



DUBLIN MASTER PLAN 2017

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New Hampshire state law (RSA 674:2 I) provides that:

“The purpose of the master plan is to set down as clearly and practically as possible the best and most appropriate future development of the area under the jurisdiction of the planning board, to aid the board in designing ordinances that result in preserving and enhancing the unique quality of life and culture of New Hampshire, and to guide the board in the performance of its other duties in a manner that achieves the principles of smart growth, sound planning, and wise resource protection.”

In accordance with RSA 674, this Master Plan has been drafted by the Dublin Planning Board, beginning in the fall of 2016. The following members contributed to drafting this Plan:

Bruce Simpson, Chair

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Sturdy Thomas, Select Board representative (2017)

Dale Gabel, Select Board representative (2018)

In addition, invaluable assistance was provided by the staff of the Southwest Regional Planning Commission, especially Lisa Murphy, who met with us numerous times during this process, and who assisted us with a significant amount of the data and analysis contained in this Plan, and Henry Underwood, who compiled the maps and was largely responsible for the Transportation Chapter.

Dublin's Vision Statement 2016

The Town of Dublin has been constantly evolving over the many years of its existence. From a high-land wilderness of old-growth forest to an open landscape of neat fields bounded by stone walls and hardly a tree to be seen, to the tangled second growth forest that now covers most of our town. From a farming village, to a sheep raising town, to an artist and writer's retreat and summer vacation spot, to a small New Hampshire town where folks still gather for town meetings, Memorial Day Parades, fireworks on the Fourth of July.

There are still traces here of the Dublin of years past: a few old trees, plenty of stone walls, a few farmers, some sheep, and a good number of artists and writers. The Lake and the mountain are relatively unchanged. Still here are plenty of old houses and buildings like the Library, the Town Hall, the original Yankee Building, the four churches, the old General Store; most changed but still functioning and still lending a sense of historic charm to the town.

Today only a few Dubliners try to wrest a livelihood from the soil, and our current population probably has more in common with the "summer people" who started coming here in the 1800s than with the farmers of yesteryear: we live here because of the quiet beauty of the area, the rural character of the town, and an appreciation of the sense of community shared by the townspeople. Most of us work elsewhere, others telecommute, other run small businesses, often out of their homes.

When our Master Plan was updated in 2007, the Town anticipated a wave of growth and development approaching from the east that could have a profound effect on Dublin. The trend at that time was for increased commercial development, especially along state highways, and increased residential development of rural areas, with more families and more children in the schools. After surveys and public meetings, the Planning Board felt that a majority of the townspeople wanted prevent major changes to the town, and accordingly the Master Plan, and subsequent amendments to our land use ordinances addressed this desire by making residential development more difficult and more expensive by doubling the minimum lot size in most of the town, and limiting where business development could take place.

Those regulatory changes, in conjunction with economic factors that discouraged development, have resulted in a Dublin that has changed little over the past ten years. In addition, Dublin has a limited amount of undeveloped land that doesn't contain steep slopes, wetlands, or restrictions against development. Few new homes have been built, and only a few businesses have started or expanded, while several have closed their doors. And the demographic trends have changed: according to the U.S. Census, the population has actually fallen, rather than increasing as had been expected. And, as in other New Hampshire towns, the population has aged, and we now have fewer residents per home, fewer young families, and fewer children in our schools.

The people of Dublin want to preserve the Town's natural resources and scenic beauty, its small town charm, rural character, and its community spirit. Given current regulations and current economic and demographic trends it is unlikely that major changes or stricter regulations are appropriate to accomplishing this goal. Rather the Town should consider minor adjustments that would protect what we already have while enhancing the vitality of Dublin by allowing some residential and business growth in a way that will not adversely impact the natural resources, scenic beauty, and small town charm that we so value.

Consistent with this vision of Dublin, the town should consider the following objectives:

- Continue to make protection of Dublin's natural resources and scenic beauty a top priority.
- To reverse the slight declining trend in the Town's vitality since the last Master Plan was approved, proactively encourage a measure of managed growth by promoting residential growth in the Village District.
- Revisit our current Retirement Community Overlay District ordinance to ascertain if there is a better way to encourage appropriate senior housing in Dublin.
- Review Dublin's municipal facilities to determine what upgrades, relocations, replacements and other changes that might be necessary in the coming decade and consider the options available, including the purchase of land for future expansion, and sources of funding for the required improvements.
- Increase citizen participation in town government.
- Work with state officials to minimize, to the greatest extent possible, the adverse effects of the Town's two state highways with respect to such factors as noise, traffic, and pedestrian and bicycle safety.
- Seek avenues to provide high-speed internet and improved cellular coverage to the entire town at the earliest possible date.
- Establish and/or maintain a regulatory scheme that encourages agriculture and alternative energy sources, and investigate the possibility of converting some or all town facilities to renewable energy.
- Review the inventory prepared by the Open Space Committee and determine what actions should be taken to conserve properties identified as valuable for environmental and recreational purposes.





POPULATION & HOUSING ANALYSIS

Introduction and Purpose

The purpose of a Master Plan Population and Housing chapter is to serve as a flexible framework to guide the orderly changes of a community over a period of years. The interconnection between population growth and an adequate supply of housing is evident in the tables and charts within this chapter. Since population change is dependent upon many factors, this plan and its components should be regularly reviewed to determine their applicability. The population analysis will alert the town to the possible future demands on schools, housing, public facilities and other land uses.

The analysis within this chapter will include a subregional comparison on the changes in population that the Town of Dublin and the surrounding towns have experienced, as well as the population projections developed by the New Hampshire Office of Energy and Planning (NHOEP). Population change is attributed to two factors: natural increase/decrease (the number of births/deaths), and migration (movement of people in or out of the town). This chapter will provide information on these as well as the population density as it relates to the total land area.

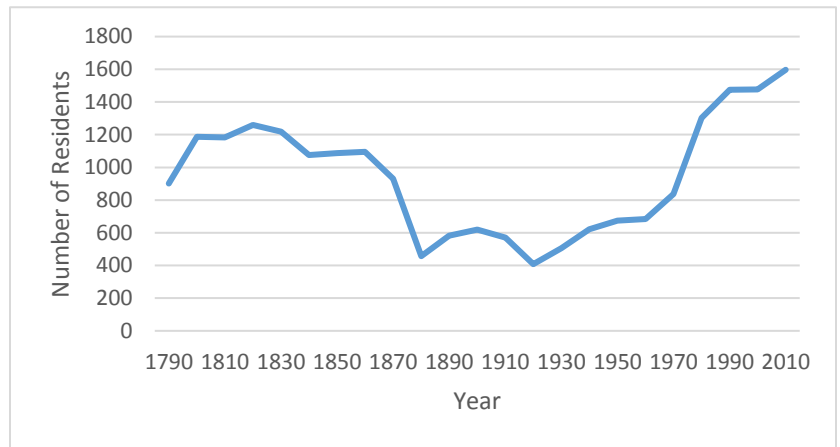
The second half of this chapter includes a housing analysis to provide information on the current affordability and future housing needs of Dublin. The data used to make this analysis uses the population trends and projections, as well as income information and housing trends.

Population Analysis

Historical

The table to the right shows the historical population of Dublin since 1790. Dublin had a peak in population of 1,260 in 1820, then experienced a gradual decline followed by a large drop when part of Dublin broke off to become Harrisville in 1870. The early 1900's show a transition period with up and down fluctuations, followed by a steady rise in population to the present day. The most significant increase in Dublin's history occurred between 1970 and 1980.

Population Trends from the years 1790-2010



Source: Office of Energy and Planning, Historical Data

Population Trends

Looking at population trends, both increases and declines, can provide insight to planning for the community needs such as town services, education, housing, employment, and recreation. This table shows the population trend in Dublin since 1970, including the percent change between decades. Dublin's largest increase was the boom during the

Year	Population	% Change
1970	837	----
1980	1,303	55.6%
1990	1,474	13.1%
2000	1,476	0.1%
2010	1,597	8.2%

Source: U.S. Census Bureau

1970's with a population that more than doubled in a 10 year time period.

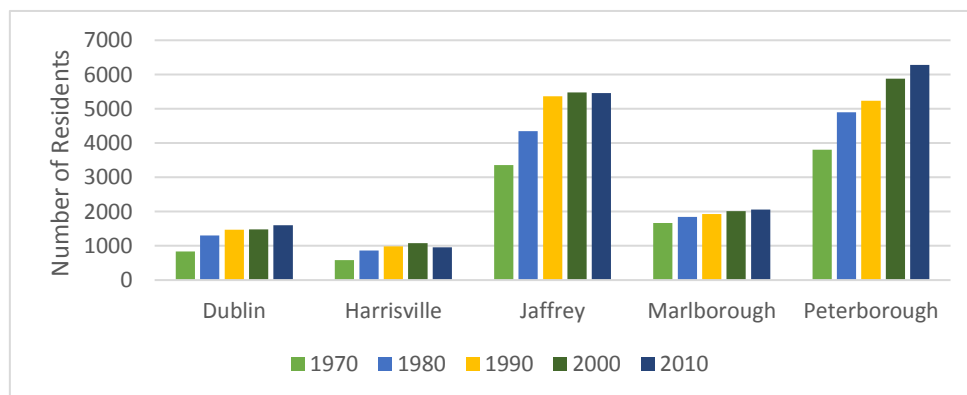
When planning for future town needs, an overall look at the surrounding towns, as well as county and state information, is useful since the need for adequate housing and employment opportunities can be influenced by the economy beyond the town line. The table and graph below provide the data and a visual representation of the population of the same time period as above, but also includes the surrounding towns and the percent change between decades. Dublin experienced a greater percent change during the 2000 to 2010 time period than did any of the surrounding towns. While Dublin had an 8.2% change, Harrisville and Jaffrey both experienced a decline in population with a -11.9 and -0.3 percent change. Dublin also exceeded the state and county change. This change, however, could be very different during the next decade since the table shows that fluctuations have varied greatly among these towns in previous decades.

Subregional Population Trends 1970 to 2010

	1970	1980	1990	2000	2010
Dublin	837	1,303	1,474	1,476	1,597
Harrisville	584	860	981	1,075	961
Jaffrey	3,353	4,349	5,361	5,476	5,457
Marlborough	1,671	1,846	1,927	2,009	2,063
Peterborough	3,807	4,895	5,239	5,883	6,284
Cheshire County	52,364	62,116	70,121	73,825	77,177
New Hampshire	737,681	920,610	1,109,252	1,235,786	1,316,470
% CHANGE	1970-1980	1980-1990	1990-2000	2000-2010	1970-2010
Dublin	55.7%	13.1%	0.1%	8.2%	90.8%
Harrisville	47.3%	14.1%	9.6%	-11.9%	64.6%
Jaffrey	29.7%	23.3%	2.1%	-0.3%	62.7%
Marlborough	10.5%	4.4%	4.3%	2.7%	23.5%
Peterborough	28.7%	7%	12.3%	6.8%	65.1%
Cheshire County	18.6%	12.9%	5.3%	4.5%	47.4%
New Hampshire	24.8%	20.5%	11.4%	6.5%	78.5%

Source: U.S. Census Bureau 2010

Population Change from the years 1970-2010



Source: U.S. Census Bureau 2010

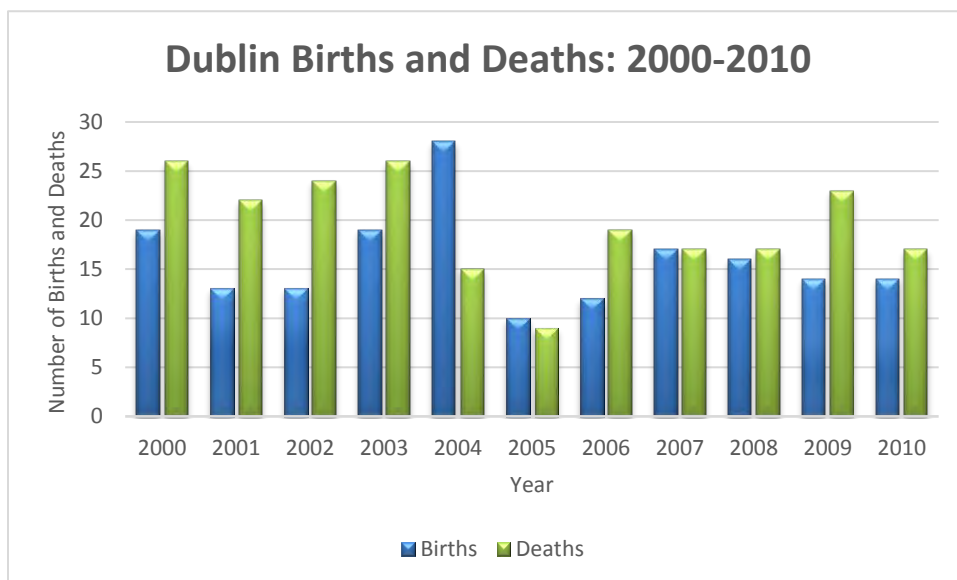
Births, Deaths, and Net Migration

Population growth is the product of two factors: natural increase (defined as births minus deaths) and migration, the movement of people in or out of the community. This table shows the number of births and deaths of Dublin residents from the years of 2000 to 2010. The average number of births in this time period was 16 per year and the average number of deaths was 20 per year.

The table provides a visual representation and makes it easier to see where trends are occurring. In the first four years of this analysis (2000 to 2003) there were more deaths than births. A spike in births happened in 2004 during the same time that a drop in deaths occurred.

Births, Deaths and Natural Increase 2000-2010			
Year	Births	Deaths	Natural Increase
2000	19	26	-7
2001	13	22	-9
2002	13	24	-11
2003	19	26	-7
2004	28	15	13
2005	10	9	1
2006	12	19	-7
2007	17	17	0
2008	16	17	-1
2009	14	23	-9
2010	14	17	-3

Sources: NH DHSS, Health Statistics & Data Management (births); Dublin Town Clerk and Town Reports (births, deaths)



Sources: NH DHSS, Health Statistics & Data Management (births); Dublin Town Clerk and Town Reports (births, deaths)

The next table shows the in-migration of people moving into Dublin between the same time period. This can be determined by adding the births and deaths to the 2000 population. The sum of that number is then deducted from the 2010 population. The result gives you the number of people moving in from other towns. For Dublin, the population increase between 2000 and 2010 was due to an in-migration of 161 people.

IN-MIGRATION 2000-2010	
Population, 2000	1,476
Natural Increase, 2000-2010	-40
Population in 2010 with no in-migration	1,436
Actual 2010 Population	1,597
Population increase due to in-migration	161

Sources: US Census; NH DHSS, Health Statistics & Data Management (births); Dublin Town Clerk and Town Reports (births, deaths)

Population Density

Looking at the population density gives a perspective of the amount of people per square mile. In the table below, Dublin's population density is shown along with the subregional towns. The population density for Dublin is similar to that of Harrisville, both of which are well below the state and county density. From a land area perspective, Dublin is most similar to that of Marlborough, however, the density is much less.

	Land Area in square miles	Population Density		2000		2010	
		1990					
		Population	Density	Population	Density	Population	Density
Dublin	27.89	1,474	52.9	1,476	52.9	1,597	57.3
Harrisville	18.71	981	52.4	1,075	57.5	961	51.4
Jaffrey	38.41	5,361	139.6	5,476	142.6	5,457	142.1
Marlborough	20.41	1,927	94.4	2,009	98.4	2,063	101.1
Peterborough	38.08	5,239	137.6	5,883	154.5	6,284	165.0
Cheshire County	717.2	70,121	97.8	73,825	102.9	77,177	107.6
New Hampshire	9,024.20	1,109,252	122.9	1,235,786	136.9	1,316,470	145.9

Sources: US Census

Age Distribution

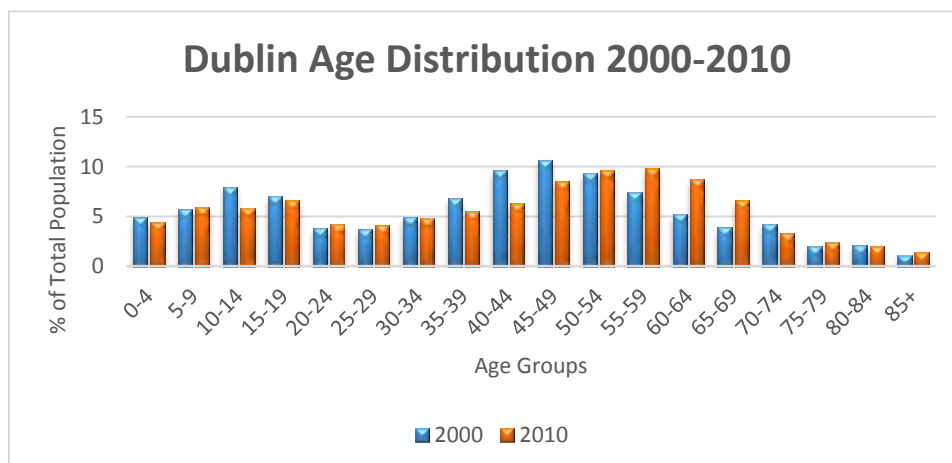
An important statistic for community planning is the age distribution of the residents. The percentage of the total population for the age groups can provide valuable indicators for planning the needs of a community. This helps provide a “looking glass” of the potential services needed by the residents in the upcoming years. The following table shows that the age groups between 50 and 69 years of age has had some considerable increases in the total population of Dublin, especially in the 55 to 69 years of age. The most significant decreases of total population include the age groups between 40 to 49 years of age.

Dublin Age Distribution 2000 - 2010

	Population		% of Total Population	
	2000	2010	2000	2010
0-4	72	71	4.9	4.4
5-9	84	95	5.7	5.9
10-14	114	93	7.9	5.8
15-19	103	106	7.0	6.6
20-24	56	67	3.8	4.2
25-29	54	66	3.7	4.1
30-34	73	76	4.9	4.8
35-39	101	88	6.8	5.5
40-44	141	101	9.6	6.3
45-49	157	135	10.6	8.5
50-54	137	153	9.3	9.6
55-59	109	156	7.4	9.8
60-64	77	139	5.2	8.7
65-69	57	106	3.9	6.6
70-74	62	52	4.2	3.3
75-79	29	39	2.0	2.4
80-84	31	32	2.1	2.0
85+	6	22	1.1	1.4
Denotes population increase in age group (of % total population)				

Source: US Census

The chart shows a visual representation of the age distribution table. This visual makes it easier to see the large change in the age groups mentioned above as well as the groups with minor change.



The US Census provides the age structure of communities according to categories, or sectors, which can be beneficial for planning for the housing needs and services of residents. For example, combining the four blocks showing the age categories between 0-4 through 15-19 in the table above will help plan for school enrollment needs. Another group with specific needs is the older population. Combining the blocks showing the age categories that are 65 and greater can help the community prepare for housing needs and services of that population. Observing the trends of the blocks showing the age categories of 55-59 and 60-64 is also beneficial for similar potential needs within the next 10 years. Following trends in this way can assist the town with planning and budgeting for projects that may be necessary to meet the growing demands of the public.

The table below uses this data by showing the trend that has occurred in Dublin since 1980. Grouping the population by sectors can be particularly useful for consideration of projects in the Capital Improvement Plan. It includes a school age (0-17), workforce (18-64), and senior (65 and over) sector. The declining trend in the *Birth to 17 Years* group and the increasing trend in the *65 Years and Over* group are consistent with trends seen throughout the state.

Age Structure of Dublin's Population								
	1980		1990		2000		2010	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Total Population	1,303	----	1,474	----	1,476	----	1,597	----
Birth to 17 Years	295	22.6%	393	26.7%	345	23.4%	330	20.7%
18 to 64 Years	859	65.9%	916	62.1%	936	63.4%	1,016	63.6%
65 and Over	149	11.4%	165	11.2%	195	13.2%	251	15.7%

Source: US Census

Income and Poverty Status

The next table shows the estimated median household income, median family income, and the per capita income based on the US Census Bureau ACS 5 year estimates for 2011-2015. These terms are often used for different purposes, therefore, all three are included in this chapter. *Median household income* figures include the income of the householder and all other individuals 15 years of age and over, whether they are related or not. *Median family income* includes the income of two or more people in the same household related by birth, marriage, or adoption. *Per capita income* includes the average income earned by all residents (regardless of household size or relation), divided by the total population.

Dublin's median household and family incomes are higher than those of the county, but slightly lower than the state. Many factors can influence these figures, such as household size and age distribution.

Median Income: Household, Family, and Per Capita

	Median Household Income	Median Family Income	Per Capita Income
Dublin	\$64,688	\$75,417	\$31,985
Cheshire County	57,782	71,354	32,298
New Hampshire	66,779	81,726	37,499

Source: United States Census Bureau American Community Survey (ACS) 5-Year Estimates 2011-2015

The poverty status in Dublin is consistently below the county and state poverty rate. The table shows that Dublin and Cheshire County began an upward trend in 2013 while the poverty rate in New Hampshire has held steady during the last several years. Dublin has consistently remained well below the county and state level.

Poverty Status

	2010	2011	2012	2013	2014	2015
Dublin	1.2%	2.9%	2.9%	1.9%	2.5%	3.9%
Cheshire County	6.0%	5.3%	5.3%	5.8%	6.1%	6.1%
New Hampshire	5.2%	5.2%	5.9%	5.6%	5.7%	5.6%

Source: US Census ACS Table DP03-each year starting with 2006-2010 and ending with 2011-2015

HOUSING ANALYSIS

This portion of the Master Plan discusses the present status and future needs of housing in Dublin. By reviewing the housing data, a projected housing need can be estimated. This will, however, change if population projections do not meet the estimates compiled by the New Hampshire Office of Energy and Planning, or if other variables such as past population trends change significantly. Since there is no single method that can be foolproof, it will provide a basis to begin with for potential regulatory and zoning changes.

This section includes statistics on Dublin's current housing supply and type, people per room, affordability, and various other data related to housing in order to describe the status of the housing supply.

These are only a few of the assets which are presently lending themselves to the development of Dublin's character. In order to continue to provide services demanded by the townspeople, while allowing for continued responsible fiscal management, an effort is needed to maintain and perhaps enhance these assets. Consideration should be given to determining what Dublin has currently and what it will need.

Existing Housing

A housing unit, as defined by the US Census, is a house, an apartment, a group of rooms or a single room intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants live separately from any other individuals in the building and which have a direct access from the outside of the building or through a common hall.

Dublin Housing Units 1970 to 2010 (Percent Change)

	1970	1980	% Change 1970-1980	1990	% Change 1980-1990	2000	% Change 1990-2000	2010	% Change 2000-2010	% Change 1970-2010
# of Units	282	491	74.1%	651	32.6%	686	5.4%	785	14.4%	178%

Source: U.S. Census Bureau

Beginning with the basic number of total housing units, the table above presents these numbers for the years 1970-2010. In 2010, there were 785 housing units, which is an increase of 14.4% in housing units since the previous decade. The largest increase in housing units occurred between 1970 and 1980 yielding an increase of 209 units or approximately 21 units built each year. The rate of increase in housing units has exceeded the rate of increase in population in each decade. This is consistent with state and national trends and has resulted in fewer people per household in each succeeding decade.

The table below shows a comparison of the total number of housing units for the subregion between 1970 and 2010. By looking at the subregion, we can get a better understanding of the housing activity in the surrounding area. This information is useful when looking at the housing needs for local employees and commuting as well as other local needs. In examining the most recent activity, Dublin experienced an increase of approximately 100 additional units, or an average of 10 units per year between 2000 and 2010. In comparison to the neighboring towns; two had few or no new units constructed and two had an average of twenty or more units constructed per year during that decade.

Subregional Total Housing Units 1970 to 2010

Housing Units	Year					%Change 2000-2010
	1970	1980	1990	2000	2010	
Dublin	282	491	651	686	785	14.4%
Harrisville	281	325	588	698	695	-0.4%
Jaffrey	1,223	1,770	2,426	2,352	2,547	8.3%
Marlborough	568	703	856	896	946	5.6%
Peterborough	1,374	1,952	2,242	2,509	2,956	17.8%
Cheshire County	17,241	23,274	30,350	31,876	34,773	9.1%
New Hampshire	235,529	347,758	503,541	547,024	614,754	12.4%

Source: U. S. Census Bureau

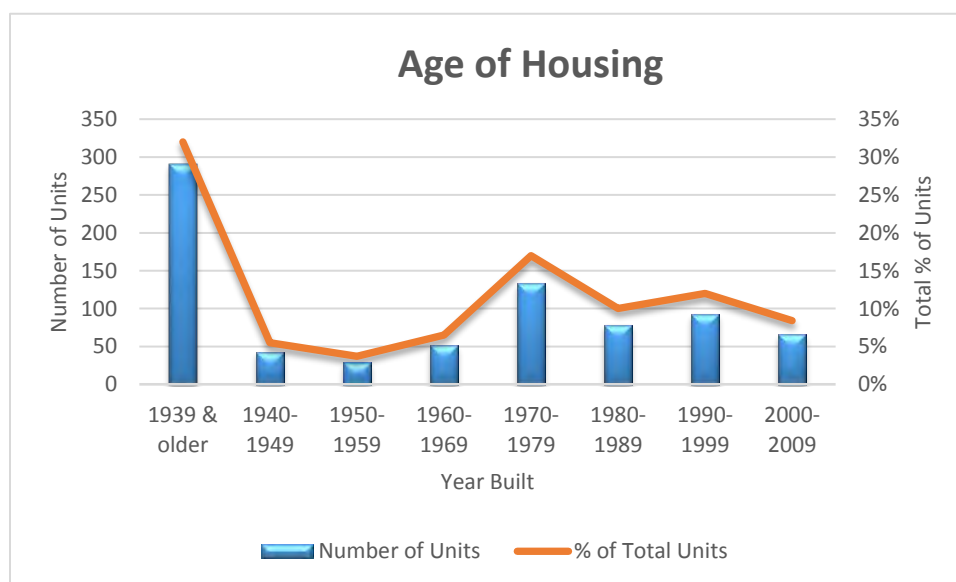
Age of Housing Stock

The age of the housing stock is useful in gauging its probable condition. There is a presumption that homes built prior to 1940 are less energy efficient and are more likely to have outdated heating, plumbing and electric systems. Nearly 1 in 3 homes in the Southwest region of New Hampshire are over 75 years old. While many of these homes add historical significance, older homes are generally more expensive to own, especially with respect to maintenance and wintertime heating costs, thereby adding to the monthly living expenses. In Dublin, approximately 32% of the homes fall into this age group.

Age of Housing Stock

	1939 & older	1940-1949	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999	2000-2009
Number of Units	291	43	29	51	133	78	92	66
% of Total Units	32%	5.5%	3.7%	6.5%	17%	10%	12%	8.4%

Source: U.S. Census Bureau, ACS 2011-2015 Estimates



Source: U.S. Census Bureau, ACS 2011-2015 Estimates

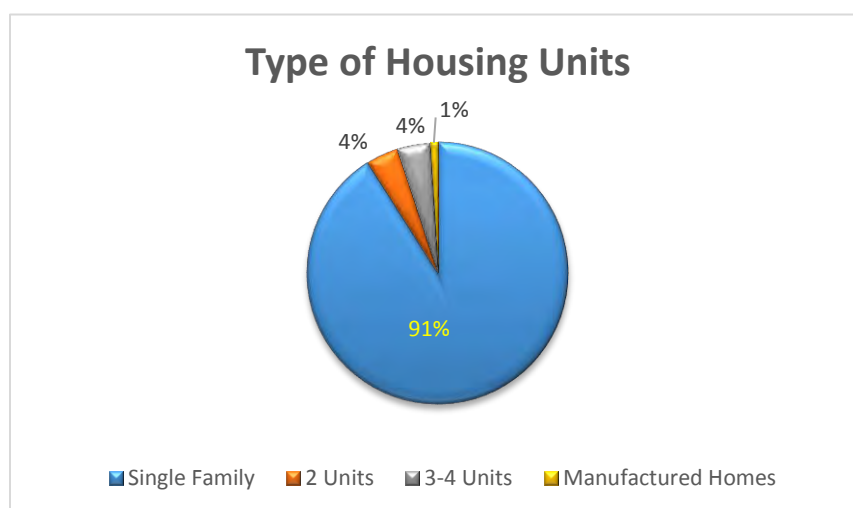
Housing Supply

The primary use of these data is to identify needs based on the distribution of housing types in the housing supply. A mix of housing choices is important to help ensure that there are housing opportunities for all ages and at all income levels. Data for Dublin can be found in the next table.

Dublin: Housing Supply by Type 2015

	Single Family	2 Units	3-4 Units	5-9 Units	10-19 Units	20 or More Units	Manufactured Homes
Number of Units	711*	28	34	0	0	0	10
% of Total Housing Units	91%	4%	4%	0%	0%	0%	1%

Source: U. S. Census Bureau 2011-2015 (ACS) 5-Year Estimates *(includes listing of 1-unit attached and 1-unit detached)

**Housing Tenure**

The housing tenure table gives information on recent trends of occupancy (owner occupied or renter occupied) as well as the average number of people per unit in each category. The table shows that there have not been any significant changes in distribution of owner or renter occupancy and only slight changes in the number of people per unit. Most notable is the increase in number of people per unit in owner occupied units and the corresponding decrease in the number of people per unit in the renter occupied units in 2010. This is similar to the state and national data. It should be noted that the figures for 2015 are estimates based on the US American Community Survey and may not be as accurate as the other years shown.

Housing Tenure

	Owner Occupied			Renter Occupied		
	2000	2010	2015 *	2000	2010	2015*
Total Occupied Units	454	446	493	106	115	123
Percent of Occupied Units	81.1%	79%	80%	18.9%	21%	20%
Average # of People per Unit	2.5	2.75	2.38	2.55	2.19	2.49

Source: U. S. Census Bureau 2011-2015 (ACS) 5-Year Estimates*; Other data from US Census 2000 and 2010

Occupants

The average number of occupants per room is an indicator of overcrowding. This is a factor in determining if there is an adequate supply of housing in Dublin. Based on the census criteria for overcrowding, households ideally should have no more than one person per room. The next table makes a comparison of occupants per room for Dublin, Cheshire County, and the State of New Hampshire. In all three locations, the number of occupants per room meets the criteria, according to the US Census, for not being overcrowded.

Number of Occupants Per Room

	Dublin Estimate	Cheshire County Estimate	New Hampshire Estimate
1.00 or less occupants per room	99.5%	98.7%	98.7%
1.01 to 1.50 occupants per room	0.5%	0.9%	0.9%
1.51 or more occupants per room	0%	0.5%	0.4%

Source: U.S. Census Bureau, ACS 2011-2015 Estimates

Affordability

The information in this section is intended to determine how affordable and available housing is for Dublin residents. This table presents the relative cost of housing for home ownership and for rentals in Dublin, based on the 2015 estimates.

Dublin: Cost of Housing 2015* (Ownership)	
Dublin	2015*
Median Cost for Homeowners	\$1,565
Median Gross Rent	\$1,031

Source: U.S. Census Bureau, ACS 2011-2015 Estimates.

*These figures are estimates.

Here is the percentage of rental units in each gross rent category. The size of the units or number of bedrooms per unit in each category, however, is not given in the data. A rental analysis would need to be done to get a more detailed representation of the rental market. There are approximately 99 occupied rental units in Dublin.

Dublin: Cost of Housing 2015* (Rental)	
Gross Rent (monthly)	% of Total Rental Units
Total # of Occupied Rental Units	100%
Less than \$500	10.9%
\$500 - \$999	34.8%
\$1000 - \$1499	41.4%
\$1500 and more	10.1%
Median Monthly Rent	\$1,031

Source: U. S. Census Bureau ACS 2011-2015 Est.

This table refines the data in the previous table by illustrating not just what people pay for housing, but what percentage those costs are of their income. It has been recognized that people in lower income brackets generally pay more proportionally for housing than do people in higher income brackets. According to the figures found in the table, approximately 35% of owner occupied households (with a mortgage) paid 30% or more of their monthly incomes on housing in 2015. A greater percentage of renters in Dublin (approximately 55%) paid 30% or more of their monthly incomes in 2015. Only 22% of homeowners that did not have a mortgage paid more than 30% of their monthly income toward housing expenses. It should be noted that utilities are factored into the monthly household owner and renter costs. Using the same source of data, it is estimated that 72% of the occupied households use oil as the primary heat source. The full breakdown of primary heat sources includes: gas 10%, electric 1%, and other 17%.

**Selected Monthly Owner Costs as a Percentage of Household Income (SMOCAP)
and Gross Rent as a Percentage of Household Income (GRAP) 2015**

Dublin Housing Costs	With a Mortgage		Without a Mortgage		Gross Rent as a Percentage of Household Income	
	# of Units	% of Units	# of Units	% of Units	# of Units	% of Units
Less than 20.0 %	90	27.7%	93	55.4%	30	30.3%
20.0 to 24.9 %	73	22.5%	21	12.5%	9	9.1%
25.0 to 29.9 %	50	15.4%	16	9.5%	6	6.1%
30.0 to 34.9 %	20	6.2%	3	1.8%	3	3.0%
35.0 % or more	92	28.3%	35	20.8%	51	51.5%
Total Housing Units	325	100%	168	100%	99	100%
Not Computed	0	0%	0	0%	24	0%

Source: U. S. Census Bureau 2011-2015 American Community Survey (ACS) 5-Year Estimates

Changes in the economy, housing market and lending policies continue to have a dramatic effect on the statistics of home ownership and housing costs, and will make it difficult to make accurate projections based on past figures and trends. In addition, the difference in the data source and methodology may result in inaccuracies. Therefore, these figures and trends should be used for generalized planning purposes only.

Home Values

According to the 2011-2015 ACS 5-Year Estimates, the median home value in Dublin is \$282,900 and the median household income is \$64,688. This table indicates that 38.7% of the homes are in the \$200,000 to \$299,999 price range.

Home Values in Dublin, 2015

Home Values	# of Units	% of Occupied Units
Owner-occupied units	493	100%
Less than \$50,000	16	3.2%
\$50,000 to \$99,999	6	1.2%
\$100,000 to \$149,999	44	8.9%
\$150,000 to \$199,999	23	4.7%
\$200,000 to \$299,999	191	38.7%
\$300,000 to \$499,999	133	27%
\$500,000 to \$999,999	56	11.4%
\$1,000,000 or more	24	4.9%
Median	\$282,900	

Source: U. S. Census Bureau 2011-2015(ACS) 5-Year Estimates

Based on the principle that no more than 30% of a household's income should be spent on housing to be considered affordable, the possibilities for home ownership in Dublin are examined below.

Under the three scenarios examined in this table, median income households could afford a home valued up to \$203,851. Those, however, earning 80% or 50% of the median household income could afford a home valued at \$164,502 and \$105,342 respectively. Comparing those levels to the *Home Values* table above indicate that the housing selection in these ranges are limited.

Home Ownership Affordability in Dublin, 2015*

	2015* Median Household Income	80% of 2015* Median Household Income	50% of 2015* Median Household Income
Annual Income	\$64,688	\$51,750	\$32,344
30% of income	\$19,406	\$15,525	\$9,703
Purchase price affordable at 4.5% for 30 years**	\$203,851	\$164,502	\$105,342

Source: New Hampshire Housing Finance Authority Mortgage Qualifier Calculator

* U. S. Census Bureau 2011-2015 (ACS) 5-Year Estimates Table DP03

**includes 2016 property tax rate of 2.7%, home insurance rate of 0.5%, \$10,000 cash on-hand, and 1% loan origination fee

Future Housing Need

In order to estimate what the potential need for housing will be in the future, the available data on housing characteristics and population trends must be reviewed along with estimates for growth in population, and therefore housing need. The NH Office of Energy and Planning (NH OEP) population projections can be used to estimate future housing need, based on a person per unit estimate. The projections for Dublin and surrounding towns are presented below in five-year intervals up to the year 2040, beginning with the US Census count from the year 2010. The table shows the most recent projections for the subregional towns, Cheshire County, and New Hampshire. If the population projections are accurate, Dublin's population should hold steady during the next twenty years. The projections for the subregion, however, show some relatively significant increases (Peterborough with an 11.5% increase) and decreases (Harrisville with an 8.5% decrease) during the same time period.

Population Projections 2010-2040

	2010	2015	2020	2025	2030	2035	2040	% Change 2010- 2040
Dublin	1,597	1,568	1,571	1,575	1,582	1,586	1,589	-0.5%
Harrisville	961	952	909	866	870	872	874	-8.5%
Jaffrey	5,457	5,393	5,308	5,225	5,246	5,262	5,272	-3.4%
Marlborough	2,063	2,110	2,130	2,151	2,160	2,166	2,170	5.2%
Peterborough	6,284	6,445	6,604	6,795	6,926	7,008	7,008	11.5%
Cheshire County	77,117	77,345	77,653	78,002	78,315	78,543	78,695	2.0%
New Hampshire	1,316,470	1,330,501	1,349,908	1,374,702	1,402,878	1,422,530	1,432,730	8.8%

Source: NH Office of Energy and Planning (OEP) 2016

Dublin's future housing need is estimated based on the projected population by dividing population by housing units to reach a person per unit figure. A person per unit figure can be calculated for the past decades: 2.7 in 1980, 2.3 in 1990, 2.2 in 2000, and 2.0 in 2010. In order to calculate future housing need, a reasonable person per unit figure for the future must be assumed; in this case, since the figure fluctuated up and then down, a simple average will be used, which is 2.3. The following calculations will use two possible scenarios: one using the known past population increase between 1980 and 2010 and the other using the OEP projected population increase over the next twenty five years.

Projected Housing Needs

Methodology Used	2010 Housing Units	Average Population Change Between 1980-2010 (Census)	2040 Projected Population	Persons Per Unit (average of 1990-2010)	Total Housing Units Needed by 2040	Additional Housing Units Needed by 2040
Past Trend Method	785	9.8	1,891	2.3	822	37
Projection Based Method	785	N/A	1,589	2.3	691	0

Thus, if Dublin were to experience the same level of population growth between now and the year 2040 (using the Past Trend Method) as it did between 1980 and 2010, the total number of housing units needed by 2040, at the current average household size of 2.3 persons per household, is 822 units. To meet this, there would need to be an additional 37 units built, or less than 1 unit per year. If, on the other hand, the Projection-Based Method was used, the number of housing units needed to meet the 2040 population would be 691. Using this method, the current number of housing units adequately meets the number of units needed to meet the future demands.

It is critical for a town to have a housing stock that meets the needs of all residents to maintain a healthy diversity. Having the necessary regulations that enable a range of housing options will help to ensure that there are no regulatory barriers for residential development. Nevertheless, there are other housing issues to be considered that are not addressed by the current zoning provisions; in particular, the availability of housing for the elderly. Based on updated national census information, the country can expect to see a continued increase in the number of elderly residents (those aged 65 and over). In Dublin, the age categories with the most residents in 2010 are the five consecutive groups between the ages of 40 – 64 accounting for 40% of the total population. In 20 years, this group will be between the ages of 60-84 years old.

However, as important as anticipating the housing needs of the senior population, is the potential for the smaller group of middle-age residents of Dublin needing to provide care for aging parents in the form of on-site housing accommodations, through options such as accessory dwelling units.



ECONOMIC DEVELOPMENT ANALYSIS

ECONOMIC DEVELOPMENT ANALYSIS

INTRODUCTION

This chapter is intended to evaluate the local economy in Dublin through an analysis of data related to the labor force and industry, as well as local revenue, commuting and other information that may assist in understanding the current economic footprint. By examining the current information, it is easier to plan for changes and determine the direction that is appropriate for Dublin's economic future. The challenge is to balance demographic pressures with demands for economic and community development while preserving the overall character of the Town that adds to the quality of life for residents.

Data for this chapter was collected using several sources including: the New Hampshire Department of Resources and Economic Development, NH Employment Security, New Hampshire Department of Revenue Administration, US Census American Community Survey 5-year estimates, and US Bureau of Labor Statistics Local Area Employment Statistics (LAUS). Since this data is dependent on the labor market, changes may occur frequently. Therefore, caution should be used when making comparisons in future years, especially if using a different data source.

BUSINESS PROFILE - DEMOGRAPHICS

Situated in the eastern portion of Cheshire County, Dublin has a central location to five New Hampshire labor market areas including Keene, Concord, Manchester, Nashua, and Peterborough. Dublin is one of nine communities in the Southwest Region of New Hampshire that are part of the NH 101 Corridor, which is an important east-west highway connecting the region to Manchester, Nashua, and I-93. This corridor provides opportunities for economic development with the daily commuting traffic through town.

Dublin Labor Force

According to figures from the Census Bureau, the total employed residents of Dublin has increased by 3.4% between 2010 and 2015. In 2016, the New Hampshire Department of Resources and Economic Development reported that there were 511 employed Dublin residents. This however, does not include some of the home based business that are not registered with the state. The top jobs by occupation type are shown in the table below. Approximately 64% of workers are employed in white collar jobs and 35% in blue collar jobs (with 1% unknown).

Top Jobs by Dublin Workers- 2016	
Education, Training, Library	14.70%
Office, Administrative Support	13.30%
Food Preparation, Serving	10.60%
Executive, Managers, Administrators	9.80%
Sales	9.40%
Source: NHDRED (nheconomy.com)	

Employment- Industry Trends

The largest industry of employment for Dublin residents continues to be the category of *Arts, Entertainment, Recreation, Accommodation, and Food Services* accounting for about 29% of all employment by Dublin's residents in 2015. *Manufacturing* and *Retail Trade* maintained their second and third status in both years. Additional industry sector figures are shown below.

Dublin Employed Civilian Population by Industry Type					
Industry Type	2010*	% 2010	2015**	% 2015	% Change
Civilian employed population 16 years and over	814	814	842	842	3.4%
Agriculture; Forestry; Fishing and Hunting; and Mining	0	0.0%	6	0.7%	
Construction	87	10.7%	60	7.1%	-45%
Manufacturing	144	17.7%	147	17.5%	2%
Wholesale Trade	25	3.1%	8	1.0%	-212.5%
Retail Trade	92	11.3%	97	11.5%	5.4%
Transportation; Warehousing; and Utilities	15	1.8%	22	2.6%	46.7%
Information Tech.; Finance/insurance; Real Estate and Rental and Leasing	15	1.8%	19	2.3%	26.7%
Professional; Scientific; Management; Administrative; and Waste Mgmt.	33	4.1%	25	3.0%	-32%
Educational Services, Health Care and Social Assistance	63	7.7%	71	8.4%	12.7%
Arts; Entertainment, Recreation; Accommodation; and Food Services	218	26.8%	242	28.7%	11%
Other services, except Public Administration	49	6.0%	76	9.0%	55.1%
Public Administration	37	4.5%	50	5.9%	35.1%
<i>Source: US Census Bureau ACS 5-Year Estimates 2006-2010* and 2011-2015**, Civilian employed population 16 years and over</i>					

Dublin Businesses

In 2016, the New Hampshire Department of Resources and Economic Development listed 68 businesses in Dublin. The current largest employers are the Dublin School and Yankee Publishing. The next table highlights the top employers by the number of employees. These major employers offer a range of employment opportunities such as educational, manufacturing, retail sales, governmental, and healthcare services. Included in this list are seasonal and volunteer employers since they contribute to the commuting patterns within the Town.

Largest Employers by Number of Workers- 2016

Employer	Industry Type	Employer Size
Dublin School	Education	50-99
Yankee Publishing Inc.	Publishing	50-99
Camp Wanocksett (seasonal)	Recreation/Education	50-99
Dublin Christian Academy	Education	20-49
Town Of Dublin	Government	20-49
Mountain Shadows School	Education	20-49
Dublin General Store	Retail	10-19
New England Academy-Therapeytc	Education	10-19
Del Rossi's Trattoria	Restaurant	10-19
Phoenix House	Rehabilitation	10-19
Dublin Consolidated School	Education	10-19
Life Safety Fire Protection (Kwench Systems)	Industry	10-19
Fairwood Bible Institute	Religion	10-19

Source: New Hampshire Employment Security 2016

This table shows the number of employees in Dublin businesses according to the type of industry as reported in 2016. This gives a general representation of the types of employment opportunities in Dublin.

Number of Employees in Dublin Businesses by Industry Type in 2016

Industry Type	Number of Employees
Education	125
Accommodation & Food Services	110
Other Services	100
Public Administration	78
Source: NHDRED (nheconomy.com)	

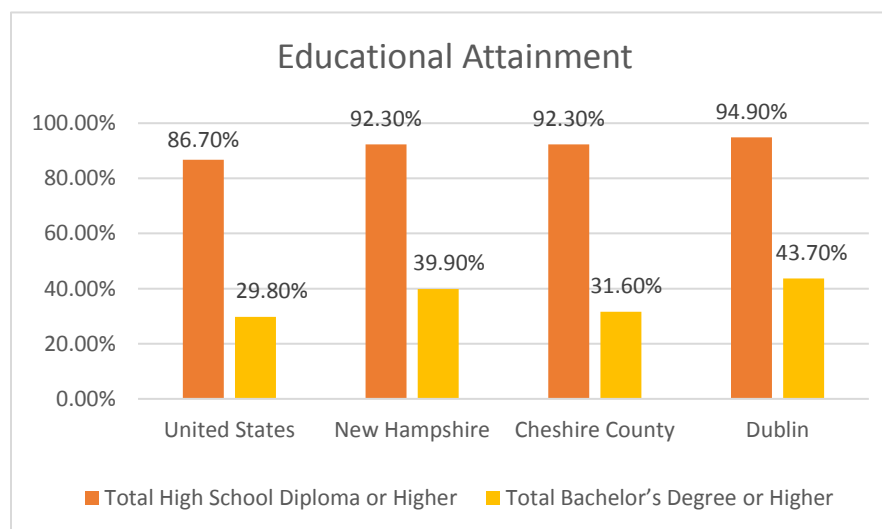
Educational Attainment

A well-educated workforce is an important resource for both existing and new businesses. The next table indicates that nearly 95% of Dublin residents aged 25 and over have earned a high school diploma or higher, and nearly 44% have received a bachelor's degree or higher. This is well above the figures for the United States and Cheshire County, and slightly higher than New Hampshire. The accompanying graph provides a visual representation of this table.

Highest Level of Educational Attainment

	Less than 9th grade	9th to 12th grade, no diploma	High school graduate	Some college, no degree	Associate's degree	Bachelor's degree	Graduate or professional degree	Total High School Diploma or Higher	Total Bachelor's Degree or Higher
United States	5.7%	7.6%	27.8%	21.2%	8.1%	18.5%	11.2%	86.7%	29.8%
New Hampshire	2.5%	5.2%	28.8%	19%	9.6%	21.8%	13%	92.3%	39.9%
Cheshire County	2.3%	5.4%	33.8%	19%	7.9%	19.4%	12.2%	92.3%	31.6%
Dublin	<1%	4.1%	34.6%	11.3%	5.3%	24.4%	19.3%	94.9%	43.7%

Source: United States Census Bureau American Community Survey 5-Year Estimates 2011-2015



Source: US Census Bureau American Community Survey 5-Year Estimates 2011-2015

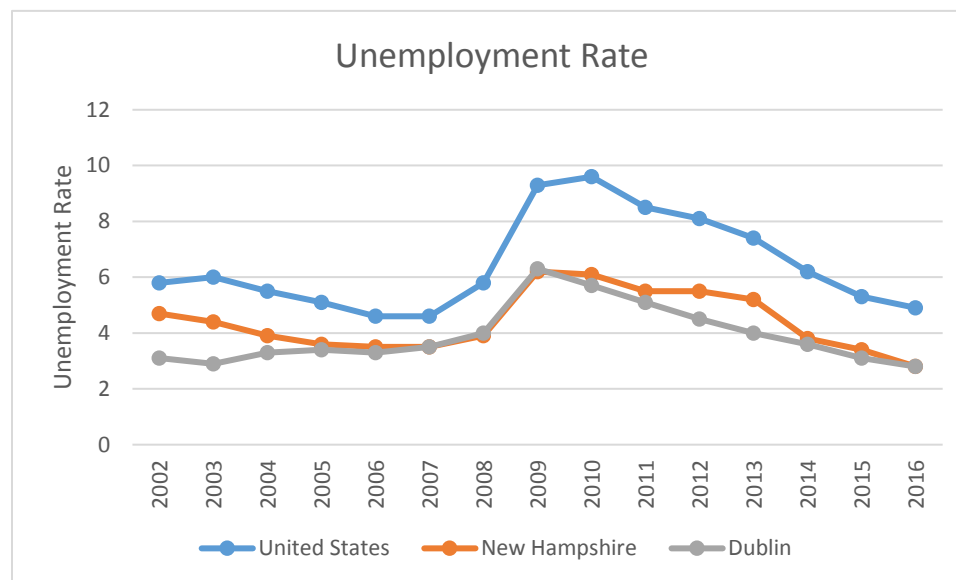
Unemployment Rate

The unemployment rate refers to the percentage of the labor force (persons 16 years and older) that are jobless and are looking for work. The following graph shows the average annual unemployment rate between 2002 and 2016 for Dublin, New Hampshire and the United States. The unemployment rate in Dublin over the last fifteen years has followed the state trend with a peak in 2009. Both the Dublin and New Hampshire unemployment rates are consistently below the national rate as shown in the table and graph on the next page.

Average Annual Unemployment Rate

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
US	5.8	6	5.5	5.1	4.6	4.6	5.8	9.3	9.6	8.5	8.1	7.4	6.2	5.3	4.9
NH	4.7	4.4	3.9	3.6	3.5	3.5	3.9	6.2	6.1	5.5	5.5	5.2	3.8	3.4	2.8
Dublin	3.1	2.9	3.3	3.4	3.3	3.5	4	6.3	5.7	5.1	4.5	4	3.6	3.1	2.8

Source: NH Employment Security and US Bureau of Labor Statistics Local Area Employment Statistics (LAUS)



Source: United States Census Bureau American Community Survey 5-Year Estimates 2011-2015

LAND VALUATION AND TAXATION

Land Valuation

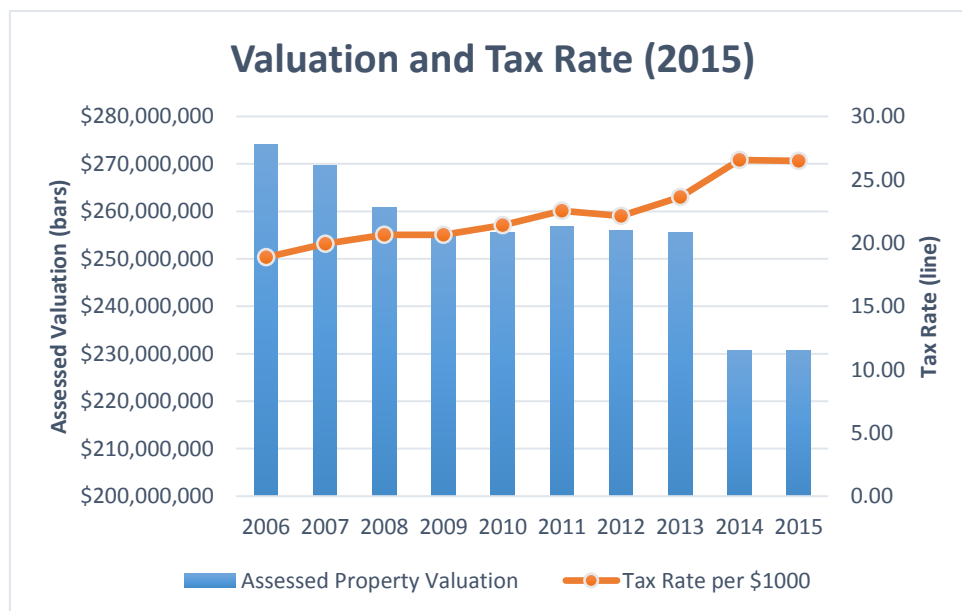
Municipal property taxes are levied as a percentage of the assessed value of buildings and land in the community. Similar to the national and state trends, tax rates fluctuate with the land valuations.

Taxes are still needed to cover the cost for the Town services, even in years of assessment declines. In 2015, the assessed valuation in Dublin was nearly \$231 million and the tax rate was \$26.50.

Dublin Valuation and Tax Rate 2006-2015

	Assessed Property Valuation	Tax Rate per \$1000
2006	\$274,190,366	18.87
2007	\$269,730,695	19.95
2008	\$260,760,644	20.65
2009	\$254,689,026	20.65
2010	\$255,615,271	21.40
2011	\$256,735,375	22.54
2012	\$255,981,783	22.15
2013	\$255,544,828	23.64
2014	\$230,734,338	26.56
2015	\$230,701,607	26.50

Source: NH Department of Revenue Administration (NHnetwork)



Source: NH Department of Revenue Administration (NHnetwork)

This breakdown of property valuation according to land use is shown below. The land valuation is listed as residential, commercial/industrial, utilities, and current use land and shown as a percentage of the towns' gross valuation. The distribution of each category is a common theme throughout the state, with a significant portion in the residential category.

Subregional Property Valuation Statistics (2015)

	Gross Valuation	Residential (% of Gross)	Commercial & Industrial (% of Gross)	All Utilities (% of Gross)	Current Use (% of Gross)
Dublin	\$231,001,607	87%	10%	2%	>1%
Harrisville	\$188,719,628	96%	3%	1%	>1%
Jaffrey	\$405,440,851	88%	10%	2%	>1%
Marlborough	\$185,759,600	85%	13%	1%	>1%
Peterborough	\$630,557,851	77%	21%	2%	>1%

Source: NH Department of Revenue Administration. Taxable valuations only.

Taxes

In order to levy a fair and proportional statewide property tax and county tax, the imbalance created by varying municipal assessments must be resolved. This process, called "equalization", involves the adjustment of a town's local assessed value, either upward or downward, in order to approximate the full value of the town's property. The equalized tax rates can then be compared from town to town. Below is a subregional comparison of the tax rates with neighboring towns. Dublin ranks 135 out of 227 towns in a scale of lowest to highest taxes in the state.

2015 Tax Rate Comparison

	Dublin	Harrisville	Jaffrey	Marlborough	Peterborough
Equalized Valuation	\$253,285,654	\$194,096,790	\$419,375,018	\$163,020,784	\$675,565,610
Total Property Taxes Assessed	\$6,101,355	\$3,325,997	\$13,392,269	\$5,230,630	\$18,561,407
Municipal Tax Rate	\$6.68	\$4.59	\$11.51	\$7.24	\$9.32
Local Education Tax Rate (equalized)	\$11.98	\$6.96	\$15.07	\$19.00	\$14.65
State Education Tax Rate (equalized)	\$2.36	\$2.31	\$2.35	\$2.42	\$2.27
County Tax Rate (equalized)	\$3.07	\$3.27	\$3.43	\$3.43	\$1.24
Total Tax Rate	\$26.50	\$17.66	\$33.22	\$28.31	\$29.71
Full Value Tax Rate	\$24.09	\$17.14	\$31.93	\$32.09	\$27.48
Equalization Ratio	90.9	97.0	96.6	114.6	95.6
State Ranking	135	53	219	220	187

Source: NH Department of Revenue Administration (1 = Low, 227 = High)

COMMUTING PATTERNS

This section takes a look at the commuting patterns of those employees coming into Dublin for work, as well as those employees living in Dublin but working in another town. Combining this information with traffic counts and other data found in the Transportation Chapter, decisions can be made about infrastructure needs and potential areas for future economic development.

Top 10 Work Destinations for Dublin Residents 2014

	Count	Share
Keene	220	35%
Peterborough	59	9%
Dublin	41	7%
Jaffrey	21	3%
Swanzey	21	3%
Harrisville	20	3%
Brattleboro, VT	16	3%
Concord	15	2%
Rindge	10	2%
Greenfield	10	2%
Other locations	199	32%

This table shows the most common work destinations for all Dublin residents that are employed. Approximately 35% (or 220 workers) of employed Dublin residents work in Keene. The next most common work destination is Peterborough with 9% (or 59 workers), and another 7% (or 41 workers) of Dublin's employed residents also work in town. The near-by towns of Jaffrey, Swanzey, and Harrisville account for 9% (or 62 workers) of Dublin commuters.

Source: US Census Bureau, Center for Economic Studies-On the Map

This table differs from the previous table by showing where the people who work in Dublin are commuting from to get to their jobs. This can help to determine where the commuting patterns are, and what the potential infrastructure needs may be as the businesses grow. There are approximately 338 people who work in Dublin. Of these workers, 41 (or 12%) also live in Town. The most common locations that workers are coming from include Stoddard (10%), Peterborough (7%), and Keene (7%).

Top 10 Places of Residence for People who Work in Dublin Businesses (2014)

	Count	Share
Dublin	41	12%
Stoddard	33	10%
Peterborough	24	7%
Keene	23	7%
Harrisville	16	5%
Sullivan	16	5%
Jaffrey	14	4%
Nelson	13	4%
Hancock	10	3%
Swanzey	9	3%
Other Locations	139	41%

Source: US Census Bureau, Center for Economic Studies-On the Map

UTILITIES AND MUNICIPAL SERVICES

Electric

In terms of industrial and manufacturing development, the availability of three-phase power is desirable. Three-phase power is made up of three single phases of electricity synchronized and offset by 120 degrees. The benefit of three phase power is that, at any given instant, one of the three phases is nearing a peak to provide even power output for high power motors and industrial applications. There are currently no plans to extend the three phase power, however, this may change as development opportunities arise.

Communications and Entertainment

Internet and satellite television is available to residences and businesses throughout Dublin provided by private companies. Providers and service options vary depending on location.

Transportation Infrastructure

Dublin is part of the regional highway network of the NH 101 corridor. This corridor, as defined by Southwest Region Planning Commission's (SWRPC) Long Range Transportation Plan, is an important east-west highway in the Southwest Region, connecting the region to Manchester, Nashua, and I-93. Regional corridors, such as this, provide the backbone of the transportation network that connects communities to employment, goods and services, entertainment, and travel destinations within and beyond the region and thereby bring economic opportunities.

Broadband

The current internet service is limited in much of the town. The town is seeking a consultant to explore options for bringing broadband into town.

MUNICIPAL POLICY ANALYSIS

To remain in a competitive economic market, a review of local policies and regulations should be done on a regular basis. This will not only bring an awareness to gaps in the types of uses that are acceptable to the Town, but it will also help to identify outdated requirements that may need to be amended as new strategies and technological methods are developed. An important element of economic development planning is ensuring that current municipal policies and regulations can support the policies, goals and actions recommended in this plan. The analysis also examines the policies and regulations in the surrounding towns to ensure that Dublin is prepared to compete regionally for new businesses.

The table on the next page looks at the minimum lot requirements for Dublin and the surrounding towns. The Districts listed are those which allow some type of business uses. This gives a snapshot

comparison and can aid in decisions regarding changes in minimum lot size and setback requirements to remain competitive.

Minimum Lot Requirements for Dublin and Surrounding Towns

District	Minimum Lot Size	Minimum Lot Frontage	Minimum Front Setback	Minimum Side /Rear Setbacks
Dublin				
Village District	1 acre	150'	35'	35'
Neighborhood Commercial District	2 acres	150'	35'	35'
Rural/ District	4 acres	250'	35'	35'
Mountain District	8 acres	250'	35'	35'
Harrisville				
Residential/Agricultural District	2 acres	250'	50'	40'
Commercial District	35,000 sq.ft.	200'	35'	35'
Industrial District	40,000 sq.ft.	200'	35'	35'
Village Residential District	35,000 sq. ft.	150'	25'	15'
Jaffrey				
Rural District	1.5 or 3 ac	150 or 200	60'	40'
General Business District	1 acre	125'	30'	30'
Industrial District	2.5 acre	200'	100'	30' & 50'
Turnpike Road Industrial District	2.5 acre	200'	100'	30' & 50'
Marlborough				
Village Residential (R1)	10,000 sq. ft.	100'	25'	20'/15'
Residential District (R2)	1.5 acres	150'	40'	20'/40'
Residential District (R 3, 4)	5 acres	200'/300'	40'	25'/40'
Village Commercial District (C1)	10,000 sq. ft.	100'	15'	15'
Rte. 124 Commercial District (C2)	2 acres	200'	50'	35'
Rte. 101 Commercial District (C3)	1 acre	150'	20'	20'
Rte. 12 Commercial District (C4)	2 acres	200'	40'	20'
Peterborough				
Downtown Commercial District	none	none	5'	15'
Commercial District	none	50'	15' or 30'	15'
Business/Industrial District	none	50'	25' or 50'	25'
Commercial Park District	20,000 sq.ft.	100'	25'	20'
Office District	1 acre	100'	50'	30'
Rural District	3 acres	200'	50'	30'

Source: Town Zoning Ordinances

DUBLIN ZONING

Permitted Uses that Support Business Activity

Dublin has four districts that support a range of economic opportunities and can serve as places of employment for residents and commuters as development occurs.

Village District: The Village District includes a variety of mixed-uses and is generally a higher density.

Neighborhood Commercial District: The Neighborhood Commercial District allows a variety of commercial uses near the intersection of NH 101 and NH 137.

Rural District: The Rural District allows a mix of residential uses, agriculture, forestry, and limited businesses by Special Exception as appropriate.

Mountain District: The Mountain District was designed to protect the scenic beauty of Mount Monadnock. It allows a mix of residential, agriculture, forestry, and limited businesses by Special Exception. Minimum lot sizes are double the requirement of the Rural District.

Here is a list of business uses that are allowed within each district. This table is a guide only for the types of businesses. Additional information can be found in the Zoning Ordinance.

Uses Permitted in Dublin's Business, General Residence, and Industrial Districts

Land Use	Village	Neighborhood Commercial	Rural	Mountain
Health Care Facility	Permitted	Not Permitted	Special Exception	Not Permitted
Retail	Permitted	Permitted	Special Exception	Not Permitted
Village Grocery	Permitted	Not Permitted	Not Permitted	Not Permitted
Office	Permitted	Permitted	Permitted	Special Exception
Consumer Service	Permitted	Permitted	Special Exception	Not Permitted
Inn, Hotel	Permitted	Not Permitted	Special Exception	Special Exception
Child Care Center	Permitted	Special Exception	Special Exception	Special Exception
Veterinary, Kennel	Special Exception	Not Permitted	Special Exception	Not Permitted
Religious, Governmental, Educational, Cultural Facility	Permitted	Not Permitted	Special Exception	Special Exception

Land Use	Village	Neighborhood Commercial	Rural	Mountain
Gasoline Service Station, Repair garage	Special Exception	Special Exception	Special Exception	Not Permitted
Restaurants	Permitted	Permitted	Special Exception	Not Permitted
Craft/Artisan Shop	Permitted	Permitted	Permitted	Special Exception
Commercial Recreation Facility	Not Permitted	Permitted	Special Exception	Not Permitted
Boarding House, Bed & Breakfast	Special Exception	Not Permitted	Special Exception	Special Exception
Family Day Care	Special Exception	Not Permitted	Special Exception	Special Exception
Home Business	Special Exception	Not Permitted	Special Exception	Special Exception
Private Club or Lodge	Permitted	Not Permitted	Special Exception	Special Exception
Agriculture Activities	Not Permitted	Not Permitted	Permitted	Permitted
Forestry Activities	Not Permitted	Not Permitted	Permitted	Permitted
Wholesale Business	Not Permitted	Not Permitted	Special Exception*	Not Permitted
Material Storage	Not Permitted	Not Permitted	Special Exception*	Not Permitted
Building Trades (Contractor services)	Not Permitted	Not Permitted	Special Exception	Special Exception
Printing, Packaging, Bottling	Special Exception	Permitted	Special Exception	Not Permitted
Sawmill	Not Permitted	Not Permitted	Special Exception*	Not Permitted
Cabinetry & Woodworking	Not Permitted	Permitted	Permitted	Special Exception
Other Light Industrial Uses	Not Permitted	Not Permitted	Special Exception*	Not Permitted
Home Occupations	Permitted	Permitted	Permitted	Permitted

Source: Dublin Zoning Ordinance * Must have frontage and access onto NH 137 or NH 101 or other limitations. Refer to Dublin Zoning Ordinance for details.



LAND USE CHAPTER

Introduction

This section is intended to guide the Town's thinking about future uses in long-term concepts. A well-conceived land use plan allows for new growth and development while it protects and preserves the integrity of neighborhoods, businesses, transportation routes, and the environment.

This chapter also provides guidance for future land use development by considering a variety of information including existing land uses, development constraints, the community survey, and discussions throughout the Master Plan update process.

The development of a land use plan forms the basis of land use regulations, which are affected through zoning ordinances, subdivision and site plan review regulations. The land use plan considers the goals and objectives found within each chapter; the regulations are the means to put these goals and objectives into place. For instance, if in the process of describing present land use patterns in Dublin, recommendations are made to encourage more commercial activity in a particular area, the zoning ordinance should be amended to permit that kind of activity in that location - if it does not already do so. Or, by the same token, the land use plan might recommend that the zoning ordinance be made more restrictive in particular areas, for the purpose of protecting and preserving certain natural features in town.

The Land Use Plan is that section of the Master Plan required by RSA 674:2 that "takes into account natural conditions and which shows the existing conditions and the proposed location, extent and intensity of future land usage." The natural conditions to be taken into account include such features as wetlands, steep slopes, aquifers, surface water bodies, and any other natural features considered to be particularly significant. Existing conditions refer to the actual land uses found in town at the time, e.g., residential development, commercial uses, etc. Both the man-made conditions and the natural features impact the future development in the town.

As discussed in preceding chapters, the prevalence of steep slopes, water and wetlands, and conservation land in Dublin present significant challenges to future development. The Development Constraints map illustrates how little easily-developed land remains in Dublin. Coupled with this limited supply of land is the concern of Dubliners, as reflected in the results of the Master Plan Survey, for the preservation of our environment, rural character and historic charm. Accordingly, it is especially important for us to consider carefully how and where future growth should occur. As indicated in the Population chapter, the greatest period of growth in Dublin was between 1970 and 1990. This growth was guided by a regulatory scheme that favored a sprawling type of development which spread houses out over long stretches of road in the Rural District, while minimal development occurred in the Village or Mountain, and business use remained located primarily along the two state highways running through town.

In response to the unsustainably rapid growth of this period, and concern over a wave of development heading west down NH Route 101 from the Amherst/Milford area, the Town

imposed greater restrictions on development, including a doubling of lots sizes in the Rural and Mountain zones, which comprise most of the land in town, and put into place a somewhat complex open-space subdivision ordinance that provided for a more environmentally-friendly type of residential development. The new ordinance also imposed a number of requirements on developers, including an exhaustive inventory of the property to be developed with topography, wetlands delineation, aerial photographs, vegetative cover conditions, soil types, geologic formations, viewshed analysis, etc. It also required that 50% of the useable (non-wet, non-steep) land be put in permanent conservation easement, and gave the Planning Board the authority to decide which portion of the property could be developed and which part would be conserved. It also allowed smaller lots (as small as 2/3 acre) both to create a neighborhood effect and to limit the amount of disturbed land and the length of roadways.

But due to economic factors, including the large decrease in home values, there was little incentive for developers to attempt navigation of our new subdivision ordinance. The expected wave of development never arrived, and over the past decade Dublin has seen little development or population growth, and no major subdivisions. And, as referenced in the Population and Housing Chapter, a population projection prepared by the NH Office of Energy and Planning forecasts that Dublin will lose population over the next two decades. This will likely happen even though some new houses are built because we tend to have fewer residents per home each year, and because the population loss due to deaths and people leaving town are not offset by births and other new residents.

Future Land Use Plan

The proposed future land use plan for Dublin has been developed using the following information: results of the Community Survey, the goals and objectives for each chapter, data, maps, and input provided by SWRPC, and input, analysis, and discussion by the Planning Board.

Basically, the plan will attempt to achieve the following:

Maintain the rural character while accommodating the demand for future needs;

- Steer the majority of residential development either to the Village District or to Open Space Subdivisions in the Rural District;
- Protect Dublin's valuable natural resource areas by supporting conservation of important properties and leaving in place current restrictions on development in the Mountain District;
- Protect Dublin's aesthetic and historic values to insure its continued rural beauty and village character;

- Encourage some limited commercial development in the Village and Neighborhood Commercial District that is appropriate to the proposed location;
- Guide growth so that fiscal and environmental impacts are minimized.

The development of vacant land depends in part on the physical capabilities and development constraints, and in part on the regulatory restrictions. The following future land use plan addresses the town's specific zoning districts.

The Village District

Dublin's village has a unique history and mix of land uses and has vital role to play in Dublin's future just as it has in the past. The rural New England village is an important part of the heritage of a town like Dublin and needs to be protected. Villages can assimilate new development and actually benefit from it if land use regulations are designed appropriately.

The Village District is located along Route 101 from East Harrisville Road to Upper Jaffrey Road, and extending 1000 feet north and south of the highway, this district contains the portion of town that was densely settled in the 1800s, and is seen as an appropriate place for some denser housing in the future, which is why the minimum lot size here is only one acre, and back lots lacking frontage can be used for residences, the idea being that regulations here should enable roughly the same type of development as led to the original village being built as it was.

Residential development here would have less of an environmental impact and would make the village a more lively and welcoming place to live, with neighbors, schools, and services nearby. The current open space subdivision regulations could minimize adverse visual impacts, since the Planning Board can require the developers to screen such developments from the road and from other properties should the Board feel it is not in keeping with the visual appeal of the Village.

As was the case in our previous Master Plan, it is hoped that some, if not most, of the growth will take place in the Village District, which has retained its one-acre zoning, and is seen as the appropriate place for denser development that would use up considerably less land than development in the other zones. But given the small size of the district, the main obstacle to the plan to steer development to the Village District has been, and still is the lack of available land. A potential solution here is to increase the size of the district so as to provide more opportunities for development. This could be one by extending the district further to the east and west, and/or by increasing the depth from 1000' feet to 2500' or, possibly to the next roadway (i.e. Windmill Hill Road).

Dublin should encourage a compatible mix of land uses in the Village including residential, commercial, and public. Care must be taken, though to ensure any such development would not adversely affect the visual charm of the Village, and would not create undue noise, traffic, or other issues that would negatively impact abutters.

The Rural District - By far the largest district, the rural zone has seen most of the growth in recent years, and still has more easily developable land than any other. The density of development here was halved in 2008 when the minimum lot size was increased from two to four acres. Given that most of the developable land is located there, it is likely that the majority of development over the next decade will take place in the rural zone. With the exception of existing buildable lots and minor subdivisions that create only one or two lots, future residential development there will be governed under the Open Space Ordinance, which will minimize the environmental impacts, limit sprawl, and create permanently conserved open space in amounts equal to (or greater) than the amount of land that is developed. It can also minimize the visual impacts, as screening can be required between the development and roads or neighbors.

The Town should also consider protecting important natural resources located in the rural district, especially those areas identified in the Open Space Plan. One particular area that should be addressed in the near future is the land over and around the large aquifer near Mud Pond. Activities that present a danger of harming the aquifer should be forbidden, and rules should be adopted forbidding or limiting large-scale water withdrawals for commercial purposes lest the aquifer be depleted or reduced to the point that ground pollutants can be drawn into the aquifer.

The current rules restricting high-impact commercial uses in the Rural District to lots on the two highways should be left in place to prevent adverse impacts to residential areas. To the extent that commercial uses do seek to locate along the highways, appropriate controls should be enforced so as to minimize visual impacts to the town and adverse impacts upon abutters.

The Neighborhood Commercial District – This small district is located at the intersection of NH Routes 101 and 137. The current ordinance currently allows commercial uses, cluster housing, and mixed use (commercial/residential). Given its prime location at the intersection of Dublin's two state highways, the zone should be preserved for the type of commercial development that may not be appropriate in the Village. Given that there are commercial uses on both NH Routes 101 and 137 in all directions from the intersection, the Planning Board should consider whether enlargement of the district would provide additional economic growth in a location that would not adversely affecting the esthetic appeal of the Village.

The Mountain District is comprised of the land nearest Mt. Monadnock. In order to protect the beauty and natural resources there, this district has the most restrictive zoning, allows the least number of nonresidential uses, and requires an eight-acre minimum lot size. There seems to be a strong consensus among Dubliners that area around the mountain should not heavily developed, and, accordingly the current restrictions should remain in place.

Specific Types of Housing

Single Family Homes - This is the type of housing we are most likely to see in the coming years, and the type most favored by townspeople. Under our Open Space Subdivision Ordinance, any major subdivision will be subject to regulations requiring at least half of the parent lot to be placed in permanent conservation, with the remainder to be divided into small building lots, with roughly the same number of homes as would be allowed under the previous subdivision rules. This result in less impact on the natural environment and significantly less roadway constructed. Screening of the development from the road and from neighboring properties reduces the aesthetic impact.

Affordable Housing – In response to evidence that zoning schemes used by a number of towns in New Hampshire made it difficult or impossible to build affordable housing in their towns, the NH Legislature passed a new law requiring every municipality to provide opportunities for affordable housing. While acknowledging that such housing does not rank as a priority for most current residents, Dublin addressed this obligation by enacting a 2010 Workforce Housing Ordinance that allowed a developer of housing units that were considered affordable under the statute to obtain waivers of some of the regulations that would otherwise apply, including density limits.

To date, no such affordable units have been built, likely due to relatively higher costs of land here, and to the lack of municipal water and sewer, which makes building such housing here more expensive than in some other local towns and makes it difficult for developers to keep the price of the units low. We also have fairly liberal provisions regarding accessory living units, which often provides affordable housing. In addition, we still allow manufactured housing in Dublin. Given the cost of land, this is unlikely to be used much, but the fact that it is a possibility helps keep Dublin in compliance with the state statute.

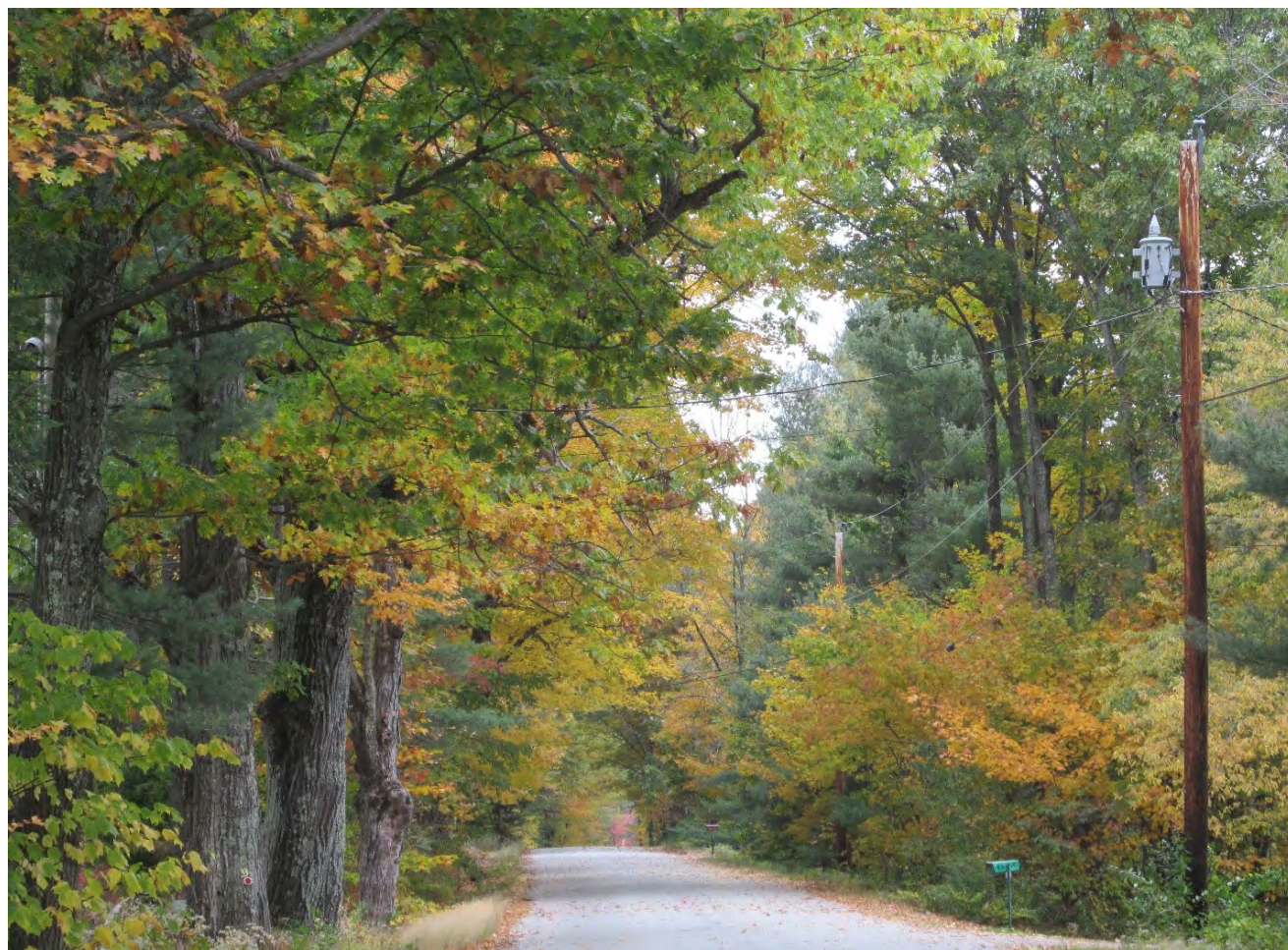
Accessory Housing – Although a recent state law requires all towns to allow accessory apartments, Dublin has been ahead of the curve in allowing this type of housing, as it can provide convenient and affordable housing that uses existing building stock and has a very little impact on the natural environment compared to building new housing. It also allows for more efficient use of large older homes at a time when fewer people have large families: Dublin now has an average of just over two residents per living unit.

Senior Housing – Dublin also has provisions in the Land Use Ordinance for Retirement Housing. As with Affordable Housing, the rules would allow a Retirement Community to be built here, and with the number of units tied to the density allowed if the land were subdivided. But as with workforce housing, the cost of land and the absence of town water and sewer makes this type of development more expensive here than in other towns where such housing has been built.

A significant portion of respondents to the survey identified retirement housing as an important need, as many of our residents have reached retirement age and would prefer to stay in Dublin if such facilities existed here. Unfortunately, the factors militating against retirement housing being built here are beyond the control of the Town.

Specific Initiatives:

- Analyze expansion scenarios for the dimensions of the Village District and Neighborhood Commercial District.
- Consider and implement incentives that may be necessary to increase development potential in the Village District.
- Review the 2006 Conservation Subdivision Design procedures, to see if the process can be simplified without affecting the protections underlying the regulations.
- Review the Retirement Community Overlay District statute to determine if there may be incentives that would make senior housing more likely.
- Analyze potential incentives for creating more affordable housing consistent with Dublin's character.
- Work with public and private entities to protect strategic properties, such as those identified as especially valuable in the Open Space Committee's Natural Resource Inventory.
- Pursue funding for land conservation in Dublin; continue to search for grants and aid, both financial and advisory; cooperate with local organizations, such as the Monadnock Conservancy, to help the Monadnock region achieve conservation goals.
- Implement regulations to protect Dublin's stratified-drift aquifer and work with NH DES to mitigate impacts from large groundwater withdrawals..
- Review and analyze the use of town-owned properties.
- Consider installation of alternative energy systems to power town-owned properties.
- Consider the adoption of Innovative Land Use methods as authorized in RSA 674:21 for efficient development of land and protection of the existing built and natural environment.



TRANSPORTATION

Introduction

Transportation planning has far reaching impacts on the development of the town. The careful planning of road and other transportation-related infrastructure will help determine where development will occur and the type of land uses it will attract. Transportation planning should include and encourage all modes of transportation including pedestrian, bicycle, and mass transit.

Linkages of Transportation to Other Chapters

Transportation planning factors into a number of other parts of Dublin's Master Plan. It is important to recognize the interconnectedness to guide the growth and development of the town.

Land Use: Transportation connects origins to destinations and helps people access goods, services and each other. Roads will, in large part, be the basis for the development patterns of the future. Road design, functionality and placement will determine the types of land uses that will be able to occur on a parcel of land. For example, a collector road will attract a mix of uses including retail, professional offices, and residential, whereas a local road will typically provide safe access to residential development.

Economic Development: The ability to provide access to businesses will enhance the success of the towns' likeliness to attract businesses. Direct access to major roads and parking availability are key elements to attract and retain uses that depend on drive-by traffic. Planning for nodal development, or interspersing centers of development between roads with little development, allows communities to plan for multiple economic and cultural activity areas that are separated by roadways designed for moving traffic.

Housing/Population/Demographics: The *pattern* of residential development will be determined, in part, by the roads that service them. Roadway classifications also have an effect on the *density* of development that can occur. Local roads can serve residential neighborhoods and multi-family developments safely without concerns of heavy through traffic. The use of access management also provides safe transportation to denser developments. Road design standards such as width, grade, and speed are factors to consider when choosing to live in certain types of residential development. Higher density housing or low income housing may benefit by an offering of bicycle, pedestrian or transit improvements in order to maximize space and increase the affordability of the neighborhood. Certain sectors of the community will have different transportation preferences or needs. Consideration should be given to those sectors of the population that are less likely to drive such as youth, seniors, and persons with disabilities.

Natural Resources-Environmental: The careful consideration of locating roads away from sensitive areas such as streams and wildlife habitats is critical to the protection of our natural resources. Avoiding these areas will not only protect the wildlife that depend on large unfragmented areas, but will also add to the safety of roadway users. The use of Low Impact Development methods (LIDs) will help to reduce the length of roads, thereby reducing the amount of impervious surface. This will protect the water quality

of our waterbodies and will also allow for groundwater recharge. Transportation has a major impact on air quality and should be planned to reduce vehicle miles traveled whenever practical.

Emergency Operations/Hazard Mitigation: Maintaining access to primary and secondary evacuation routes in town is an important life safety issue. Proper culvert size and installation for all road/stream crossings must be a priority for reducing the impact of severe weather events. Bridge maintenance, erosion control, and stormwater management are also important considerations to maintain safe roadway infrastructure. Considerations such as these should be added into the Hazard Mitigation Plan and included as priority actions items. An inventory of road/stream crossings should be updated annually, and erosion control methods used along roads with steep slopes to prevent washouts and erosion.

Road Classifications and Conditions

Dublin roads are managed under a series of classifications. Road systems are grouped and classified for several reasons. Some important reasons to classify roads include:

- Designing appropriate capacity, safety measures and design speed for roads;
- Guiding investment priorities for roads;
- Providing a framework for a road maintenance program; and
- Guiding land use related regulations and access management standards with frontage on the roadway system.

Broadly, roadways in New Hampshire are classified for planning purposes into two types: State Highway Classification and Federal Functional Classification. *State highway classification* refers to the state's system of defining state and town responsibilities for road construction and maintenance. *Federal functional classification* is the system by which streets and highways are grouped into classes according to the type of service they are intended to provide. Basic to this process is the understanding that individual roads or streets do not serve travel independently: rather, travel involves movement through a series of roadways in a logical manner by defining the part any particular road or street can play in serving traffic flow through a highway network.

State Classification (Administrative) Classification

All public roads in New Hampshire are classified in one of seven categories per NH RSA 229:5. Highways under state maintenance and control include Classes I, II, III and III(a). Classes IV, V, and VI highways are under the jurisdiction of municipalities. The following provides a description of various administrative classes.

Class I: Trunk Line Highways

Class II: State Aid Highways

Class III: State Recreational Roads

Class III(a): State Boating Access Roads

Class IV: Town Roads with Urban Compact

Class V: Town Roads

Class VI: Unmaintained Highways

Of these seven road classifications, Dublin roads fall into four of them. The definition of these classifications, and the roads that fall within each category are described below. The road classifications can be found on the *Town of Dublin Transportation Infrastructure Map*.

Class I: Trunk Line Highways - These belong to the primary state highway system. NH DOT assumes full control and responsibility for construction, reconstruction and maintenance of these roads. The only Class I highway in Dublin is NH 101 which includes 9.3 miles of highway through town.

Class II: State Aid Highways - These consist of highways that belong to the secondary state highway system. All sections improved to state standards are maintained and reconstructed by NH DOT. Other Class II highways, not improved to DOT's standards, are maintained by the Town and are eligible to be improved to DOT standards with the use of state aid funds as those funds become available. The same applies to bridges on Class II highways. There are four roads in Dublin that are Class II highways which provide a total of 6.4 miles of road. These include NH 137 (Brush Brook Road and Lower Jaffrey Road), Chesham Road, and Dublin Road.

Class III: Recreational Roads – Recreational Roads are those roads leading to and within state reservations designated by the State Legislature. NH DOT assumes full control for construction, reconstruction and maintenance of these roads. There are no Class III roads in Dublin.

Class III(a): Boating Access Roads- boating access roads from any existing highway to any public water in New Hampshire. There are no Class III(a) roads in Dublin.

Class IV: Urban Compact Section Highways – These are all highways within the compact sections of towns and cities of 7,500 residents or more. The municipality assumes full responsibility for construction and maintenance of these roads. There are no Class IV roads in Dublin.

Class V: Town Roads - These consist of all regularly maintained roads that are not in the state system, which the town has the duty to construct and maintain. These roads may be paved or graveled. There are 40.1 miles of Class V roads in Dublin including, but not limited to: Upper Jaffrey Road, East Harrisville Road, Old Troy Road, Pierce Road, and many others. This category makes up 56% of all road mileage in Dublin.

Class VI: Unmaintained Highways - These roads are all other existing public ways, including highways, that are not maintained by the town and have not been for five or more consecutive years. While subdivision of land is usually restricted on Class VI roads, the potential for development exists if the roads are upgraded to a Class V status, either by the landowner or the town.

As frontage along Class V roads becomes less available and the centers of town villages reach capacity, there is mounting pressure to develop on Class VI roads. Class VI roads are an important component of a town's transportation infrastructure as they personify the community's rural character and can provide a variety of recreational opportunities. The town should evaluate and make recommendations for future status of Class VI roads and develop a Class VI road policy. There are 2.1 miles of Class VI roads in Dublin including Blackberry Lane, Oxbow Road, and Valley Road.

Other Roads- In addition to the state and town owned and maintained roads, Dublin has 13.4 miles of private roads. These are owned and maintained by private landowners. Some of the private roads in town include, but are not limited to: Beech Hill Road, Farnum Road, and Chestnut Hill Road.

Administrative Classification of Dublin's Roadways

Road Class	Miles
I: Trunk Line/Primary State Aid Highways	9.3
II: Secondary State Aid Highways	6.4
III: Recreational Roads	0
Total State	15.7
IV: Urban Compact Section Highways	0
V: Town Owned Roads	40.1
VI: Unmaintained Roads	2.1
Total Town	42.3
Other: (includes private)	13.4
Other Miles	13.4
Total Miles of Roadway	71.4

Source NH Department of Transportation Mileage by Town and Legislative Class (report 2016)

Federal Functional Classification

Functional classifications can be used by local, state and federal governments, but the federal functional classification is most commonly cited in transportation planning. It is a method of grouping roads by the service they provide and is very useful for planning purposes. Functionality, at its most basic level, is divided into three road types: arterials, collectors and local roads. By identifying the function of the road, decisions can be made as to the road design and speed. A road that functions as a means to move traffic from one town to another town has different needs than a road that provides access within a residential neighborhood. They will require different road widths, speeds, signs and construction standards. A road that has truck traffic is constructed differently to handle heavier, larger, and wider vehicles and greater traffic volumes than those serving neighborhoods. Access and turning maneuvers are also different depending on the functional classification. Therefore, identifying the function of the road is an essential part of planning. It is important to balance all three types of roadways in order to ensure an efficient (and in the long-term less costly) transportation system. Reducing road widths will not only be less costly to construct, but they will also be less costly to maintain, and reduce the amount of impervious surface, which is beneficial to the environment.

Principal Arterial Roads- These arterials are controlled access highways and interstates. Principal arterial highways are designed to carry the largest percentage of traffic entering and leaving a region as well as the greatest amount of traffic traveling through the region. NH 101 carries the greatest amount of local and regional traffic and is considered as the principal east/west corridor for southern New Hampshire.

Minor Arterial Roads- Similar to the principal arterial roads, these are designed to carry traffic through the region. Minor arterials have limited access and faster speeds than collector and local roads. NH 137 is a minor arterial road since it is an important route to connect Dublin, Hancock, and Jaffrey residents with NH 101.

Collector Roads (major & minor)- The collector system provides more direct land access than do the arterials. Collector streets may enter residential areas, business districts, and industrial areas. A major collector is designed to move medium traffic volumes at medium speeds between or within communities and to funnel traffic to and from residential and commercial areas to an arterial system. The major collector roads in Dublin include Cobb Meadow Road, Upper Jaffrey Road, New Harrisville Road, and Chesham Road. A minor collector has lower traffic volumes and provides alternative routes to major collectors. Some of the minor collectors include East Harrisville Road, Old Marlborough Road, Lake Road, and Charcoal Road.

Local Roads- These include all locally maintained and private roads that are not otherwise considered arterials or collector roads. The primary function of these roads is to provide direct access to individual properties. This system offers the lowest level of mobility. Through-traffic is usually deliberately discouraged.

Roadway Usage and Conditions

Roadway usage and conditions have an effect on our everyday enjoyment, or frustrations, of traveling through town. As the population increases within the state and region, so will the amount of traffic. Careful planning of our roadways, including alternative routes will give users options to get to their destinations. A heavily travelled road during peak hours or a road with poor maintenance can be avoided making our travel experience more desirable. The next chart shows the Average Daily Traffic Counts that NHDOT has been tracking in Dublin over the last eight years. This is an important factor in planning the location of future land uses as well as access points. The changes in traffic counts can be attributed to a variety of factors including but not limited to new subdivisions, new businesses opening, closing of businesses and road construction.

Dublin Average Daily Traffic Counts

Counter Location	Counter Number	2009	2010	2011	2012	2013	2014	2015	2016
NH 101 west of Old Harrisville Rd.	127050	6200	---	---	5300	---	---	6300	---
NH 101 west of NH 137	127051	7800	---	---	6700	---	---	7000	---
NH 101 east of Church St.	127054	7900	---	---	6400	---	---	7900	---
Dublin Rd. north of Beech Hill Rd.	127056	640	---	---	570	---	---	640	---
NH 137 north of NH 101	127057	1600	---	---	2200	---	---	1800	---
NH 137 south of NH 101	127058	1200	---	---	1300	---	---	1200	---
Old Marlborough Rd /Charcoal Brook	127059	240	---	---	200	---	---	240	---
East Harrisville Rd over Brush Brook	127060	200	---	---	230	---	---	240	---
Craig Rd over Stanley Brook	127061	200	---	---	220	---	---	260	---
Goldmine Rd over Stanley Brook	127062	440	---	---	430	---	---	380	---
NH 137 at Jaffrey town line	233051	1000	---	---	1000	---	---	980	---
NH 101 at Marlborough town line	287051	6100	---	---	6700	---	---	7000	---
NH 101 at Peterborough town line	363001	---	6500	---	---	6300	---	---	6800

Source: NH DOT 2016

The traffic count locations are shown on the accompanying map entitled *Town of Dublin Transportation Infrastructure Map*. Counter numbers in the table above correspond with the numbers found on the map.

In addition to the average daily traffic counts, the following table shows supplemental traffic counts that were taken as part of this Master Plan update. This will provide a basis for future counts that can aid the town for changes and improvements as may be determined.

Additional Local Traffic Counts	2017 AADT	Rounded	Duration of study
Cobb Meadow Road east of East Harrisville Road	324	320	8-8-17 to 8-14-17
East Harrisville Road north of NH 101 (Main Street)	228	230	8-8-17 to 8-14-17
Lake Road south of NH 101 (Main Street) and Snow Hill Road	741	740	8-8-17 to 8-14-17
Lake Road south of NH 101 (Main Street)	143	140	8-8-17 to 8-14-17
Upper Jaffrey Road south of Windmill Hill Road	404	400	8-8-17 to 8-14-17

Source: SWRPC Traffic Data 2017

Commuting to Work

Understanding commuting patterns is a useful planning tool when proposals are presented to the Town. According US Census Bureau, Center for Economic Studies, Dublin had an estimated 632 working residents in 2014. Of these working residents, 41 commuted to work within town and 591 traveled to work outside of town. The top commuting locations for Dublin residents are listed in the chart below. Approximately 305 residents work in towns abutting Dublin. Based on the percentage of residents travelling to these locations, it would appear that NH 101 carries the greatest amount of commuter traffic.

Inflow/Outflow job Counts (Primary Jobs) 2014		
Dublin Employment (jobs in Dublin)	Count	% Total
Total # of Workers Employed in Dublin	338	100%
Employed in Dublin but Living Outside	297	87.9%
Employed and Living in Dublin	41	12.1%
Dublin Residents that are Employed		
Employed Dublin Residents	632	100%
Living in Dublin but Employed Outside	591	93.5%
Living and Employed in Dublin	41	6.5%

Source: US Census Bureau, Center for Economic Studies-On the Map

This Inflow/Outflow graph provides a visual representation of the daily commuting for Dublin residents to their place of employment, and also non-residents who are employed in Dublin. As shown in the graph, 297 people travel into Dublin for employment while 591 Dublin residents leave Dublin to get to their jobs. It also shows that 41 people live and work in town.



Source: US Census Bureau, Center for Economic Studies-On the Map

Travel Time to Work

This next table shows the time that it takes Dublin residents to get to their jobs. The mean travel time is 23.9 minutes. With Dublin's geographic location between Peterborough and Keene, the commute to work is relatively short compared to other towns in the Monadnock Region. The table indicates that 71% of working residents spend less than 30 minutes to get to work.

Travel Time (in minutes)	Percent of Employed Residents
Less than 10	18%
10-14	23%
15-19	19.3%
20-24	10.7%
25-29	5.5%
30-34	9.9%
35-44	1.5%
45-59	2.5%
60 or greater	9.6%
Mean Travel Time to Work is 23.9 Minutes	

Source: U.S. Census, ACS 5-Year Estimates, 2011-2015

Maintenance and Condition of Roads: In most municipalities, road surfaces are the largest single cost of maintaining and building a transportation system. Investing in roads when they are in good condition costs a fraction of rebuilding roads that have deteriorated to poor conditions. Knowing the history of road repairs and the condition of those roads that may be in need of repair can assist the town in budgeting and prioritizing. It may also be useful as supportive information when seeking funding opportunities to help offset the costs.

One tool that is available to aid local municipalities in evaluating road conditions and prioritizing projects is the Road Surface Management System (RSMS) to ensure that cost-effective decisions are being made regarding roadway maintenance. The RSMS is the application of a pavement management analysis system, which includes budgets, condition data, and repair strategies, to assist local governments in maintaining their paved roads. The Town of Dublin worked with Southwest Region Planning Commission (SWRPC) as the pilot project in the region using the RSMS. The Dublin Road Agent worked directly with SWRPC on all phases of the project. Upon completion, the final project included maps of pavement conditions, development of a road segment priority list, and four 10-year maintenance plan scenarios.

Problem Locations

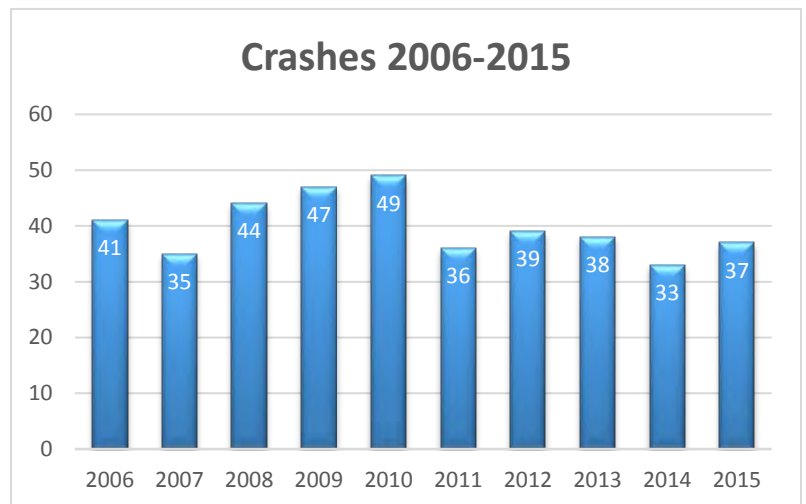
Vehicle crashes are an occurrence that we all want to avoid. However, without careful planning of roadways and intersections, there may be an increase of crashes at a given location. Accident reports obtained from the NHDOT and the Dublin Police Department are an effective way to identify areas that are in need of correction. Factors such as sightline visibility at intersections and driveways, poor drainage, excessive speed, sun glare and icing are some of the key reasons for crashes. Many of these can be avoided with good design. It is more efficient and cost effective to identify potential conflicting

points prior to construction than to retrofit a problem. It is also easier for drivers so they don't need to adjust to the change.

Projects involving heavy traffic should be required to submit a traffic study by a licensed engineer to the Planning Board. A traffic study will identify the projected level of service (LOS) at intersections and the entrance to the property during peak hours of traffic. The Planning Board may require a peer review, or third party review, to check the accuracy of the traffic study. The peer review may also result in potential alternatives such as a more suitable driveway location, intersection improvements, pedestrian enhancements, or other safety measures.

Consulting with the local traffic authority and road agent to review sight lines for proposed new accessways can help reduce hazardous situations. Adding sight line distance standards into the Subdivision Regulations and driveway regulations will help to improve safety for those entering onto the roads and those traveling the roads.

The following charts provide information regarding crashes in Dublin between 2006 and 2015. The first chart, *Crashes 2006-2015*, shows that there has been a decline in the number of crashes between 2011 and 2015 over the preceding five year period. Similarly, the chart entitled *Serious Injuries 2006-2015* also shows a reduction in the number of serious injuries during this same period. In addition to the serious injuries, there was one fatality in 2010.



Source: NH DOT

The map entitled *Town of Dublin Crash History Map* shows the locations of the documented crashes since 2003.

Areas of Concern

The intersection of NH 101 and NH 137 was identified as an area of concern based on the number of crashes. As such, the Planning Board requested that a turning movement count be conducted at this intersection to include in this chapter. The results of the study include:

- A review of the intersection crash history, from 2006-2015 identified this intersection as the site of the Town's only fatal crash, which occurred in 2010. During the analysis period, the intersection was the site of at least 12 crashes (including a total of 4 injury crashes and 1 fatal crash).
- Traffic movements at the intersection of NH 101 (Main Street) and NH 137 (Brush Brook Road/Lower Jaffrey Road) are dominated by through traffic on NH 101 (about 69% and 70% of total vehicles during the busiest morning and evening hour, respectively). This is partially understood based on the regional significance and demand for travel to the greater Keene area and US 202 corridor, both major job centers.
- The intersection is one of many two-way stop controlled intersections along NH 101 in Dublin. The major street, NH 101 is uncontrolled and the minor street, NH 137 is controlled by stop signs. Even during busy periods of the day, the intersection does not create significant delay for most vehicles.

The results below are according to level of service (LOS) criteria for unsignalized intersections as found in the Transportation Research Board Highway Capacity Manual (Exhibit 20-2). A level of service is a letter designation that describes a range of operating conditions on a particular type of facility. Six levels of service are defined, using the letters A through F. Level of service A represents the best level of service, and generally describes operation of free flow and very low delay. Level of service F represents the worst operating conditions.

Level of Service (LOS)	Control Delay (seconds/vehicle)
LOS A	0 - 10
LOS B	> 10 - 15
LOS C	> 15 - 25
LOS D	> 25 - 35
LOS E	> 35 - 50
LOS F	> 50

Source: NH DOT

The following tables depict the level of delay for each approach and applicable turning movements.

Peak AM hour Level of Service

	Left	Through	Right	Approach Delay (seconds/vehicle)	Approach LOS
Eastbound on NH 101	A	N/A	N/A	1.0	N/A
Westbound on NH 101	A	N/A	N/A	0.3	N/A
Northbound on NH 137	C	N/A	B	15.5	C
Southbound on NH 137	C	N/A	B	12.6	B

Peak PM hour Level of Service

	Left	Through	Right	Approach Delay (seconds/vehicle)	Approach LOS
Eastbound on NH 101	A	N/A	N/A	0.8	N/A
Westbound on NH 101	A	N/A	N/A	0.2	N/A
Northbound on NH 137	C	N/A	C	17.9	C
Southbound on NH 137	C	N/A	B	16.0	C

Source: SWRPC Traffic Data (2017)

In addition to the NH 101/NH 137, other intersections along NH 101 have been identified as areas of concern due to the cluster of crashes shown on the map. These areas include: the intersections of NH 101 with Upper Jaffrey Road, Church St, and Old Peterborough Road, as well as the sharp curve around the east side of the lake are other relative hot spots.

A Road Safety Audit for these areas may be considered as a means to reduce these potential hazardous areas. A Road Safety Audit is a formal proactive safety performance examination of a road or intersection by a multidisciplinary audit team. It is a qualitative assessment that reports on potential safety issues and identifies opportunities for improved safety options. The Road Safety Audit team is made up of town employees, such as Police Chief, Road Agent, Emergency Management Director, Fire Chief, and members of the community. Consideration should also be given to identifying other potential team members that may offer unique and valuable input such as a school bus driver whose bus route is in the study area or a nearby crossing guard.

Bridges

NH RSA 234:2 defines a *bridge* as a structure on a public highway that has a clear span of 10 feet or more, measured along the highway's center line, spanning a water course or other opening or obstruction.

It includes the substructure, superstructure, deck and approaches. This definition is important to help the town and state in determining the maintenance and funding responsibility.

NH RSA 234:23 imposes a requirement on towns to inspect all bridges along town roads and town maintained roads on Class II highways, every two years. A record of the inspections must be kept by the town and is a prerequisite to apply for state bridge aid funds. This inspection and corresponding classification is a useful planning tool for budgeting of those bridges in need of repairs or replacement. Priority should be given to bridges that are located in the primary and secondary evacuations routes in the event of emergencies.

These bridge classifications are defined as:

Not Deficient - Bridges that do not need repairs, just scheduled maintenance.

Structurally Deficient - A bridge, due to its deteriorated condition, that no longer meets current standards for load carrying capacity and/or structural integrity.

Functionally Obsolete - A bridge, due to the changing need of the transportation system, that no longer meets current standards for deck geometry, load carrying capacity, vertical or horizontal clearances, and/or alignment of the approaches to the bridge.

Red List - Bridges that require more frequent inspections due to known deficiencies, poor structural conditions, weight restrictions, or the type of construction (such as a replacement bridge installed on a temporary basis).

There are 14 bridges in Dublin. Below is a list of bridges with information that may be useful in planning for the Capital Improvements Program (CIP).

Location	Bridge Number	Owner	Year Built/Rebuilt	Condition
NH 101 /Howe Reservoir	074/117	NHDOT	1980	Not Deficient
Charcoal Road over brook	081/114	Dublin	1935	Not Applicable
Charcoal Road over Charcoal Brook	085/103	Dublin	2016	Not Applicable
Old Troy Road over brook	086/084	Dublin	1940/1991	Functionally Obsolete
Old Marlborough Road over Charcoal Brook	089/099	Dublin	2008	Not Deficient
Pierce Road over brook	155/103	Dublin	2013	Not Deficient
East Harrisville Road over Brush Brook	155/121	Dublin	1984	Not Applicable
Page Road over Hinds Brook	161/064	Dublin	1970	Not Applicable
Craig Road over Stanley Brook	170/064	Dublin	1935	Not Deficient
NH 137 over Stanley Brook	176/072	NHDOT	1936	Red Listed
Gold Mine Road over Stanley Brook	180/077	Dublin	1985	Not Deficient
NH 101 over Mud Pond	180/102	NHDOT	1966	Not Deficient
NH 137 over Brush Brook	188/117	NHDOT	1939	Not Applicable
NH 101 over Gold Mine Road	196/085	NHDOT	1967	Not Deficient

NHDOT Bridge Summary, July 6, 2017

Of the bridges in Dublin, seven are listed as *not deficient*, none are listed as *structurally deficient*, one is listed as *functionally obsolete*, and one is *red listed*. There were also five bridges that are listed as *not applicable*, which typically means that it is a culvert type structure and is not rated the same, however, they remain on the annual inspection report due to the size of the structure.

Multimodal

Multimodal transportation includes a variety of ways of moving people and goods. It encompasses a broader range of transportation modes other than motor vehicles. Multimodal transportation includes:

Pedestrian: Planning for pedestrian traffic involves providing areas and amenities that allow pedestrians to get to their destination by walking. Providing sidewalks, crosswalks, and pathways is the way to accomplish this form of transportation. Adding amenities, such as benches and shade trees will help to encourage walking. Another point of consideration for this mode is *connectivity* from one location to another. The proximity and safety between locations will be a deciding factor for some users. Sidewalks that don't connect pose a safety risk for pedestrians, especially those with physical challenges and strollers. It forces them to walk in the roadway or walk across unpaved and uneven terrain. Curb cuts should be provided at driveway entrances. Curb ramps should be provided at the end of each sidewalk.

Dublin has made many improvements during the past 10 years to increase opportunities and improve safety for pedestrians, particularly along NH 101. The Town has been working with the NHDOT through several funding sources to add sidewalks, improve existing sidewalks, and add or improve crosswalks near the school.

Bicycle: As people become more health conscious and environmentally aware, this form of transportation is more attractive. The rising cost of fuel also contributes to this decision. Providing bicycle lanes along the roadways is an important and responsible part of transportation planning. This includes clearly established bike lanes, pavement markings, and signage. Planning for the safe passage of bicycle users also includes bike friendly drainage grates and an awareness of other potential hazards. Similar to the needs of pedestrians, connectivity between locations is important for the local bikers that are just trying to get to areas within town. Making sure that pathways and bike lanes connect to the local destinations will help to avoid conflicts between bikes and vehicles. Bike racks should be required for sites that tend to attract the bicycle users.

The NHDOT has established a statewide network of bicycle routes. Today, these routes are published in seven regional printed maps and via an on-line interactive map at the Bike/Ped website. In Dublin and elsewhere, the routes generally avoid NH 101, which has high traffic volumes. Notably, Recreational Loop 502, which begins at the intersection of Hancock Road and Main Street in Harrisville, is a 12.8 mile beginner loop that utilizes Dublin Road, NH 101, and NH 137 in Dublin.

Carpooling: Ride sharing to work and events is a form of transportation that should be encouraged. While most of us enjoy the freedom of getting to our destinations in our own vehicle, and at our own convenience, there are other options that can be utilized in an effort to be environmentally sensitive and budget wise. A role that the town can play to help facilitate this is to establish a commuter lot. Providing a ride-share board will also establish a way for interested commuters to make connections with other commuters that are travelling to a similar destination.

Volunteer Driver Program: The Community Volunteer Transportation Company (CVTC) provides a “no fee” transportation service including rides for non-emergency medical, social service appointments, trips to the grocery store and pharmacy, etc. Advanced notice is required.

Complete Streets

“Complete Streets” is an overall approach to planning, improving and maintaining the street right-of-way for all potential users of the roadway. It takes into consideration all modes of transportation. It is an understanding that people have a variety of needs and at varying levels of abilities. Complete Streets encompasses a broader way of viewing transportation corridors beyond the travelled portion of the roadway. By understanding these needs and abilities, streets can be planned in a way that is safe and convenient for all users. Providing safe crosswalks, ramps, benches, and shade trees help to encourage walking, which in turn includes benefits such as healthier lifestyles, social interaction, reduction in localized automobile trips, and improved environmental quality. This adds to the social capital of the community and helps to define the distinct character of the community. It provides options for residents and visitors to access shopping, health care, school, and employment. The additional pedestrian traffic can have economic benefits for local businesses as well. Inclusion of landscape improvements may also result in an increase of adjacent property values.

The town should consider adopting a Complete Street Policy. Along with adopting this policy, other ordinances should be reviewed for barriers that make a walkable/bikable community difficult to implement. A review should also be done to provide economic opportunities for businesses along these areas such as outdoor patio areas.

Components of Complete Street Policies include:

- Addition of sidewalks and bicycle lanes;
- Intersection improvements to include crosswalks and signalization for pedestrians and bicyclists;
- Installation of raised or textured crosswalks in locations that have higher pedestrian traffic;
- Streetscape amenities such as benches, street lights, shade trees;
- Sidewalk bumpouts for creating locations for trees and benches, and to add traffic calming principles;
- Bus service, bus stops and shelters

Access Management

Access management is a planning mechanism to improve the safe usage of the roads for motorists, cyclists, and pedestrians. It includes careful planning for the location, spacing, design and operations of driveways and commercial accessways onto the road. Encouraging interconnections between properties helps to limit the number of access points onto the road and thereby reduces the number of conflict points. This is especially useful in retail centers, and in residential areas that have sight-line limitations due to road design. RSA 236:13 establishes requirements for driveway permits.

Traffic Calming

Many communities in New Hampshire have a concern about the speed of traffic through the Town center. The lack of state highway bypasses, leave communities with a heavy flow of drive-through traffic. While this traffic may be beneficial for local businesses, it often creates traffic from additional motor vehicles that have out-of-town destinations. In an effort to slow traffic down, it may be necessary to use traffic calming techniques in these areas. Traffic calming measures are designed to alter the behavior of drivers and improve safe conditions for pedestrians and cyclists.

The speed along NH 101 has been a concern for Dublin as the region has developed. As such, the Town of Dublin has been working with the State to determine the most effective methods to use near the Town Hall.

Below is a list of additional traffic calming methods that may be utilized in other areas of town as necessary.

Raised, textured or colored crosswalks- raised crosswalks is a physical approach to slowing speeds; textured or colored crosswalks are visual approaches to slowing speeds.

Raised median strip/island- this method narrows the road and limits turning across traffic.

Signalization and signage- traffic signals with pedestrian features provide safety for pedestrians; signage can also be an effective method for reducing speed and providing safe pedestrian passage.

Reduce road width- narrowing the road width generally slows the speed of vehicles, however, it also reduces the safe zone for cyclists.

Future of Transportation Modes/Changing Technologies

Planning for the future involves a great deal of insight to the trends within the region, state, country, and even worldwide. The changing technologies will undoubtedly bring about changes to the way we look at our modes of transportation. With the rising cost of gasoline, and the increased environmental awareness, the movement towards alternative fuel sources is stronger than ever. With these changes, we may be faced with finding creative ways of making adjustments to accommodate them. Although the change is inevitable, it will be a gradual process. Fortunately, with careful planning, we can make the necessary shift to the future. It is anticipated that changes to roadway standards, parking areas, refueling/repowering stations, and more will require us to change the way we currently think about transportation.

State and Regional Transportation Plans

State and regional plans provide important information that should be considered as an aid to the town for planning. They can be useful in preparation for Capital Improvement Programs, site plan and subdivision reviews, multimodal planning, and other uses as well. The next table contains a list of Regional and State Transportation Plans and links to information. It is beneficial to provide local input to these studies as they are updated.

Regional Plans:	Description:	Source:	Web link:
Town Traffic Data	Provides data on traffic counts for every town in the Region.	SWRPC/NH DOT	http://www.swrpc.org/trans/traffic_counts
Southwest Connects	Inventory of transportation system and policy recommendations for Region.	SWRPC	http://www.swrpc.org/trans
SWRPC Transportation Improvement Program	List of projects offered to NHDOT by SWRPC for inclusion in the Ten Year Plan. Part of the Southwest Connects listed above.	SWRPC	http://www.swrpc.org/trans
Coordinated Community Transportation Plan	Documentation of regional community transportation needs and plans for improvement.	SWRPC	http://www.swrpc.org/trans
Regional Transportation Directory	A directory of community transportation services for those needing rides within the region.	Monadnock Regional Council for Community Transportation	http://monadnockrcc.weebly.com/uploads/1/3/0/3/13039095/dublin.pdf
Monadnock Region Future (MRF)	The Regional Plan for Southwest NH.	SWRPC	http://swrpc.org/files/MonadnockRegionFuture_RegionalPlan_FINAL.pdf
NH 101 Corridor Study	Inventory of NH 101 Corridor and policy and infrastructure recommendations for corridor.	SWRPC	Not available on web
State Plans:			
NH Ten Year Transportation Improvement Plan	List of projects planned for construction in a ten year period.	NHDOT	http://www.nh.gov/dot/org/projectdevelopment/planning/typ/index.htm
NH Long Range Transportation Plan	Inventory of transportation system and policy recommendations for state.	NHDOT	http://www.nh.gov/dot/org/projectdevelopment/planning/lrtbp.htm
NH Climate Action Plan	Plan that includes many transportation policy recommendations specifically on transportation.	NHDES	http://des.nh.gov/organization/divisions/air/tsb/tps/climate/action_plan/nh_climate_action_plan.htm

Useful Resources, Links, Programs, Funding Opportunities

The list below provides a variety of state and federal programs with potential funding opportunities. These resources cover a range of transportation projects including, but not limited to: road and

intersection improvements, bridge & culvert projects, sidewalks and other pedestrian safety enhancements, transit, etc.

Monadnock Region Coordinating Council for Community Transportation

State Aid Bridge (SAB)

State Aid Highway (SAH)

Block Grant Aid (BGA)

Federal Bridge Aid (MOBRR)

Highway Safety Improvement Program (HSIP)

Transportation Alternative Program (TAP)

Congestion Mitigation and Air Quality Program (CMAQ)

Federal Emergency Management Agency (FEMA)

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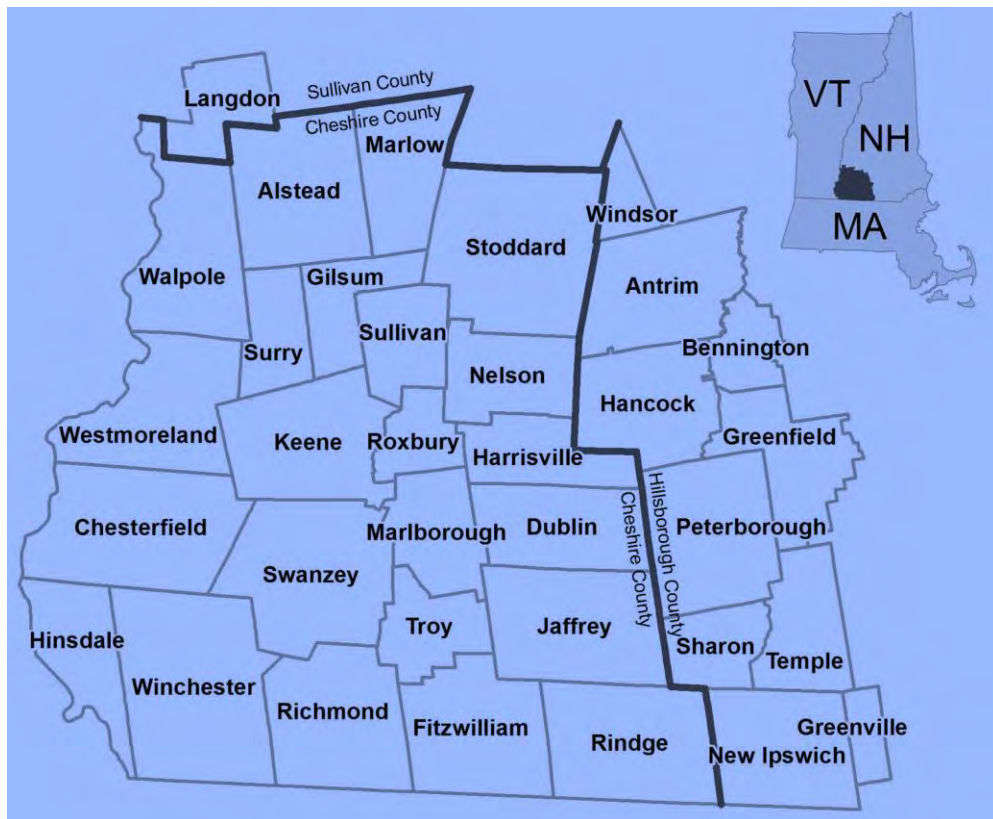
REGIONAL CONTEXT

Regional Context Chapter

Regional Profile

Dublin lies at the heart of the Monadnock Region and is an active member of the Southwest Region Planning Commission. The region is composed of 34 municipalities in the southwestern corner of New Hampshire. It comprises a geographic area of 1,007 square miles that borders the states of Massachusetts to the South and Vermont to the West. It includes 23 municipalities in Cheshire County, 10 municipalities in western Hillsborough County and 1 municipality in Sullivan County. A full listing of the region's municipalities is below.

Alstead	Greenfield	Langdon	Rindge	Temple
Antrim	Greenville	Marlow	Roxbury	Troy
Bennington	Hancock	Marlborough	Sharon	Walpole
Chesterfield	Harrisville	Nelson	Stoddard	Westmoreland
Dublin	Hinsdale	New Ipswich	Sullivan	Winchester
Fitzwilliam	Jaffrey	Peterborough	Surry	Windsor
Gilsum	Keene	Richmond	Swanzy	



Source: Monadnock Region Future: A Plan for Southwest New Hampshire

Development pressures from the east and south have already changed land use throughout the region and this change is likely to continue. Those concerned about Dublin's future should look at land use and development pressures from a regional perspective. Housing, education, transportation, emergency services, and internet communication planning are examples of issues that cross town borders, as are our natural resources. Those involved with planning should be aware of any anticipated new construction, such as industry, road construction, new shopping centers, or major residential developments in nearby towns that might have an impact on Dublin.

Quick Demographics

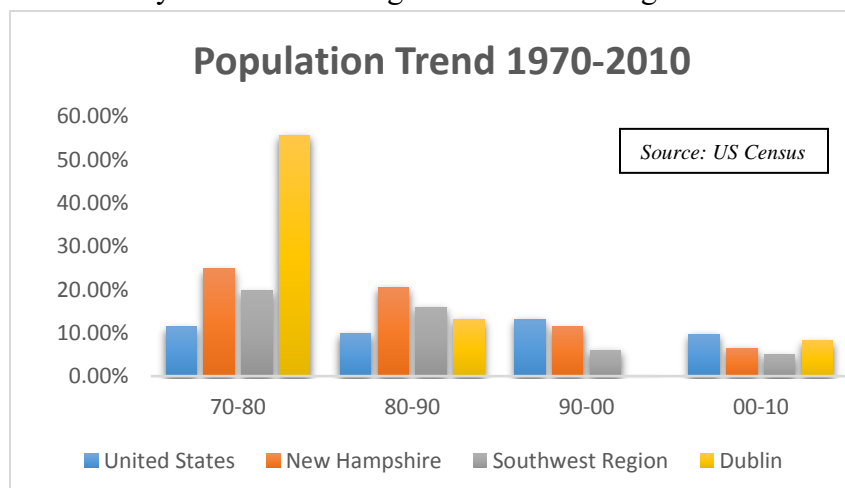
- 100,751 Residents
- 976 Square Miles
- 44.7 Median Age
- 40,837 Residents are Employed
- 23,052 Live and Work in the Region
- 35,754 People Work in the Region
- \$62,118 Median Household Income
- 45,744 Housing Units

Source: Monadnock Region Future

New Hampshire's growth has resulted primarily from migration radiating from the Massachusetts border and following major and secondary road systems. The majority of this growth has been further east. As southeastern New Hampshire has become more and more a part of the Boston metropolitan area, significant growth has been experienced in the highway corridors leading west and north. If these trends continue, as studies predict, three development corridors are likely to impact Dublin sometime in the future: Route 101, and Routes 119 and 124. Historical trends demonstrate the relationship between growth and location, and show that Dublin has grown as have other corridor towns, but it remains the least densely populated town in these corridors.

Population

In 2010, municipal populations ranged from 23,409 in the City of Keene to 224 in Windsor. With Dublin's population of 1,597, it ranks as the 15th in the region in terms of total population from smallest to largest communities. Excluding Keene, the average population of communities in the region is 2,321. In recent decades, the region's population has experienced its smallest gains in over 60 years as can be seen in the graph below. A similar trend was experienced by the state, however, the national rate of growth has remained fairly constant with a growth rate teetering between 9.7% and 13.4%. Although the region's population of 100,751 has grown by 78.5% since 1970, the vast majority of this growth occurred before 1990. The trend of high growth and in-migration that characterized the mid to late 20th century has substantially decelerated. Since 2000, the region's population grew by only 5%, well below the national average of 10%. Prior to 1990, the region's population growth



had far outpaced that of the nation. Dublin's population, however, exceeded the rate of growth of the state and region with a growth of 90.8% between 1970 and 2010, and an 8.2% increase between 2000 and 2010.

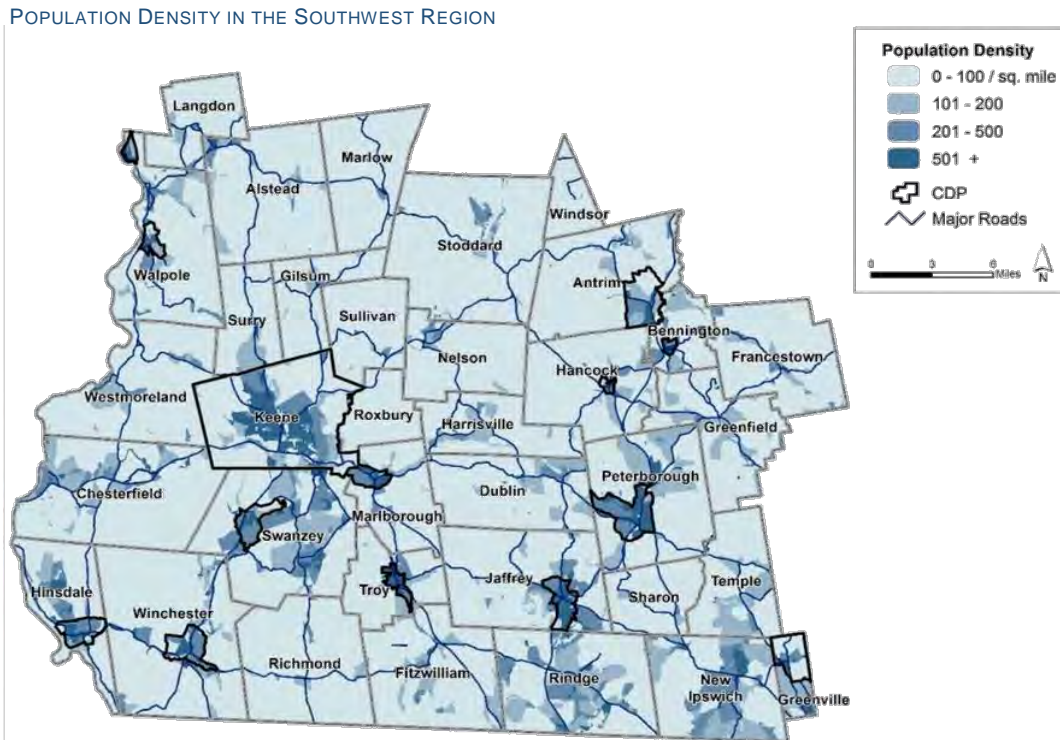
Between 2000 and 2010, ten of the region's thirty four communities experienced a decline in their total population. Yet, strong growth persists in some areas. Communities that experienced the

Population Trend 1970 to 2010							
<i>Source: US Census data</i>	1970	1980	1990	2000	2010	% Change 2000-2010	% Change 1970-2010
United States	203,302,031	226,542,199	248,709,873	281,421,906	308,745,538	9.7%	51.9%
New Hampshire	737,681	920,610	1,109,252	1,235,786	1,316,470	6.5%	78.5%
Southwest Region	65,246	78,080	90,504	95,911	100,751	5.0%	54.4%
Dublin	837	1,303	1,474	1,476	1,597	8.2%	90.8%
Alstead	1,185	1,461	1,721	1,944	1,937	-0.4%	63.5%
Antrim	2,122	2,208	2,360	2,449	2,637	7.7%	24.3%
Bennington	639	890	1,236	1,401	1,476	5.4%	131.0%
Chesterfield	1,817	2,561	3,112	3,542	3,604	1.8%	98.3%
Fitzwilliam	1,362	1,795	2,011	2,141	2,396	11.9%	75.9%
Gilsum	570	652	745	777	813	4.6%	42.6%
Greenfield	1,058	972	1,519	1,657	1,749	5.6%	65.3%
Greenville	1,587	1,988	2,231	2,224	2,105	-5.4%	32.6%
Hancock	909	1,193	1,604	1,739	1,654	-4.9%	82.0%
Harrisville	584	860	981	1,075	961	-10.6%	64.6%
Hinsdale	3,276	3,631	3,936	4,082	4,046	-0.9%	23.5%
Jaffrey	3,353	4,349	5,361	5,476	5,457	-0.3%	62.7%
Keene	20,467	21,449	22,430	22,563	23,409	3.7%	14.4%
Langdon	337	437	580	586	688	17.4%	104.2%
Marlborough	1,671	1,846	1,927	2,009	2,063	2.7%	23.5%
Marlow	390	542	650	747	742	-0.7%	90.3%
Nelson	304	442	535	634	729	15.0%	139.8%
New Ipswich	1,803	2,433	4,014	4,289	5,099	18.9%	182.8%
Peterborough	3,807	4,895	5,239	5,883	6,284	6.8%	65.1%
Richmond	287	518	877	1,077	1,155	7.2%	302.4%
Rindge	2,175	3,375	4,941	5,451	6,014	10.3%	176.5%
Roxbury	161	190	248	237	229	-3.4%	42.2%
Sharon	136	184	299	360	352	-2.2%	158.8%
Stoddard	242	482	622	928	1,232	32.8%	409.1%
Sullivan	376	585	706	746	677	-9.2%	80.1%
Surry	507	656	667	673	732	8.8%	44.4%
Swanzy	4,254	5,183	6,236	6,800	7,230	6.3%	70.0%
Temple	441	692	1,194	1,297	1,366	5.3%	209.8%
Troy	1,713	2,131	2,097	1,962	2,145	9.3%	25.2%
Walpole	2,966	3,188	3,210	3,594	3,734	3.9%	25.9%
Westmoreland	998	1,452	1,596	1,747	1,874	7.3%	87.8%
Winchester	2,869	3,465	4,038	4,144	4,341	4.8%	51.3%
Windsor	43	72	107	201	224	11.4%	420.9%

highest growth between 2000 and 2010 were Stoddard (32.8%), New Ipswich (18.9%), Langdon (17.4%), and Nelson (15.0%).

Population Density

The region, which has a population density of approximately 101 people per square-mile, is predominantly rural in character. Dublin has a more rural population density of 57.3 people per square mile. The darker areas on the map below indicate higher densities. Also shown are the Census Designated Places (shown as CDP in the legend). These are areas with concentrations of populations and are recognized by the US Census Bureau for statistical purposes. As growth continues in the region, Dublin will likely absorb some of the additional population, but should be able to remain below the higher densities experienced in several of the other towns.



Source: Southwest Region Housing Plan

Housing

In 2010, the Southwest Region had a total of 46,040 housing units. These include single-family, multi-unit, attached-units like row houses or condominiums, manufactured homes, and vacant units. The City of Keene had nearly three times the number of housing units (9,719 total units) as the next highest community, Swanzey (3,205 total units). Compared to 1990 figures, the region as a whole added 6,659 units by 2010, an increase of 17%. However, the Southwest Region's total housing units grew more slowly than the state as a whole (22%), and the nation (29%). Almost half (49%) of the total increase in the region's housing units came from five towns: Keene, Peterborough, Swanzey, New Ipswich, and Rindge. The average growth in housing units in the regional towns between 2000-2010 was 17%. The percentage increase of housing units in Dublin during this same time period was similar, with a 14 % change. Dublin's location between the employment centers of Peterborough and

Keene, access to transportation corridors, and scenic and recreational attributes make Dublin a desirable location for building homes. It is anticipated that this growth in housing units will continue as economic development occurs in the region.

Housing Unit Trend 1970 to 2010							
	1970	1980	1990	2000	2010	% Change 2000-2010	% Change 1970-2010
New Hampshire	235,529	347,758	503,541	547,024	614,754	22%	161%
Southwest Region	20,829	29,592	39,381	41,670	46,040	17%	121%
Dublin	282	491	651	686	785	14%	178%
Alstead	412	568	843	950	991	18%	140%
Antrim	658	779	1,162	1,160	1,329	14%	102%
Bennington	217	347	643	635	666	4%	207%
Chesterfield	621	1,003	1,527	1,632	1,802	18%	190%
Fitzwilliam	474	745	1,031	1,074	1,257	22%	165%
Gilsum	190	237	320	323	378	18%	99%
Greenfield	330	370	517	640	699	35%	112%
Greenville	458	728	918	918	933	2%	104%
Hancock	399	495	723	814	864	20%	117%
Harrisville	281	325	588	698	695	---	147%
Hinsdale	1,056	1,357	1,655	1,714	1,827	10%	73%
Jaffrey	1,223	1,770	2,426	2,352	2,547	5%	108%
Keene	6,597	7,934	8,841	9,295	9,719	10%	47%
Langdon	105	157	243	266	306	26%	191%
Marlborough	568	703	856	893	946	11%	67%
Marlow	184	234	364	387	408	12%	122%
Nelson	151	171	379	404	460	21%	205%
New Ipswich	545	798	1,326	1,449	1,916	44%	252%
Peterborough	374	1,952	2,242	2,509	2,956	32%	690%
Richmond	111	230	398	432	492	24%	343%
Rindge	493	985	1,781	1,863	2,224	25%	351%
Roxbury	56	85	95	91	101	6%	80%
Sharon	64	81	128	160	164	28%	156%
Stoddard	103	260	890	939	1,044	17%	914%
Sullivan	117	201	283	294	309	9%	164%
Surry	154	218	262	302	324	24%	110%
Swanzey	1,382	1,894	2,582	2,818	3,205	24%	132%
Temple	137	252	429	464	542	26%	383%
Troy	595	782	867	778	932	7%	57%
Walpole	991	1,288	1,465	1,592	1,715	17%	73%
Westmoreland	279	451	573	618	680	19%	144%
Winchester	921	1,342	1,673	1,741	1,932	15%	110%
Windsor	14	34	120	123	137	14%	879%

Source: US Census data

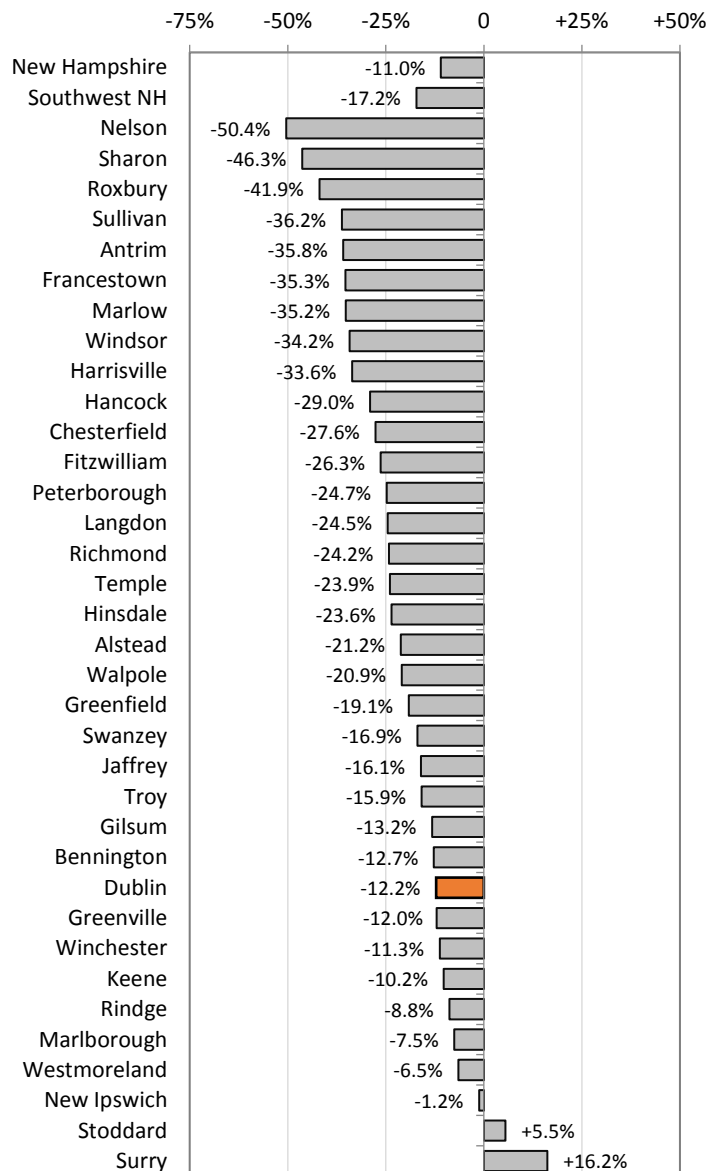
Age of Housing Stock

Nearly 1 in 3 homes in the Southwest Region are over 75 years old, which represents a much older housing stock in comparison to that of New Hampshire and the United States. Older homes are

generally more expensive to own, especially with respect to wintertime heating costs. However, many of these homes, especially single-family structures, are prized for their historical significance and rural character. More than half of the region's housing inventory is greater than forty years old, which will result in increased need to renovate or replace existing units or to make them more energy efficient. The age of Dublin's housing stock is consistent with these figures. Options should be available to convert these homes to avoid losing them. Innovative planning such as mixed-uses and co-housing can give the homeowner alternatives to demolition. For figures on the age of Dublin's housing stock, see the table and graph on page 10 in the Population and Housing chapter.

Education

In the most recent decade, New Hampshire and the Southwest Region have experienced significant declines in K-12 public school enrollments. The spike in enrollments that came from the children of the baby-boomer generation in the 1990s has abated, and today school enrollments are in decline - more so in the Southwest Region than the state overall. Between the 2005/2006 and 2013/2014 school years, statewide public school enrollment declined by 11%. Over the same time period, Southwest Region towns experienced a drop in enrollment of 17.2%. While Dublin's school enrollment experienced a 12.2% decrease, the chart shows that there were 25 towns in the region that experienced a greater decline and 9 of those towns experienced 30% or more loss in student enrollment.



Source: Southwest Region Housing Plan

Transportation

Transportation analysis is generally done by looking at the reason that people are on the roads, and where they are going. In New Hampshire, this is done by dividing it into two categories: commuting for work; and driving for shopping, services, medical appointments, and entertainment.

In a study done for the Regional Plan in 2015, approximately 60% of the working population live and work in the region. Almost half of commuters travel less than 10 miles from home to work. Yet, there are approximately 14% of the region's workforce that travel greater than 50 miles on a regular basis. In contrast to these figures is the Dublin (residents) commuting figures in which approximately half of the workers travel 10 to 24 miles to work and only 1.1% travel greater than 50 miles to work. Although these commuting figures are different from the region, there is also a large percentage (32%) of Dublin residents that travel less than 10 miles to work.

The majority of trips that Southwest Region residents make for shopping, services or medical appointments are local or regional in nature depending on the town of residence. Major supermarkets are distributed around the region in Walpole, Keene, Swanzey, Hinsdale, Peterborough and Rindge, and just outside of the region in places like Hillsborough and Brattleboro, Vermont. There are two medical hospitals in the region, located in Keene and Peterborough, as well as a hospital in Brattleboro, all of which provide medical services including some medical specialization services. Access to health care services depends on each town's geographical location, but most services are within a 20 mile drive. Dublin is fortunate to be located within 20 miles of both the Peterborough and Keene hospitals, thereby giving residents more options for the services and care needed.

Transportation Corridors

Transportation planning in the Southwest Region heavily relies on the studying of the New Hampshire Corridor Systems. There are 8 corridors in the region including:

- NH 9 East Corridor (Alstead, Antrim, Gilsum, Keene, Langdon, Marlow, Nelson, Roxbury, Stoddard, Surry and Windsor);
- The NH 9 West Corridor (Chesterfield, Hinsdale and Keene);
- The NH 10 South Corridor (Hinsdale, Keene, Richmond, Swanzey and Winchester);
- The NH 12 North Corridor (Alstead, Keene, Surry, Walpole and Westmoreland);
- The NH 12 South Corridor (Fitzwilliam, Keene, Richmond, Swanzey and Troy);
- The NH 101 East Corridor (Dublin, Greenville, Harrisville, Keene, Marlborough, New Ipswich, Peterborough, Sharon and Temple);
- The US 202 North Corridor (Antrim, Bennington, Greenfield, Hancock and Peterborough); and
- The US 202 South Corridor (Jaffrey, Peterborough and Rindge).

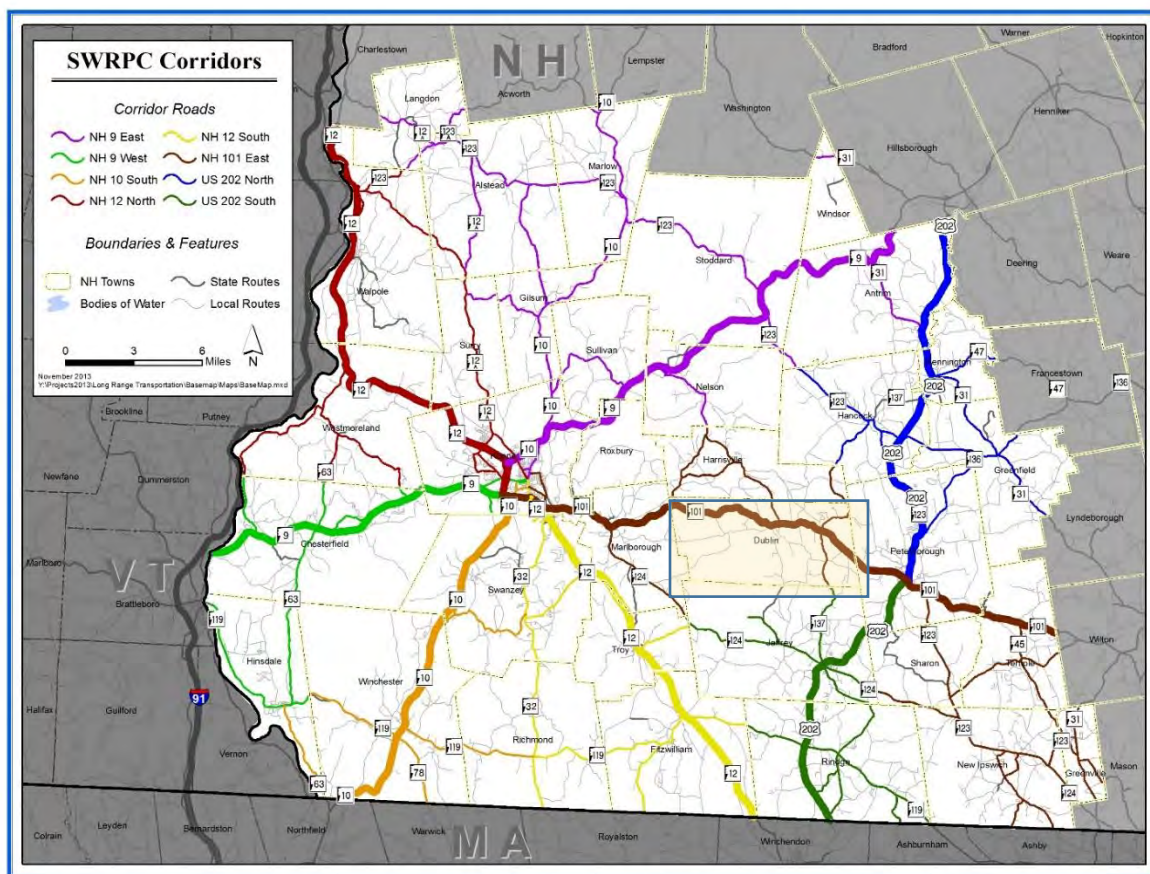
The NH 101 East Corridor is an important east-west highway connecting the region to Manchester, Nashua and I-93. It is used frequently by communities having origins or destinations in the southern half of Southwestern New Hampshire. There are a number of characteristics along the NH 101 Corridor that sometimes delay traffic including village centers in Marlborough and Dublin, mountains

in Peterborough and Temple, and a traffic light in Peterborough. Two roundabouts have been constructed along this corridor to act as a traffic control without causing delays and are located in Keene and Peterborough. A similar method of traffic calming was constructed in Dublin which functions similar to a roundabout, but doesn't meet all of the criteria to be considered one.

The Regional Transportation Plan, *Southwest Connects*, identifies priority challenges and opportunities for the NH 101 East Corridor which include the following:

- Many parts of the region are very rural and isolated. There will need to be persistent push to continue improving alternative passenger transportation options on the Corridor.
- Maintaining winter safety in the mountainous parts of the NH 101 highway corridor (Hurricane Hill, Pack Monadnock and Temple Mountain on NH 101 and Mount Monadnock on NH 137) will need to continue to be a high priority.
- Intercity bus services used to connect Peterborough with Keene and the I-93 communities. In 2014 Greyhound Bus Inc. reinitiated a direct route from Keene to Nashua to Boston passing through (but not stopping) in Peterborough, but a stop should be assessed.
- The former Manchester and Keene Branch Rail Trail is an asset that deserves more attention.

This is a map from the *Southwest Connects* that shows the eight corridors and gives a perspective on the interrelatedness to the communities and destinations beyond the region.



Economy

While a strong sense of local identity defined by municipal boundaries prevails, Mount Monadnock and its highlands bisect the economic landscape into two sub-regions. One is dominated by the City of Keene as an employment, commercial and population center and the other is a more linear configuration of the Contoocook River Valley's population centers of Peterborough, Jaffrey, and Rindge. The majority of the region's largest employers are located in these areas. As land in these areas becomes developed, other towns with direct connections to the main transportation corridors, such as Dublin and Marlborough, are likely to experience an increase in proposals for commercial and industrial developments, and for housing to meet the needs of the workers.

The predominant industry sector in the region is *educational services, health care and social assistance*, which employs 28% of the region's workforce. In contrast to the region is Dublin's predominant sector of *arts, entertainment, recreation, accommodation, and food services* accounting for about 29% of the local workforce. While the larger communities like Keene and Peterborough employ many educators and health care professionals with the location of schools and hospitals, nearby towns such as Dublin play an important regional role by establishing businesses in the other industry sectors.

Between 2007 and 2009, the United States experienced the most severe economic downturn in the post-World War II era. The region fared the Great Recession better than the state and most of the Country with lower unemployment rates, until 2016 with both the state and region unemployment rates reaching the lowest rate in over a decade of 2.8%. The Town of Dublin has helped maintain this trend with its lowest rate (2.9%) since the beginning of the recession in 2007. For additional information on Dublin figures, see the Economic Development chapter.

Broadband

The availability of high-speed internet, also known as broadband, has a significant impact on the region's long-term economic growth. The majority of businesses in the region rely on broadband to keep up to speed with competitors both locally and globally. As stated in *the Comprehensive Economic Development Strategy for Southwest New Hampshire*, broadband has become a critical utility for nearly every sector, whether it be education, health care, public safety, local government, or other economic development. In addition, broadband availability is becoming an increasingly important factor in the region's ability to attract new residents and businesses.

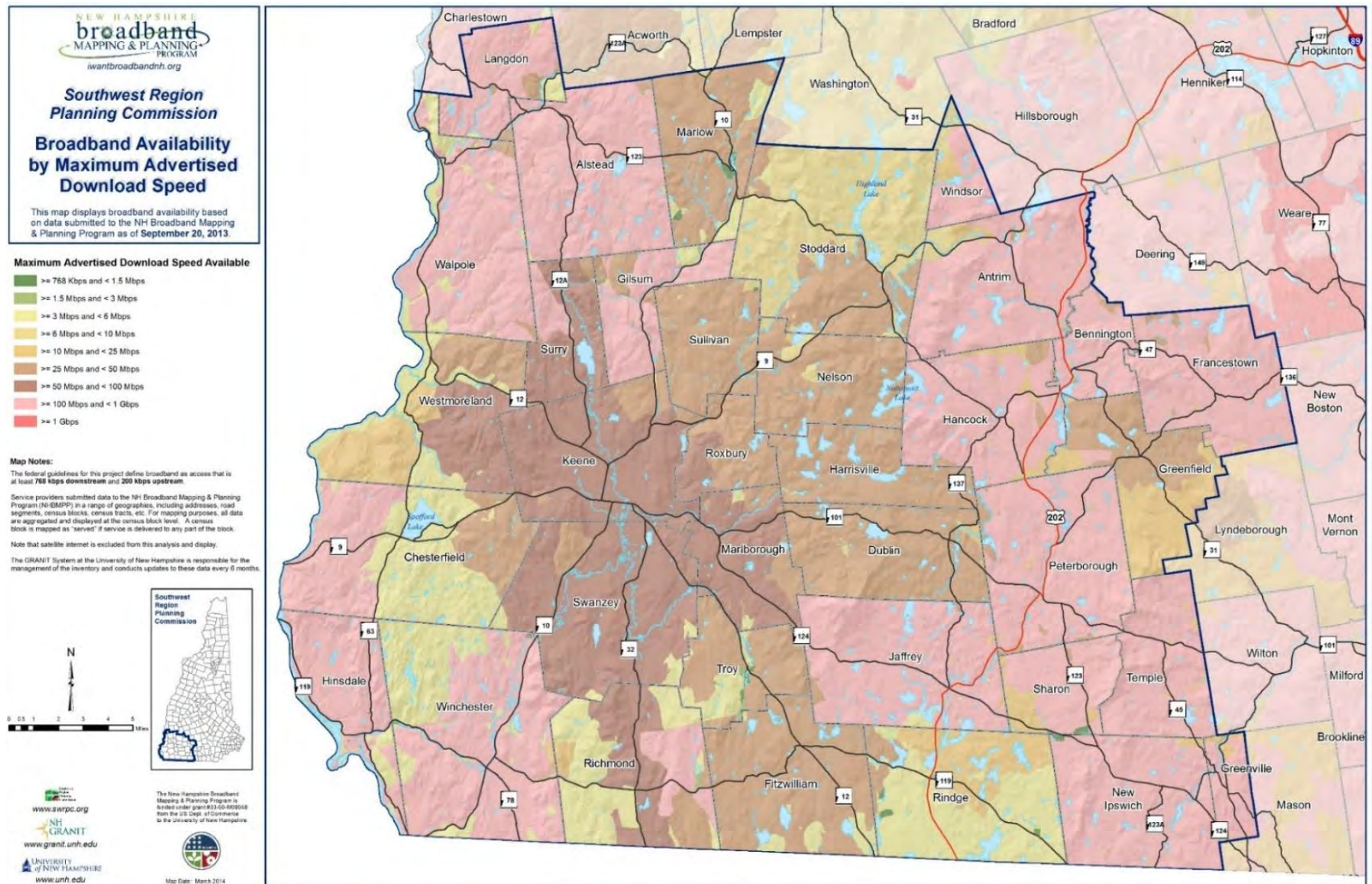
Access to reliable broadband in the region, however, varies significantly. Many of the densely developed areas have good coverage, but there are still areas without any broadband access and many more areas with service that is not capable of meeting the current needs of residents and businesses. Since 2010, Southwest Region Planning Commission has been working with the University of New Hampshire and other partners on New Hampshire's Broadband Mapping Program (NHBMPP's). This initiative is part of a national effort to create and maintain a searchable, public database of information on broadband availability in the United States. It is also the first comprehensive statewide effort to understand where broadband is currently available in New Hampshire.

Difficult terrain, expensive equipment, and the lack of competition between Internet providers makes the deployment of broadband in the region a burdensome and costly endeavor. Since 2009, NH FastRoads has been working to confront these challenges in the interest of expanding access to high-speed Internet in the region. FastRoads has developed a network of 161 miles of middle-mile fiber-optic broadband infrastructure and 86 miles of last-mile fiber-to-the-home. This network provides a fiber connection to 233 Community Anchor Institutions (CAIs) in 19 towns as well as 1,300 homes in Rindge and Enfield, NH.

What is unique about FastRoads is that it does not sell Internet service to individuals or businesses. Instead, it leases space on its network to Internet companies that market and sell service to customers directly. Profits received by FastRoads will be used to maintain existing infrastructure and to continue to expand the network to other communities. This open-access model is intended to encourage competition in the market for broadband service, potentially decreasing costs for consumers and reducing some of the economic and technological barriers to future broadband.

The map on the next page displays the maximum download speeds available to customers as advertised by service providers in the Southwest Region. Service providers submitted data to the NHBMP in a range of geographies including road segments, addresses, census block groups, census tract, etc. It is important to note that for mapping purposes this information was aggregated and mapped at the U.S. census block level. The census block is the smallest geography measured by the U.S. Census Bureau. These blocks are determined by population and can be greater than 2 square miles in size, especially in less densely populated areas. If a broadband provider offers service to a location within a census block, the entire block is depicted as having access to this level of service. In addition, the information presented does not differentiate between speeds provided for business/commercial service and residential broadband service. Because of these limitations, this map may depict overstated levels of broadband service and may not reflect the types of service available to the majority of residences, businesses and CAIs in the Region.

The different colors presented on this map represent speed tiers. Much of the region located in the greater Keene area is shown as having access to maximum advertised download speeds greater than 50 Mbps and less than 100 Mbps. While many of the residents in that area may not have access to such speeds there are businesses and institutions such as Keene State College and Cheshire Medical Center that do. The same situation is true for those areas of the region shaded in pink on the map, which represent areas with access to maximum download speeds greater than 100 Mbps and less than 1 Gbps. No areas of the region shown on the map have access to download speeds of 1 Gbps or greater. The dark green areas on this map represent census blocks with maximum advertised download speeds of 1.5 Mbps or less. These areas include small segments of Marlow, New Ipswich, Rindge, Sharon, and Troy. Dublin is in the category shown as greater than 25 Mbps and less than 50 Mbps with a few small pockets of greater than 10 Mbps and less than 25 Mbps.



Source: Southwest Region Broadband Plan

The next table shows the results of a survey conducted for the *Southwest Region Broadband Plan* to determine if the schools in the region are adequately being served. The table shows that 66% of Public Elementary schools are either underserved or not being served. The public middle schools and high schools fared better with 62.5% and 85.7% being served. Schools that lack adequate broadband capabilities may be unable to provide students with the necessary training and exposure to 21st century skills and resources that make them more competitive candidates for higher education and the workforce. This gap in digital literacy is evidenced by education professionals at all levels, who have witnessed the difference in students transferring from schools in areas unserved or underserved by broadband and those who have had previous exposure to broadband-enabled learning opportunities.

Broadband Service in Regional Public Schools

School Type	Total Surveyed	% Unserved	% Underserved	% Served
Public Elementary School	36	5.6%	61.1%	33.3%
Public Middle School	8	0%	37.5%	62.5%
Public High School	7	0%	14.3%	85.7%
Colleges/Universities	3	0%	0.0%	100%

Source: Southwest Region Broadband Plan, 2014

Absent competitive market conditions, the Southwest Region is challenged with finding affordable and feasible solutions to encourage broadband expansion in un-served and underserved areas and upgrades to existing network capabilities. Without incentives to encourage broadband deployment in rural communities, it is unlikely that the region can create, or maintain, a level of demand needed to attract private sector interest in expanding or upgrading broadband infrastructure.

Potential solutions include encouraging and promoting the development of open access networks, such as NH FastRoads. Another opportunity to incentivize further broadband deployment is the development of mechanisms, similar to Tax Increment Financing Districts, to generate committed revenue streams to support local broadband initiatives. Tax Increment Financing is a method to use future gains in taxes to subsidize current capital or community development improvements, which are projects to create the conditions for said gains.

Some grant funding is available for broadband expansion efforts. One source of funding is the Connect America Fund, which is an initiative by the FCC to expand broadband capabilities to the estimated 19 million Americans that lack high-speed Internet. Portions of this fund were used by the NH FastRoads project to install a middle-mile fiber backbone and last-mile fiber, also known as “fiber to the home,” in parts of western NH.

Natural Resources

The quality and accessibility of the Southwest Region’s natural resources are an important component of the way in which many residents and visitors define quality of life. These rich and varied resources shape our region and community identity. They serve not only as links to the past, but contribute to our health, well-being, and economic prosperity. While the region is fortunate to have abundant

natural resources, these resources cannot be taken for granted. If they were to disappear or degrade, much of what is valued about the region would be threatened, and there would be significant impacts on public health and the economy. For these reasons and many others, it is important to care for and protect the natural and cultural resources locally to ensure that future generations can experience the same benefits from them as we do today.

Given the diversity of interests and values related to the landscape, establishing collective priorities for resource conservation and management is a challenge. This is especially true when trying to coordinate it with other towns. Management strategies must balance meeting diverse needs and uses of the natural resources, with protecting them from current and future threats such as the loss of biodiversity and resource degradation as a result of human activities, development pressure, and the impacts of a changing climate. Planning strategies and management options for communities have been identified in the *Southwest New Hampshire Natural Resources Plan* and the *Monadnock Region Future Regional Plan*.

Forests

In the Southwest Region, forest lands are a defining feature of the landscape and an asset for economic development and tourism. Forests, which cover approximately 83% of the region's land area, play an important role in providing clean air, clean water, and essential habitat for plants and animals. Other roles of forestlands include protecting watersheds; reducing the impacts of floods; and, storing carbon from the atmosphere. In addition to these ecosystem services, forests have significant economic value. They serve as a renewable and local resource for heating fuel and for products such as lumber and paper. They also contribute to the scenic quality and rural character of the region, attracting visitors to enjoy their beauty and fall foliage, and to participate in recreational activities such as hiking, hunting, mountain biking, cross country skiing, etc.



Source: *Monadnock Region Future: A Plan for Southwest NH*

Of significant regional importance is Mount Monadnock, located in Dublin and Jaffrey, which includes thousands of acres of protected land with numerous trails, swimming holes, and mountain climbing opportunities. The elevation is 3,165 feet and is the highest point in Cheshire County. To reach the summit, hikers have five trails to choose from, two of which are located in Dublin (Dublin Trail, and Pumpelly Trail).

Dublin's role as a provider of trail related recreation is highly regarded in the region. In addition to the two trails named above, Dublin is host to the Monadnock-Sunapee Greenway and a Nordic Center.

The threats facing these forests and the services they provide are varied and complex; however, fragmentation, development, invasive species, disease, climate change and unmanaged forest practices are among the most critical.

Water Resources

The economic well-being, public health, and quality of life in Southwest New Hampshire depend on the continual availability of high quality water resources. Whether it is needed for drinking, agriculture, wildlife, recreating, manufacturing, energy generation, or ecosystem health, water is a vital resource. In order to ensure there is access to safe and reliable sources of water in the region, now and into the future, proper management and protection of water quality and quantity is critical.

Surface Waters

Approximately 3% of the Region, or 21,696 acres, is surface water (lakes, ponds, perennial streams). There are more than 3,000 perennial water bodies, ranging in size from less than an acre to 715 acres (Nubanusit Lake in Hancock and Nelson). Among the region's water bodies, there are 164 great ponds (water bodies 10 acres or larger) and 5,869 miles of shoreline including all rivers, lakes, ponds, and perennial streams. Dublin Lake is one of the largest and deepest lakes in the region and is a common destination for boaters and fisherman.

Two major drainage basins, the Connecticut River and the Merrimack River, encompass the region. The Connecticut River is the largest river in New England and runs along the border of New Hampshire and Vermont. Its watershed, which spans 11,250 square miles, drains 3,063 square miles in New Hampshire, about one-third of the state. This basin covers approximately 60% of the Southwest Region. The Merrimack River Watershed covers 40% of the Region and encompasses a total 5,010 square miles in New Hampshire and Massachusetts. However, 75% of the watershed is located in New Hampshire.

These surface waters provide important habitat and travel corridors for wildlife and aquatic species; offer recreational opportunities such as boating, fishing, and swimming; and, are a major attraction for seasonal visitors and residents. A study conducted in 2002 determined that just four uses of NH's surface waters – boating, fishing, swimming, and drinking water supply, contribute up to \$1.5 billion annually in total sales to the state's economy and surface waters boost property tax revenue by an estimated \$247 million per year.

Groundwater

Approximately 98% of the region's population is dependent on groundwater for their drinking water supplies. Groundwater is water that lies beneath the surface of the land within bedrock fractures and between particles of soil and sediment. It is closely connected to surface waters, as it replenishes rivers, lakes and wetlands during dry periods. It provides an estimated 40% of total flow in the state's rivers, which in turn feed the state's lakes, reservoirs, and estuaries. Maintaining the high quality and availability of groundwater is important to protect public health and the environment.

Wetlands

Wetlands are an integral part of the Southwest Region's water resources and are essential to the health of waterways and to flood prevention. Approximately 5% (32,370 acres) of the

region is classified as wetlands by the National Wetland Inventory of the U.S. Fish and Wildlife Service. In New Hampshire, a wetland is defined as “an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal conditions does support, a prevalence of vegetation typically adapted for life in saturated soil conditions (NH RSA 482-A).” Wetlands generally include swamps, marshes, bogs, vernal pools, and other similar areas. Of these wetlands, about 25% are conserved. The different types of wetlands in the region include emergent wetlands (marshes, meadows, and fens), scrub-shrub wetlands (bogs), and forested wetlands (predominantly Red Maple Swamp).

Regional Topics of Concern

Below is a list of strategies from the *Monadnock Region Future* (Regional Plan) that outline regional concerns. Many of these can best be addressed with a coordinated effort among several communities working toward the same outcome. Therefore, these strategies should be taken into consideration during the review process of applicable development proposals.

Economic Development

- The availability of high-speed Internet, also known as broadband, has a significant impact on long-term economic growth. However, access to reliable broadband in the region varies significantly. The speeds needed to conduct most business on the Internet have increased 100-fold over the past 15 years. The need for faster broadband will only increase over time.
- While the region has a strong base of diverse industries, civic engagement, and high quality of life to build on, this alone cannot ensure future prosperity and economic resilience. We have the opportunity to identify what it takes to build a competitive regional economy in a post-recession, globalized economy and to address areas that we know need improvement. To do so, we might consider expanding a skilled workforce; growing business and industry; strengthening our existing assets; and maintaining adequate infrastructure. It also requires promoting a balanced and diverse mix of business and industry that offers quality employment for a range of skills and abilities.
- In the region, our infrastructure needs are great; however, we are challenged in our ability to repair, maintain, and upgrade these systems and structures. High-performing and reliable infrastructure is a vital component of a robust regional economy. Without functioning roads and bridges, access to clean drinking water, constant supplies of energy, high-performing Internet, and other critical support services (e.g. childcare or eldercare), most businesses would be unable to function, let alone compete in a global economy.

Emergency Preparedness

- There are many factors that influence a community’s resilience - the ability to prevent or withstand and recover from natural or manmade disasters, public health emergencies and other crises. Resilience involves developing the capacity to account for and mitigate vulnerabilities, establishing strong social networks, considering preparedness and mitigation in local planning efforts, reducing negative health consequences, and rapidly restoring community functions. While many communities in the Southwest Region have in place plans and trained volunteers to respond to a disaster or emergency, building resilience is an ongoing task. Critical infrastructure, such as transportation, water and wastewater, energy, emergency management, health care, agriculture, and telecommunications, is intricately linked with the

overall resilience of a community. Therefore, protecting these systems against disruptions and adverse impacts is an important component of preparedness and hazard mitigation.

Housing

- There is a regional need to expand the diversity of housing options. The region's current supply and location of housing is not aligned with the evolving preferences among different age groups. As our population ages, the need for appropriate housing, transportation, health care, and support services will continue to increase. While seniors and 'Baby Boomers' generally want to grow old in their own homes or locale, most of our region's communities do not currently support the appropriate housing, social services and transportation these older adults need to be able to live independently. Nor do many communities support the housing or transportation preferences of younger generations, who are more inclined towards renting and short commuting distances. Communities can support the development of a more adaptable housing inventory by creating a regulatory environment that supports innovative land use approaches such as allowing for accessory dwellings, the conversion of single family units to multi-family units, and mixed use development.

Transportation

- Within the region, public transportation in the form of fixed-route service is primarily limited to Keene and small portions of Hinsdale and Walpole. Most residents in need of transportation rely on family members and friends, or volunteer driver networks, such as those operated by the American Red Cross and Contoocook Valley Transportation Company. These services, which primarily provide rides to medical appointments, meet some of the demand for transportation options. Multi-modal transportation options should be expanded throughout the region to stay in line with the emerging needs.

Regional Plans and Reports

The Southwest Region Planning Commission (SWRPC) publishes studies and reports to provide a more developed regional perspective for use by municipal governments. Several of the Commission's reports and research, which are available on the SWRPC website (www.swrpc.org) or by contacting the Commission, are described below:

Monadnock Region Future: A Plan for Southwest New Hampshire (2015)

The Southwest Region Planning Commission (SWRPC) developed this document to provide information and guidance to anyone with an interest in planning for the future of the Southwest Region. This Plan maps out a vision for the future based on an understanding of the region's assets and opportunities, ongoing initiatives and current challenges. It encourages the reader to think broadly about the region and the factors affecting its success, and presents strategies that can enhance current efforts, as well as promote new and emerging opportunities. It is intended to promote regional thinking, coordination, and action.

Southwest New Hampshire Housing Plan (2014)

The *Southwest New Hampshire Housing Plan* provides a detailed analysis of housing trends and housing cost burdens by income level based on US Census data for the Southwest Region. The report

highlights housing needs and trends in the Southwest Region and its counties, as well as statewide totals. The report uses census data to analyze changes in population, households by tenure, vacancy rates, and housing cost burden for renters and single family homeowners, and estimates the range of and demand for housing production.

Southwest New Hampshire Broadband Plan (2014)

This plan contains recommendations oriented around a central vision and four primary goals, which respond to broadband challenges and needs specific to the Southwest Region at the time of release. The objectives and proposed strategies identified in this plan are viewed as realistic measures for improving the landscape of broadband in the Southwest Region over the next five years and beyond. They are directed at regional organizations, municipalities, community anchor institutions, broadband providers, policy and decision makers and others to consider, pursue, and/or support their efforts to increase access to and the utilization of high quality broadband in the region.

Southwest New Hampshire Natural Resources Plan (2014)

This plan provides an overview of the significant conditions and trends, issues and challenges and opportunities facing the region's diverse natural resources, and the infrastructure we rely on to safely access and utilize these resources. It highlights strategies for communities, organizations, and others to consider in addressing natural resource, water infrastructure, energy, and climate challenges at the regional and local level. Additionally, it addresses opportunities for regional coordination and action, and outlines some of the many resources communities and others can use to advance certain objectives.

Southwest Region Natural Resources Inventory (October 2003)

The *Southwest Region Natural Resources Inventory* provides a basic analysis of natural resources and landscape fragmentation on a regional scale that can be used "as is" by municipalities as their first edition NRI, or used as a template to be enhanced with original local research and local knowledge. While a set of topographic maps annotated with information by residents about the character of the forests and ponds, movement of wildlife and viewsapes that define their town is a perfectly acceptable starting point for conservation planning, the Planning Commission offers this analysis of available GIS information. It is hoped that this project can provide a common point of departure for the development of municipal NRI's in the Southwest Region.

Southwest Connects: Southwest Region Transportation Plan 2014 – 2035

Southwest Connects: Southwest Regional Transportation Plan presents policy and technical information relevant to local, regional, and state activity of the planning and management of the transportation system. The plan facilitates a regional approach among local and state decision makers to planning and decisions regarding transportation, land use, and community development.

Comprehensive Economic Development Strategy for Southwest New Hampshire (2015)

The purposes of the *Comprehensive Economic Development Strategy* (CEDS) for Southwest New Hampshire are to promote greater coordination among communities and economic development interests and to establish eligibility for federal assistance through the U.S. Economic Development Administration. The current CEDS was developed through the coordination of regional economic development stakeholders and municipal officials through the CEDS Advisory Committee as part of the *Monadnock Region Future: A Plan for Southwest New Hampshire*. The committee reviewed and

analyzed existing trends and developed goals and objectives to help the region manage its destiny and protect its competitive advantage in New England and the global economy in the coming years. The CEDS will be updated annually and revised every five years.

Regional Resources

The following regional and state groups, organizations and agencies are key resources for implementation of the Master Plan:

Monadnock Business Ventures

Monadnock Business Ventures (MBV) is a Non-Profit Regional Economic Development Corporation providing the following services to communities in the Monadnock and Contoocook Valley regions:

- Assist business start-ups, expansions and relocations.
- Advise businesses and communities about state programs available for economic assistance.
- Operate an "incubator" facility for new business start-ups.
- Maintain a database of available commercial and industrial property
- Initiate, process and receive Community Development Block Grants (CDBG) for local governments to create employment opportunities.
- Operate a revolving loan fund for new and expanding businesses.
- Work with others to market the region for the creation of jobs.

Monadnock Conservancy

The Monadnock Conservancy is a regional non-profit land trust that assists land owners and municipalities with protecting land through easement, donation or purchase of land. Preservation efforts may include farmland; productive forest; open space; recreational trails; water supply; wildlife corridors; scenic ridgelines above the City of Keene and the Ashuelot River Valley; floodplain, aquifer and wetlands along the Contoocook River; and, scenic forests along the Wapack Trail and the Monadnock-Sunapee Greenway.

Monadnock Economic Development Corporation

Monadnock Economic Development Corporation (MEDC) is one of 15 Non-Profit Regional Economic Development Corporations located throughout New Hampshire. MEDC is a private, not-for-profit regional development organization committed to the creation of jobs and the broadening of the tax base for New Hampshire's Monadnock Region communities. The Board of Directors and staff of MEDC concentrate their efforts on business retention, relocation, expansion, and recruitment projects, as well as downtown revitalization and rehabilitation projects. In addition to its revolving loan fund, its USDA Rural Development Intermediary Re-lending Program and its network of financial institutions, MEDC has access to state and federal funds earmarked for economic development.

NH Department of Environmental Services

The goals of the NH Department of Environmental Services (NH DES) are to protect and promote wise management of the state's environment. The Department's responsibilities include ensuring high levels of water quality for water supplies, regulating the emissions of air pollutants, fostering the proper management of municipal and industrial waste, and managing water resources for future generations.

NH Department of Resources and Economic Development

The Department of Resources and Economic Development (NH DRED) consists of four divisions: Forest and Lands, Parks and Recreation, Travel and Tourism Development, and Economic Development. The Division of Forests and Lands protects and promotes the values provided by trees, forests and natural resources (and includes the Natural Heritage Bureau) while Parks and Recreation aims to protect historic and natural resources. Promoting New Hampshire as a travel destination is the mission of Travel and Tourism Development. Similarly, Economic Development promotes businesses and the expansion of existing businesses.

NH Municipal Association

The New Hampshire Municipal Association (NHMA) was established in 1941 to serve member cities and towns. NHMA has evolved into a service and action arm for New Hampshire local governments. The Association prides itself on its ability to meet the ever-changing educational and training needs of municipal officials and employees, as well as the flexibility to develop new programs designed to meet the needs of local governments. Today, NHMA offers legal and technical assistance, legislative representation, training, workshops, and personnel services.

NH Office of Energy and Planning

The NH Office of Energy and Planning (NH OEP), formerly known as the Office of State Planning, is based in Concord and is legislatively required to plan for the orderly development of the state and the wise management of the state's resources. NH OEP compiles, analyzes, and disseminates data, information, and research services to advance the welfare of the state; encourages and assists with planning, growth management, and development activities of cities and towns; administers select federal and state grant-in-aid programs; and, participates and advises in matters of land use planning regarding lake and river management programs. NH OEP typically does most of its work with communities through the regional planning commissions.

Southwestern Community Services

Southwestern Community Services, Inc. (SCS) is one of six community action agencies throughout New Hampshire, and part of the larger network of 70 agencies in New England and nearly 900 agencies nationwide. SCS advocates for and assists citizens in need through a variety of program areas including Head Start, fuel assistance, developmental services, economic development, elderly services, weatherization, homeless services, housing rehabilitation, affordable housing, health and nutrition, and workforce development.

Southwest Region Planning Commission

The Southwest Region Planning Commission (SWRPC) currently serves 34 member-municipalities in Cheshire, western Hillsborough, and Sullivan Counties. SWRPC provides local assistance on a wide range of planning issues to member municipalities through activities including community master planning, site plan review, capital improvement planning, subdivision reviews, ordinance preparation, interpretation of state and local planning requirements, grant administration, cartographic support, and geographic information system (GIS) applications. The agency has a diverse work program made up of six major program areas: Local Planning Assistance, Natural Resources Planning, Community and Economic Development, Transportation Planning, Hazard Mitigation and Emergency Management Planning, and Regional and Geographic Information Systems.

U.S. Environmental Protection Agency, Region I

The goal of the Environmental Protection Agency Region I (New England) is to protect human health and safeguard the natural environment where people live, learn, and work in the six New England states: Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, and Vermont. One way to help accomplish this goal is to ensure that communities have access to accurate information sufficient to effectively participate in managing human health and environmental risks. This federal agency is a resource for information on environmental regulation, resource protection, and human health protection.



NATURAL RESOURCES

Introduction

Dublin is a town whose development has been profoundly affected by its natural environment. Our town's elevation on the shoulder of Mount Monadnock meant a short growing season, and its steep slopes and rocky soil presented a challenge to the early settlers who struggled to make a living tilling the land. Despite the prevalence of water bodies and wetlands, there was a lack of the type of water resources that could power factories and which had led to industrial development and population growth in neighboring towns. Therefore, the town's agriculture focused on sheep farming, and most of the land was cleared and fenced for pasture. When sheep farming ceased to be profitable, Dublin's population waned as people left to find better land, as indicated in the Population graph, Page _____. Subsequently, most of the pastures and farmland have turned back into forests.

But the undeniable beauty of the rugged landscape gave rise to a new focus for Dublin's economy: serving as a retreat for tourists, artists, and writers. The cool temperatures that meant a short growing season for farmers provided a welcome summer respite to city dwellers in an age before air conditioning. The high rocky hills that were so hard to farm were beautiful to paint and hike, and the cool clean waters of our lakes were wonderful for swimming, fishing, and boating. Locals made a living renting rooms to visitors, selling them produce, and building them summer homes.

Today, only a handful of contemporary Dubliners cater to the tourist industry, and fewer still attempt to make a living off of the land, but the environment and the scenic beauty of the area continue to be the leading reasons why people choose to live here. Along with the small-town charm, the natural beauty of Dublin was a major factor in the re-population of the town in the period between 1970-1990 by new residents who mostly commuted to work in other towns. Fortunately, this growth has not had a significantly adverse impact on Dublin's beauty or natural resources.

Agriculture

As previously mentioned, Dublin's elevation and rocky soil make agriculture difficult. Despite the difficulty, there have always been farms here, and an increasing interest in locally grown food will likely result in increased farming in the coming years. Dublin should encourage this, and ensure that there is some protection for prime agricultural soils for future use.

Conservation.

There is an ongoing effort on the part of individuals and non-profit organizations to conserve important tracts of land in Dublin, especially on and around Mt. Monadnock. As a result, Dublin has a relatively high percentage of land in permanent conservation easement, including significant portions of the mountain and the area around it, as shown on the Development Constraints map.

In addition, the town commissioned an Open Space Committee to review unprotected tracts of land in order to identify additional parcels for protection in the future based on scenic beauty, wildlife habitat/corridors, hiking trails, contiguity with other protected parcels, recreation, and other factors. The Planning Board and Conservation Committee should monitor the most important parcels identified by the Open Space Committee to see if opportunities arise in coming years for protection of those properties, or parts of them, with permanent easements. When possible, this should be done through cooperation with landowners, contributions from private individuals or organizations, or as part of a development process that allows the use of less important sections of the tract. Dublin should consider using proceeds from the Land Use Change Tax to obtain easements where other options are not available, or to fund other activities by the Conservation Committee that will protect and enhance Dublin's natural environment, including such actions as the Commission's ongoing attempts to control the spread of invasive species.

Water Resources.

Water is an important component of Dublin's natural environment. As noted by Concom Chair Tracey May Kalavitas in her series of articles in the *Dublin Advocate*, Dublin is divided almost in half as a headwater of two different drainage basins: the west part of town feeds water into the Connecticut River running south, and the eastern portion of town sends water into the Contoocook River, which is part of the Merrimack River system draining water east to the Atlantic Ocean in northeastern Massachusetts. The geological position is a blessing in that we don't face pollution flowing into Dublin from other towns but brings with it a responsibility to our downstream neighbors to ensure the water flowing out of Dublin is clean and free of chemicals or other pollutants.

Our lakes and ponds, and especially Dublin Lake, are part of Dublin's scenic beauty and are also important for recreation activities such as swimming, boating, skating, fishing, and diving. These activities also benefit the Town economically by bringing people in to patronize local businesses. Dublin Lake is well-known for its beauty and has stayed surprisingly clean despite the fact that one of New Hampshire's major east-west highway runs along its northern shore, thanks to efforts by the Town, the state, and private organizations. The Town should support the continuation of these efforts in the future.

Our wetlands, once considered wastelands to be drained whenever possible, are now recognized as not only beautiful, but also vitally important ecologically. They serve such functions as habitat for an abundant number of diverse species of plants and animals, trapping floodwaters, recharging groundwater supplies, and removing pollution. The Planning Board should continue to closely monitor and regulate activities in the wetlands or wetlands buffer areas to maintain the beauty and ecological integrity of our wetlands.

Dublin also has important water resources located beneath the surface. Groundwater is held both in the cracks and fissures in the bedrock that underlies Dublin, and in a large stratified drift aquifer located in the Mud Pond area. Groundwater in the bedrock can generally meet the needs of homeowners, but the stratified drift aquifer, which is made of sand and gravel type materials left

by glaciers, reportedly contains a large amount of water that could be important to Dublin in future years.

All of these water resources, including the source of our drinking water, can easily be degraded by such pollutants as petroleum products, stormwater runoff, including salt and petroleum from roads, chemical fertilizers and pesticides. It is essential that Dublin have (and enforce) ordinances that limit the type of uses and activities that could threaten Dublin's groundwater, especially in the area of the stratified drift aquifer. As large groundwater withdrawals (i.e., for commercial purposes) could threaten nearby wells and/or draw pollutants down into the groundwater as the natural water level is reduced, Dublin should work with the New Hampshire DES to ensure that our aquifers are protected to the greatest extent possible.

Steep Slopes

As illustrated on the Development Constraints Map, Dublin contains a relatively high percentage of steep land compared to nearby towns. The town includes a large part of Mt. Monadnock, plus Pumpelly Ridge, Beech Hill, and a number of other significant hills and ridges. Although steep slopes can be developed, special precautions are necessary to prevent erosion, site septic systems, and prevent damage to Dublin's scenic views. Sufficient regulations must be kept in place to ensure that such development be engineered and constructed in a manner which will minimize these risks.

Recreation

Although the availability of organized recreation is limited in Dublin, the opportunity for outdoor recreation is a very important part of the town's appeal. Mt. Monadnock is one of the most climbed mountains in the world, and many of the hikers pass through Dublin. In addition to the trails on the mountain and on Beech Hill, there are many miles of other trails throughout the town, many of which are used year-round by walkers, equestrians, cross-country skiers, bikers, snowshoe-ers, and snowmobilers. The Town should work with volunteers and non-profit organizations to keep these trails open and maintained.

Additional outdoor recreational opportunities include boating, swimming, diving and fishing, especially in Dublin Lake. Other, smaller water bodies also offer opportunities for fishing, and hunting for deer, wild turkey, and other game is still popular.

The future

Some of the same limitations that affected early farmers also limit development today. Tracts with steep slopes are difficult and costly to develop and require special care to prevent erosion. Rules restricting development of land in or near wetlands are important to protect wetlands, but also diminish the amount of usable land, which is already reduced by the significant amount of land under permanent conservation easement. See the Development Constraints Map which shows the land which is constrained by steep slopes, water or wetlands (including the current 100' wetland buffers) and permanent conservation easements.

Given the importance of Dublin's natural resources and the limited amount of land available for development, it is vital that the planning process balance the need for preservation with the need to provide some room for the town to grow by identifying areas of the town where future growth should (and could) occur. This can be done in a way that will protect the natural beauty that is so important to Dubliners while still protecting property owners' right to use their land and providing opportunities for future growth.



IMPLEMENTATION PLAN

Implementation Plan

A Master Plan is not fully complete without a mechanism that sets the wheels in motion for actions to be taken to implement it. The matrix below is a compilation of strategies that can be explored to help meet the goals and objectives in each chapter of this Master Plan. The strategies include the leadership of different members of the Town staff and Town Boards, Commissions, Committees, and organizations. To maximize the success of this plan, there should be an annual meeting between all of the parties identified in the leadership column of this matrix. This will keep the plan fresh and can be a catalyst for conversation and action.

The timeframe used for the “When” column is Short-term (1-3 years), Mid-term (4-6years), and Long-term (7-10 years).

Implementation Plan

Population & Housing Chapter			
Goal 1: Understand the needs of the community to maintain the population and encourage gradual and sustainable growth.			
Objective 1: Initiate planning for anticipated demographical changes.			
Strategy/Action	Leadership	When	How/ Funding & Other Resources
1. Develop strategies to determine ways to maintain the desirability to live and work in Dublin.	Planning Board	Short 2018	Master Plan budget
2. Review/analyze the 2016 Master Plan Survey. Develop an action plan that will best meet the survey responses. Incorporate actions into this Implementation Plan.	Planning Board	Short 2018	Master Plan budget
3. Maintain an updated Hazard Mitigation Plan and incorporate it into the Master Plan (appendix). Update the Emergency Operations Plan. These plans should be updated every five years.	Emergency Management Director	Short	Incorporate the plan into the appendix as a reference.

Goal 2: Understand and maintain the housing needs of Dublin residents.			
Objective 1: Initiate appropriate planning for anticipated demographical changes.			
Strategy/Action	Leadership	When	How/ Funding & Other Resources
1. Revisit the Retirement Community Overlay District to ascertain if there is a better way to encourage senior housing that is at an appropriate scale for Dublin.	Planning Board	Short	Master Plan budget
2. Consider Innovative Land Use methods for residential development in the Village District. (mixed use, co-housing, etc.)	Planning Board	Short	Master Plan budget
3. Encourage the development or rehabilitation of diverse housing types that meet the needs and preferences of multiple generations, diverse abilities, and a range of income levels.	Planning Board	Short	Master Plan budget
4. Review cluster subdivision ordinance to determine if changes are needed to simplify and streamline	Planning Board	Short	Town budget
Economic Development Chapter			
Goal: To have a balance of business opportunities to meet the retail, service, and employment needs at a scale appropriate for the Town.			
Objective 1. Seek ways to make the Town more business friendly and increase employment options.			
Strategy/Action	Leadership	When	How/ Funding & Other Resources
1. Seek avenues to provide high-speed internet to the entire town.	Broadband Committee	Short	Town budget
2. Consider strategies to improve cellular coverage to the entire town.	Planning Board		Consider a change in the ordinance.
3. Consider methods of enhancing economic development at a size and amount that is appropriate for Dublin.	Planning Board	Short	Consider mixed uses.
4. Update the Towns' website to show that Dublin is a business friendly community. Make information available on-line to encourage business development.	Town Administrator	Mid	Seek assistance from NH Department of Business & Economic Affairs.

Land Use Chapter			
Goal: Maintain the rural character of Dublin while allowing for sustainable growth.			
Objective 1: Determine potential growth areas and consider the appropriate scale of development.			
Strategy/Action	Leadership	When	How/ Funding & Other Resources
1. Review the Site Plan Review Regulations to determine where changes are needed.	Planning Board	Short	Town budget
2. Implement <i>Innovative Land Use</i> methods to allow development while preserving the historic, cultural, and natural resources of Dublin.	Planning Board	Short	Consider changes to density requirements.
3. Consider adjusting the boundaries of the Village District.	Planning Board	Short	Town budget
Objective 2: Establish and/or maintain ordinances that encourage agriculture and alternative energy sources.			
Strategy/Action	Leadership	When	How/ Funding & Other Resources
1. Review land use regulations for barriers. Revise as needed.	Planning Board	Short	Town budget
2. Attend seminars and webinars for latest methods and strategies.	Planning Board	Short	Town budget
Traffic and Transportation Chapter			
Goal: Provide safe transportation infrastructure for all modes of transportation.			
Objective 1. Maintain adequate local roads to meet the needs of Dublin residents and commuters.			
Strategy/Action	Leadership	When	How/ Funding & Other Resources
1. Perform a culvert inventory. Replace or upsize culverts where needed. Inspect culverts and ditches for handling excessive stormwater prior to heavy weather events.	Road Agent/ Emergency Management Director	Short/ Ongoing	Contact SWRPC and use town list if available; grants
2. Ensure that Primary and Secondary evacuation routes are maintained.	Road Agent	Short/ Ongoing	Town budget
3. Review Local Road Design Standards and update as needed.	Planning Board	Mid	Town budget

Objective 2. Improve safety of pedestrians and bicyclists along roadways.			
Strategy/Action	Leadership	When	How/ Funding & Other Resources
1. Consider adopting a Complete Street policy.	Board of Selectmen	Long	Contact SWRPC; grant
2. Work with state officials to minimize the adverse effects of the Town's two state highways with respect to such factors as noise, traffic, and pedestrian and bicycle safety.	Board of Selectmen	Short/ Ongoing	Contact NH DOT; Town budget & grants
3. Conduct a road safety audit in accident areas or in areas of concern.	Police Chief	Short/ Ongoing	Contact SWRPC & NH DOT; grant
4. Improve crosswalk safety & visibility.	Board of Selectmen/ Police Chief	Short	Contact NH DOT
Regional Context Chapter			
Goal: Goal: Understand the value and importance of Dublin's role in the region and implement findings.			
Objective 1. Provide infrastructural needs within Dublin that connect to other communities in the region.			
Strategy/Action	Leadership	When	How/ Funding & Other Resources
1. Work with collaboratively with neighboring communities to provide or improve upon infrastructure needs of Dublin and the region.	Board of Selectmen	Short/ Ongoing	Meet with neighboring communities to initiate conversation.
2. Work with landowners and organizations to establish and improve connection of the trail system within the region.	Conservation Committee/ Recreation Committee	Short/ Ongoing	Grants, Conservation funds
Objective 2. Consider the opportunities to share municipal services and resources.			
Strategy/Action	Leadership	When	How/ Funding & Other Resources
1. Identify potential areas for cost sharing with other communities.	Board of Selectmen	Short/ Ongoing	Identify areas for partnerships.

Objective 3. Encourage and support regional protection of natural resources.			
Strategy/Action	Leadership	When	How/ Funding & Other Resources
1. Work with adjacent communities to develop priority properties that would connect conservation areas thereby establishing unfragmented parcels of land for wildlife corridors and habitat areas.	Conservation Commission	Short/ Ongoing	Work in collaboration with non-profit organizations.
2. Work with adjacent communities on protection of water resources.	Conservation Commission	Short/ Ongoing	Work in collaboration with non-profit organizations.
Objective 4. Support the efforts of regional and state agencies as well as non-profit organizations that provide outreach and education on all aspects of planning within the region and state.			
Strategy/Action	Leadership	When	How/ Funding & Other Resources
1. Participate in regional and state workshops that seek to develop solutions and improve upon strategies concerning local, regional and state issues such as housing, transportation, education, natural resources/environment, economic development and tourism, and renewable energy.	Board of Selectmen Planning Board Conservation Commission	Short/ Ongoing	Look for opportunities to attend beneficial forums.
2. Appoint 1 or 2 residents to become Dublin representatives on the Southwest Region Planning Commission and regional advisory committees.	Board of Selectmen Planning Board	Short	Contact SWRPC.
Natural Resources Chapter			
Goal: To protect Dublin's natural resources and scenic beauty for current enjoyment and for future generations.			
Objective 1. Understand the vulnerabilities of the water resources, natural landscape, and forested areas.			
Strategy/Action	Leadership	When	How/ Funding & Other Resources
1. Review the Natural Resources Inventory to determine the need for an update.	Conservation Commission	Mid-Long	Grants & Town budget
2. Continue best management practices (BMPs) for all town construction projects.	Road Agent	Short/ Ongoing	Town budget
3. Adopt regulation of large commercial water withdraws so as to protect the underground water resources.	Planning Board	Short	Contact NH DES for assistance; Town budget & grants.

Objective 2. Continue to support conservation efforts.			
Strategy/Action	Leadership	When	How/ Funding & Other Resources
1. Review the inventory prepared by the Open Space Committee. Determine appropriate actions to conserve properties identified as valuable for environmental and recreational purposes.	Conservation Comm./ Planning Board	Short/ Ongoing	Consider identified priority areas during review of applications presented to the Planning Board.
2. Identify uses compatible with recreation and education to see if opportunities arise for protection of those parcels.	Conservation Comm./ Recreation Committee	Short/ Ongoing	Town budget
3. Employ good land steward methods for land held in conservation.	Conservation Commission	Short/ Ongoing	Grants & Town budget
Community Facilities Chapter			
Goal: Provide the necessary community facilities and services to meet the varied needs of Dublin residents.			
Objective 1: Inventory town facilities and assets to determine appropriate capacity, needed maintenance and upgrades.			
Strategy/Action	Leadership	When	How/ Funding & Other Resources
1. Maintain and update the yearly Capital Improvement Plan (CIP).	Board of Selectmen	Short/ Ongoing	Town budget and grants
2. Inventory recreation areas. Determine capacity needs, equipment and facility condition, accessibility, (add others). Make improvements as needed.	Recreation Committee	Mid	Town budget and grants
Objective 2: Improve energy efficiency and usage in all town buildings.			
Strategy/Action	Leadership	When	How/ Funding & Other Resources
1. Conduct an energy audit of Town buildings.	Board of Selectmen	Short/ Ongoing	Town budget and grants
2. Consider the converting some or all town facilities to renewable energy.	Board of Selectmen	Short/ Ongoing	Town budget and grants
Objective 3: Increase citizen participation in town government and volunteer opportunities.			
Strategy/Action	Leadership	When	How/ Funding & Other Resources
1. Seek methods to encourage a range of people of different age groups to serve on town government (also Fire Dept., etc.).	Board of Selectmen/ Planning Board Conservation Comm.	Short/ Ongoing	Social media, town website, field trips, community events, and others.

MAPS



Photo Credits:

Photo for Population & Housing Chapter - Caleb Niemela

All others - Bruce Simpson

Wetland Conservation District

The Wetlands Protection District is an overlay zone, superimposed on all other zoning districts in the Town of Dublin. It was established to protect wetlands from development, among other things. Since there is not a single comprehensive source for this information, all Dublin wetlands fall within this district. This includes those documented in the Master Plan and through the procedures of NH RSA 482-A.

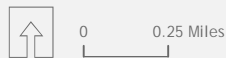
Scenic Gateway Overlay District

The Scenic Gateway Overlay District is comprised of all property with frontage on Route 101 from the Peterborough town line west to East Harrisville Road, and from the Marlborough town line east to the Dublin Road (formerly New Harrisville Road).

Retirement Community Overlay District

The Retirement Community Overlay District, designed to regulate housing and related facilities for residents over the age of 62, applies to all zoning districts with the exception of the Mountain District.

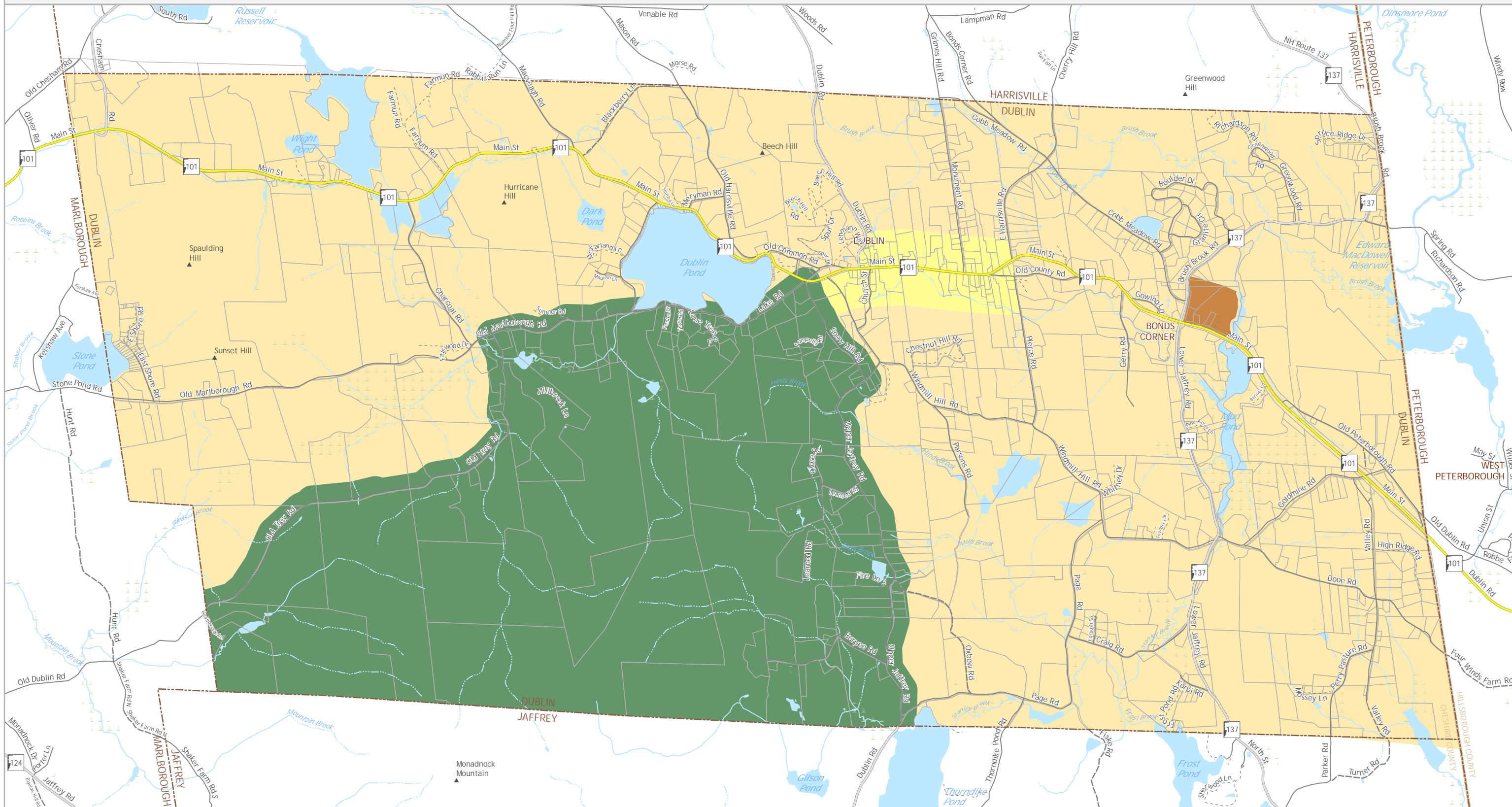
- | | | |
|------------------------|----------|---------------------|
| ▲ Summit | Highway | River or Stream |
| --- Municipal Boundary | Class I | Intermittent Stream |
| | Class II | Perennial Stream |
| | Class V | Water Body |
| --- Class VI | | Swamp or Marsh |
| --- Private | | Lake or Pond |



TOWN OF DUBLIN

ZONING MAP

- | | |
|----------------------------------|-------------------|
| Village District | Mountain District |
| Neighborhood Commercial District | Rural District |



Census Blocks

The United States Census Bureau tabulated the number of housing units in 156 distinct areas referred to as "blocks" as part of the 2010 Census. Census Blocks are statistical areas bounded on all sides by visible features, such as streets, roads, streams, and railroad tracks, and/or by nonvisible boundaries such as city, town, township, and county limits, and short line-of-sight extensions of streets and roads.

Housing Units

According to the Census Bureau, a housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and which have direct access from the outside of the building or through a common hall. SWRPC created estimates of population density in each census block according to its size. They are depicted in the map below.

- ▲ Summit

— Municipal Boundary

↑ 0 0.25 Miles
- Class I

Class II

Class V

Class VI

Private
- River or Stream

Intermittent Stream

Perennial Stream

Water Body

Swamp or Marsh

Lake or Pond

TOWN OF DUBLIN

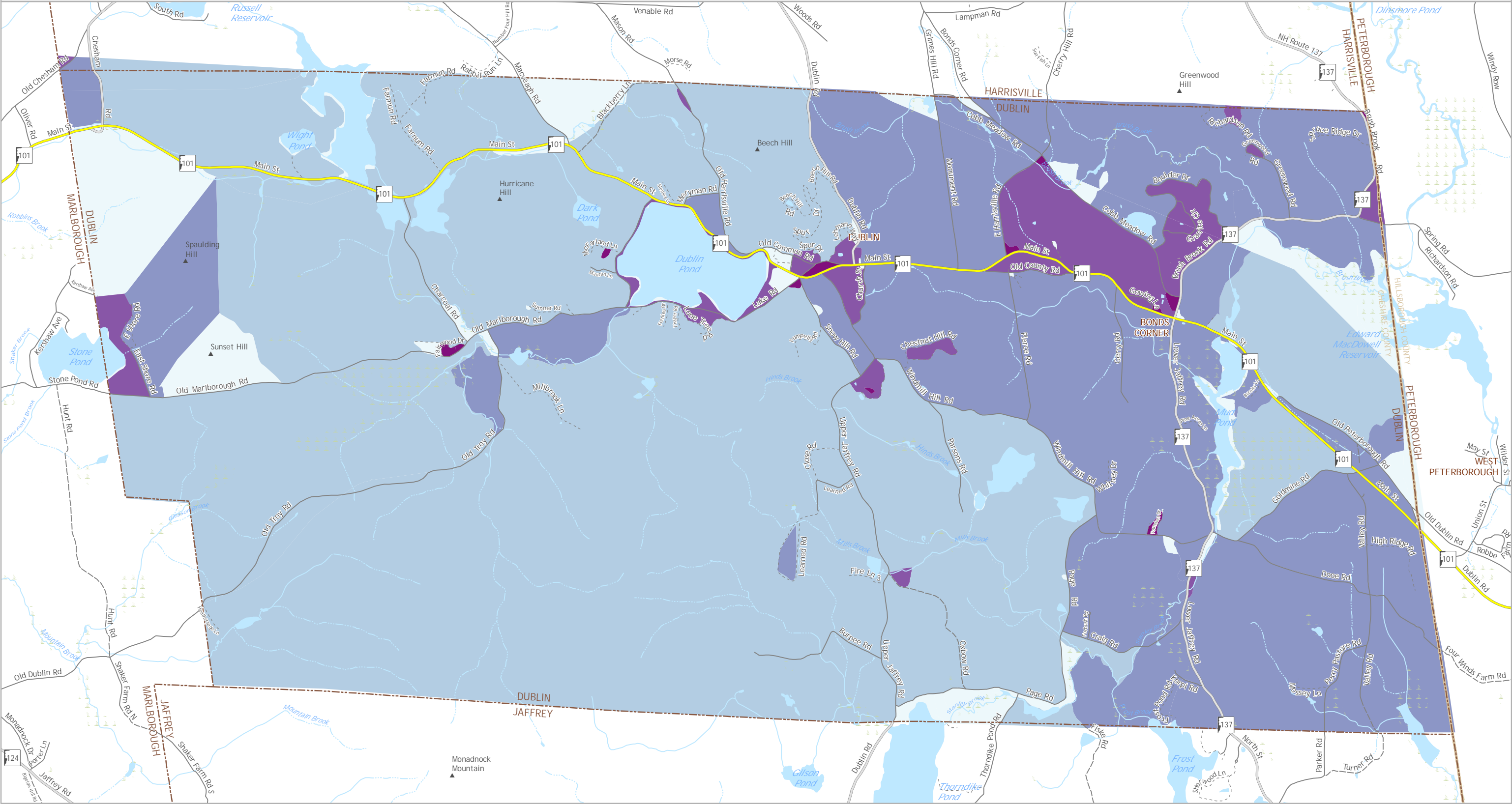
HOUSING DENSITY MAP

- 0 - 6 units per sq. mi.

7 - 25 units per sq. mi.

30 - 91 units per sq. mi.
- 91 - 312 units per sq. mi.

325 - 1,058 units per sq. mi.



Stratified Drift Aquifer

Stratified-drift aquifers consist mainly of layers of sand and gravel, some of which are suitable for wells. The transmissivity of the aquifer is a measure of its ability to transmit water. The higher the value, the more readily water can flow. In Dublin, stratified drift aquifers underly about 1.4 square miles, or 5% of the Town's total area. Outside of stratified drift aquifers, bedrock aquifers serve as the source of groundwater. Stratified drift aquifers are subject to the Town's Wetland Conservation District (Article XIII).

Topography

Elevation contours are depicted according to the National Elevation Dataset (NED), the primary elevation data product of the United States Geological Survey.

Surface Water

The United States Geological Survey National Hydrography Dataset includes features such as rivers, streams, canals, lakes, ponds, coastline, dams, and streamgages.

- ▲ Summit

— Municipal Boundary

□ Tax Parcel

↑ 0 0.25 Miles
- Class I

— Class II

— Class V

--- Class VI

--- Private
- River or Stream

— Intermittent Stream

— Perennial Stream

— Water Body

Swamp or Marsh

Lake or Pond

TOWN OF DUBLIN

DEVELOPMENT CONSTRAINTS

- Stratified Drift Aquifer Transmissivity
- Elevation Contour
- up to 1,000 sq. ft. per day

20 ft.
- 1,000 - 2,000 sq. ft. per day

100 ft.



Conservation Land

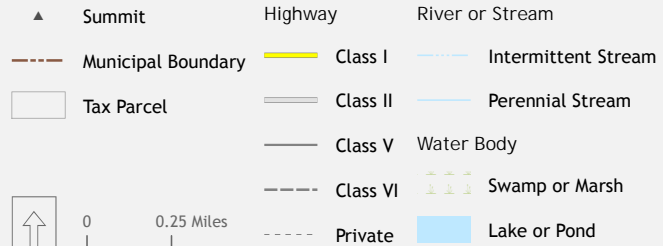
The conservation lands layer published by NH GRANIT includes parcels of two or more acres that are mostly undeveloped and are protected from future development. Data gaps may occur if 1) a parcel has been protected since our last data update, or 2) a parcel was inadvertently overlooked during previous mapping phases.

National Wetland Inventory

Wetlands are some of the Nation's most ecologically and economically important habitats, and provide benefits for fish, wildlife and people. The United States Fish & Wildlife Service National Wetlands Inventory has been producing wetland maps and geospatial wetland data for the United States since the mid-1970s. In Dublin, the Wetland Conservation District (Article XIII) governs development within and near these areas.

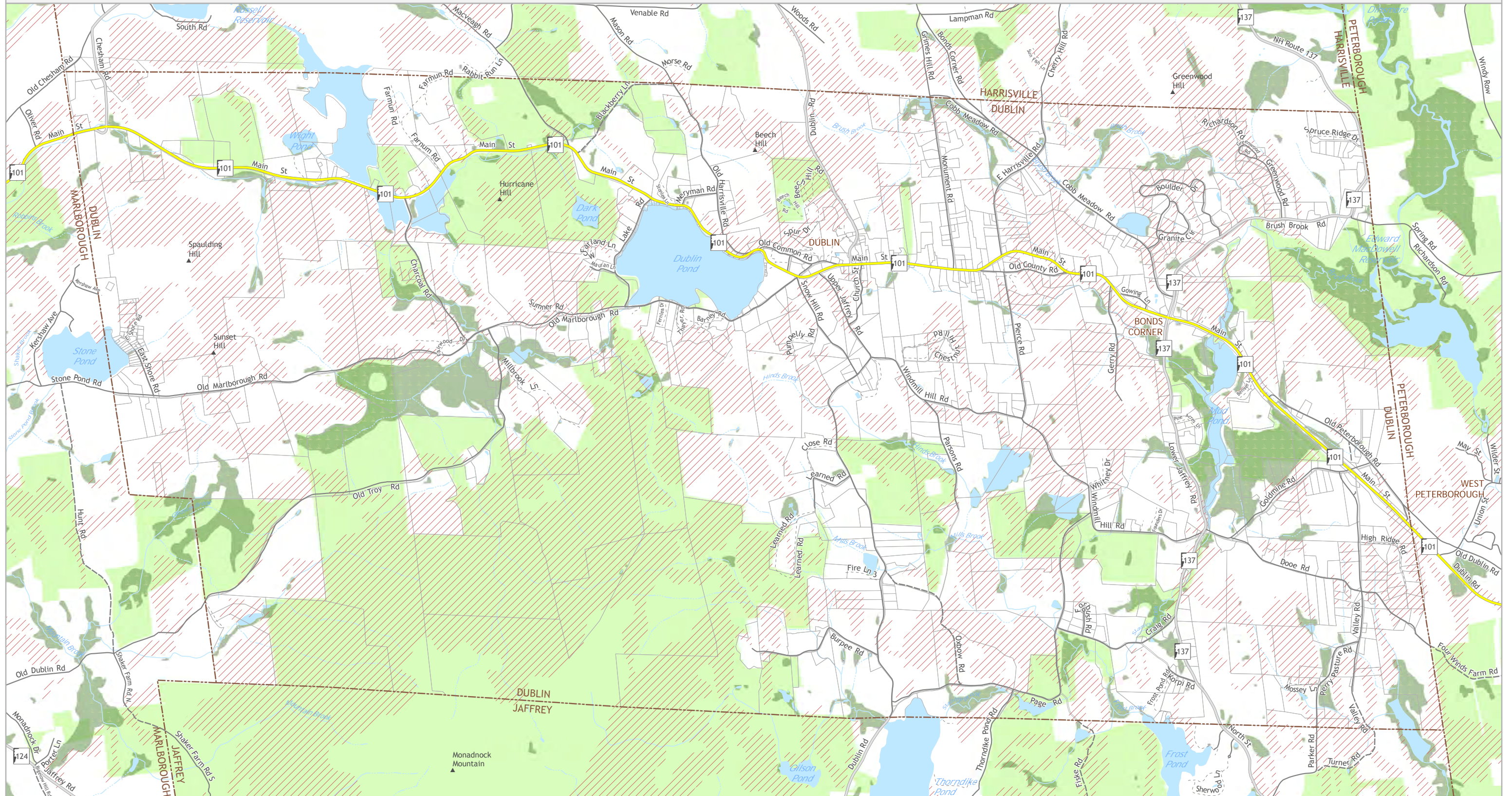
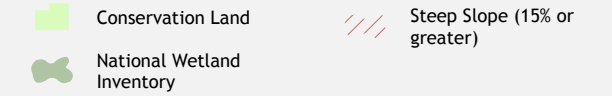
Steep Slopes

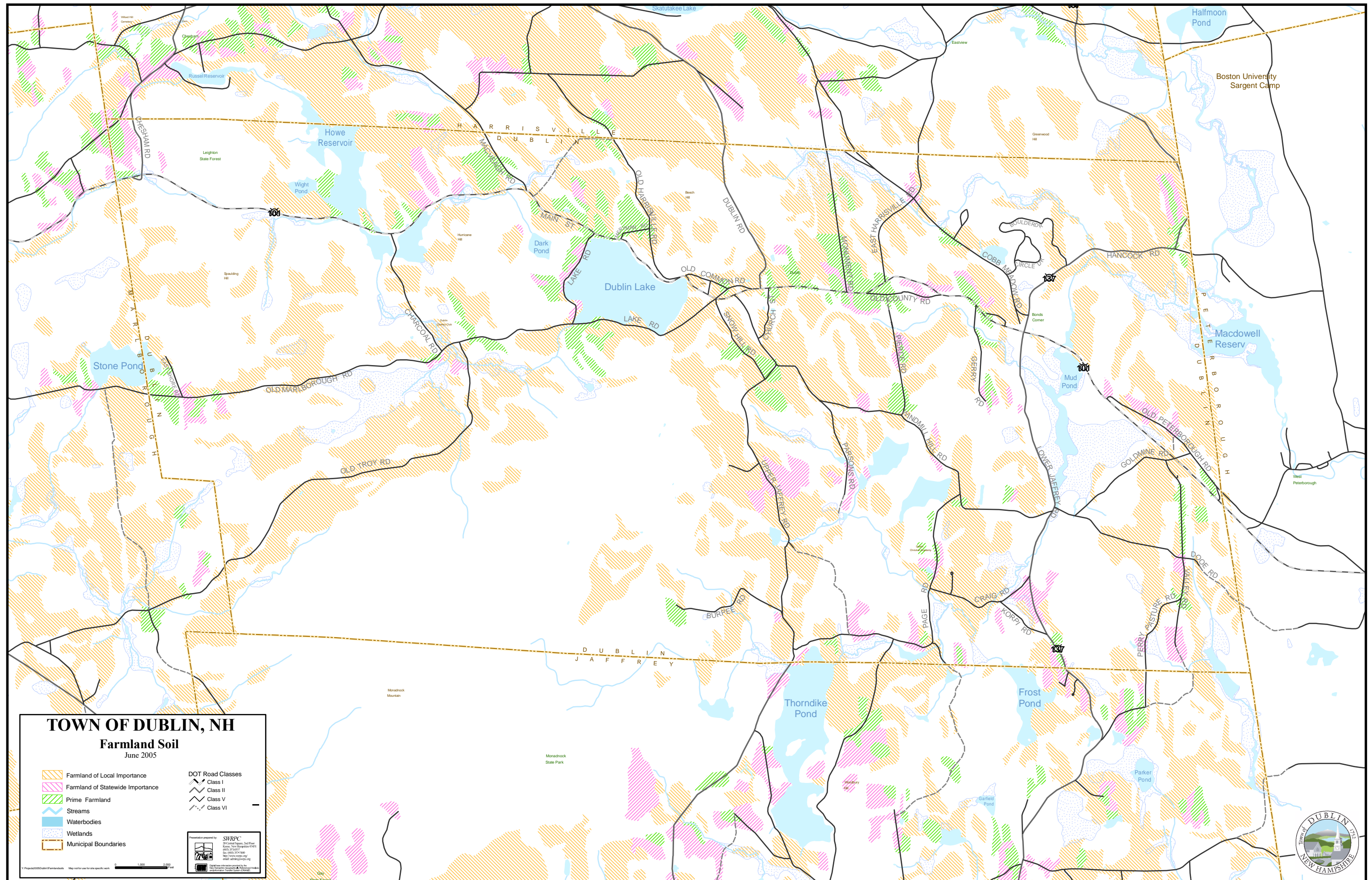
Areas where slopes 15% and greater are depicted. It is typically more costly to develop in steep slopes areas. And, they can be more susceptible to erosion. Dublin's Zoning Ordinance (Article XIV) regulates development in these areas in a particular way.



TOWN OF DUBLIN

DEVELOPMENT CONSTRAINTS





TOWN OF DUBLIN

TRANSPORTATION
INFRASTRUCTURE
MAP

Traffic Counts

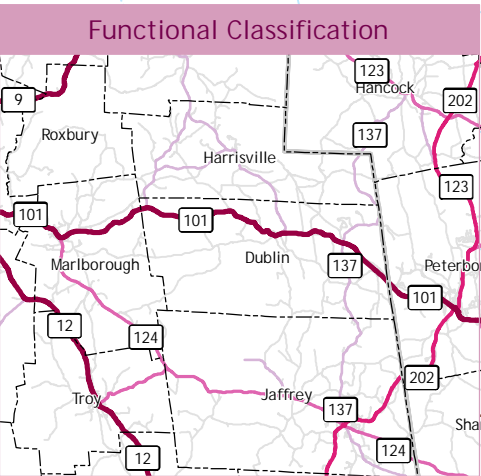
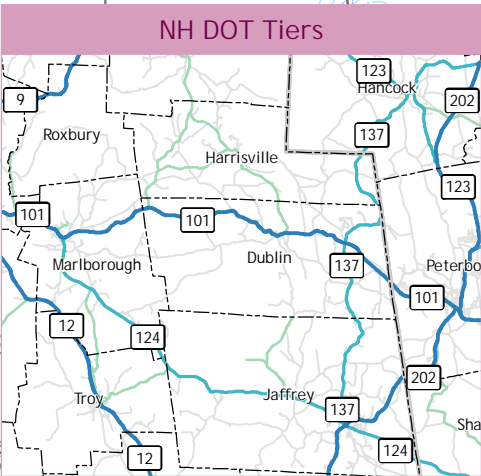
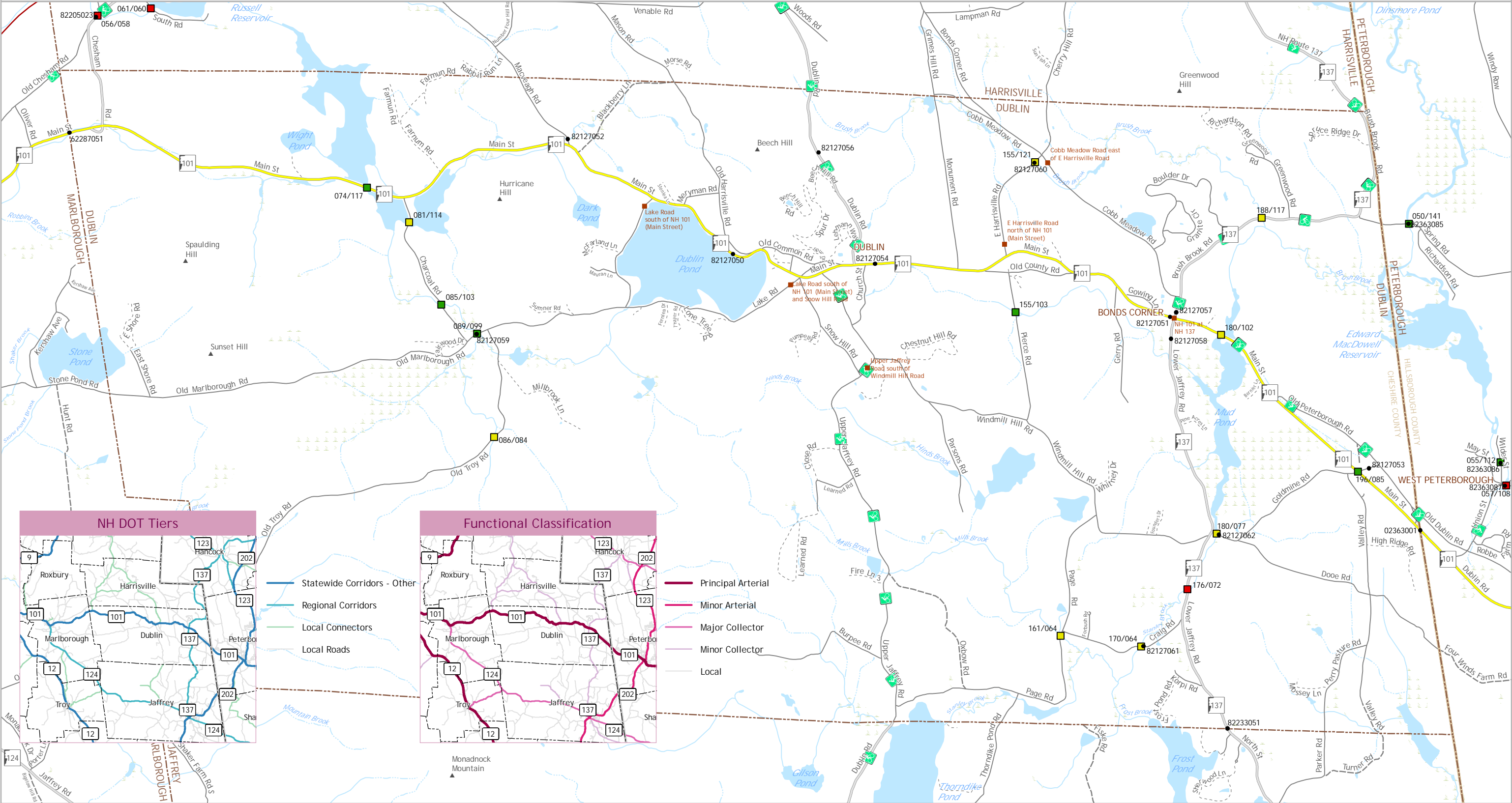
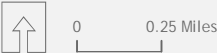
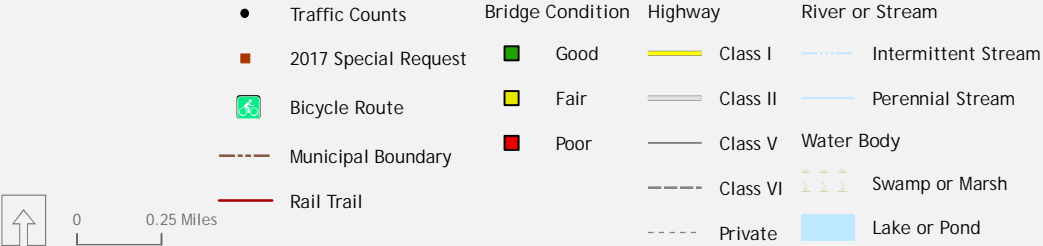
The New Hampshire Department of Transportation maintains a network of both short-term and continuous traffic count locations to provide data on the performance and use of both State and local highways. The traffic count locations, depicted on the map and labeled by an eight-digit identification number as associated with traffic volume studies conducted every three years.

Bridge Condition

Bridges depicted on the map below include structures that have at least a ten-foot span. Seven Dublin bridges meet this criteria and seven more (for a total of fourteen bridges) meet the federal definition of a bridge (twenty feet). The majority (nine out of fourteen) bridges in Dublin are locally-owned and maintained. Regardless of ownership, the New Hampshire Department of Transportation inspects each bridge at least annually as part of a national bridge inventory program.

Legislative Classification

The New Hampshire legislative classification of a highway is unrelated to other systems such as the federal functional classification (determined by the service a route is intended to provide). The legislative classification of a road (described in NH RSA 230) identifies parties responsible for road reconstruction and maintenance, among other things.



Public Water Supplies

According to NH RSA 485:1-a, a public water system is defined as "a piped water system having its own source of supply, serving 15 or more services or 25 or more people, for 60 or more days per year."

Wellhead Protection Areas

According to the New Hampshire Drinking Water Protection Act (NH RSA 485:48), New Hampshire Department of Environmental Services is responsible for protection wellheads in a variety of ways, including identification of potential manmade contaminants. The eight circles below (0.5 miles in diameter) show the location of wellhead protection areas for schools, businesses, and institutions.

Electric Distribution

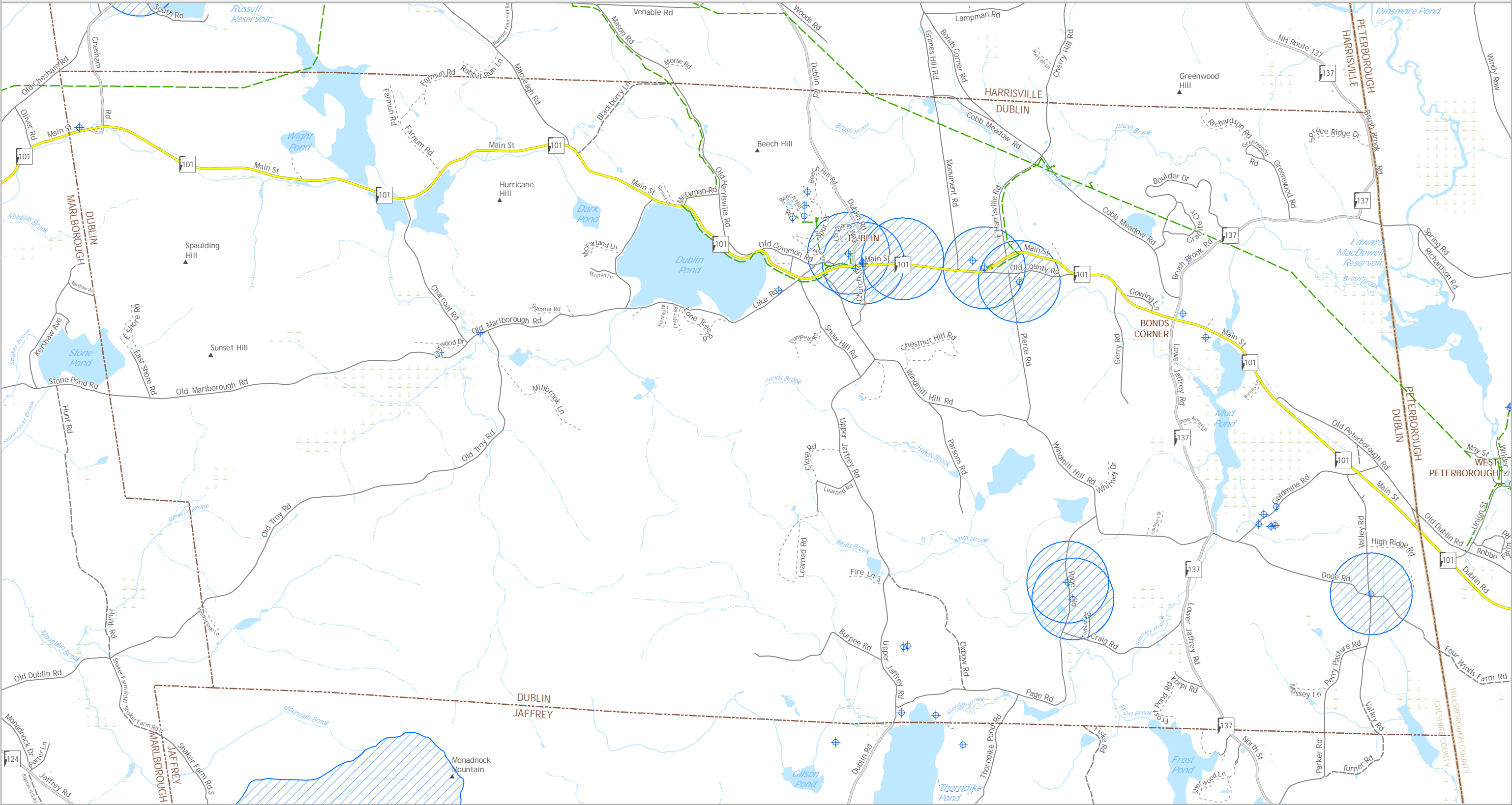
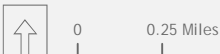
Eversource 3-phase electric distribution lines are depicted on the map below.

TOWN OF DUBLIN

PUBLIC UTILITIES MAP

- Public Water Supply
- Electric Distribution (3-phase)
- Wellhead Protection Area

- Summit
- Municipal Boundary
- Highway
 - Class I
 - Class II
 - Class V
 - Class VI
 - Private
- River or Stream
 - Intermittent Stream
 - Perennial Stream
 - Water Body
 - Swamp or Marsh
 - Lake or Pond

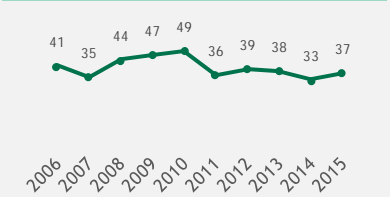


Maps prepared by Southwest Region Planning Commission (SWRPC) are for planning purposes only. SWRPC uses data from multiple sources at various scales of accuracies. No warranties, expressed or implied, are provided for the data herein, its use, or its interpretation.

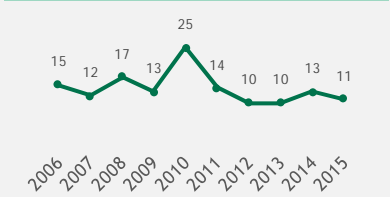
Crash Inventory

Starting in 2002, the New Hampshire Department of Transportation Bureau of Planning and Community Assistance catalogues, analyzes, and distributes the crash data from reports submitted by municipal and state police. For each point depicted below (which shows "locatable" crashes only), the database contains information on the type, contributing factors, severity, vehicles involved, safety equipment used, traffic controls, and other information from the Department of Safety Motor Vehicle Accident Report.

Crashes per Year



Total Injuries per Year



▲ Summit

--- Municipal Boundary

— Rail Trail

Class I

Class II

Class V

Class VI

Private

Intermittent Stream

Perennial Stream

Water Body

Swamp or Marsh

Lake or Pond

TOWN OF DUBLIN

CRASH HISTORY MAP

● Fatal

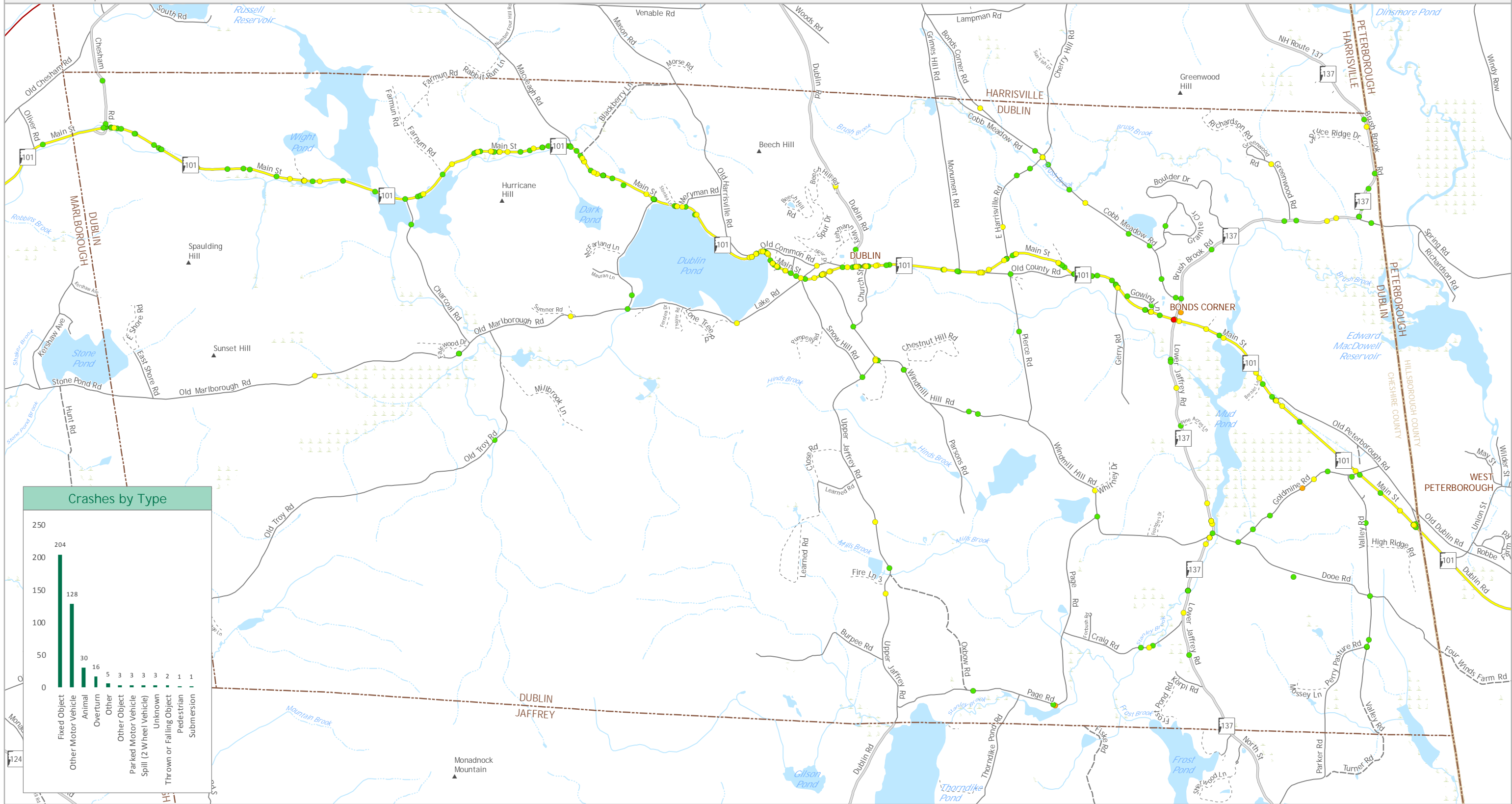
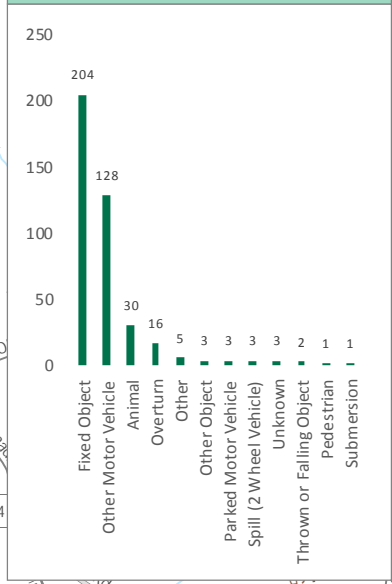
● Injury

● Property Damage Only

● Unknown

○ Not Declared

Crashes by Type



Stratified Drift Aquifers

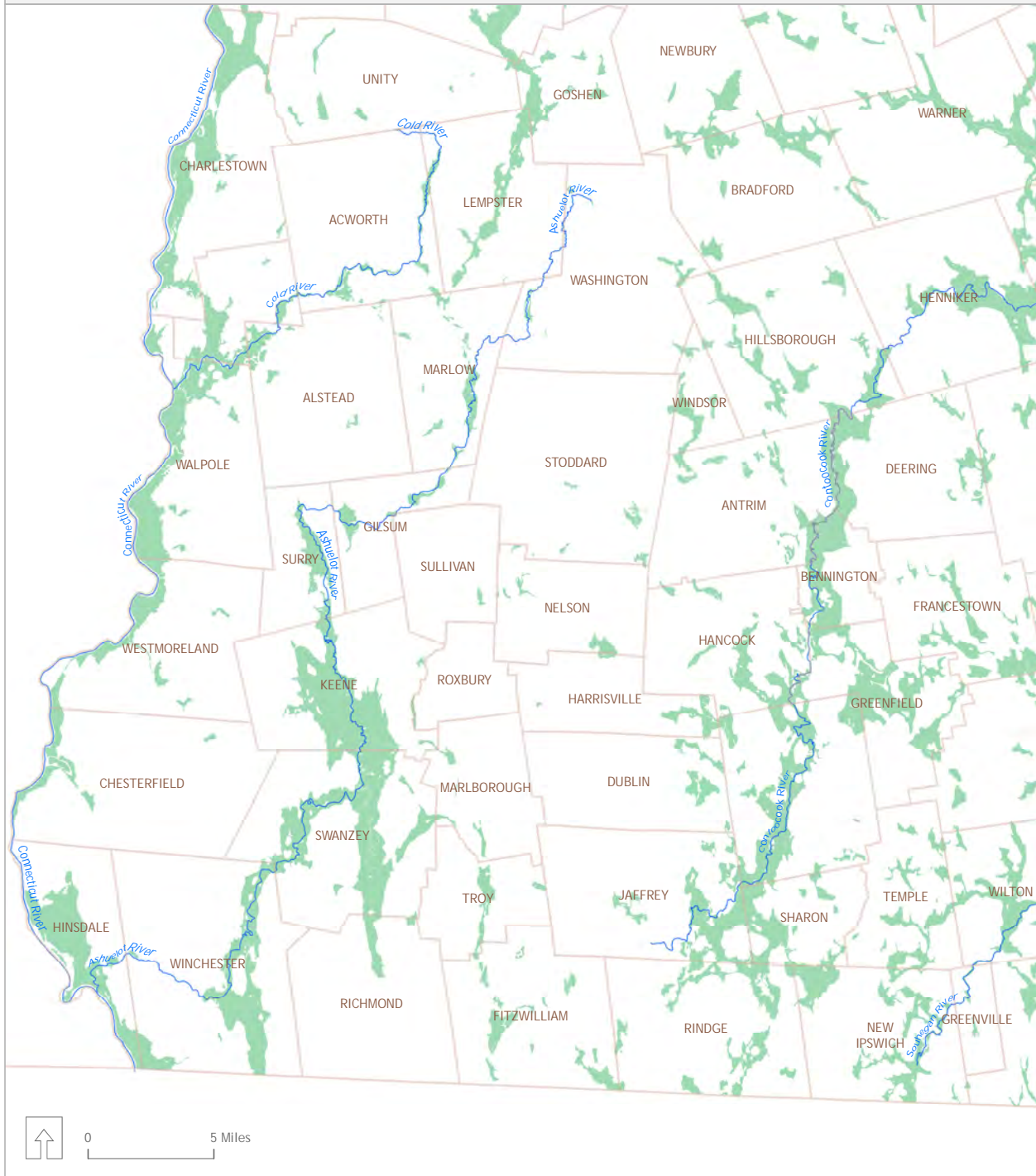
Stratified drift aquifers consist mainly of layers of sand and gravel, some of which are suitable for wells. In Dublin, these areas underly about 1.4 square miles, or 5% of the Town's total area.

TOWN OF DUBLIN

REGIONAL AQUIFERS MAP



Stratified Drift Aquifer



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