project in Peterborough submitted a proposal to the Endowment for Health for a regional Community Transportation planning grant. This initiative has resulted in the recently incorporated non-profit Contoocook Valley Transportation Company (CVTC) which is exploring methods to provide transportation to those in need including volunteer driver networks, rideboards, and ride sharing. Antrim currently has an active volunteer driver network, and members of the community are working with CVTC to bring more transportation services to the community.



The Antrim Community Bus

State and Regional Efforts

In 2007, the State of New Hampshire established a State Coordinating Council (SCC) for Community Transportation in an effort to coordinate community transportation services throughout the state. The Council came about as a result of a Governor’s Task Force in Community Transportation which recommended “a state-level body to oversee the development of a coordinated system, regional councils to design and implement coordinated services around the state, and regional transportation coordinators, which would arrange trips through a ‘brokerage’ system of varied funding sources and a network of providers.” With limited resources, a growing budget deficit and an aging and growing population, the state is facing many of the same problems as towns such as Antrim: how to make the existing resources go further, coordinate the resources that are currently available to eliminate duplication and provide more services for the ever growing needs of the state’s inhabitants.

The SCC is composed of representatives from a number of state agencies, including the Departments of Transportation and Health and Human Services, as well as transit providers, the UNH Institute on Disability, AARP, Easter Seals, the community action agencies, regional planning commissions, the Coalition of Aging Services, the Endowment for Health, and Granite State Independent Living. The Regional Coordinating Councils (RCCs) are in the process of being organized throughout the state. Antrim is part of Region 6, composed of thirteen towns in the eastern Monadnock region:

<i>Antrim</i>	<i>Bennington</i>	<i>Dublin</i>	<i>Francestown</i>	<i>Greenfield</i>
<i>Greenville</i>	<i>Hancock</i>	<i>Jaffrey</i>	<i>New Ipswich</i>	<i>Peterborough</i>
<i>Rindge</i>	<i>Sharon</i>	<i>Temple</i>		

At the monthly meeting of the SCC on April 1, 2010, the application of the members of Region 6 to be recognized as the RCC for the eastern Monadnock area was unanimously approved by the SCC, which noted the wide diversity of stakeholders that were represented in the application. Spearheaded by Southwest Regional Planning, this RCC (known as EMRCC), is now working to develop a governing structure, to inventory the existing transportation services in the region and to bring more stakeholders to the table in order to fulfill its mission; *“to implement and facilitate a community transportation coordination framework in the Eastern Monadnock Region that encourages participation, involvement and support from the entire community and successfully facilitates the creation of inter- and intra-regional services to benefit transportation users, providers, and purchasers.”*

One of the most important functions of the EMRCC will be to select a Regional Transportation Coordinator (RTC), which will act as a broker of transportation services for the region. The RTC will contract with transportation providers to supply rides,

¹ <http://www.nh.gov/dot/programs/scc/about.htm>

² <http://swrpc.org/trans/rcc6.htm>

maintain a call center, schedule services, collect data, provide billing services and report back to the EMRCC, which is responsible for oversight of the RTC. Because of funding issues at the state level, it is currently unclear how quickly the EMRCC can establish these services. CVTC is working closely with the EMRCC in its efforts to expand transportation services to the region.

Problem Areas/Intersections

There have been many comments elicited through the master plan revision process concerning the intersection of Route 202 and 31 where traffic from the T-Bird, Laconia Savings Bank, Antrim Market Place and the Baptist Church all converge. The town should continue its involvement with regional and state transportation officials as it is expected that the traffic at this location will continue to increase.

Speeding in other areas of town, particularly Gregg Lake Road, was also cited as a concern by many respondents to the Master Plan Survey. The Police Department has employed the speed trailer on various routes in town as a traffic calming measure. Respondents also expressed the desire for stricter enforcement of our speed limits.



Intersection of Routes 31 and 202 at TBird

Transportation Planning Recommendations

There are a number of strategies the town and Planning Board can employ to address our transportation issues. These include:

- **Focus development in residential zones.** Provide for mixed uses and higher densities than in the outlying areas of town. This approach can alleviate heavy traffic, be it residential or commercial, on roads that may not be suitable for such traffic by encouraging pedestrian and bicycle traffic.
- **Set development boundaries along a corridor.** Ensure that any adjacent sensitive natural resources along a corridor will not be threatened by development. Identify areas along highways that can serve as “centers” for commercial development, with access provided by an interior road, rather than from the highway.
- **Interconnect developments.** For non-residential sites, require developers to provide easements across their property to an adjacent site through the Site Plan Review Regulations. When the adjacent site is developed, the easement can be used to connect the two sites with a service road and pedestrian facilities, allowing customers to move from site to site without exiting to the main road. Through the subdivision regulations, require developers to connect development roads or require that a right of way be provided to the adjacent site, so that a connecting

road can be constructed when the neighboring lot is developed. Discourage permanent cul-de-sacs and single point of entry developments.

- **Major collectors and arterial highways:** recognize the advantages of preserving the capacity and free flow characteristics of Antrim's major collectors and arterial highways that serve as regional corridors.
- **Plan for pedestrian and bicycle connections.** Whenever new subdivision roads are being proposed or NHDOT is planning any improvements on state-maintained roads in Antrim, Antrim has an opportunity to request bike paths along the roadsides. In addition, off-road connections can be identified and mapped, and efforts undertaken to secure easements for public use.
- **Develop and adopt a road policy.** The planning board, in conjunction with the selectmen, can develop a road policy to guide development in town based on the status of existing roads and future plans for roads. This can go far to ameliorate potential questions and problems when applications are submitted for the upgrading of a road, or for a building permit on a substandard Class V or Class VI road.
- **Impact fees:** Communities face the problem of having to upgrade local infrastructure as new development occurs. RSA 674:21 authorizes communities to adopt impact fee programs to offset the costs of expanding services and facilities that communities must absorb when a new home or commercial unit is constructed in town. The amount of the fee is developed through a series of calculations and is charged at the time a building permit is issued. Antrim may want to consider the implementation of an Impact Fee System.
- **Local option for transportation improvements:** RSA 261:152 VI (a) grants municipalities the ability to institute a surcharge on all motor vehicle registrations through a vote at Town Meeting, for the purpose of funding the construction or reconstruction of roads, bridges, public parking areas, sidewalks and bicycle paths. Funds generated under this law may also be used as matching funds for state or federal projects. The maximum amount of the surcharge permitted is \$5, with \$.50 reserved for administering the program. This would not apply to off-road vehicles, motorcycles, or antique automobiles.
- **Identify appropriate land uses.** Existing land uses can be monitored and regulations and ordinances reviewed to ensure that development is compatible with the road system. Applications for development should be reviewed with the scale of the proposal relative to the road network and abutting land uses in mind.
- **Continue the capital improvements program.** In conjunction with the Road Policy, the Capital Improvements Committee can set the proposed schedule for road improvements for a six (6) year period, including the degree and type of improvements to be made.
- **Continue monitoring the progress of the EMRCC and provide**

representation to CVTC. Antrim currently has an active volunteer base providing rides through CVTC, a Town Representative to CVTC’s “Town Rep” Committee and an Antrim resident on the Board of Directors of CVTC. The Town should continue to support the activities of both CVTC through active representation and monitoring of their progress in expanding community transportation options to the town and region.

Subdivisions and Site Plan Recommendations

- **View the whole parcel.** It is important to step back from an individual plan and look at it in relation to the neighboring properties and land uses. If the lot fronts on more than one road, decisions can be made about which roads would better serve as access, how the parking should be laid out, etc.
- **Lot layout.** Shared driveways or an interior street should be considered in a multi-lot subdivision, with lots fronting off of the interior road rather than the main frontage road.
- **Parking lot location and design.** Some recommendations for commercial parking lots are (1) locate the building(s) close to the road and put the parking on the side or in the rear of the parcel; (2) require shared parking, when feasible or plan for future shared parking; (3) prohibit parking and loading that requires backing out into the street; and (4) require the use of vegetative buffers between parking lots and roads.
- **Impact fee:** Antrim should consider creating an impact fee for roads to be assessed on new development within Antrim to keep pace with development for expansion and maintenance of roads within the town.

Conclusion

The overall goal of transportation planning is to create and maintain a convenient and efficient transportation network to allow the safe transfer of goods and people throughout Antrim while protecting the aesthetic and scenic qualities of the roads within the town and maintaining the rural character of the town in the face of increased development and traffic. This chapter’s recommendations encourage the use of best practices to enhance and improve the existing roadway infrastructure and new development in ways that are cost effective, less intrusive, and more acceptable to the community.

Implementation

According to RSA 674:2, III, the master plan may include the following sections:

“..(m) An implementation section, which is a long range action program of specific actions, time frames, allocation of responsibility for actions, description of land development regulations to be adopted, and procedures which the municipality may use to monitor and measure the effectiveness of each section of the plan.”

In terms of the recommended implementation section, the following list has been created to help put the new master plan into action. This chapter will facilitate the planning board and the selectboard to oversee the completion of the suggested implementation actions of this master plan. Each of these actions has been assigned a timeline and a responsible party to assist with future evaluation of the progress on these tasks. A chapter reference has also been included to tie these actions back to their corresponding chapters. This section of the master plan is dynamic and should be reviewed and modified annually to measure the progress made on the implementation actions.

<i>Implementation Action</i>	<i>Time Period</i>	<i>Agencies</i>	<i>Chapter Reference</i>
Allow cluster development in all zones in Antrim, particularly in the rural and rural conservation zones.	1-2 years	Planning Board	Chapter III, Natural Resources and Conservation
Actively work with the state and the other organizations involved in the Quabbin to Cardigan initiative to preserve those large, undeveloped areas of Antrim, particularly in the western portion of town.	Ongoing	Selectboard, Conservation Commission; Open Space Committee	Chapter III, Natural Resources and Conservation
Work to carry out the recommendations of the Open Space Committee as adopted by Town Meeting, March 2006.	Ongoing	Selectboard, Conservation Commission; Open Space Committee	Chapter III, Natural Resources and Conservation
Offer incentives in the form of property tax exemptions for residents or businesses who install renewable energy systems such as wind turbines and photovoltaic panels.	1-2 years	Selectboard, Energy Committee, Tax Collector	Chapter IV , Energy Usage and Conservation

<i>Implementation Action</i>	<i>Time Period</i>	<i>Agencies</i>	<i>Chapter Reference</i>
Install the EPA Portfolio Manager software or the RETSCREEN software to manage the data from energy audits and to set goals for energy reduction over time.	1-2 years	Selectboard, Energy Committee	Chapter IV , Energy Usage and Conservation
Thoroughly explore all the various programs listed in this document and any others that come to light so that the town can make intelligent choices about energy conservation and planning and take advantage of any grants or financial help that may be available.	1-5 years	Selectboard, Energy Committee, Town Administrator	Chapter IV , Energy Usage and Conservation
Conduct a feasibility study for creating a Community Choice Aggregate (CCA) to improve energy efficiency services, expand renewable energy and stabilize energy costs.	1-2 years	Selectboard, Energy Committee	Chapter IV , Energy Usage and Conservation; Chapter XII, Economic Development
Consider entering into a Performance Contract with an energy service company (ESCO).	1-2 years	Selectboard	Chapter IV , Energy Usage and Conservation
Establish point standards similar to those set up by the U.S. Green Building Council LEED certification to promote energy efficiency in future construction.	1-2 years	Selectboard, Planning Board	Chapter IV , Energy Usage and Conservation
Encourage smart growth principles such as mixed use, centralized development, higher density, and alternative transportation to reduce energy use.	1-5 years	Planning Board, Zoning Board of Adjustment, Selectboard	Chapter IV , Energy Usage and Conservation
Reevaluate using biodiesel fuel for Antrim's diesel engines.	1-2 years	Selectboard, Highway Department; Energy Committee	Chapter IV , Energy Usage and Conservation

<i>Implementation Action</i>	<i>Time Period</i>	<i>Agencies</i>	<i>Chapter Reference</i>
Determine which water resources have inadequate public access and find ways to make them more accessible.	1-5 years	Recreation Commission, Selectboard, Conservation Commission	Chapter V, Water Resources; Chapter X, Community Facilities
Establish a stormwater zoning ordinance to control stormwater runoff to our rivers, lakes, ponds, streams and subsurface waters.	1-2 years	Planning Board	Chapter V, Water Resources
Observe the spirit and regulations of the State of New Hampshire's Rivers Management and Protection Program and the National Park Service's Outstandingly Remarkable Values as they pertain to the Contoocook and North Branch Rivers.	Ongoing	Conservation Commission	Chapter V, Water Resources
Determine if some of our water resources can be promoted as tourist attractions.	1-5 years	Economic Development Committee, Selectboard	Chapter V, Water Resources
Only allow commercial/industrial development within 500 feet of a water resource if the development complies with the State of New Hampshire Shoreland Protection Act and best management practices.	1-2 years	Planning Board, Zoning Board of Adjustment	Chapter V, Water Resources
Prevent vernal pools from being filled in or drained.	Ongoing	Planning Board, Conservation Commission	Chapter V, Water Resources
Require vegetative buffers between developments and valuable surface water bodies.	1-2 years	Planning Board, Conservation Commission	Chapter V, Water Resources
Determine in which zoning districts new earth excavation sites will be allowed, either by permitted use or as a special exception with conditions. Note that all current excavation sites are in the Rural District.	1-2 years	Planning Board	Chapter VI, Earth Excavation Sites

<i>Implementation Action</i>	<i>Time Period</i>	<i>Agencies</i>	<i>Chapter Reference</i>
Consider revising the Earth Excavation and Reclamation Regulations to remove ambiguity, add more definitions, and add more specificity.	1-2 years	Planning Board	Chapter VI, Earth Excavation Sites
Consider revising the Earth Excavation and Reclamation Regulations and/or the Aquifer and Wellhead Protection zoning ordinance to add specific language and restrictive regulations governing the operation of earth excavation sites in areas overlying an aquifer or within a NH DES identified wellhead protection area.	1-2 years	Planning Board	Chapter VI, Earth Excavation Sites
Consider revising the Earth Excavation and Reclamation Inspection Checklists to ensure annual inspections of active earth excavation site.	1-2 years	Planning Board	Chapter VI, Earth Excavation Sites
Conduct inspections of inactive earth excavation sites to determine if they are inactive, reclaimed, and/or abandoned in such a manner that nature will reclaim them.	1-2 years	Planning Staff, Selectboard	Chapter VI, Earth Excavation Sites
Draft a Water Management Resource Plan to protect existing surface and subsurface water resources from potential contamination sources.	1-5 years	Planning Board	Chapter VI, Earth Excavation Sites
Consider implementing three preferred development zones: the existing South Village, the northeastern corner of town along Route 202, and appropriate land along Route 9, using smart growth principles.	1-3 years	Planning Board	Chapter VIII, Future Land; Chapter XII, Economic Development

<i>Implementation Action</i>	<i>Time Period</i>	<i>Agencies</i>	<i>Chapter Reference</i>
Consider multi-family, open space cluster development, and townhouse units in addition to the traditional single family residence on two plus acres.	Ongoing	Planning Board	Chapter VIII, Future Land Use
Consider the most effective use of land when reviewing commercial development in the Residential and Highway Business zones, and consider delineating new or expanded commercial areas and uses in all districts.	Ongoing	Planning Board	Chapter VIII, Future Land Use
Encourage the use of conservation easements to preserve undeveloped land.	Ongoing	Planning Board, Conservation Commission	Chapter VIII, Future Land Use
Consider Open Space Development and offering incentives to builders to provide more open space in consideration of being able to build more units than would otherwise be allowed.	1-2 years	Planning Board, Conservation Commission	Chapter VIII, Future Land Use
Periodically review the required minimum lot size and frontage in the Rural and Rural Conservation District to ensure the preservation of the town's rural character.	Ongoing	Planning Board	Chapter VIII, Future Land Use
Develop reasonable restrictions to allow for the development of small to medium sized new businesses in the rural areas as well as the growth of existing businesses, while protecting the property rights of the residential owners.	Ongoing	Planning Board	Chapter VIII, Future Land Use
Encourage the redevelopment of downtown properties such as the mill buildings to incorporate a mix of uses, including a variety of housing types and costs.	Ongoing	Planning Board, Economic Development Committee, Selectboard	Chapter IX, Population and Housing; Chapter XIII, Traffic and Transportation

<i>Implementation Action</i>	<i>Time Period</i>	<i>Agencies</i>	<i>Chapter Reference</i>
Review the regulations concerning accessory units in owner-occupied single-family homes.	1-2 years	Planning Board	Chapter IX, Population and Housing
Strive to provide affordable housing options within Antrim by providing incentives to housing developers that create workforce housing units, and examine other techniques.	1-5 years	Planning Board	Chapter IX, Population and Housing
Examine Antrim's existing housing and zoning ordinances to determine if the town is in compliance with RSA 674:58, the new workforce housing law. If not, draft a new ordinance to assure compliance with the law.	1-2 years	Planning Board	Chapter IX, Population and Housing
Work with developers to minimize the costs of living through quality housing design, energy efficient construction, proximity to transportation, and employment and reemployment options.	Ongoing	Planning Board, Building Inspector, Selectboard	Chapter IX, Population and Housing
Study the advisability of impact fees to generate adequate funds to cover the costs of the new infrastructure that new residential growth necessitates.	1-2 years	Planning Board, Growth Committee, Selectboard	Chapter IX, Population and Housing
Monitor the conversion of Antrim's many seasonal houses into year-round homes to ensure all are in compliance with building and safety requirements.	Ongoing	Zoning Board of Adjustment, Building Inspector	Chapter IX, Population and Housing
Reach out to new residents to integrate them into our community, while maintaining the town's character.	Ongoing	Town Administrator, Selectboard, Town Clerk, Police Department	Chapter IX, Population and Housing

<i>Implementation Action</i>	<i>Time Period</i>	<i>Agencies</i>	<i>Chapter Reference</i>
Consider establishing a Community Center. Support or continue to support the teen and senior centers and determine if the facilities used are adequate to their needs.	1-5 years	Selectboard	Chapter X, Community Facilities; Chapter XI, Historic and Cultural Resources
Increase communications infrastructure by establishing a Wi-Fi district in the downtown area or other areas of town.	1-5 years	Selectboard, Economic Development Committee	Chapter X, Community Facilities; Chapter XII, Economic Development
Address police safety and space needs.	1-2 years	Selectboard, Police Department	Chapter X, Community Facilities
Periodically revisit the idea of having a Public Works Director as the town grows.	3-5 years	Selectboard, Highway Department, Water and Sewer Commission	Chapter X, Community Facilities
Increase the number of recreational fields.	1-5 years	Parks and Recreation Department, Selectboard	Chapter X, Community Facilities
Increase safety and accessibility at Antrim Memorial Gym.	1-2 years	Parks and Recreation Department, Selectboard	Chapter X, Community Facilities
Study and address the recreation needs of all of Antrim residents.	1-2 years	Parks and Recreation Department, Selectboard	Chapter X, Community Facilities
Enact the recommendation in the town's Hazard Mitigation Plan, including continuing the repair of the town's bridges.	1-10 years	Selectboard, Highway Department, Emergency Management Director	Chapter X, Community Facilities
Assess the feasibility of expanding the water and sewer system.	1-5 years	Water and Sewer Commission, Selectboard, Economic Development Committee	Chapter X, Community Facilities

<i>Implementation Action</i>	<i>Time Period</i>	<i>Agencies</i>	<i>Chapter Reference</i>
Survey the town to determine which houses, structures and locations have historic significance but which are not now identified and, with the owner's permission, post standardized plaques identifying the property with a brief description of why it is significant.	1-5 years	Historical Society	Chapter XI, Historic and Cultural Resources
Create a map or booklet of Antrim's significant locations to help promote tourism and appreciation of Antrim.	1-3 years	Chamber of Commerce, Historical Society, Great Brook School, Selectboard	Chapter XI, Historic and Cultural Resources
Consider creating a community gardening area and a farmer's market.	1-5 years	The Grange, The Grapevine	Chapter XI, Historic and Cultural Resources
Explore the possibility with neighboring towns of establishing other cooperative organizations such as a 4-H Club or other community-oriented groups.	1-5 years	Citizens	Chapter XI, Historic and Cultural Resources
Establish an Economic Development Committee to promote and invite businesses.	1-2 years	Selectboard	Chapter XII, Economic Development
Market Antrim. Support the Chamber of Commerce in its efforts to promote Antrim through public events and marketing.	Ongoing	Selectboard, Economic Development Committee, Chamber of Commerce	Chapter XII, Economic Development
Update the ordinances and regulations in the Village Business District to adopt "smart growth" principles that will encourage private investment in the downtown area.	1-3 years	Planning Board	Chapter XII, Economic Development
Work closely with the owner of Antrim Mills to develop the property into a true "Mixed Use" facility that will provide a means of low cost housing and economic development for the town.	1-5 years	Selectboard, Building Inspector, Planning Board, Zoning Board of Adjustment	Chapter XII, Economic Development

<i>Implementation Action</i>	<i>Time Period</i>	<i>Agencies</i>	<i>Chapter Reference</i>
Review the definitions and regulations of the town with awareness and concern for the small business owner and the affordability of operating a business in town.	1-5 years	Planning Board	Chapter XII, Economic Development
Review the definitions and regulations for Commercial Office/Warehouse Space.	1-2 years	Planning Board	Chapter XII, Economic Development
Work with current landowners or developers in locating two to three small to medium sized locations suitable for industrial parks.	1-2 years	Planning Board, Growth Committee, Economic Development Committee	Chapter XII, Economic Development
Consider tax incentives and the possible establishment of a new TIF district for those areas that would encourage new businesses to locate in Antrim.	1-5 years	Selectboard, Economic Development Committee	Chapter XII, Economic Development
Consider whether to renew the TIF district now in effect in the downtown area, which will expire in 2011.	1-2 years	Selectboard, TIF Committee, Economic Development Committee	Chapter XII, Economic Development
Consider allowing new small businesses in the Rural District and mixed uses in the other districts and consider the impact of these regulations on existing businesses in these districts.	1-5 years	Planning Board	Chapter XII, Economic Development
Pursue infrastructure improvements, particularly for bridges, roads, water, sewer, and communications.	Ongoing	Selectboard, Highway Department, Water and Sewer Commission, Economic Development Committee	Chapter XII, Economic Development
Encourage local businesses to have an internet presence. Offer to expand the town's website.	Ongoing	Selectboard, Economic Development Committee, Chamber of Commerce	Chapter XII, Economic Development
Pursue high speed broadband internet service and wireless and cable television access for the entire town. Keep abreast of all technological advancements.	Ongoing	Selectboard, Economic Development Committee	Chapter XII, Economic Development

<i>Implementation Action</i>	<i>Time Period</i>	<i>Agencies</i>	<i>Chapter Reference</i>
Establish a “wireless zone” in the downtown area.	1-2 years	Selectboard, Economic Development Committee	Chapter XII, Economic Development
Develop a long-term plan for supporting wireless communication and wireless cell towers in Antrim. After the plan is developed, determine what if any changes are needed to the zoning regulations. Pursue the cooperation of cell phone carriers in executing the plan.	1-2 years	Selectboard, Economic Development Committee, Planning Board	Chapter XII, Economic Development
Consider requiring fiber optic cable be provided underground for all new and renovated developments.	1-2 years	Planning Board	Chapter XII, Economic Development
Develop an educational program in collaboration with area schools, colleges and professionals to provide educational business programs at low or no cost to Antrim residents.	1-5 years	Economic Dev. Com., ConVal School District, Chamber of Commerce, local colleges	Chapter XII, Economic Development
Continue to improve and maintain the downtown area	Ongoing	TIF Committee, Economic Development Committee	Chapter XII, Economic Development; Chapter XIII Traffic and Transportation
Complete Phase II of the Transportation Enhancement Grant, making improvements to Route 202 to Elm Street and up Elm Street to North Main Street.	1-2 years	TIF Committee	Chapter XII, Economic Development
Maintain consistent signage and directional information in the downtown area.	Ongoing	Highway Department, TIF Committee	Chapter XII, Economic Development
Continue maintenance of the parks, buildings, and sidewalks	Ongoing	Highway Department, Parks and Recreation Department, Town Administrator, Selectboard	Chapter XII, Economic Development
<i>Implementation Action</i>	<i>Time Period</i>	<i>Agencies</i>	<i>Chapter Reference</i>

Develop further beautification programs for the town that tie the downtown elements together.	1-5 years	TIF Committee, Selectboard, Economic Development Committee, Chamber of Commerce	Chapter XII, Economic Development
Identify buildings and/or land that are available for commercial development. Keep a current inventory at Town Hall, updated quarterly.	1-5 years	Economic Development Committee, Chamber of Commerce	Chapter XII, Economic Development
Be proactive in assisting people through the process of establishing a business in town.	1-5 years	Economic Development Committee, Chamber of Commerce, Town Administrator	Chapter XII, Economic Development
Reexamine the Special Exception process to determine its adequacy as the approach to proper land use management.	1-2 years	Planning Board	Chapter XII, Economic Development
Set development boundaries along a corridor. Ensure that any adjacent sensitive natural resources along a corridor will not be threatened by development.	1-2 years	Planning Board, Conservation Commission	Chapter XIII, Traffic and Transportation
Identify areas along highways that can serve as “centers” for commercial development, with access provided by an interior road, rather than from the highway.	1-2 years	Planning Board, State Department of Transportation	Chapter XIII, Traffic and Transportation
Interconnect developments. Discourage permanent cul-de-sacs and single point of entry developments.	Ongoing	Planning Board	Chapter XIII, Traffic and Transportation
Recognize the advantages of preserving the capacity and free flow characteristics of Antrim’s major collectors and arterial highways that serve as regional corridors.	Ongoing	Planning Board	Chapter XIII, Traffic and Transportation
<i>Implementation Action</i>	<i>Time Period</i>	<i>Agencies</i>	<i>Chapter Reference</i>

Plan for pedestrian and bicycle connections.	Ongoing	Planning Board	Chapter XIII, Traffic and Transportation
Develop and adopt a road policy.	1-2 years	Planning Board, Selectboard	Chapter XIII, Traffic and Transportation
Consider the adoption of an impact fee programs to offset the costs of expanding services and facilities that the town must absorb when new homes, subdivisions or commercial units are constructed in town.	1-5 years	Planning Board, Highway Department, Selectboard	Chapter XIII, Traffic and Transportation
Consider instituting a surcharge on all motor vehicle registration for funding the construction or reconstruction of roads, bridges, public parking areas, sidewalks and bicycle paths.	1-5 years	Selectboard, Highway Department, Town Clerk	Chapter XIII, Traffic and Transportation
Monitor existing land uses and review applications for new land uses to ensure that development is compatible with the road system.	Ongoing	Planning Board, Selectboard, Highway Department	Chapter XIII, Traffic and Transportation
Continue to strengthen the capital improvements program.	Ongoing	Capital Improvements Committee, all Town Departments, Selectboard	Chapter XIII, Traffic and Transportation
Continue monitoring the progress of the EMRCC and provide representation to CVTC.	Ongoing	Selectboard, Planning Board	Chapter XIII, Traffic and Transportation
Review site plan and subdivision applications with a view to how the parcel relates to neighboring properties and land uses.	Ongoing	Planning Board	Chapter XIII, Traffic and Transportation
Consider shared driveways or interior streets in the review lot layouts in a multi-lot subdivision.	Ongoing	Planning Board	Chapter XIII, Traffic and Transportation
<i>Implementation Action</i>	<i>Time Period</i>	<i>Agencies</i>	<i>Chapter Reference</i>

<p>Review commercial parking lot location and design to encourage locating buildings close to the road and locating the parking on the side or in the rear of the parcel; require shared parking, when feasible, or plan for future shared parking; prohibit parking and loading that requires backing out into the street; and use vegetative buffers between parking lots and roads.</p>	<p>Ongoing</p>	<p>Planning Board</p>	<p>Chapter XIII, Traffic and Transportation</p>
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Antrim 2010 Master Plan

Appendix *

1. Master Plan Survey Responses, May 2006 – Appendix, Pages 1 – 31

2. Open Space Conservation Plan for Antrim –

http://www.antrimnh.org/Pages/AntrimNH_WebDocs/AOSC%20Report%20FINAL11%208%2005_1.pdf

3. Technical Bulletin 10, Preservation of Scenic Areas & Viewsheds, OEP –

<http://www.nh.gov/oep/resourcelibrary/documents/technicalbulletin10.doc>

4. Contoocook and North Branch Rivers Local Advisory Committee River Corridor Management Plan –

http://des.nh.gov/organization/divisions/water/wmb/rivers/documents/management_plan_contoocook.pdf

5. NH Handbook on Energy Efficiency and Climate Change –

Volume 1 –

<http://www.nhenergy.org/images/a/a1/Handbook.pdf>

Volume 2 -

http://www.nhenergy.org/images/e/ea/NH_Handbook_Energy_Efficiency_V2.pdf

6. NH DES Nomination of Rivers for Special Protection – (scroll down at report)

<http://des.nh.gov/cgi-bin/htsearch?config=dessearch&restrict=%2Fdes&exclude=&method=and&format=built-in-&long&sort=score&words=NH+DES+Nomination+of+Rivers+for+Special+Protection&submit=Search>

7. Directory of Antrim Businesses –

http://www.antrimnh.org/Pages/AntrimNH_business/bizdirectoryindex

* Due to the length of some appendices, and/or the changing nature of the information reported within, internet “links” have been provided for many of them, rather than regular hard-copy.

Maps

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