

EXISTING AND FUTURE LAND USE

Changing social and economic trends and evolving housing needs as discussed throughout this Master Plan can have a direct impact on the landscape of Loudon. Population growth, investments in NH 106, and the expansion of the NH International Speedway into a major sports venue has profoundly changed the character of the community. Land is a finite resource and well-planned land use is of critical importance to maintaining the Town's distinctive landscape and heritage.

Development trends in Loudon have been influenced by NH Routes 106 and 129, and the NH Motor Speedway. The Town's village area, and the low density residential and undeveloped areas which give the town its distinct character, have been, and will continue to be, important elements in what it means to live and work in Loudon.

The purpose of this Chapter is to identify and explore land use trends in Loudon, as well as to offer recommendations on what regulatory steps can be taken in the future to meet the needs of the community. Past trends, local opinion regarding land use, the existing zoning framework, present land uses, and proposed uses for land in Loudon are all explored. Although land use issues are addressed in this Chapter, it is important to refer to other elements of the plan to see how these issues are interconnected, particularly with transportation.

VISION STATEMENT

Loudon will continue to be a largely rural, residential community with unique opportunities for conservation and economic development. Loudon will maintain its rural character and feel, while encouraging appropriate development along NH 106 and the Village. The NH 106 corridor should develop into a focused, commercial area that will supplement the tax base and support keeping good jobs in the community.

CHAPTER OBJECTIVES

The Existing and Future Land Use Chapter focuses on a number of achievable objectives.

OBJECTIVE 1

To compare the Master Plan recommendations with Loudon's current land use regulations.

OBJECTIVE 2

To provide recommendations for the future utilization of land in the form of amendments to the regulations and ordinances.

OBJECTIVE 3

To encourage the proper balance between residential and business growth to ensure Loudon continues to prosper while protecting the historic, natural resources and rural character of Loudon. Acquire additional open space as needed and available for public use.

OBJECTIVE 4

Incorporate the following standards into the Land Development Regulations.

OBJECTIVE 5

To concentrate retail commercial, office uses, personal service uses at nodes on the NH 106 Corridor.

OBJECTIVE 6

To plan for appropriate redevelopment of depleted and/or inactive excavation sites.

COMMUNITY SURVEY RESULTS

In preparation for the master plan update, a community survey was available for residents to provide input. Like many communities in the Central NH Region, Loudon has a long history of residents with strong ties and commitment to their community. Completed in 2012, the survey demonstrated a mix of those who favor development and those who don't. Overall, it was clear residents appreciate Loudon's high quality of life and support preserving it in the future.

Community Survey Question 6-10: The current minimum lot sizes in Loudon vary from 40,000 square feet to 5 acres depending on the Zoning District. Should minimum lot sizes be changed in the rural residential, commercial, industrial, agricultural/forestry, and the village zones?

Q. 6 Rural Residential	Total	Percentage
Stay with current 2 acre (3 for 2-family)	256	74.4%
3-acre	37	10.8%
5-acre	23	6.7%
No opinion	28	8.1%
Total	344	100.0%

Q. 7 Agricultural/Forestry	Total	Percent
Stay with current 5 acres	253	72.1%
10-acre	42	12.0%
6-acre	7	2.0%
No opinion	49	14.0%
Total	351	100.0%

Q. 8 Commercial	Total	Percent
Stay with current 2 acres	277	82.9%
No opinion	57	17.1%
Total	334	100.0%

Q. 9 Industrial	Total	Percent
Stay with current 5 acres	286	85.1%
No opinion	50	14.9%
Total	336	100.0%

Q. 10 Village	Total	Percentage
Stay with current 40,000sf	222	62.0%
Increase	46	12.8%
Decrease	18	5.0%
No opinion	72	20.1%
Total	358	100.0%

Community Survey Question 19: Why do you feel that Loudon is a desirable place to live? (Please check all that are important)

Q. 19	Total	Percentage
Small Town/Rural Atmosphere	311	89.9%
Proximity to Cities	288	83.2%
People/Community Spirit	192	55.5%
Scenic Areas	180	52.0%
Historical Character	136	39.3%
Town Services	99	28.6%
Community/Recreational Facilities	98	28.3%
NH Motor Speedway	95	27.5%
Educational System	85	24.6%
Employment Opportunities	17	4.9%

Community Survey Question 11: Are you in favor of Loudon trying to encourage commercial/industrial uses (nonresidential growth) to broaden its tax base?

Q. 11	Total	Percentage
Yes	269	75.6%
No	69	19.4%
No opinion	18	5.1%
Total	356	100.0%

Community Survey Question 12: The current zoning regulations allow for commercial and industrial uses in the same area. Should the Town have an area, or areas, that are dedicated strictly for industrial uses?

Q. 12	Total	Percentage
Yes	174	49.7%
No	120	34.3%
No opinion	56	16.0%
Total	350	100.0%

Community Survey Question 13: Are you in favor of the Planning Board reexamining the Route 106 commercial zone to increase the zones' area? The Route 106 Commercial/Industrial Area is located the length of Route 106 and generally stretches approximately 500' back from the highway, except when bordered by the Suncook River.

Q. 13	Total	Percentage
Yes	147	41.8%
No	144	40.9%
No opinion	61	17.3%
Total	352	100.0%

Community Survey Question 14: Should Loudon consider allowing New Hampshire Motor Speedway (NHMS) to build a casino on their property if future state legislation permits it?

Q. 14	Total	Percentage
Yes	181	50.7%
No	167	46.8%
No opinion	9	2.5%
Grand Total	357	100.0%

Community Survey Question 15: In your opinion, which statement best characterizes Loudon's rate of growth?

Q. 15	Total	Percentage
Loudon is growing as fast as neighbors	115	32.7%
Growth is not a major issue here	112	31.8%
Loudon is growing too fast	53	15.1%
Loudon is not growing fast enough	32	9.1%
No opinion	40	11.4%
Total	352	100.0%

Community Survey Question 16: What types of development would you prefer in Loudon? (Presented in order of priority).

Q. 16	1	2	3	4	5	6	Rating Average	Response Count
Any Type of Development Designed to Help Preserve Loudon’s Quality of Life	46.4%	14.6%	10.2%	24.5%	3.7%	0.6%	2.26	323
Industrial/Commercial Development	24.8%	26.0%	18.6%	19.8%	6.5%	4.3%	2.70	323
Residential Development	13.0%	27.2%	32.2%	19.8%	4.0%	3.7%	2.86	323
Mixed-Use Development	9.0%	25.1%	32.5%	26.6%	5.6%	1.2%	2.98	323
No Development	5.0%	4.6%	4.3%	6.5%	64.7%	14.9%	4.66	323
Other	1.9%	2.5%	2.2%	2.8%	15.5%	75.2%	5.53	323

Community Survey Question 18: Which of the following commercial enterprises would you like to see within Loudon?

Q. 18	Like	Dislike	No Opinion	Response Count
Agriculture-related Businesses	86.3%	1.6%	12.1%	313
Restaurants	86.1%	7.9%	6.0%	331
Professional Offices	83.5%	6.7%	9.8%	328
Home Businesses	77.9%	7.3%	14.8%	317
Services	77.6%	6.3%	16.1%	317
Recreational Businesses	76.0%	11.2%	12.8%	312
Light Industrial Parks	73.5%	17.9%	8.6%	324
Retail	73.3%	16.5%	10.2%	322
Tourism-related Businesses	66.5%	17.9%	15.7%	319
Motels/Hotels/Inns	56.5%	25.9%	17.7%	317
Major Grocery Store	48.3%	44.5%	7.2%	321
Major Shopping Malls	16.2%	75.0%	8.8%	308
Heavy Industrial Parks	14.5%	68.1%	17.4%	304

EXISTING AND PAST LAND USE

ZONING ORDINANCE AND THE REGULATORY FRAMEWORK

Ideally, the Master Plan is the guidance document, setting the vision, goals and objectives, and the zoning ordinance and other regulations implement what is in the Plan. As much as any other municipal topic, zoning is an issue in which nearly everyone has an interest; it influences aesthetics, population density, the tax base and how and where we grow.

Loudon adopted formal zoning districts in 1987 and established four (4) general development districts: Village, Rural Residential, Agriculture-Forestry Protection (AFP), and Commercial/Industrial (C/I). Prior to the establishment of these zoning districts, residential uses were allowed throughout the Town and commercial and industrial uses were permitted by special exception. The establishment of the four zoning districts was intended to concentrate commercial and industrial development along the NH 106 corridor and reduce land use conflicts arising from mixed development in rural areas. A Steep Slope Overlay District, Wetlands Overlay District and an Elderly Housing district were also subsequently adopted. In 2000, the Commercial/Recreational district was approved at Town Meeting and regulates the future use of land currently owned and occupied by New Hampshire Motor Speedway (NHMS).

The Town of Loudon's Land Development Regulations are a compilation of both Site Plan Review and Subdivision Regulations. First enacted in 1987 and amended continuously through 2016, the Land Development Regulations are adopted by the Planning Board after a public hearing, as prescribed by RSA 675:6. These Regulations provide guidance and structure to applications for site or subdivision development. They also include certain standards

THE LOUDON VILLAGE PLAN

Acting on recommendations included in the 2001 Loudon Master Plan, the Loudon Village Plan was completed in 2003 and adopted by the Planning Board in 2004.

The goal of the plan is to identify those opportunities/improvements that support village development as an attractive and practical destination for residents and visitors. A Study Committee Group was formed, which developed many of the suggestions found within the Plan through discussions and visioning sessions held throughout the community.

Suggestions and recommendations from the Village Plan have been reviewed and incorporated into this Master Plan Update. Please refer to the Village Plan for additional information.

that must be met, including land development standards and required improvements. The overall regulatory framework, including zoning and land development regulations, should continue to be monitored for potential amendments, as issues arise or new concepts and technologies are available that can impact land use in Loudon. Growth trends should also be monitored in order to evaluate whether to adopt a growth management ordinance; there was a previous ordinance in place but it was repealed in 2012.

ZONING DISTRICTS

The purpose of the Village (V) district is to regulate development in the village area to uses that are compatible with current residential, retail, and office uses, development densities, and structural types that are already present. The Village district, located on Old Route 106, occupies about 150 acres of the Town, or approximately 0.51%

of the total land area. It is a mix of residential and commercial land uses, as well as the primary location of municipal and school facilities. The minimum lot size within the zone is 40,000 square feet.

The Rural Residential (RR) district was established with the purpose of regulating development in a manner that will promote the preservation of the natural landscape and rural character. The rural residential district encourages primarily residential development at densities that do not exceed the capabilities of the land, capacity of community facilities and services, and the limitations of the road network. It is also the largest zoning district in Loudon. The minimum required lot area is two acres, with the exception of when two family dwellings are present which require a minimum lot area of three acres.

The Agriculture/Forestry Preservation (AFP) district has the most limited uses and lowest development densities of all of the districts. Its purpose is to regulate development in order to preserve agricultural and forestry resources and other critical resources identified in the master plan, and to limit growth so as not to overwhelm the capacities of the Town’s community facilities. The minimum lot area within the agriculture/forestry preservation district is five acres, with a minimum contiguous buildable area of one and a half acres.

The Commercial/Industrial (C/I) district was established in order to promote commercial and industrial growth in areas that have the best access to major transportation corridors and which best serve the interest of the community. The C/I district centers on NH 106, and the structure of this district has lent itself to strip development along the developable frontage of 106. The minimum lot area within this district is two acres for commercial uses and five acres for

industrial uses. Buildings also are not permitted to cover more than 25% of the total lot area and impervious surface area is not to exceed 50% of the total lot area.

The Commercial/Recreational (C/R) district was created at the March 2000 Town Meeting which encompasses the NH Motor Speedway to the east of NH 106 and surrounding lands. Similar to the commercial/industrial district, the commercial/recreation district requires a minimum of two acres for commercial uses and five acres for industrial uses, but requires one hundred acres for sport facilities.

In an effort to manage growth while protecting resources in an economically viable manner, the Town has adopted a number of land use controls to facilitate the planning process.

Table 11.1: Land Use Controls

Town Zoning Districts	Town-Adopted Special Regulations/Planned Developments
Village District	Open Space Development
Rural Residential District	Home Occupation Regulations
Commercial/Industrial District	Off-Street Parking Regulations
Commercial/Recreational District	Sign Regulations
Agricultural/Forestry Preservation District	Manufactured Housing Parks and Subdivisions Regulations
Wetlands Conservation District (overlay)	Campgrounds and Camping Park Regulations
Steep Slope District (overlay)	Multi-Family Dwelling Regulations
Elderly Housing District (overlay)	Wireless Telecommunication Towers and Antennas Regulations
	Sexually Oriented Businesses Regulations
	Fire Dept. Residential Water Supply
	Floodplain Ordinance

Source: Town of Loudon Zoning Ordinance

OVERLAY DISTRICTS

These districts are generally draped over or “overlay” the base zoning districts. They usually provide a higher level of regulation that protects certain features of the natural environment or address issues that may affect a certain area. Loudon’s Zoning Ordinance contains a Wetlands Conservation District, Steep Slope District, and Elderly Housing District.

WETLANDS CONSERVATION DISTRICT

The Wetlands Conservation District is defined as all wetlands, including but not limited to swamps, streams, ponds, vernal pools, marshes, bogs, tidal wetlands and similar areas determined and delineated on an individual parcel basis by a Certified Wetland Scientist. The Wetlands Conservation District was designed to aid in protection against degradation in surface and ground water quality for potential water supplies and existing aquifers and to protect habitats for wetlands dependent fish and wildlife. The district also prevents development of structures and land uses on wetlands which prevents the destruction or significant alteration of wetlands and prevents unnecessary or excessive expenses to the town for the purpose of providing or maintain essential services and utilities.

As long as no structure is built, and no surface is altered by additional fill or dredging, permitted uses in the Wetlands Conservation District include forestry, agriculture, wildlife management, conservation areas and passive recreational uses, including trails. Exceptions, which include streets, roads, and other access ways, water impoundments, and accessory buildings or structures need to be approved by the Zoning Board of Adjustment. Within the Town’s Wetlands Conservation District, a seventy-five foot buffer is to protect all wetland areas larger than 2,000 square feet and wetlands smaller than 2,000 square feet deemed to have

exceptional functional value. No pesticides or fertilizers are permitted to be used within the entire wetland buffer.

STEEP SLOPE DISTRICT

Added following the preparation of the 1985 Master Plan, Section 302 of the Zoning Ordinance established a Steep Slope District that prevents development on slopes over 25%. Development on slopes greater than 25% can cause soil erosion, stream sedimentation, unnecessary loss of vegetative ground cover, on-site waste disposal problems, and expensive street construction and maintenance. This ordinance only applies when the proposed site disturbance is greater than 25,000 square feet, and steep slope and other topographic features are determined by a field survey in conjunction with USGS maps.

With the exception of buildings, structures, or roads, permitted uses include forestry, wildlife refuges, open space and outdoor recreation, septic systems, cultivation and harvesting of crops, and driveways not impacting more than 2,500 square feet. Exceptions, which include streets, roads, and other access ways, need to be approved by the Zoning Board of Adjustment.

Elderly Housing District

In Section 303 of Loudon’s Zoning Ordinance, the Elderly Housing District was established to encourage the construction of housing units suitable for occupancy aged fifty-five and older. The district includes all of the current Village District plus the area bounded by NH 106 on the east, Route 129 on the South, North Village Road on the west and the northern boundary of parcel map 30, lot 6. The District also includes an area to the west bounded by Oak Hill road and Hardy Road to a line closest to the Soucook River, the Soucook River upstream, N. Village Road and School Street.

PLANNED DEVELOPMENTS

MANUFACTURED HOUSING PARKS AND SUBDIVISIONS

In Section 400 of the Zoning Ordinance, manufactured housing is only permitted in manufactured housing parks and subdivisions. Manufactured housing parks must be located on parcels at least ten acres in size and contain at least four manufactured housing spaces. Gross density of the park should not exceed 0.5 manufactured home per acre, and should contain a common playground area.

All parks should be accessible from good roads, a safe distance from swamps, poorly and very poorly drained soils, slopes larger than 15%, and land subject to natural or human made hazards. Special requirements state that each manufactured home space have a minimum area of 10,000 square feet with no more than one manufactured home per space. The structure should be placed at least ten feet from each space boundary and have at least 150 square feet of parking space.

Manufactured subdivisions must be at least ten acres and contain at least five lots only occupied by manufactured homes.

OPEN SPACE DEVELOPMENT

Open Space Development is designed to allow more creative and alternative development with the goal of protecting open space areas. A density no greater than one dwelling per two acres must be maintained but lot size and frontage may be reduced; these developments are only permitted on parcels greater than 10 acres. Under the ordinance, a minimum of 66% of the land is to become permanently designated as open space, of which two thirds must be farmland, forestland, or wildlife habitat. No more than 25% of the total land area can be wetlands or steep slopes.

OTHER ORDINANCES

SMALL WIND ENERGY SYSTEMS

This zoning ordinance was established so to accommodate small wind energy systems within Loudon, which are one alternative source of energy production that has become increasingly popular since the past master plan was prepared in 2001. The ordinance describes small wind energy systems as an accessory use permitted in all zoning districts with a corresponding building permit and granted special exception through the Zoning Board. All abutters will be notified via certified mail if any small wind energy system building permit application is received and can provide comment in a thirty-day public comment period to the building inspector.

WORK FORCE HOUSING

Work force housing regulations were developed to provide a diverse supply of home ownership and rental opportunities for low to moderate income households. The provisions of this ordinance will be in effect only when Loudon does not meet its regional “fair share” of workforce housing, as determined by a housing commission or the Planning Board. Permitted housing types include single family, duplexes, multi-family, accessory apartments, and manufactured housing.

All workforce housing units shall have similar architectural style and exterior appearance as market-rate units of similar type. The workforce housing units should also be dispersed throughout any development, and not grouped in one separate area. These units should be available so that combined rental or mortgage costs with property taxes and required insurances does not exceeds 30% of the household’s gross income.

EXISTING LAND USE

Mapping and analyzing existing land use patterns is an important part of long range planning. Loudon’s *Existing Land Use Map* was delineated using data from aerial photography and digital tax maps and town assessing data. Land use is categorized into 14 different categories displaying roads, conservation lands, and waterbodies.

Unfortunately, these categories of estimated land use are not directly comparable to past master plans. The previous land use estimates in the 2001 Master Plan only used the town’s digital tax maps and assessing data, while this 2015 Master Plan includes delineating off of aerial photography, which provides more accurate estimates. It should also be notes that the total Town acreage is slightly larger than that used in the past, which is due to differences in the data source used.

RESIDENTIAL LAND USE

As shown in Table 11.2, residential land use was broken down in to single family, multi-family, and mobile home parks. Single family household, which is the exception of uncategorized is the largest land use, covers nearly 2,150 acres of Loudon, an estimated 7.2% of land area. Multi-family and mobile home parks comprise a much smaller portion of Town with 0.2% and 0.4%, respectively.

COMMERCIAL RETAIL

Retail includes commercial establishments that sells goods rather than services. As seen on the map, these few locations are located along the NH 106 corridor with areas along Clough Hill Road and Pleasant Street. Retail covers and estimated 86 acres, which is 0.3% of the Town’s total land area.

Table 11.2: 2016 Estimated Land Uses (Estimated with aerials, tax maps, and assessing data)

Land Use	Acres	% of Land Area*
Single Family/Duplex	2,148.4	7.2%
Multi-family	69.9	0.2%
Mobile Home Park	120.8	0.4%
Commercial Retail	86.0	0.3%
Commercial Mix/Other Commercial	202.7	0.7%
Event Parking	404.6	1.4%
Institutional (Includes Government)	61.0	0.2%
Gravel Pits	400.2	1.3%
Road Pavement Surface	268.8	0.9%
Cemeteries	9.8	0.0%
Outdoor Recreation/Developed Parks	188.3	0.6%
Industrial	19.3	0.0%
Uncategorized (undeveloped)	25,486.8	85.2%
Water	430.2	1.4%
Total Town Acreage	29,897.1	

Source: NH GRANIT, NH Department of Transportation, CNHRPC, Town of Loudon Digital Tax Map and Assessing Data, Aerial Photography

**Total % of Land Area was calculated using a GIS System and rounding, so numbers may not add up to 100%*

COMMERCIAL MIX/OTHER COMMERCIAL

Commercial Mix includes establishments that sell food in a restaurant setting, services, or contain mixed uses in the same building, such as store on the main level and an apartment located above. These uses are primarily located along the NH 106 corridor and includes the New Hampshire Motor Speedway to the north and the Red Roof Inn to the south along the Concord border. Overall, commercial land use comprises an estimated 0.7% of the total town acreage with 204 acres.

EVENT PARKING

The event parking category was created uniquely for Loudon, and includes non-developed or paved areas near the New Hampshire Motor Speedway that are stripped for parking. Though event parking only comprises 0.3% of the Town's total land acreage, the 80.9 acreages is considerable considering it is located in one collective location. Three events at the NH International Speedway bring over 70,000 visitors to the community, included in the event parking area are extensive recreational vehicle parking areas where people camp during race weeks.

INSTITUTIONAL

This designation includes all land owned by the municipality or the state, including schools, municipal buildings, and churches. It also includes lands that are tax exempt. These sites are also located along the NH 106 corridor, covering 61 acres and 0.2% of the Town.

GRAVEL PITS

Gravel pits represent one of the larger land use categories in Loudon, comprising 1.5% of the Town. These lands are large undeveloped areas that have been excavated. As shown on the **Existing Land Use Map**, these areas follow the NH 106 corridor, and can be seen to the north and south along the entirety of the corridor from the Town's boundary with Concord to just before the NH Motor Speedway.

ROAD PAVEMENT SURFACE

This category includes all paved roads within Loudon. The State Roads layer was used when creating this map in the GIS software. Overall, road pavement surfaces cover 0.9% of the total town acreage with 268.8 acres.

CEMETERIES

Compared to other land uses, cemeteries comprise a rather small

portion of Loudon with a total of 9.8 acres (0.0%). Two cemeteries are visible on the Existing Land Use Map, located along NH 106 and Clough Hill Road.

OUTDOOR RECREATION/DEVELOPED PARKS

The areas included in this designation includes the Loudon Country Club, the Town Fields, and Cascade Campground. Comprising a total 0.6% of the Town total acreage, at 0.6%, these recreation spots are located within the NH 106 corridor.

INDUSTRIAL

Industrial uses are currently concentrated along International drive along with Sand and Gravel Processing facilities and along Ricker Road adjacent to Chichester.

UNCATEGORIZED (UNDEVELOPED)

Undeveloped land includes forests, agriculture land not related to a commercial greenhouse, and non-commercial agriculture related buildings. Undeveloped lands, which comprise about 85.2% of Loudon's total land acreage, are scattered throughout the Town and is Loudon's highest percentage of all land uses designated. Some undeveloped land is related to its natural condition, such as topography and soil conditions, that would create higher development costs in areas such as environmental permitting and needed infrastructure costs.

CONSERVATION/PROTECTED LAND

Of Loudon's total 29,896 acres of land, 2,844 acres are conserved and protected, which is just under ten percent. This value may also include portions of agricultural and undeveloped lands, as the conserved land acreage was not based on specific parcel data. Areas of conserved land can be seen on the **Conservation and Public Lands and Scenic Vistas Map**.

Table 11.3: Conserved Land

Conserved Land	Acres	% of Town
Canterbury	4,555.8	16.1%
Chichester	589.3	4.4%
Concord	9,091.8	21.7%
Gilmanton	6,584.4	17.3%
Loudon	2,649.2	9.0%
Pembroke	468.3	3.2%
Pittsfield	726.0	4.7%

Sources: GRANIT Conservation and Protected Lands, 2012

As shown in the Table above, Loudon’s percent of conserved land falls in the middle range when compared to surrounding communities. With over 2,000 acres of land conserved, it provides easily accessible recreation opportunities for residents by connecting people to the outdoors and promoting a healthy lifestyle. Residents across all generations appreciate easy and safe access to recreation opportunities that are close to home. This is especially true as many opportunities, such as trails, provide multi-purpose use year-round, such as hiking in the summer and cross-country skiing in the winter.

Loudon should look for opportunities to increase access points, such as trail heads and parking, as well as the means to get there, so that conservation land can be fully accessed by the public. This is especially true as the population continues to age and retirees are choosing to stay in New Hampshire.

Commercial building permits issued between 2006 and 2015 are presented in Table 11.5. There were 19 permits issued for additions, of which 70% were issued since 2010. Only 14 new construction building permits were issued over the ten-year period, with one, two or three per year with the exception of 2010 and 2011.

Table 11.4: Number of New Subdivisions, 2000-2015

Year	# New Major Subdivisions	# New Minor Subdivisions
2000	9	4
2001	9	17
2002	13	12
2003	3	10
2004	4	8
2005	13*	12
2006	4	6
2007	3	1
2008	1	1
2009	0	2
2010	2	0
2011	0	3
2012	0	3
2013	3	5
2014	2	4
2015	1	3
Total	67	91

Table 11.5: Number of Commercial Building Permits, 2006-2015

Year	# New Permits	# Additions Permits
2006	1	2
2007	2	2
2008	2	1
2009	1	1
2010	0	4
2011	0	3
2012	1	3
2013	2	3
2014	2	0
2015	3	0
Total	14	19

*Includes the Villages – 100 lots Source: Loudon Town Files

CURRENT USE

In 1973, the New Hampshire State Legislature enacted RSA 79-A:1 and created the Current Use program, a tool landowners can use to reduce the amount of property tax they pay on open space within their property limits as well as an incentive to keep the land in its traditional use. Before the RSA, financial burdens were being placed on individuals with large open space land holdings, since property taxation was based on the highest and best use of the land. Now under the program, current use value is the assessed valuation per acre of open space land based upon the income-producing capability of the land in its current use - not its real estate market value. Land placed in current use can be classified as farm land, forest land, open space land, unproductive land and wetlands.

By allowing open space land to be classified as current use, it acts as an incentive for landowners not to develop property. When land is removed from Current Use, ten percent of the full and true value of the land, not the Current Use assessed value, must be paid as a Current Use Land Change tax. It is important to understand that the Current Use classification can be placed on, or removed from, land at the landowner's discretion which is why these lands vary from conservation lands. For more information on Current Use, please refer to the Master Plan's Natural Features chapter and the NH Department of Revenue Administration: www.revenue.nh.gov/current-use/index.htm.

Excerpted from the Natural Features Chapter, Table 11.6 illustrates the trend of land within current use over the past six years. Over sixty percent of Loudon's land area was in Current Use in 2015, which has varied little over the six year period. The smallest amount of Current Use acreage of the six year period was in 2011, with 18,122.05 acres.

Table 11.6: Current Use Acreages by Land Type, 2011-2016

CU Acreage by Land Type	2011	2012	2013	2014	2015	2016
Farm Land	1,934.06	1,939.52	1,929.27	1,930.20	1,923.88	1,923.94
Forest Land	14,631.72	14,731.48	14,772.46	14,655.04	14,675.35	14,690.20
Unproductive Land	131.95	131.95	132.47	128.25	128.25	128.25
Exempt Wet Land	1,424.32	1,423.53	1,441.87	1,435.82	1,434.57	1,437.27
Total CU Acres	18,122.05	18,226.48	18,276.07	18,149.31	18,162.05	18,179.66
Land Use Change Tax Collected	\$14,046	\$13,368	\$40,031	\$37,511	\$7,796	N/A

Sources: NH Department of Revenue Current Use Reports

Most recently in 2015, the land use change tax collected was \$7,796. From the land use change tax collected, 50% goes to the conservation commission. An additional 10% of the tax on State-owned land cuts also goes to the conservation commission.

Further information on the physical characteristics of the land in Loudon can be found in Loudon's Natural Features Chapter.

TRENDS

Building permits for residential housing by year and by housing type are displayed in the following tables. Overall, historically building permits saw a large decrease beginning in 2009, but has been increasing in recent years (See Table 11.7 for totals in 2012 through 2016). The most recent number of permits in 2016 was 38, which is over three times the number of permits issued in 2012 (12 permits). Additionally, the majority of permits have been issued for single family housing units, with only a few more multi-family and manufactured housing units. In total over the 5 year period, 147 residential building permits were issued, with the majority for single family units.

Table 11.7: Residential Building Permits for New Construction

Residential Building Permits By Housing Type						
Housing Type	2012	2013	2014	2015	2016	5 Year Totals
Single Family Housing	10	20	20	24	29	103
Manufactured Housing	2	0	0	0	0	2
Multifamily Housing	0	2	2	0	9	13
Yearly Totals	12	22	22	24	38	147

Source: New Hampshire Office of Strategic Initiatives

DEVELOPMENT CONSTRAINTS

As the trend of development is increasing, many naturally occurring features, such as topography, soil quality, and floodplain locations, continue to act as constraints for current and future development. Shown on the **Development Constraints Map**, Loudon has many areas that limit development, and potentially impact future development.

STEEP SLOPES

Slopes that are greater than 25% are present in areas throughout Loudon, commonly associated with jutting hills and mountains, along roadways, or surrounding bodies of water. Steep slopes often present challenges to development, mainly for their erosion and rockslide potential. The largest area of steep slopes can be found along the Town’s border with Concord and in the area surrounding Clough Pond. Additional steep slope areas can be found throughout Loudon, including areas in the center of the Town and along the northern border.

FLOODPLAINS

Floodplains are areas that have the potential to carry and store floodwater, also termed flood storage land. Preserving the floodplain’s ability to store this excess water is key to protecting

surrounding land uses, especially as the trend of extreme storms and frequency increases. In Loudon, floodplains are predominantly located along waterways, including the Soucook River corridor. Floodplains also surround many wetlands, including one large wetland just north of Lovejoy Road.

HYDRIC SOILS

Although hydric soils are not depicted on the **Development Constraints Map**, poorly drained soils are shown. Variations of poorly drained soils are often found in areas of land with high water table, floodplains that are seasonally flooded, and depression areas that collect and store runoff. The presence of hydric soils is one third of the requirement for a land area to be classified as a jurisdictional wetland, impacting any potential development. Hydric soils, including poorly and very poorly drained soils, also limit agricultural production and limit the ability to install off-site waste disposal systems. Please refer to Loudon’s Natural Features Chapter for additional information on soil classifications in Loudon.

WETLANDS

Wetlands can be defined by three characteristics: standing water at or near the ground surface during some portion of growing season; soils with characteristics that show they are saturated for some time; and plants adapted to growing in saturated soils. Wetlands are valuable to preserve, as they provide flood control, natural water filtration, water storage and water recharge, wildlife habitat and aquatic nurseries, and economic increase to property value. Wetlands are present throughout Loudon, predominantly in the southwestern corner and east of Route 129.

CONSERVATION LANDS

In addition to the naturally occurring resources listed above, just over 9.0% of Loudon’s total land acreage is conserved lands. These

lands have been categorized as conserved for their scenic beauty and resources they provide. Forest, open fields, and agricultural lands comprises much of the conserved land, and include vast recreational resources used year round by Loudon residents and residents from the surrounding communities. These recreational opportunities will become more valuable in the near future, as the population continues to age and retirees choose to remain in New Hampshire and enjoy local access to these resources.

Similar to the other naturally occurring features, areas of conservation lands are present throughout Loudon, with a larger area in the town's upper northeast corner. This conserved area also contains wetlands, steep slopes, and Sanborn Pond.

For additional information on development constraints mentioned, refer to the Natural Features Chapter of the master plan or refer to the Central New Hampshire Regional Plan.

CONSTRUCTION MATERIALS & ACTIVE GRAVEL PITS

The section identifies all known sources of sand and gravel deposits in Loudon. The purpose of this identification is to ensure that towns meet the state's statutory requirement that zoning ordinances provide reasonable opportunity for excavation.

One way that towns addressed this issue in the past was through the inclusion of a construction materials section or chapter in their master plan. The name "construction materials" comes from soil surveys conducted for every county in the state by the former Soil Conservation Service of the US Department of Agriculture, now known as the Natural Resource Conservation Service. These surveys, in addition to the various maps illustrating soil types, also include a number of tables, one of which is Construction Materials. This table lists all of the soil types that are associated with the four designated

materials suitable for construction: roadfill, topsoil, sand, and gravel.

The inclusion of a construction materials section in a master plan was once identified in state law as being one of a number of optional topic/issues to address in a local master plan. RSA 674:2 has now been amended with new chapters identified while others were modified, and the construction materials section deleted. Despite the topic no longer appearing in the list of optional sections, a town is not prohibited from addressing the issue; given the level of excavation activity in Loudon, it seems appropriate to include this section in the Town's Master Plan.

The location of the sand and gravel deposits are depicted on the Excavation Potential Map. While the soils information provides a good visual identifier of resources, the soils data will not necessarily identify all construction material sources: The surveys are only accurate to a certain degree and these deposits don't necessarily align completely with known sand and gravel excavation operations. Note that roadfill and topsoil are also designated as construction materials in the Soil Survey; however, for the purposes of this section, only sand and gravel are addressed due to the predominance of excavation activity in Loudon.

The Soil Survey defines sand and gravel as natural aggregates suitable for commercial use with a minimum of processing. The Survey evaluated only the probability of finding materials in quantities large enough to be suitable for removal. The properties used to evaluate sand and gravel soils include the thickness of the material, the size of the grain, and the content of rock fragment. A soil rated as "probable" has either a layer of clean sand or gravel, or a layer of sand or gravel with up to 12% silty fines. In addition, the

material must be at least three feet thick and have less than 50%, by weight, large stones.

The **Excavation Potential Map** identifies the materials by the likelihood, or probability, of being present based on soil type. Probable locations of sand and gravel are shown in orange on the map with sand only in yellow. The map illustrates some scattered deposits throughout Town with the predominance of sand and gravel located within the Suncook River corridor.

Because of the permeability of sand and gravel, it is very typical that these materials tend to co-locate over aquifers. Loudon has a large stratified drift aquifer that runs the length of the Town along the Suncook River. The **Aquifer and Excavations Map** shows the known

EXCAVATION REGULATIONS: THE PATH TO ADOPTION

Even with the long history and scale of activity in Town, Loudon only recently adopted excavation regulations, most likely because most of the operations are grandfathered – meaning that they began operations before RSA 155-E was enacted, allowing them to continue, within certain parameters. During the process of developing this Master Plan, the Planning Board identified the lack of regulations as a key priority and decided to pursue the development of regulations during the Master Plan process. After working on draft regulations, all pit owners in Loudon were sent a copy of the final draft and an explanation of the purpose of adopting regulations. In November of 2015, the Board held a public hearing on a draft regulation, which was then adopted.

excavation operations in Loudon in relation to the aquifers. This map illustrates that, with two exceptions, all of the excavation operations in Loudon are located over the aquifer. These two operations that are not shown over the aquifer are, however, located over areas that the **Excavation Potential Map** shows as being probable for sand and gravel.

This co-relationship creates special challenges for land use planning. For example, due to the permeability of these soils, they tend to be good sites for water supply wells. These soils are also valuable sources of construction materials that can be an important resource for future development in the state. On the other hand, permeability also means that if a pollutant is absorbed, it can quickly spread and pollute the aquifer, which is a major source of drinking water in New Hampshire. Therefore, special attention should be given to regulating land uses over sand and gravel deposits, in particular sand and gravel excavations which, as noted above, are commonly located over aquifers and have the potential, if not properly regulated and managed, to harm aquifers.

THE LAW GOVERNING EARTH EXCAVATIONS

The state law that governs excavations is RSA 155-E. The law was enacted in 1979, and saw significant revisions in 1989 and other revisions in 1991. The law was enacted to ensure that no town could prohibit any excavation; in that sense, RSA 155-E preempts local zoning because it states that if a zoning ordinance has no provisions for excavation, then by law it is considered to be a use that is allowed by special exception, based on specific criteria. RSA 155-E contains standards for the operation and reclamation of excavation sites, as well as a list of projects that would be prohibited (for example, damaging a known aquifer). A permitting process is also described, with a list of excavations that are exempt from a permit. The law gives regulatory authority over excavations

to the Planning Board that includes the authority to adopt specific regulations for this activity. RSA 155-E names the planning board as responsible for ensuring compliance with law, regardless of whether the board has adopted regulations, or whether a particular operation has a permit or is exempt.

EXISTING EXCAVATIONS

As mentioned previously, due to the presence of a significant aquifer in Loudon, the Town has a long history of active sand and gravel pits. As of this writing, there are 24 pits that are active principally as excavation operations; in addition to these, there are several others that are not considered excavations by law because they are incidental to construction – meaning that in order to build any structure or develop a site for residential or non-residential use, construction materials on the site must be removed.

The following Table 11.8 presents the known active excavations in Loudon that filed Intents to Excavation with the state’s Department of Revenue Administration in 2015. The Table includes information on the size of the parcels, how much material was excavated in the previous year, and how many acres have been reclaimed. This information illustrates the scale of excavation activity in Loudon.

One of the land use implications that came out of the Board’s decision to adopt regulations, was the identification of several pits that could conceivably be coming to the end of their useful lives within the time frame of this Master Plan – this determination was based solely on the amount of material estimated to be remaining. From the information shown in the following Table 11.8, it appears that excavation operations could continue far into the future; obviously the rate of removal of material is market-driven, and some sites could be depleted sooner than anticipated. Even with only the six operations that are considered to be possible sites for

near-term depletion, there is enough potential for future development to warrant the Board’s attention to future land use scenarios in this Master Plan.

Reclamation of depleted pits should consider the potential future uses of the site. Some, for example, may remain vacant and undeveloped with the primary considerations being soil stabilization and proper establishment of drainage patterns. If, on the other hand, there are immediate plans to develop the land, the accompanying site work becomes, in effect, the reclamation. Issues of drainage, runoff, etc. are dealt with as part of the overall site plan.

Another consideration for pit owners is to be sure that they have not conducted excavation in a way that could potentially limit the future uses of the site; for example, if the land is to be used for residential development after the gravel is removed, enough material should be left so to allow the construction of septic systems and other underground systems.

In summary, the information on construction materials in this section is useful not only for future planning purposes, but for the equally important task of ensuring that there is reasonable opportunity in a town for excavation to occur.

The maps created for this section illustrate the location of known excavations and of probable sand and gravel resources. This is information the Planning Board can use to determine whether existing excavation opportunities are aligned with the likely locations of the materials.

Table 11.8: Status of Active Excavation Operations

Map/Lot#	Location	Total Acres	Permitted Area	Excavation Area as of April 1, 2014	Acres Reclaimed	Yards Excavated (2014)	Intent to Excavate (2015)	Remaining Yards to Excavate
1/3	Ricker Road	1						
1/4	Ricker Road	10.15	10.5	2		3,400	20,000	147,000
1/5	Ricker Road	83+/-	83			15,000	30,000	
1/6	Ricker Road	4.6	2.5	0.5		1,058	6,600	
11/12	Chichester Road	40.8	120.11	16	9.5	49,241	113,000	5,000,000
19/13	Hardy Road	4.13	4.13	0.8			550	143,748
20/01	1 Indian Point Road	30						4,000,000
20/02	2 Wales Bridge Rd /River Rd	30.67	30	1		250	<1,000	50,000
20/10	South Village Road	20.03	20			750	1,500	150,000
20/13	South Village Road	9	9			4,500	3,000	3,000
21/16-1	Route 106 South	13.8	1.15					
39/37	Goshen Drive	15.6		1		60	600	6,000
40/7	Route 106 North / Dump Rd	30.95	30			892	500	
40/11	Currier Road N/S	60	60	25		112,200	150,000	1,885,000
40/13	Currier Road S/S	367.73	367	5		11,406	50,000	14,800,000
40/14	Currier Road S/S	15.48	15	2	0.1	1,392	6,000	180,000
40/16	Route 106 North / Currier Rd	90	90	90			25,000	1,000,000
40/17	Route 106 North	90	90				25,000	1,000,000
40/18	Route 106 North	7	7	2			60,000	100,000
49/72	Route 106 North		83	83			20,000	1,000,000
50/1-1	Route 106 North		8.36	4	0.8	12,234	26,000	26,632
50/6	Route 106 North E/S	82	82	3	10	1,515	2,500	660,485
51/15	Lower Ridge Road	24.5	24.5	1	3	20	<1,000	100,000
52/07	Lower Ridge Road	89.29	89	2		40	<1,000	200,000
TOTALS:		1,139.7	1,226.25	238.3	23.4	213,958	540,250	30,451,865
LEGEND: The sites highlighted in yellow are those that, based on the amount of remaining materials, appear likely to complete operations during the Master Plan timeframe.								

As far as appropriate locations of existing operations, the map shows that the majority of excavation operations are occurring over the resource (i.e., the aquifer). Regarding opportunities for excavation, the Loudon Zoning Ordinance allows excavation by special exception in the Rural Residential District – which is the largest land area in Town, and in the Commercial District, which is located along NH 106 and over the aquifer. Therefore, the zoning ordinance permits excavations to occur in locations where it is most likely that sand and gravel resources are present. It would appear, then, that the Town of Loudon has met its obligation to ensure that reasonable opportunity for excavation exists in the Town.

FUTURE LAND USE

Responses to the community survey are important considerations when evaluating potential changes to land use. Most respondents indicated that they were currently in agreement with the zoning and lot size requirements in all of the zoning districts. A majority (76%) were in favor of encouraging commercial uses to broaden the tax base, yet were evenly split on whether the C/I zone should be expanded. Development that is in keeping with Loudon's quality of life was most important to the majority of respondents. It is clearly important to Loudon residents that existing and new commercial, retail, industrial, residential and mixed use development maintains and enhances the Town's rural character and quality of life.

THE FUTURE LAND USE MAP

A Future Land Use Map is an advisory tool to guide future decisions regarding potential zoning and land use changes in order to preserve the assets of the Town in balance with new or expanding development such as businesses and homes. As illustrated by the *Existing Land Use Map*, much of Loudon's road frontages have been developed with single-family homes. A great deal of land is

permanently protected in the northeastern corner of Town and conserved to various degrees in the southwestern corner of Loudon. The NH 106 corridor, over the Soucook River aquifer, is zoned commercial/industrial from the Concord to the Gilmanton border.

As such, the *Future Land Use Map* is based on input from other chapters of the Master Plan, including the Economics Chapter and the Natural Features Chapter. Building upon these Chapters is an appropriate starting point for thinking about how land in Loudon could be used in the future. Existing and potential conservation areas were identified for their significant natural qualities and were identified as priority areas to protect from future development. Commercial nodal development around the busy intersections of roadways such as NH 106 and Shaker Road, NH 106 and the Clough Hill Road area, and NH 106 and Staniels Road focus on concentrating future commercial enterprises around existing businesses. In doing so, these commercial "centers" become destinations for travelers and shoppers, and vehicle trips between businesses are reduced. Lastly, the recommendation of an industrial area spanning from Tote Road to Gues Meadow Road encompasses the existing industrial businesses and allows for expansion and containment of such future industrial development in that area. The environmental sensitivity of the Soucook River, its aquifer, and tributaries needs to be evaluated in the context of setbacks and other regulations to protect this resource.

The *Future Land Use Map* is a good starting point for discussions on how Loudon will look and feel in the future and should be modified on a regular basis as the Town continues to grow and change. Beyond the designation of certain areas as specific zones on the Map, additional tools and suggestions within this section can be used to guide future land use decisions within Loudon. They take the form of examining current zoning districts, proposing changes to

the Zoning Ordinance and Land Development Regulations, and illustrating how different land uses affect one another.

VILLAGE DISTRICT

Recommendations for the Village District itself focus on supporting continued improvements to support revitalization of the “downtown” of Loudon. The Town is taking a key step in this direction with the construction of a new municipal complex. The vision is to create a Village Center with essential town services, sidewalks, a senior housing complex, a Post Office, centralized parking, recreational and social facilities, and businesses to form an historic neighborhood.

POTENTIAL REGULATORY CHANGES

The Commercial/Industrial Zone currently follows a buffer along NH 106 as well as parcels that have been added to the zone over the years. Commercial and industrial opportunities further strengthen the tax base of the community and provide employment for residents. These businesses can also draw patrons outside of Loudon.

Commercial development first occurred in Loudon at principal intersections, creating identifiable commercial centers. From those points, development is slowly beginning to form linear patterns along NH 106. If this trend continues, Loudon’s commercial development can take on a sprawling, strip-mall character, which is a common sight along many heavily traveled main corridors in the Region. As stated in the Transportation Chapter, land use, economic and transportation decisions are all interconnected and need to be integrated as the only way to provide safe and efficient mobility while supporting a healthy environment. The effects of dispersed development are that central business areas can lose economic strength, giving way to serious traffic congestion and the reduced

capacity of NH 106 to move traffic through safely and efficiently. Nodal development is encouraged in the Transportation and Economic Chapters with new business locations designed to serve the expanding resident population as well as the tourists at the Concord/Loudon line, at the intersection of Routes 106 and 129, and at the NH 106/Shaker Road intersection. Working with businesses to locate in these three areas is important for commercial centers to be effective and safe, promoting mobility and maintaining the rural character of the community.

Commercial Zone: The existing Commercial Industrial District (C/I) allows almost every conceivable commercial or industrial use. While allowing flexibility, this type of zoning often results in the attraction of low value uses, such as concrete plant with lots of open lot storage, which add little if any taxable value and often generate few if any high value jobs. Loudon currently has two commercial parks which could provide opportunities for growth of the commercial and industrial tax base.

Industrial Zone: A separate zone to support existing and future industrial activity at International Drive and Ricker Road should be created. The existing C/I zoning could be revised to remove the intensive industrial uses, large scale warehousing, and uses requiring large areas of open lot storage. This would reserve the most valuable frontage along NH 106 for higher value non-residential uses such as medical and professional offices, shops and boutiques, farm stands, and restaurants. This would also open up the opportunity to revise the C/I District for mixed use commercial/residential development, as well or create a separate district allow for resort supported or agriculturally supported development in existing C/I areas located east of the Soucook River.

Agricultural Supported Development. This is a relatively new type of development where some form of agricultural development is used to support or promote the residential development. This could include the incorporation of farms, orchards, or community gardens in the amenity package that attracts new home buyers. A focus on locally grown food, and sustainable development is a key feature of these developments. Approximately, 200 such projects have been developed across the US according to a report from 2013.

Mixed Use/Amenity District: Allow Open Space Development in the Commercial/Industrial District or rezone the Commercial/Industrial Areas as well as appropriate abutting properties east of the Soucook River to a new Mixed Use District to a new mixed use district which would support resort, golf course or agriculturally supported developments.

AQUIFER PROTECTION

A large coarse-grained stratified drift aquifer exists along the Soucook River corridor in Loudon. This aquifer stretches from Rocky Pond at the junction of the Gilmanton, Loudon, and Canterbury border and travels south along NH 106 until the Soucook River forms from the confluence of small streams. From there, the aquifer underlies the Soucook River and runs between Concord and Pembroke. Transmissivity, a measure of how quickly water travels, is measured in feet squared per day. Along the aquifer, there are large areas of high transmissivity, with spots of 3000 or more feet squared per day, and spots of much lower transmissivity mixed in. Every effort should be undertaken to protect this valuable resource and potential future public water supply.

A future aquifer protection ordinance could focus on regulations that Town should consider adopting regulations establish best management practices for land uses within the identified aquifer

areas and works to protect existing and proposed private wells. The ordinance could outline specific performance standards that outline containment measures and seek to minimize the release of regulated substances into Stormwater.

OPEN SPACE DEVELOPMENT

Loudon now has open space development regulations, approved as part of the zoning ordinance in 2006. The Town could consider revising as needed to better utilize cluster of residential development in order to protect natural resources by modifying the Open Space Development district to allow condominium land units and allow Agricultural Supported Development as well.

Condominium land units are non-frontage areas usually between 30,000SF to 1 acres which are owned in fee, on which a residence and accessory structures are allowed to be constructed and maintained by the owner. These homes would be served by appropriately designed common private drive(s). Common areas for these would have restricted open space areas where only farming, forestry or conservation use is allowed, and other common open space would be established for the common private drive(s), storm water drainage facilities, and potentially individual wells and septic systems, community buildings, overflow parking, barns and other accessory common facilities and structures. In Agricultural Supported Developments farm or garden plots could be established as Limited Common Areas, owned in common but generally linked to and restricted to use by the owner of a specific condominium land units for agricultural purposes only. The farm or garden plots could be separated from the homes, and only be provided with very low impact structures such as a common water supply, or tool sheds allowed and accessed by single lane unpaved farm roads.

The limit on the number of approved lots allowed to be recorded each year should either be eliminated or revised substantially. The

requirement to prepare a “yield plan” to determine density should be eliminated to simplify the development process and to reduce the burden on the Planning Board to administer the open space development process.

FUTURE LAND USE ALONG NH 106

Current development along NH 106 shows various opportunities for future development. Loudon has an opportunity to utilize NH 106 for economic development while retaining the character the Town desires by employing techniques such as buffers and innovative landscaping standards. The NH Department of Transportation (NH DOT) has already purchased rights-of-way along the NH 106 for future expansion and safety improvements. Utilizing the nodal development approach with cooperation of the NH DOT will limit commercial activity along the entire strip of NH 106, thus reducing vehicle trips, improving safety, and encouraging commerce.

Landscaping, design, and follow-up of such conditions of approval in the interim should be included with any new commercial enterprise along NH 106.

From an economic standpoint, the presence of the New Hampshire Motor Speedway (NHMS) in Loudon is extremely important to the Town of Loudon, along with the regional and statewide economy. Recent planning efforts such as the NH106 Interim Corridor Study highlight the importance of maintaining excellent transportation linkages to and from the Speedway and this is a view that is echoed in the Master Plan survey results. The Town of Loudon should actively work with its partners at NHMS and NHDOT to ensure that these transportation links are maintained and improved where applicable.

FOREST AND NATURAL RESOURCE MANAGEMENT

A great deal of land is undeveloped within Loudon. Much of this land is forested at nearly 40% of the Town’s total acreage. The Town has two official town forests and should continue the forest management plan for each and revise as necessary. Currently, the Conservation Commission receives timber revenue to use for land acquisition purposes. Large blocks of unfragmented land exist within the Town and protect other resources such as wetlands and wildlife habitat areas. The Natural Features Chapter has a number of natural resource management recommendations.

SOUCOOK RIVER CORRIDOR

The Soucook River is the Town’s largest and most important surface water resource. The River flows through the Town for approximately 7.8 miles with much of the shoreline currently undeveloped. Creating a corridor for the Soucook River would protect the river and its tributaries and the uplands incorporated with it for multiple recreational uses. This corridor could provide public access to the Soucook, increase active and passive recreational use, provide a protective buffer to the River itself and generally increase the quality of life in the community as well as provide a protected wildlife corridor. There are many challenges to pursuing this recommendation, including negotiating easements for access and trail development, identifying funding opportunities and recruiting local volunteers to champion such an effort. Should the Town wish to pursue this, the corridor could stretch the entire length of the River in Town and beyond should there be interest in a regional corridor with the neighboring communities of Canterbury, Concord and Pembroke. The adoption of an Aquifer Protection Ordinance would also act to protect this important resource.

CONNECTIVITY AND NEW DEVELOPMENT

Typically, connectivity is the system that connects origins and destinations, multiple routes and connections to the same origins and destinations allow shorter, more efficient, and less congested trips and are the most beneficial for a community. However, one of the difficulties for many towns, including Loudon, is that many new developments exhibit poor connectivity, often seen in residential subdivisions that are designed in a series of cul-de-sacs.

When considering residential and other types of development, coordination of access points can minimize site access conflicts and maximize the traffic capacity of a roadway. Planning efforts should focus on all modes of transportation, including vehicles, public transit, bicycles, and pedestrians. A well connected street system also improves emergency response time for firefighters, police, and ambulance services. In addition to traffic operational benefits, a well-connected street system also serves to create a sense of community as opposed to a sense of isolation that cul-de-sacs can at times create. Different techniques that the Town of Loudon can use to take a proactive approach are outlined in the Transportation Chapter. The concept of complete streets and other techniques are important considerations for new developments. For additional information on connectivity, access management, and transportation related to new development please refer to the Transportation Chapter.

FUTURE LAND USE OF DEPLETED EXCAVATION SITES

An important component of future land use in Loudon is the potential for redevelopment of excavation sites that are depleted or no longer operating. Based on information provided by pit operators, Loudon appears to have approximately 1,000 acres currently permitted for excavation. As Table 11.8 indicates, most of these sites have significant materials left to excavate and could

potentially be in operation for quite some time. As noted in the Construction Materials section, however, there are six operations that, based largely on a review of the previous year's activity and the amount of material remaining, could be depleted and available for redevelopment within the timeframe of this Master Plan.

The possibility of these sites ending their useful life as excavations provides an opportunity to plan for the future uses of these parcels. Even though the acreage is not significant in terms of percentage of total land area in Loudon (+/-60 acres), the location of the sites adjacent to or near the NH 106 and Suncook River corridors is especially of interest, considering the issues identified earlier in this Chapter regarding future land uses along the NH 106 corridor, as well as the importance of protecting the aquifer that exists along the Suncook River.

When considering potential redevelopment of these sites, it makes sense to first look at the existing zoning for the districts in which the parcels are located. Two of the sites are located in the Village District and the other four are in the Rural Residential District. (Note that all of the remaining sites in Town are in the Rural Residential District as well.)

The Village District allows by right residential and some non-residential uses, including public and semi-public (e.g., churches, government); the district also allows by special exception multi-family residential and a range of non-residential uses. The minimum lot size for the district is just under one acre and the minimum lot frontage is 125 feet. The two excavation sites in the Village District are approximately 30 acres and 9 acres. For these lots to be redeveloped, it would likely involve the construction of new roads in order to create the frontage needed for new lots.

The Rural Residential District has similar permitted by right uses as

the Village District, with the addition of agricultural uses. As in the Village District, there is also a range of non-residential uses allowed by special exception, the uses being more appropriate to a rural setting. The minimum lot size is two acres and the minimum frontage is 200 feet. The four parcels in this district range from approximately 4 acres to ten acres. Redevelopment of the 10-acre and 8-acre lot would likely involve the construction of new roads to create the necessary frontage.

Engaging in a review of the existing uses in these districts – both those permitted by right and those permitted by special exception has many benefits. There may be uses that will be identified as being appropriate for the redevelopment of these particular sites, but are not allowed by the current zoning ordinance.

Both districts limit development to one residential building per lot (except for multi-family); and, while the ordinance does not explicitly state it, it appears that this restriction applies to non-residential uses as well. This one-lot-one-use technique is very common in zoning ordinances; there is, however, an alternative approach known as mixed use development, which permits any of the uses allowed in a district to be located on one lot and/or in more than one building.

Even though, for the purposes of this section of the Master Plan, the focus is on the few excavation sites that may be looking at redevelopment in the near term, considering the overall potential for development and/or redevelopment of any of the parcels along NH 106, it is not too soon to begin forward thinking about new ways to get the kind of development that meets the needs and desires of the current, as well as the future population.

OBJECTIVES AND RECOMMENDATIONS

OBJECTIVE 1

To compare the Master Plan recommendations with Loudon's current land use regulations.

- Ensure Land Use Regulations as appropriate reflect Master Plan priorities and recommendations.
- Update the Zoning Ordinance as appropriate to reflect Master Plan recommendations.
- Continue to evaluate the future need for a Growth Management Ordinance based on current growth trends in the housing market.

OBJECTIVE 2

To provide recommendations for the future utilization of land in the form of amendments to the regulations and ordinances.

- Consider revisions to the zoning ordinance related to the existing C/I Zone and the creation of an Industrial Zone in the vicinity of International Drive.
- Investigate revisions to the Zoning Ordinance to allow and promote mixed use developments in specific areas within the existing C/I zone.
- Investigate revisions to the zoning ordinance that allow and promote agricultural supported residential developments in the RR and AFP zones.
- Adopt measures to protect the Soucook River's aquifer under NH 106 and the Commercial/Industrial Zone, including the

consideration of groundwater performance standards to mitigate potential damage to the Town's aquifers.

- Consider amending the Zoning Ordinance to incorporate a 20-foot wide landscaped buffer into NH 106 setbacks to lessen the impact of commercial development on Loudon's rural landscape.

OBJECTIVE 3

To encourage the proper balance between residential and business growth to ensure Loudon continues to prosper while protecting the historic, natural resources and rural character of Loudon. Acquire additional open space as needed and available for public use.

- Review and revise as necessary the July 2001 Open Space Trail System Plan's recommendations to expand the areas currently protected around the Hunting Swamp, Broken Ground, LCIP lands, Bumfagon Swamp, the Hoit Road Marsh/Town Forest area, and areas listed in the Plan.
- Revise the Open Space Development Ordinance to reflect current open space development practices, allowing for more housing alternatives (see Chapter 6 for desired options), agricultural-based open space development and resort development to ensure the maximum benefit for the Town, the developer, new residents of the community, and the protection of the Town's natural features.

OBJECTIVE 4

Incorporate the following standards into the Land Development Regulations.

- Incorporate specific stormwater management performance standards in order to simplify the current site plan and

subdivision application process.

- Establish specific planting requirements, performance standards, and landscaped buffers for Site Plan Reviews.
- Establish a set of access management standards, including on NH 106 north of Shaker Road and where traffic volume has increased significantly to best maintain and promote an efficient transportation network, to better plan for future development in Loudon.
- Adopt driveway construction standards in regard to driveway geometry including maximum length, minimum grade, alignment, site distances, etc. to simplify the current site plan and subdivision application process.
- Specify the minimum required amount of landscaping along road frontages and internal to parking lots, as well as establishing planting requirements and performance standards for required buffers.

OBJECTIVE 5

To concentrate retail commercial, office uses, personal service uses at nodes on the NH 106 Corridor.

- Revise the Commercial Industrial District to limit heavy industrial and open lot storage along NH 106.
- Create a new Industrial Zoning District focused on International Drive area and Ricker Road.
- Consider resort, golf course, or agriculturally supported residential cluster development on the Commercial/Industrial Zoned property locate east of the Soucook River.

OBJECTIVE 6

To plan for appropriate redevelopment of depleted and/or inactive excavation sites.

- Ensure the ongoing safe and efficient operation of existing and any new excavation operations.
- Work with excavation owners who are nearing completion of their operations to ensure that a reclamation plan is consistent with any known future uses of the land.
- Considering establishing wetland buffer regulations adjacent to gravel operations.
- Continue to implement the system established by the Planning Board to monitor all excavations in Town to ensure compliance with RSA 155:E.