

# **PLAINFIELD, NH MASTER PLAN - LAND USE CHAPTER**

## **DRAFT FOR REVIEW PURPOSES ONLY**

**UPDATED 12/20/10 BY UVLSRPC  
FOR THE PLAINFIELD PLANNING BOARD**

### **INTRODUCTION**

Plainfield enjoys a diverse natural environment that has shaped its history and today provides the Town its rural character, which is highly valued by its residents. These resources include large blocks of forest land, productive farm soils, a rich plant and animal habitat, scenic views, surface and drinking water supplies. Plainfield's land use plan is based on the premise that Plainfield's natural resources should be conserved. Future development of the Town should be directed and limited by the ability of the environment to support that development.

Land use considerations are closely related to the other topical areas addressed by this Master Plan. Other chapters describe historic and natural resources, housing and economic development, population trends, public facilities/services, roads and transportation, and recreation. This Chapter describes the Town's current land use, the community attitudes toward growth and existing land use, provides a discussion of the development capability of Plainfield's land, and recommends guidelines for future growth of the Town.

### **EXISTING LAND USE & DEMOGRAPHIC TRENDS**

Plainfield's traditional development pattern persists today -a community with two village centers and a mix of residential, small business, agricultural and forestry uses throughout the Town. The residential, business and agricultural uses are found along the roads, with both managed and unmanaged forest filling in between the more intensively used road corridors. There are a large number of Class VI roads as well as public and private trails, which provide opportunity for outdoor recreation.

#### **Historic Land Use Trends and Existing Land Use Data**

As shown in Table [1], there has been a historic trend where developed lands increased proportionately from 1953-1975<sup>1</sup>. During this same period there was a trend of agricultural land reverting to forestry use, as field and pastures were left fallow. There is no comparable analysis of current land cover and land use at a large scale that would provide information about land use trends for Plainfield since 1975.

The best source of information for recent trends in land use change can be extrapolated from the NH Department of Revenue Administration (NHDRA) annual reports, which summarize total acreage of lands assessed and taxed under respective statutes for current use (RSA 79-A) and

---

<sup>1</sup> *Agriculture, Forest, and Related Land use in New Hampshire, 1952 to 1975*, Coppelman, G. G., Pilgrim, S. A., Peschel, D. M., University of New Hampshire, 1978

conservation (RSA 79-B) assessed lands<sup>2</sup>. Table [2] provides a summary for available data of taxed lands (2006 to 2008) under both current use and conservation restriction programs. As of 2008 approximately 83% of all land in Plainfield is managed under these two programs. At present the aggregate area of current use and conservation lands (both taxable and non-taxable) in Plainfield is approximately 87% of the total land area.<sup>3</sup> The total acreage under current use designation (RSA 79-A) in Plainfield has diminished approximately 8% from 2002 to 2009, Table [3].

The break-down of uses for the lands reported by NHDRA has a mix of farm land (10%), forest land (85%), and non-productive land (5%). This latter category refers to lands incapable of agricultural or forestry production including wetlands, non-productive soils, and areas of exposed ledge.

Table [1]: Land Use in Plainfield, 1953 and 1975

	1953	1975
<b>Farm Land</b>	5,665	4,483
<b>% of Total</b>	17.2%	13.6%
<b>Forest Land</b>	26,309	27,580
<b>% of Total</b>	80.1%	84.0%
<b>Idle</b>	634	458
<b>% of Total</b>	1.9%	1.4%
<b>Developed</b>	239	326
<b>% of Total</b>	0.7%	1.0%
<b>Total Acres</b>	32,847	32,847

Table [2]: Aggregated Land Use Data for Taxed Current Use and Conservation Lands

	2006	2007	2008
<b>Farm Land</b>	2,855	2,842	2,844
<b>% of Total</b>	10%	10%	10%
<b>Forest Land</b>	23,440	23,514	23,505
<b>% of Total</b>	84%	85%	85%
<b>Non-Productive Land</b>	1,461	1,469	1,462
<b>% of Total</b>	5%	5%	5%
<b>Total Acres</b>	27,756	27,824	27,811

<sup>2</sup> *Current Use Reports (2002-2009) and Conservation Restriction Reports (2006-2008)*, NH Dept of Revenue Administration

<sup>3</sup> Figure based on total lands reported in Current Use, 2009 (25,421 ac) and total conserved lands (3,694 ac), UNH Granit database.

Table [3]: Land Use Data for Current Use Lands

	2002	2003	2004	2005	2006	2007	2008	2009
<b>Farm Land</b>	2,910	2,781	2,679	2,726	2,750	2,737	2,682	2,729
<b>% of Current Use</b>	10%	11%	11%	11%	11%	11%	11%	11%
<b>Forest Land</b>	23,425	21,098	21,221	21,563	21,633	21,707	21,344	21,351
<b>% of Current Use</b>	84%	84%	84%	84%	84%	84%	84%	84%
<b>Non-Productive Land</b>	1,447	1,364	1,444	1,416	1,418	1,426	1,395	1,410
<b>% of Current Use</b>	5%	5%	6%	6%	5%	6%	5%	6%
<b>Total Acres</b>	27,782	25,242	25,344	25,706	25,802	25,871	25,421	25,489

## Demographic Trends

In December 2010 the US Census Bureau released the 2009 American Community Survey (ACS) estimates for a range of demographic data for rural areas including most of New Hampshire. The ACS is a new form of demographic sampling with new data reports for rural areas every 5 years. Generally, these data cover the same demographic information as what was covered in the decennial census long form survey, which was discontinued after the 2000 Census.<sup>4</sup> Basic demographic information (e.g.: population, household, ethnicity, etc.) will continue to be collected as part of the decennial census program.

Tables [4] and [5] provide 1990 and 2000 Census numbers and estimates from the 2009 ACS regarding total estimated 2009 population and housing unit numbers for Plainfield, the Lebanon NH-VT Metropolitan Area, Sullivan County, and Grafton County. Additionally, Table [5] includes housing unit estimates for New Hampshire geographies.<sup>5</sup>

Population and housing trends indicate, relative to other regional geographic trends, a disproportionate rate of population and housing growth in Plainfield since 1990. Even with the reported margins of error in the 2009 ACS, the growth trend for population and housing numbers in Plainfield are double other regional trends. The NHOEP 2009 housing estimates are within the ACS margin of error.

The land use implications of these trends become more pronounced once the national recession, which began in late 2007, is taken into consideration. The recession has had a national and regional impact on construction of new housing and the overall housing market. Qualitatively, it would appear that the recession had a lesser impact on the new housing demand in Plainfield relative to the surrounding region. Development pressures on Plainfield will only intensify as the national and regional economy recovers.

---

<sup>4</sup> Refer to the US Census Web Site ([www.census.gov](http://www.census.gov)) for detailed information regarding ACS methodology.

<sup>5</sup> *Current Estimates and Trends in New Hampshire's Housing Supply*, NH Office of Energy and Planning, Oct 2010

Table [4]: Population Trends for Regional Geographic Areas

<b>POPULATION</b>	<b>US Census Tables</b>			
	<b>P001</b>	<b>P1</b>	<b>B01003 (2009 ACS)</b>	
<b>Year</b>	<b>1990</b>	<b>2000</b>	<b>2009</b>	<b>(Error)</b>
<b>Plainfield</b>	2,056	2,241	2,535	(+/-256)
<b>% Growth</b>		9%	13%	
<b>Lebanon NH-VT Metro Area</b>	-	27,138	28,155	(+/-787)
<b>% Growth</b>			4%	
<b>Sullivan County</b>	38,592	40,458	42,641	NOT REPORTED
<b>% Growth</b>		5%	5%	
<b>Grafton County</b>	74,929	81,743	85,626	NOT REPORTED
<b>% Growth</b>		9%	5%	

Table [5]: Housing Trends for Regional Geographic Areas

<b>HOUSING UNITS</b>	<b>US Census Tables</b>				<b>NHOEP Housing Rpt</b>
	<b>H001</b>	<b>H3</b>	<b>B25001 (2009 ACS)</b>		<b>Total Est. Units</b>
<b>Year</b>	<b>1990</b>	<b>2000</b>	<b>2009</b>	<b>(Error)</b>	<b>2009</b>
<b>Plainfield</b>	784	877	1,046	(+/-97)	994
<b>% Growth</b>		12%	19%		13%
<b>Lebanon NH-VT Metro Area</b>	-	10,784	11,679	(+/-458)	NOT REPORTED
<b>% Growth</b>			8%		
<b>Sullivan County</b>	19,532	20,158	21,515	(+/-125)	22,177
<b>% Growth</b>		3%	7%		10%
<b>Grafton County</b>	42,206	43,729	47,056	(+/-397)	49,572
<b>% Growth</b>		4%	8%		13%

## Existing Land Use Ordinances, Guidelines, and Reports

### Plainfield Zoning Ordinance (2010)

In Plainfield, zoning was adopted in 1971 with subsequent revisions and amendments, to protect the public health, safety and general welfare, and to carry out local goals and objectives in order to foster orderly community development, while preserving the natural resources and retaining the rural character of Plainfield. The Zoning Ordinance controls the type and intensity of land use and the location of structures on a parcel of land.

The following zoning districts have been established in Plainfield, the purposes of which are briefly described below:

- Village Residential (VR) (1,658 ac) - To encourage the development of residential centers of land suitable for building development and which will serve as a nucleus of community activity.

- Rural Residential (RR) (10,542 ac) - To encourage and maintain low-density rural character.
- Rural Conservation I (RC-I) (4,805 ac) - To encourage and maintain a low density rural character on lands generally less suitable for development than in the RR district.
- Rural Conservation II (RC-II) (10,619 ac) - To encourage limited use of lands with only minimal capabilities for development and to further maintain a rural low density use of dispersed land areas which are more remote than land areas in the RC I district.
- Conservation (CON) (5,785 acres) - To discourage any active development of lands with marginal capabilities for development, to alleviate the possibilities of major costs to the town for rendering services to such areas and to encourage agriculture and forestry uses while preserving land with severe limitations for development in its natural state.
- Wetland Conservation Overlay (W) - To discourage any active development of permanent wetlands due to possible hazard to life and property and expense to all concerned.
- Floodplain Overlay (F) - To satisfy minimum requirements for participation in the Natural Flood Insurance Program which allows residents who own land in the affected areas to purchase flood insurance.
- Connecticut River Shoreland Conservation Protection District (S) - To minimize shoreland development and disturbance so as to protect the public waters.

The Zoning Ordinance manages types of land use, density of use, and potential impacts on natural resources. Generally the Zoning Ordinance allows traditional land uses (e.g.: residential, agriculture, silviculture, and aquaculture) in all zoning districts except the Conservation District and the overlay districts. Higher density development patterns and community-based uses are allowed in the village centers with a more robust infrastructure exists. There is also allowance for commercial/professional office uses that utilizes a performance-based range of standards to measure potential impacts. Allowances exist for Home Occupation or Cottage Businesses in the majority of the zoning districts. The Zoning Ordinance includes provisions for Planned Residential Development/Conservation Design residential subdivisions.

### **Subdivision Regulations (2007)**

The Plainfield Subdivision Regulations provide both standards and a procedure for the division of a parcel of land into two or more parcels. These Regulations guard against scattered and premature developments by requiring applicants to provide detailed plans, analyses of impacts on community resources and services.

Lot size, street frontage and driveway permits, as well as State approval of septic systems, where needed, are considered in the Planning Board's review of subdivision applications. Special requirements have been set forth in the Regulations and Zoning Ordinance pertaining to planned residential developments, condominiums and cluster housing.

### **Site Plan Regulations (2007)**

The Site Plan Regulations recognize the community's desire to preserve valuable cultural and natural features in the rural landscape. Site Plan review is limited to commercial and multi-family developments where review standards include, but are not limited to:

- Aesthetic, Cultural and Natural Values.
- Architectural Compatibility.
- Erosion and Sedimentation.
- Flood Hazard Area.
- Ground Water.
- Life Safety Code Compliance.
- Lighting.
- Natural Features.
- Nuisances to the general public.
- Pedestrian and Bicycle Access and Safety.
- Regulation Provisions: Use, density, or other requirements prescribed by Town Ordinances and Regulations, permit conditions, or deed restrictions.
- Sewage Disposal.
- Solid Waste Disposal.
- Storm Water Management.
- Traffic.
- Utilities, Oversize and Off-Site Improvements.
- Water Supply.
- Wetlands, Surface Waters.

### **Plainfield Design Guidelines (1999)**

In 1999 a set of voluntary design guidelines was adopted by the Planning Board as one way to encourage new development with both a sense of place and belonging within the Town. These guidelines address building massing, architectural features, lot layout and screening, utilizing existing historic structures, and sustainable development practices.

### **Natural Resource Inventory**

The Plainfield Conservation Commission is conducting an ongoing effort to develop a comprehensive Natural Resource Inventory (NRI). This body of work addresses agricultural resources, conservation lands, groundwater resources, natural habitat, surface waters, wetlands, and unfragmented lands. The NRI recognizes the economic and qualitative value of Plainfield's historic land uses, rural character, and natural resources. The NRI emphasizes the importance land conservation and educating residents about the impacts of development on the landscape and natural resources.

## **COMMUNITY ATTITUDES**

In 2006, Plainfield's residents were surveyed to provide the Town with perspectives and opinions about how Plainfield should develop. The following is a brief summary of responses and comments where there was a majority positive response (more than 50% of respondents rate the question with a strongly in favor or in favor):

- The nearly all respondents (95.8% positive response) identify the Town's natural resources as important.

- Among the most popular “Community Cornerstones” were land use types, not landmarks or specific properties. Specifically: Rural character and environment; Open spaces, nature, natural beauty; Trails; and Farms, agriculture.
- The majority of respondents believe utilizing Conservation Commission funds to purchase conservation easements would be appropriate. The Town should also encourage private landowner action to create conservation easements.
- Plainfield should remain principally a residential community with regulatory emphasis on managing land use that may be an undue burden on community services or degrade the rural character and natural qualities of the landscape.
- The Town should foster low-intensity, low-density commercial uses that have minimal impacts on the rural character of the community or the historic character of the village districts. Large-scale or high-impact commercial enterprises should be discouraged or even prohibited as detrimental to the community’s character, infrastructure, natural resources, and an undue burden on community services.
- Many comments included concerns about whether the current development patterns and growth trends result in increased property taxes that force poorer landowners to sell their property and move out of town.
- Surveys indicate that the majority of respondents would like to see commercial development take place within or adjacent to village centers and favored placing commercial and other non-residential uses near existing municipal services and infrastructure (e.g.: major roads). Also, respondents do not want non-residential development to detract from the existing rural character of the community, particularly in the village centers.
- There is general concurrence the community should allow affordable housing opportunities for its residents.

## **DEVELOPMENT CAPACITY**

Rural land development capacity recognizes the limits of the landscape to support development. Steep slopes, flood-prone areas, wetland soils and the presence of bedrock at or near the surface can individually, or in concert, serve as major constraints to cost-effective, low-impact development practices. Environmentally sound planning and development practices seek to focus development into areas with adequate natural capacity to support development or into developed areas that would benefit from redevelopment.

One of the chief factors in assessing land capability is the capacity of the site to treat sewage effluent properly. Inadequate capability of the soil to treat septic effluent has already added excessive nutrients to the surface water; poor site planning can also cause contamination of private well waters by failed septic systems.

Natural constraints to development posed by land characteristics in Plainfield include: slopes greater than 15%, shallow to bedrock soils (within two feet of the surface), wetlands and

floodplains. Soil characteristics in aquifer recharge areas and agricultural soils may be suitable for development, so special controls may be necessary to limit development in these areas in order to protect their intrinsic resource values.

Maps classifying Plainfield soils by slope, flood hazard, soil drainage and substratum permeability are available at the Town Offices. The Planning Board should use a geographic information system (GIS) to analyze the development capability of the Town, given current and possible land use plans.

## **FUTURE LAND USE**

Given community attitudes, the Planning Board should continue to review, revise and amend regulations and ordinances in order to encourage future growth in Plainfield that is consistent with the community Vision. Looking ahead necessarily involves making assumptions about what the future will be like and adopting guidelines to direct development. It is assumed that Plainfield will continue to be a desirable place to live and that the protection of open space, critical natural resources and scenic vistas should be pursued in equal measure to the potential future development pressures.

Plainfield should continue to regulate development so that natural resources are protected. One area of interest is protecting surface water and groundwater resources from pollution and planning for possible future community water supply needs.

NH RSA 674:21 enables planning boards to enact innovative land use controls as long as they are based in the community Master Plan. A consortium of state agencies, regional planning commissions, and planning professionals developed *Innovative Land Use Planning Techniques, A Handbook for Sustainable Development* (October 2008). This publication would be a useful resource for developing future amendments that are appropriate for Plainfield's future land use initiatives geared toward sustainability.

Plainfield's light manufacturing and professional businesses have been integrated into the community and the Town should encourage more economic development to provide job opportunities and enhance the tax base. Non-residential development will challenge future community members to balance the fundamental desire to maintain the rural character of the community and accommodate existing and new business growth. The Planning Board should maintain the practice of encouraging commercial uses (other than agriculture, silviculture, and aquaculture) to locate in zoning districts aligned near major transportation arteries and existing Town services. Maintaining design guidelines, at the least, and incorporate design standards in the Ordinances to prevent strip commercial development.

The Town needs to promote the long term benefit of land conservation to maintain the highly-valued rural and natural character recognized by its residents. This may be attained through a number of concurrent, complementary approaches: acquiring land for public ownership and conservation, promoting private land conservation efforts, and fostering appropriate conservation development models.



The Planning Board should use a geographic information system (GIS) to analyze the development capability of the Town, given current and develop alternative land use plans. Future land use is summarized on the map at the end of this chapter.

## **GOALS**

1. Maintain Plainfield as the desirable place that it is today. Encourage 'sense' of place and 'sense' of belonging in all new development. Integrate land use planning with road system capability.
2. Preserve attractive vistas.
3. Sustain the natural environment of the Town to the benefit of its human and non-human inhabitants.
4. Continue to foster home-based and cottage businesses that interface well with the built and the natural environment.
5. Promote context-sensitive, appropriately scaled business uses in proximity to existing infrastructure and Town services.
6. Encourage private land conservation and development of management plans for current use properties.
7. Encourage appropriate management and use of public trails and recreational facilities.
8. To encourage landowners to implement conservation practices that protect the public's environmental quality and provide for landowners' business and stewardship needs.

## **RECOMMENDATIONS**

1. Small town settlement patterns and open space development concepts should be reinforced. Specifically, Town Ordinances and Regulations should be reviewed periodically to ensure they are up to date with current land use planning state of practice and implement appropriate innovative land use techniques.
2. The Planning Board needs to consider zoning upgrades of certain lands to increase the availability of smaller lots.
3. Maintain a high standard for review of development impacts on environmentally sensitive areas such as wetlands, shorelands, water resource buffers, and wildlife habitat. Update Regulations and Ordinances to reflect best management practices.
4. Encourage the Trail Blazers to continue to develop plans for a comprehensive long range trail plan for the town and work with the Conservation Commission and other interested land preservation groups to encourage land protection for important natural and historic resources, sites and scenic views in Plainfield.
5. Maintain up-to-date ordinances to ensure consistency with current State and Federal standards.
6. The Planning Board should pursue conducting a build-out analysis to understand the theoretical maximum development potential of the Town, given current land use Regulations and Ordinances.

7. Develop a long-term plan to acquire land for public ownership based on clear priorities, promote the use of conservation easements and encourage Conservation Design practices for new residential developments.
8. The Planning Board and Conservation Commission should design and implement a public education program directed toward promoting Best Management practices for land management and understanding the value of natural resources and open space.
9. Amend land use Regulations and ordinances to encourage rehabilitation or redevelopment of existing buildings, particularly buildings integral to the fabric of the community. Consider adopting some or all of the community design guidelines into the Regulations to codify the public desire to maintain the character of the community.
10. Encourage propagation of broadband internet and future-generation information technologies to facilitate growth of home-based, low-impact businesses that will rely on this infrastructure.
11. Plainfield should continue to regulate development so that natural resources are protected, with particular emphasis on surface water and groundwater resources. As growth pressures begin to turn toward the more marginal parcels, these same tracts of land often contain natural resources that ought to be protected.