Master Plan: Chapter 3 Existing Land Use

Existing Land Use and Development Patterns

Introduction

Land use is intimately related to community character. The progression of land use patterns developed over time is the result of numerous public and private decisions within the municipality, as well as, the product of local economic conditions and community choice. Patterns of existing land use will in turn affect the location, type, and extent of future growth in the community. How we use land represents a physical expression of our community's values, goals, and vision. Our homes, businesses, and recreational opportunities are all dependent upon the use of the land, making land use decisions one of the most important aspects of Newmarket's future.

This chapter provides an overview of current land use patterns of the Town. The following sections include a summary of existing land uses based on updated geographic information system (GIS) data, statistics generated through a build-out analysis, community initiatives taken over the past decade to manage growth and development, overviews of recent land use patterns and trends and principles of sustainability, as well as recommendations for moving forward.

Newmarket's Physical Character

The Town of Newmarket is located in southeastern New Hampshire Rockingham County. The towns bordering Newmarket are: Lee and Durham to the north, Epping to the west, and Newfields to the south. The Town also has water borders with Greenland and Newington to the east and Stratham to the southeast. Newmarket contains 41.4 square miles of land area and 2.4 square miles of inland water. The topography of Newmarket is gently rolling with elevations ranging from sea level along tidal areas to greater than 280 feet on Bald Hill in the westernmost area of town. Great Bay and the Lamprey River are the town's most significant bodies of water.

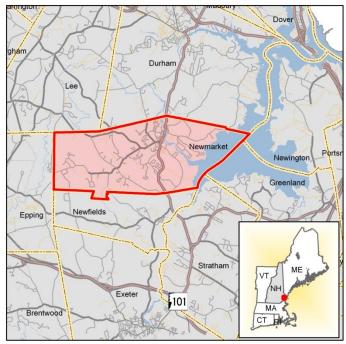


Figure 3-1: Town of Newmarket, NH

Newmarket is positioned in the lowermost

reaches of the coastal watershed, and within portions of the Lamprey River, Exeter River and the Great Bay watersheds. It contains both freshwater and tidal rivers and estuarine ecosystems. Tidal influence on the Lamprey River extends to the Macallen Dam in downtown near the NH Route 108 crossing. Tidal influence of the Great Bay extends up Lubberland Creek and the Squamscott River, as well as several unnamed tributaries in the southern areas of town.

Master Plan: Chapter 3 Existing Land Use

Newmarket Land Use and Smart Growth Principles

It is Newmarket's overarching policy to adhere to smart growth principles in the development of this Land Use Chapter of the Master Plan.

The American Planning Association (APA)¹, as articulated in its Policy Guide on Smart Growth, supports the development of mixed use, livable communities where people choose to work, live, and play because they are attractive and economical options, not forced decisions. Smart growth supports efficient and sustainable land development; incorporates redevelopment patterns that optimize existing infrastructure; and consumes less land for sustained agriculture, open space, natural systems, and rural lifestyles. Smart growth is about tailoring choices for individual settings, retrofitting communities to offer diverse choices in terms of housing types and prices, and providing transportation options. This approach to growth and planning can deliver dynamic attractive communities with greater choices for consumers and can be a powerful tool for farmland, open space, and habitat preservation.²

Newmarket has begun implementing smart growth principles as evidenced in the following development patterns.



Downtown Redevelopment, Newmarket, NH (Photo Credit: J. Gittes)

Smart growth is not a single tool, but a set of cohesive planning principles that can be blended together with unique local and regional conditions to achieve a better development pattern.

Over the past decade Newmarket has demonstrated its commitment to smart growth in its land use policies by emphasizing:

- A unique sense of community and place, a vibrant downtown, and a greater mix of uses and housing choices through downtown revitalization.
- The preservation of valuable natural and cultural resources by adopting environmental overlay districts and architectural design standards for Route 108.
- Local land conservation through the establishment of an Open Space Commission (2002), which acquired approximately 430 acres of permanently conserved lands through town funds and federal and state grants.
- Well defined wildlife corridors and greenways along the Lamprey River

For more information on Smart growth, please visit:

Policy Guide on Smart Growth

¹ The American Planning Association comprises 47 chapters representing states and regions, 19 divisions covering special interest areas and populations, students in collegiate schools of planning, and its professional development arm, the American Institute of Certified Planners (AICP).

² American Planning Association. Policy Guide on Smart Growth. April 14, 2012.

Master Plan: Chapter 3 Existing Land Use

Development Patterns

The manner in which Newmarket has accommodated its substantial non-agricultural growth since the end of World War II has been dependent on the interplay between natural and man-made features. Like all of New England, Newmarket has seen a decrease in agriculture with accompanying reforestation and housing development. The 1980's saw a further decline in agriculture and a slight decline in forested areas, as residential development increased. Newmarket's most recent development pattern, occurring outside the town center, has evolved into three distinct forms of land use: 1) residential open space design development; 2) land conservation; and 3) redevelopment, growth management, and infill development. These land use forms are defined below.

Residential Open-Space Design Development

This zoning option provides a flexible method of residential development consistent with the principles of smart growth that is not possible through traditional zoning. The primary objective is to maintain and preserve the rural character of the Town by allowing an alternative to conventional residential development. This kind of designed development promotes clustered housing, which preserves large areas of open space and provides visual buffers from existing roads and development and providing more opportunities for agriculture. These subdivisions have encouraged connected corridors of open land throughout the town and region for the preservation of wildlife habitat, environmental resources, and public enjoyment. Table 3-1 is a statistical depiction of open-space development in Newmarket from 1978-2012. A visual representation can be seen on Map 3-1: Residential Open-Space Design Development.

Table 3-1: Newmarket Residential Open-Space Design Development 1978-2012

Owner/Developer	Total Acreage	Open Space Acreage	Approximate Percentage of Open Space
Moody Point Subdivision (Cushing Road, Lubberland Drive, Eagle Drive, Osprey Lane)	152	103	68%
Swago Corporation (Pembroke Drive)	41	18	44%
American Land Development (Riverbend Road, Oak Knoll Drive, Woods Drive)	54	6	11%
Vincent Jarosz-Ash Swamp Road (Joy Farm, Beatrice Lane, Raymond Road)	71 (Phase I and II)	30	42%
Schanda Farm (Schanda Drive, Turkey Ridge)	147	78	53%
VMJ Enterprises-Norton Woods (Raymond Lane, Merrill Lane, Norton Woods)	67	21	31%
Sewall Farm (Ladyslipper Drive)	122	62	51%
Durell Woods (Durell Drive, Huckins Drive, Kimball Way, Edwin Lane)	131	82	63%
VMJ Enterprises Trotter Park (Mastin Drive, Carloyn Drive)	43	9	21%
Filion Enterprises (Hamel Farm Drive)	60	11	18%
Piscassic River Village (Briallia Circle, Kielty Drive)	29	13	45%
SGH Development (Gonet Drive)	89	31	35%
Bernier Subdivision (Winslow Drive)	27	9	33%
Biltmore-Newmarket, LLC (Madison Lane, Balsam Way)	62	25	40%
Courma, LTD (Hilton Drive)	42	19	45%
Tuck Realty (Mockingbird Lane)	12	5	42%
Carol A. Desmond-Miller (Channing Way)	22	10	46%
Carl R. Schultze (Harvest Way)	44	17	39%
Biltmore-Newmarket, LLC (Stonewall Way)	22	10	46%
James & Ruth Ann Fox, Robert A. Lemire & Pamela J. Chaffee, Biltmore-Newmarket LLC (Fox Hollow)	46	26	57%
TOTAL	1283	585	46%

[Source: Newmarket Planning Department, 2012]

Master Plan: Chapter 3 Existing Land Use

Land Conservation

Land conservation is land that is open space as protected in perpetuity through deed restriction, conservation easement, or other legal restriction. These restrictions are tied to the title of the land, regardless of its subsequent ownership. Such land may be given to a public body dedicated to the conservation of forests, parkland and natural resources or to a private conservation trust, with the intent of restricting it from being developed. Conservation land is not required to be open for public access unless it is requested at the wishes of the landowner, or is a requirement of the funding source.

In 2002, the Newmarket Open Space Commission was established and tasked with the development of criteria for the acquisition of conservation lands, identification of priority areas, goals, and uses for open space, and specific recommendations for acquisition of land from willing sellers. This resulted in the submittal of a warrant article for consideration to appropriate up to \$2 million in bonds for permanent protection and acquisition of lands. At the Town Meeting on April 9, 2002 the bond issue (\$2 million) for the purposes of acquiring land was approved.

By January 2007, these collective efforts protected approximately 430 additional acres of permanently conserved land; this exceeded the initial goal of preserving 400 acres. To accomplish this goal Newmarket leveraged \$1.6 million of Town funds with \$1.6 million of funds from federal and state grants. Conservation efforts continue in Newmarket and based on the build-out analysis completed by Underwood Engineers, Inc. in February 2011, the Town has a total of approximately 1,511 acres of conserved land.

Redevelopment, Growth Management, and Infill Development

Infill development, in its purest form, is the (re)development of land that has been bypassed, remains vacant, and/or underutilized. Infill development can occur anywhere that a parcel of land is not sufficiently being used compared to the surrounding land use. It is frequently used in housing strategies to provide affordable housing or to fulfill the need for various types of housing. Infill development plays a critical role in the conservation of land by the reuse of obsolete buildings within built-up areas for further construction. This adaptive reuse of a community can enhance the creation of village or municipal centers by connecting neighborhoods back together and providing an alternative to sprawl.

Closely related to infill development is the concept of revitalization. While infill development focuses on the development of underutilized land or parcels, revitalization more often addresses the issues of building design and building use. Implementation of both infill development and revitalization can strengthen community function through the efficient use of existing infrastructure and buildings.³

Newmarket has been involved in a multi-phase revitalization program in the downtown, spanning several decades. The Town has recently completed a \$6.8 million Main Street Reconstruction Project, which involved the replacement of water, sewer, and drainage facilities, undergrounding unsightly overhead wires, installation of new lighting, sidewalks, crosswalks, landscaping, and other pedestrian

³ New Hampshire Department of Environmental Services. Innovative Land Use Planning Techniques: A Handbook for Sustainable Development. Chapter 1.6 Infill Development.

Master Plan: Chapter 3 Existing Land Use

and streetscape improvements. Funding for these projects was provided through tax increment financing, user fees, grants, and town funding.

Existing Land Use

A visual review of land use patterns in Newmarket shows dispersed residential development along major roadways, with limited commercial strip and sprawl development. State Route 108 serves as a major regional commuting route as well as a limited commercial, mixed-use and residential corridor through the downtown. Development in the 1990s resulted in the addition of gas stations, a fast food franchise, and a chain drugstore. Four distinct development areas can be identified in Newmarket.

Residential Areas

Residential development accounts for approximately 1,802 acres or about 20% of Newmarket's total area, making it the predominant use of developed land. These areas provide a wide range of housing opportunities including single family homes, duplexes, apartments within existing homes in the urban core, multi-family apartments, townhouse condos, and high end rentals and condominiums in the mills. Newmarket is part of a regional housing market that includes the surrounding metropolitan areas of Exeter, Durham, Dover, Portsmouth, and northern Massachusetts.

According to building permit records and assessor's data Table 3-2: Townhouse Condos Built, 2000-2012 that was provided by municipal staff, Newmarket has added approximately 259 single-family buildings since 2000, 164 of which were townhouse condominiums made up of Moody Point, Kimball Way, Sewall/Durell, and Kent Place; this figure does not include age-restricted housing developments, and multi-family construction. Newmarket added 57 elderly housing units off Wadleigh Falls Road, zero industrial buildings and just three new commercial buildings since 2000. Table 3-2 shows a statistical representation of the townhouse condos built from 2000-2012.

According to the Regional Housing Needs Assessment (2009) that was prepared for the Strafford Regional Planning Commission by BCM Planning Inc., Newmarket is one of only four urban communities (the others being Dover, Rochester, and Somersworth) within the Strafford [Source: Newmarket Planning Department, 2012]

Complex Name	Number of Units	Year
Moody Point	7	2000
Kimball Way	15	2000
Moody Point	6	2001
Sewall/Durell	8	2001
Kimball Way	8	2001
Moody Point	4	2002
Sewall/Durell	20	2002
Moody Point	1	2003
Sewall/Durell	29	2003
Kent Place	5	2003
Moody Point	2	2004
Sewall/Durell	25	2004
Moody Point	2	2005
Sewall/Durell	4	2005
Sewall/Durell	24	2006
Sewall/Durell	4	2007
Total	164	-

Regional Planning Commission boundaries that has provided an adequate supply and affordability of housing for all age and income levels.

Downtown Revitalization Efforts/Village Area

In 2009, the Newmarket Community Development Corporation, which owned the mills, issued a request for redevelopment of the mills. Through this process, the Newmarket Mills, LLC was selected to

Master Plan: Chapter 3 Existing Land Use

redevelop the two historic mills on the east side of the Lamprey River. The development plan included 110 residential units, including 16 artist live/work lofts, 45,000 square feet of commercial/retail space, and 5,000 square feet of civic space devoted to the arts and culture. The mill redevelopment project included extensive public amenities, including a terraced courtyard, and a small pocket Riverwalk park.

The second phase of the project will involve the development of commercial/retail space and possibly the construction of a parking structure. The Town has received a Transportation Enhancement grant to construct a pedestrian bridge. The bridge is currently in the design phase to connect the Newmarket Mills with parking on the westerly side of Main Street.

The mill redevelopment projects have been the cornerstone of the Town's revitalization program, supporting local economic development by strengthening the central business district, encouraging new investment and jobs, and expanding the tax base. The projects also preserve culturally and historically significant local landmarks, which are listed on the National Register of Historic Places.

Newmarket's central business district is primarily zoned as M-2, a mixed-use zone, along with a new M-1 "Mixed-Use Development" zoning district. This district was adopted to encourage redevelopment within the mills with an emphasis on preserving the historic and architectural character and on complementing the Town's downtown revitalization efforts and waterfront district along the Lamprey River. The zoning provides for density bonuses for housing in return for certain public amenities including: courtyards, open spaces, a fishing pier, waterfront viewing pier, and park-like landscaping to integrate the mill redevelopment with Main Street and the adjacent Riverwalk.

Within the downtown village, public transportation is easily accessible. One COAST and one Wildcat Transit bus line have stops located downtown. Other public transportation connections include: 1) access to the Amtrak Downeaster in both Durham and Exeter; 2) access to C&J Bus Service in Durham, Portsmouth and Newburyport (MA), with connections to Boston Logan Airport and South Station, as well as New York City.

Route 108 Corridor

This corridor includes most of the office, retail, and commercial properties along Route 108 to the north and south of the downtown. This area is the B-1 (General Business) Zoning District, which is predominately developed with a mixture of residential and business uses. The area south of the railroad crossing has seen the higher intensity of business development, as opposed to the area north of the Lamprey River. There are several undeveloped parcels along this corridor.

The corridor north of the downtown is also a mix of residential and business activities. There are auto service related enterprises, as well as professional offices, a laundromat, and a hardware store. Few undeveloped parcels remain along this part of the corridor. In 2012, the Planning Board prepared new zoning provisions for properties fronting on sections of NH Route 108 to promote appropriate infill development and greater opportunities for mixed-use development. In 2013, The Planning Board will be making further recommendations to the Town Council to facilitate commercial development adjacent to the downtown village area.

Master Plan: Chapter 3 Existing Land Use

Newmarket Industrial Park & Remaining Undeveloped B-2 Zone

A 25+ acre industrial park extends from Route 108 on the west to New Road on the east and is separated into two parcels by the Pan Am Railway line. Highway access to the site is by means of New Hampshire Route 101 from the west and east, Interstate Route 95 from the south and N.H Route 108 from the north. The Industrial Park was originally developed in the early 1980's to attract "small, clean" industrial facilities to the town. Despite the existing industrial park, the residual 270+ acre tract of land behind the Newmarket self-storage facility and on the east side of the Pan Am Railway right-of-way remains largely undeveloped. Over the past decade, there have been a number of proposals considered for this area, but there have been no commitments to build. As referenced in the Economic Development Chapter, in order for this property to be developed, there needs to be proper access.

Current Land Use

According to the GIS data generated by the Strafford Regional Planning Commission (SRPC), the following land use characteristics describe Newmarket's land use development pattern in 2012. As seen in Table 3-3, roughly a quarter (27 percent) of the total land in Newmarket is classified as developed. This does not include agricultural, forest, water, wetlands, or other unclassified lands. The largest land use classification is forest land, which makes up roughly 41% of the total land use in Newmarket. The predominant urbanized land use type is residential, occupying approximately 1,802 acres, which represents 75% of the total developed portion of Town. Map 3-2: Current Land Use shows a representation of the current land use in Newmarket.

Table 3-3: Newmarket Land Use Characteristics 2012

*Land Use Classification	Acres	Percent				
Residential	1,802	20%				
Commercial & Industrial	168	2%				
Mixed Use	5	Less than 1%				
Transportation, Communications, & Utilities	182	2%				
Vacant	14	Less than 1%				
Outdoor Recreation	235	3%				
Agriculture	652	7%				
Forest	3,739	41%				
Water	1,020	11%				
Wetlands	1,090	12%				
Other Unclassified Lands	172	2%				
Total	9,080	100%				
*See next page for a complete listing of land use classification definitions according to the NH Land Use Mapping Standard – Community Technical						

[Source: GRANIT 2010 Land Use Data]

Assistance Program (CTAP) Land Use Mapping Project, March 2007

Developed Land 2,406 Acres 27%

According to SRPC's estimated land use change data from years 1962–2012, as shown in Table 3-4, over 50% of the active agricultural land which existed in Newmarket in 1962 has been lost, leaving 652 acres today. Over 30% of the town's forest lands has been harvested or developed since 1962, leaving approximately 3,700 acres today.

Master Plan: Chapter 3 Existing Land Use

Land Use Classification Definitions

Residential – Single family, duplex, multi-family, low, medium, and high rise apartments, townhouses, mobile home parks, condominiums, and group and transient quarters (boarding houses, shelters, etc.)

Commercial& Industrial- Retail,wholesale,services,lodging,government,educational,metalproduction, mining, and electronics.

<u>Mixed Use</u> – Urban or built-up land consisting of multiple stories, residential in upper stories only.

Transportation, Communications,<u>& Utilities</u> – Air, rail, water and road transportation, and communication, electric, gas, and water and wastewater utilities.

<u>Vacant</u> – Vacant, developed land such as an empty shopping center.

<u>Outdoor Recreation</u> – Urban or built-up land consisting of botanical gardens, zoos, stadiums, racetracks, amusement parks, golf courses, etc.

<u>Agriculture</u> – Cropland or pasture, orchards, bush fruits, vineyards, and ornamental horticulture

<u>Forest</u> – Forest land as defined by the Society of American Foresters; broadleaf, coniferous, and mixed.

Water – Rivers, canals, lakes, ponds, reservoirs, bays and estuaries, and other waterways.

<u>Wetlands</u> – Consists of forest, nonforest, and tidal wetlands.

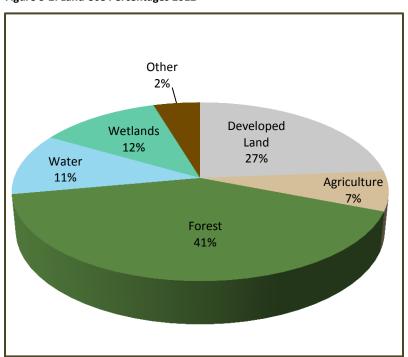
Other Unclassified Lands – Barren, disturbed, or idle land; undeveloped exposed areas or construction sites for new development.

In stark contrast, developed land in Newmarket has increased by over 343%, with over 1,000 acres of new development being added since 1962. By comparison, the growth in population of the town during this period was approximately 5,783, which according to the U.S. Census 1960-2010 report produced by NH Office of Energy and Planning, translates into a 180.4% increase in population since the 1960 census was first taken.

As with many towns, a certain amount of other unclassified land use regularly occurs. Since 1962, Newmarket has reduced its percent of other unclassified land by over 50%, with just 172 of such acres existing in town today.

The total acreage calculations for Newmarket's open water have remained consistent throughout the fifty (50) year study period, with only slight variations in data. However, due to technological and scientific advancements, changes in land classification, and land management practices (i.e. beaver control) since 1962, acreage calculations for the town's total wetland area have adjusted significantly. According to the 1962 data-set, Newmarket contained just over 263 acres of wetland area; which we now know is actually closer to 1,091 acres.

Figure 3-2: Land Use Percentages 2012



Master Plan: Chapter 3 Existing Land Use

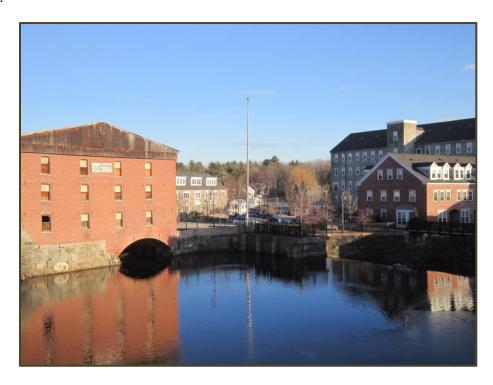
Since 2000, residential development primarily continued to be focused on the outlying areas of the town. New subdivisions were approved off Grant Road at Fox Hollow, Harvest Way, Briallia Circle and Hilton Drive and off Ash Swamp Road at Stonewall Way, Madison Lane and Channing Way. There was also extensive build-out of previously approved subdivisions on Ladyslipper Drive, Ledgeview Drive, Mockingbird Lane, Hillside Lane, Bennett Way, Winslow Drive, Carolyn Drive, Gonet Drive, Hamel Farm, Cushing Road and Lubberland Drive.

Table 3-4: Land Use Estimates and Changes in Newmarket, 1962-2012

<u>Land Use</u>	1962 Acres	% of Land Use	1974 Acres	% of Land Use	1998 Acres	% of Land Use	2005 Acres	% of Land Use	2011 Acres	% of Land Use	1962 - 2012 Acreage Difference	1962 - 2012 % Change
Agricultural	1,305	14%	854	10%	659	7%	658	7%	652	7%	-653	-50%
Developed	700	8%	919	10%	1,814	20%	2,379	26%	2,406	27%	1,706	344%
Forested	5,434	60%	5,448	60%	4,887	54%	3,714	41%	3,739	41%	-1,695	-31%
Water	1,001	11%	1,011	11%	1,013	11%	1,023	11%	1,020	11%	19	2%
Wetlands	263	3%	306	3%	293	3%	1,126	13%	1,091	12%	828	314.%
Other	377	4%	542	6%	414	5%	180	2%	172	2%	-205	-54%
Total	9,080	100%	9,080	100.00%	9,080	100.00%	9,080	100%	9,080	100%	N/A	N/A

[Source: GRANIT 2010 Land Use Layer]

For a complete list of all major commercial development projects over the past decade, refer to the Economic Development Chapter - Appendix E: Commercial and Industrial Development in Newmarket since 2001.



View from the Newmarket Veteran's Bridge Overlooking the Lamprey River and Macallen Dam (Photo Credit: G. Jones)

Master Plan: Chapter 3 Existing Land Use

Buildout Analysis

A municipal buildout analysis attempts to show what might happen if a community grows to the full extent allowed under its' present development regulations. It is not meant to paint an exact picture of the future, but instead can serve as a useful tool for administrators, planners, and emergency managers that wish to anticipate the possible impacts of future development.

There are many different ways to complete a buildout however there are two main types of community buildouts; a *tax parcel-based* buildout and a *zoning-based* buildout. In this case, a zoning-based buildout was chosen as there had just been a sewer-wide buildout completed that was based on sewer basins and zoning districts. For consistency sake, the general methodology used in the sewer-wide buildout was applied to the entire Town.

In order to meet the goal of quantifying the remaining amount of undeveloped developable land within the Town, the following methodology was followed using a geographic information system (GIS).

- 1. Calculate an estimate of the amount of undeveloped land by zoning district within the Town based on the most recent (2010) land use data
- 2. Subtract the amount of non-developable and partially developable lands by zoning district from step 1.
 - a. Non-developable lands included:
 - i. Wetlands
 - ii. Very poorly drained soils
 - iii. Permanently conserved lands
 - b. Partially developable lands included:
 - i. Poorly drained soils
 - ii. Steep sloped areas (>25% slope)
 - iii. 100 year flood zone
 - iv. Wetlands buffer zone
 - c. Note: partially developable lands were considered to be 25% developable

Table 3-5: Buildout Figures

Zoning District	Gross Area (Acres)	Total Area Suitable for Development (Acres) (Gross Area Minus Non-Developable Lands)	Current Land Already Built Out (Acres)	Remaining Land Suitable and Available for Development (Acres) (Total Area Suitable for Development Minus Current Land Already Built Out)	Percentage Remaining for Development (Remaining Land Suitable Divided by Total Area Suitable for Development)
R1	5,880	2,535	599	1,936	76%
R2	962	588	397	191	32%
R3	145	101	82	19	19%
R4	9	8	6	2	25%
M1	10	6	6	0	0%
M2	53	47	43	4	9%
M3	79	45	14	31	69%
M4	148	91	39	52	57%
B1	194	127	67	60	47%
B2	319	232	34	198	85%
В3	263	183	67	116	63%
Total	8,062	3,963	1,354	2,609	66%

[Source: Strafford Regional Planning Commission, 2012 & Underwood Engineering Inc., 2011]

Table 3-5 presents the findings of the buildout analysis and Map 3-3: Zoningbased Buildout Analysis shows the areas of the Town where there are undeveloped developable lands.

Master Plan: Chapter 3 Existing Land Use

Land Use and Sustainability

There is a growing concern for the issue of sustainability — whether the Earth's resources will be able to meet the demands of a growing human population that has rising aspirations for consumption and quality of life, while maintaining the rich diversity of the natural environment.

Planning for sustainability promotes responsible development — not anti-development. It requires a democratic process of planning to achieve the greatest common good for all segments of our population, protect the health of the environment, and assure future generations of the resources they will need to survive and progress.⁴

Over the past ten years, Newmarket has demonstrated a commitment in improving the sustainability of their community and the resources that support them. Forming and implementing strategies in which to use of resources efficiently, to protect and enhance quality of life, and to create new businesses to strengthen their economy and supporting infrastructure are all important to sustainable land use, which can be seen in the following examples:

- **Downtown Revitalization & Mills Redevelopment** has had a direct connection to land use, transportation. and economic development actions toward sustainability by:
 - Providing a housing opportunity where citizens can both live and work, thus reducing the need to drive and commute as well as minimizing the need for new road and highway construction
 - Providing a mix of integrated community uses, such as shops, workplaces, parks, and other civic facilities all within walking or bicycling distance
 - Providing a development oriented around public transit with both COAST and Wildcat Transit bus stops within walking distance to the downtown area
 - Creating a vibrant community based economy with employment opportunities including: custom bike manufacturing, athletic shoe design and distribution, meditation supplies, organic ice cream, and a farm-to-table restaurant
 - Minimizing development in outlying, undeveloped areas by the redevelopment of existing areas
 - Designing sidewalks and local streets that encourage pedestrian and bicycle use and discourage high speed traffic in the downtown area
- Residential Open Space Design Development & Land Conservation has served to encourage open space, recreation, and resource conservation actions toward sustainability by:
 - Creating well defined community edges, such as wildlife corridors or greenways along the Lamprey River
 - o Permanently protecting over 430 acres from development in town
 - Establishing an Open Space Conservation Plan (2007) that serves to promote ecosystems, natural functions, and enhance the character of the community as it grows
 - Encouraging compact and clustered residential development, which preserves large areas of open space for the protection of wildlife habitat, environmental resources, and public enjoyment

⁴ American Planning Association. Policy Guide on Planning for Sustainability. April 16, 2000. http://www.planning.org/policy/guides/adopted/sustainability.htm

Master Plan: Chapter 3 Existing Land Use

- Local Regulations & Planning have played an important role in floodplain management, watershed planning, and growth management actions towards sustainability by:
 - Making drainage and stormwater system improvements to reduce flooding
 - Adopting new stormwater regulations that encourage the use of low impact development and best management practices to reduce the volume and flow of runoff from new development, recharge surface and groundwater systems, and provide a more natural water quality treatment method by allowing water to infiltrate the ground as opposed to directly running off impervious surfaces.
 - Updating the Water Resource Chapter to the Master Plan, which includes several recommendations for floodplain management
 - Updating both the floodplain and shoreland protection ordinances, which protect floodplains from development and construction activities as well as maintain the integrity of the Town's water resources that contribute to the heritage and unique qualities of Newmarket
 - Adopting and updating environmental overlay districts to guide development away from floodplains, preventing wetland destruction, and the enhancement of water quality.
 - Supporting the efforts made by the Lamprey River Watershed Association to include the Lamprey River into the NH River's Management and Protection Program

Moving Ahead

See Future Land Use Chapter.