

Background and Existing Land Use/Land Cover

Background

The Town of Londonderry covers approximately 26,000 acres within Rockingham County (Map #1 shows Londonderry's location within the region). Although home to some 25,000 residents and over 750 businesses,¹ the town remains heavily wooded and has retained a great deal of its rural qualities. Today, Londonderry is particularly noted for its orchards – still producing apples for local and regional customers – and rural character that provides a visual connection with its history.

In addition to its rural and agricultural characteristics, Londonderry is also known for its safe and pleasant neighborhoods. As a significant number of Londonderry residents work in the greater region, the comfort of these neighborhoods provides a solace from the rigors of daily commuting.

Land Use

In general, the town's land use pattern is a reflection of Londonderry's commuter-based demographics with the majority of acreage in town classified as residential (approximately 58%). Agriculture, forest, fishing, and hunting lands make up the second highest land use category (12%), followed by lands dedicated to transportation, communications, and utilities such as the Manchester Airport and the Public Service of New Hampshire's right-of-way (10%). In the table below, commercial and industrial uses are distributed under "general sales or service" and "manufacturing and wholesale trade," and make up a very small percentage of the town's total acreage (7% combined).

¹ US Census, County Business Patterns for ZIP Code 03053.

Table 3.1: Land Classifications for Londonderry Parcels

	Total Acres	Percent of Total Acreage	Number of Parcels
Residential	14,412	57%	8,286
General Sales or Service	1,159	5%	395
Manufacturing and Wholesale Trade	513	2%	99
Transportation, Communication, information and Utilities	2,438	10%	215
Arts, Entertainment, and Recreation	2,111	8%	92
Education, Public Administration, Health Care and Other Institutions	1,325	5%	128
Mining and Extraction Establishments	81	0%	3
Agriculture, Forestry, Fishing, and Hunting	3,099	12%	142
Unclassified	57	0%	10
Total	25,196	100%	9,370

Source: Town of Londonderry Tax Assessor's Office, 2003 property tax data. Tax parcels categorized based on a modified version of the American Planning Association's Land-Based Classification Standards (according to function).

Land Cover

Land cover describes the physical state of the land surface. In map #2, land cover is used broadly to describe the natural environment (as in cropland, wetlands, or forests), as well as human structures such as buildings or pavement. Although displaying land cover from 1998, the map does provide a relatively accurate picture of present conditions, however, due to the scale and accuracy of the data, it should be considered a simplified rendering of land uses (e.g., industrial and commercial are combined) and does not match the data used in the Land Use Table above.² Nevertheless, the key land use components can still be seen – the location of residential subdivisions, primary business corridors, wooded areas, and agricultural or other “undeveloped” lands (including parks, forests, orchards, etc.).

² Note: Londonderry is in the process of digitizing tax parcels which will allow for easier and more precise visualization of the existing land use pattern in town

Residential uses, the largest land category in Londonderry, are shown in yellow on the land cover map with major concentrations found in the southern and middle sections of town. Commercial uses are located along two state highways that cross through town (Route 102, Route 28) with concentrations surrounding Exit 4 and Exit 5 from Interstate 93. Industrial uses are located primarily in the northwest section of town near Manchester and the airport with additional operations sited along Route 28 near Exit 5.

The map also shows the flavor of Londonderry's rural character. Major open areas are found in the north and west sections of town and are generally aligned with significant environmental features including the Musquash along the town's western boundary with Litchfield, Scobie Pond area in the north east, and the Little Cohas Brook and surrounding wetlands in the north. Additional open areas are found along the town's northern border with Manchester, the airport area just south of the airport, and western portion of Route 102. These areas have remained undeveloped in part due to lack of infrastructure as well as the presence of development constraints. The majority of the town's agricultural uses are found in areas with prime farm soils, generally in the center of town along Mammoth and Pillsbury Roads.

Development Patterns Since 1960

Population Trends

Until relatively recent years, Londonderry was a lightly populated rural community with a large number of active agricultural operations (Note: See appendix for a short town history). Even as recently as 1960, when Londonderry's population was less than 2,500 persons, the majority of housing was located along rural roads or in small clusters such as North Londonderry. During the next thirty years, the town underwent a dramatic transformation from an agricultural and rural community to a popular residential town. Between 1960 and 1990, Londonderry's population grew by an astonishing 700 percent, far outpacing growth in the state and county (during the same time New Hampshire and Rockingham County grew by 83 and 148 percent, respectively).

Table 3.2: Total Population for the Town of Londonderry, surrounding municipalities, Rockingham County, and New Hampshire, 1960 to 2000.

	1960	1970	1980	1990	2000
Londonderry	2,457	5,346	13,598	19,781	23,236
Derry	6,987	11,712	18,875	29,603	34,021
Windham	1,317	3,008	5,664	9,000	10,709
Manchester	88,282	87,754	90,936	99,567	107,006
Bedford	3,636	5,859	9,481	12,653	18,274
Hudson	5,876	10,638	14,022	19,530	22,928
Litchfield	721	1,420	4,150	5,516	7,360
Auburn	1,292	2,035	2,883	4,085	4,682
Rockingham County	99,029	138,951	190,345	245,845	277,359
New Hampshire	606,921	737,681	920,475	1,109,117	1,235,786

Source: US Census, 1960 to 2000.

Changes to Land Uses

As Londonderry's population increased, the town's land use characteristics changing dramatically. Forest and farmland was developed for new homes, residential neighborhoods, and other uses. For example, in 1962, only a small

fraction of the town was considered “residential” (approximately 4%). By 1974, this figure had more than doubled and the town’s “new identity” was established. The table below highlights trends in residential and farm acreage from the early 1960s to late 1990s.

Table 3.3: Farmland and Residential Acreage: 1962, 1974, and 1998

	1962	1974	1998
Farmland	2,744 acres	1,823 acres	984 acres
Residential	1,139 acres	2,618 acres	7,342 acres

Source: GRANIT Land Cover data for Rockingham County

This transformation can also be seen in a visual comparison of built property during the same time period. Map #3 highlights “built land” consisting of residential, industrial/commercial, mixed uses, and transportation features for the years 1962, 1974, and 1998. In the first image, built land, represented on the map in gray, is concentrated at major intersections, in historic nodes, along rural roads, and at the border of with Derry. By 1974 (second image) a new pattern can be seen. In addition to development along Mammoth, High Range, and most of the other pre-existing roads, new subdivisions have been established, particularly in the southern part of town. As the third image shows, by 1998 much of the land in-between Londonderry’s major routes and thoroughfares has been developed, with the southern and middle portions of town being built almost to capacity.

Recent Building Trends

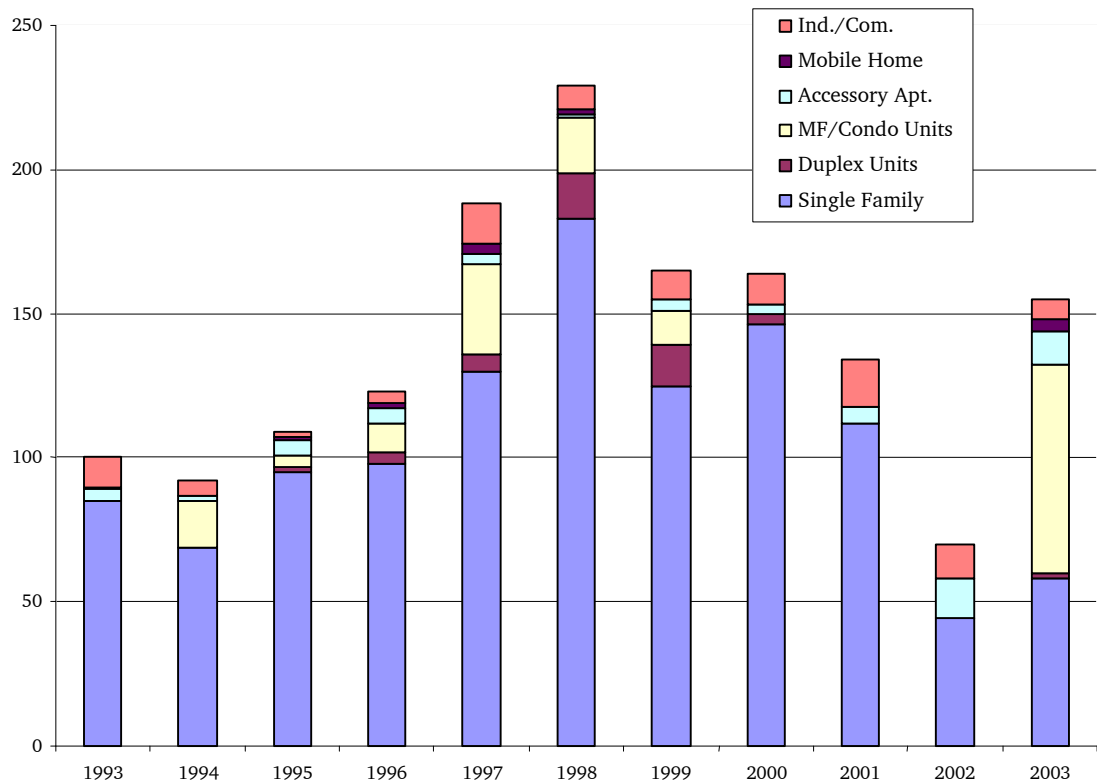
Today, Londonderry is continuing to grow, with the majority of new construction taking the form of single-family homes. While the early 1990s saw a slow down from the rapid growth of the earlier decades, the town still issues a relative high number of residential permits each year. The high-point over the last ten years for residential development occurred in 1998 when the town issued 183 permits for single-family homes. However, it seems that the town is again experiencing a growth surge. The Vista Ridge Condominium complex, approved in 2003, added 72 residential units to the town and the Planning

Board has already determined 2004 to be a “period of unsustainable growth,” in large part due to the approval of the Vista Ridge project.



The Vista Ridge multi-family complex – located just off of Route 28 near Exit 5.

Chart 3.1 Building permits issued in the Town of Londonderry for the Years 1993-2003.

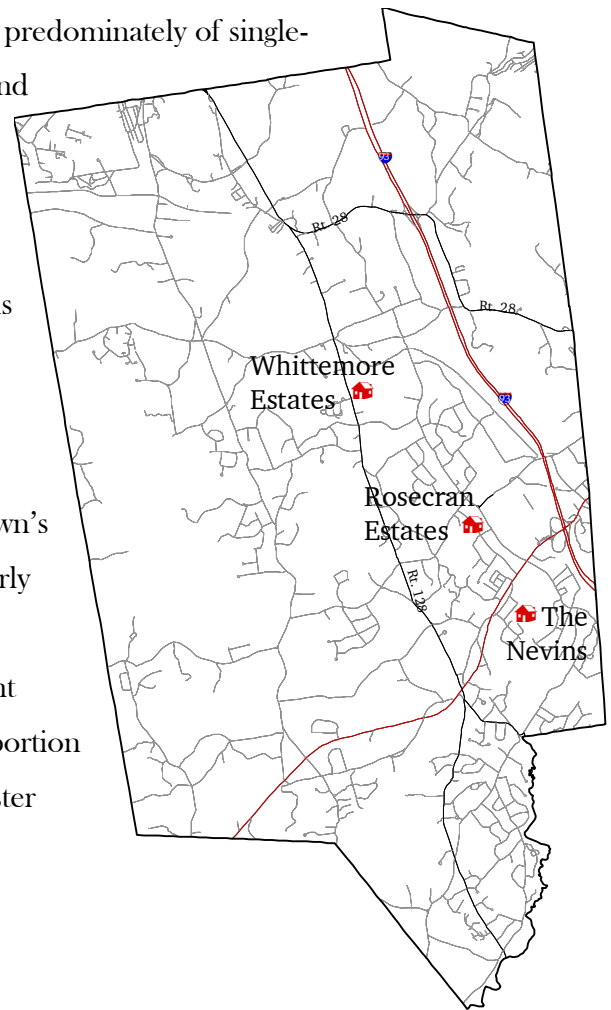


Note: for duplex and multi-family permits, the chart shows actual units permitted for each project. For example, in 2003 there were only three permits issued for multi-family/condo projects, however, the Vista Ridge project accounted for a total of 72 units.

Location of New Development

For the most part, residential development, consisting predominately of single-family residences, has been occurring in the western and northern sections of town. In addition, three age-restricted projects have recently received approvals (or conditional approvals) and will add 248 senior units to the town in the vicinity of Exit 5 (see image this page).

The majority of new commercial development and construction in recent years has occurred along the town's major corridors - Route 102 and Route 28 - particularly in the areas of Exit 4 and Exit 5 and each route's intersection with Mammoth Road (Route 128). Recent industrial development has occurred in the northern portion of town, particularly within the vicinity of the Manchester Airport along Harvey and Grenier Roads.



Existing Land Use Regulations

The Town of Londonderry regulates land development through the use of zoning, subdivision review, and the site plan process. The primary purpose of these regulations is to preserve and promote the “health, safety and welfare of the community” and to guide the future growth and development of the town in accordance with a Master Plan.³ The following is a short discussion of these laws, particularly as they relate to land use (Please see Map #4, Existing Zoning).

Zoning Districts

Agricultural-Residential (AR-I)

The town’s AR-I district is by far the largest zoning district and consists primarily of single-family neighborhoods. The AR-1 district permits uses that are compatible with and protective of areas for agricultural and forestry uses, water quality preservation, residential use, and public use. Lot sizes range from 35,000 sq. ft. to 100,000 sq. ft. or larger, based on the availability of infrastructure and soil types and development constraints in the absence of public infrastructure.

Multi-family Residential (R-III)

The R-III district permits increased residential density in areas of town with appropriate municipal services and infrastructure. The district covers land behind portions of Route 28 and behind commercial areas of Route 102 near Exit 4. This R-III zone provides the bulk of the town’s higher density and affordable housing units. However, there is very little land remaining within the district for additional growth.

³ Town of Londonderry Zoning Ordinance, Chapter 1, Section I, 103: Purpose.

Industrial Districts (IND-I, IND-II)

The town's two industrial districts provide areas for industrial development such as manufacturing, transportation services, warehouse facilities, and wholesale businesses. The Industrial-I District is the less intensive of the two zones and is found in areas of town north of Route 28. The IND-II district encompasses the majority of northwest Londonderry around the Manchester Airport as well as a large portion of land east of Interstate 93.

Commercial Districts (C-1, C-II, C-III, C-IV)

These districts provide areas for commercial development such as retail businesses, financial institutions, office buildings, and repair shops. The C-1 district allows retail stores, offices, banks, restaurants and other town-servicing uses and is found along Route 102 and at the intersection of Routes 28 and 128. The C-2 District, found east of Exit 4 on Route 102 and along a large portion of Route 28, allows uses primarily serving the automobile (auto parts stores, repair shops, motels, etc.). The C-III District is a small zone intended for business-professional offices and residential use while the C-IV District, intended for neighborhood commercial and office use, includes additional regulations that limit the impacts of development (e.g., traffic, scale of buildings, etc.).

Conservation Overlay District (CO)

The CO District's regulations are intended to, among other objectives, maintain and enhance the quality and quantity of surface waters and groundwater, minimize expense in providing utilities such as wastewater collection and public water supply, and protect native wildlife habitat and natural vegetation. As an overlay district, the CO supplements underlying zoning regulations with additional rules for the town's wetlands, streams, brooks, and surrounding buffer areas.

Airport District (AD)

The Airport District provides standards for uses and structures within the boundaries of the Manchester Airport. While the town does review and provide input for airport projects, the town is not authorized to regulate land use decisions within the airport.

Airport Zoning Regulation

The Town's Airport Zoning Regulation includes zones adjacent to Manchester Airport and is designed to ensure for safe and efficient airport operations through the establishment of maximum height limits.

Performance Overlay District (POD)

The purpose of Londonderry's POD is to guide development of land through the use of performance standards, incentives, and impact assessments to ensure a desired development pattern along the major traffic corridors of Londonderry. The POD currently encompasses a large portion of Route 102 and a section of Route 28.

Historic District

Londonderry's Historic District is designed to achieve a variety of objectives, including but not limited to safeguarding the heritage of Londonderry, preserving elements of the town that reflect history, and guiding development to be consistent with the character of historic resources. The district currently covers four lots in Londonderry's town center at the intersection of Pillsbury and Mammoth Roads.

Subdivision Regulations

Subdivision of land in Londonderry is regulated by the town's subdivision regulations and administered by the Planning Board. The regulations set forth the procedure for subdividing land and include the standards related to site layout, infrastructure, drainage, etc.

Site Plan Regulations

Londonderry's site plan regulations provide additional Planning Board review for non-residential uses and multi-family developments in town. The regulations give the town an extra level of review for projects that might have significant impacts on the environment and character of the town.

Future Land Use

Several events, already underway or scheduled for the next 5 to 10 years, will play important roles in determining Londonderry's future land use patterns. For example, the construction of the airport connector road will open up approximately 800 acres of currently undeveloped land just south of Manchester Airport for the potential of more intense use. In addition, the widening of Interstate 93 will likely lead to changes in traffic patterns, an increase in congestion during construction, and the potential for an increase in the rate of new development (upon completion).

Development and subsequent implementation of this Master Plan represent the town's opportunity to "stay ahead" of these changes and to ensure that growth and development meets the community's vision and enhances Londonderry's quality of life. As part of the implementation program and to gain a better understanding of the amount of developable land and the potential long term impacts of development, the town should conduct a full build-out analysis using the new Geographic Information System. The build-out analysis will help many committees, boards, and organizations further refine policies and strategies for dealing with growth in Londonderry.

The following recommendations summarize the land use changes necessary to achieve the goals of this plan. Most of these actions will require some type of modification to the town's land development regulations combined with the provision (or denial) of infrastructure and investment. Additional details, background information, and recommendations regarding the topics discussed below are found in the subsequent chapters of this plan. Please see "future zoning changes map" (Map #5) for a location summary of these recommendations.

Land Use Recommendations

1. Airport Area: Currently, the majority of the part of town described as the “Airport Area” is relatively undeveloped due to a lack of infrastructure and access. However, establishment of the airport connector road will make approximately 800 acres of this industrially-zoned land accessible to the regional transportation system and the surrounding industrial areas. The town should encourage appropriate development within the airport area that follows the vision developed during the Airport Area Charrette. To achieve this goal, the current zoning regulations for this area should be reviewed and amended to ensure for the appropriate type of development including specific uses, intensity/density, architectural design, landscaping, treatment and protection of the natural environment, and provision of public amenities.

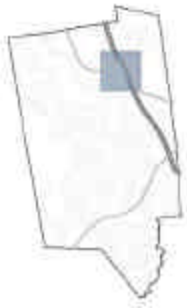


2. Northwest of Route 28 (Jack’s Bridge): This portion of town, similar to the airport area, is industrially-zoned but largely undeveloped in its current state. Londonderry should revisit the zoning designations for this area to ensure for the proper mix of uses, design, and intensity of development. In particular, the town should take steps to encourage development that has a low environmental impact.



3. Exit 4a: A new highway exit is scheduled to be constructed in Londonderry as a component of the Interstate 93 widening project. Similar to the impact that the airport connector road will have in the northern part of Londonderry, this exit will provide regional access to lands in the central portion of town. This area is characterized by forest lands surrounded by residential pockets in close proximity to active farmland (apple orchards). However, the provision of highway infrastructure will likely increase the value of these lands for commercial or industrial development. As such, the town should initiate a planning process to establish a vision and identify potential areas and resources for protection as well as future uses and density.





4. Exit 5: The Exit 5 area is rapidly becoming a major commercial center. This high-traffic zone already includes a wide mix of light industrial, office, warehouse, and hotel uses. In general, the town should encourage continuation of this mixed-use pattern – striving for a complete and diverse commercial area.



5. Town Center: Londonderry's town center and Town Common are treasured community resources that will be the focus of future enhancement initiatives. Even though land uses here should remain relatively stable, the town should consider establishment of a town center zoning district or overlay. For example, residential uses, as allowed in the existing AR-1 District, should be predominately excluded while an extremely small amount of commercial growth should be allowed to support the civic and cultural resources. Nevertheless, the allowed uses, design, and density of new development in this area should reflect the overall character of the town center. Specifics of these changes should be dealt with by the Town Center Task Force (as described on page 4 – 5).



6. Exit 4 (Route 102): The Exit 4 area is perhaps Londonderry's primary retail and commercial district. Throughout this district, more attention must be paid to pedestrian needs through the provision of sidewalks, crosswalks and a general improvement of the pedestrian environment (e.g., benches, street trees, human-scaled lighting, etc.). In addition, the town should be receptive to development proposals that utilize more compact site designs, integrate a mix of uses (including residential), and include pedestrian amenities.

7. Residential neighborhoods: Londonderry's rural and open character, particularly in its residential areas, truly makes the town a special place to live. Participants at public workshops consistently expressed the desire that new residential developments should maintain these characteristics (in terms of density, protection of natural features such as forests and wetlands, etc.).

Londonderry should continue to require residential growth to meet community standards. Particular attention should be paid to the impact residential development has on the town's natural resources (aquifers and drinking water supplies, wetlands, soils, farms, etc.). In addition, the town should encourage or possibly require the use of some type of cluster/conservation subdivision design for all future residential projects. Finally, the town should pay close attention to the affects of "commercial creep" where borders between residential neighborhoods and commercial areas become blended.

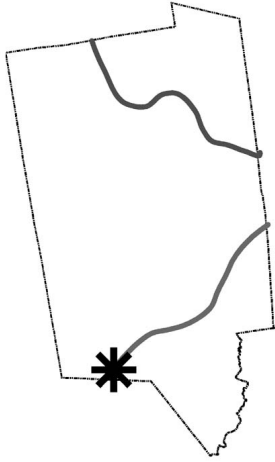
8. Page Road Area: This largely undeveloped area just east of Route 28 is another significant economic development opportunity for the town. As discussed in the Londonderry Business Park Design Charrette, the town should study the potentials for establishing a new residential/mixed-use growth center in the Page Road Area with design elements based on traditional New England hamlets (e.g., a mix of uses including small commercial operations, a variety of residential types, pedestrian amenities, etc.).



9. Encourage connections between natural features: As development spreads through town, Londonderry's diverse natural environment (its wetlands and bogs, streams, creeks, forests, soils for farming, aquifers, wildlife, plants, etc.) becomes further segmented and fragmented. Development in Londonderry should not only consider the impact on site-specific resources, but make every effort to tie preservation areas and open areas into the larger system. The town should encourage establishment of connections or "green corridors" between large preserves and natural or undeveloped areas within and outside of Londonderry and complete the town-wide greenbelt.

10. Route 102 and Route 28 Corridors: In addition to the land use recommendations discussed above, several other strategies are suggested to enhance quality of life, take advantage of economic opportunity, and protect natural and cultural resources. These recommendations are discussed within

the growth chapter of this plan (under thoroughfares). However, a short list of the actions included in that section are:



- Protect rural character of the western section of Route 102;
- Establish a new commercial area at the border with the Town of Hudson (identified by “*” on image)
- Enhance the design of development along Route 28 and consider using illustrated design guidelines;
- Establish transition zones around residential areas of Route 28 to minimize the impact of surrounding commercial uses; and
- Establish a new “corporate commerce” area north of Page Road along Route 28 (as identified in the Londonderry Business Park Design Charrette).