

MOVING SOUTHERN NH FORWARD VOLUME 2



2015-2035

Regional Comprehensive Plan 2015



SNHPC



Southern New Hampshire Planning Commission works to make our region better by facilitating cooperative and long term decision making. We believe a promising future can be achieved through fiscally sound and responsible planning and development decisions that improve the economy, efficiency and health of our region.

June 2014

DRAFT

TABLE OF CONTENTS



Land Use – Existing and Future.....A



Housing.....B



Transportation.....C



Community Infrastructure and Facilities.....D



Environment, Open Space and Agriculture.....E



Economic Development.....F



Culture and Historic Preservation.....G



Climate Change Impact Assessment.....H



Energy Efficiency.....I

A

(LAND USE – EXISTING AND FUTURE)

MOVING SOUTHERN NH FORWARD

VOLUME 2:
Land Use - Existing
and Future



2015-2035

Regional Comprehensive Plan 2015



Southern New Hampshire Planning Commission works to make our region better by facilitating cooperative and long term decision making. We believe a promising future can be achieved through fiscally sound and responsible planning and development decisions that improve the economy, efficiency and health of our region.

June 2014

TABLE OF CONTENTS



LAND USE – EXISTING AND FUTURE.....	1
Purpose	1
Vision.....	1
Public Input from SNHPC Outreach.....	1
Public Input from UNH Survey.....	4
Key Issues & Concerns	5
Existing Conditions.....	6
Historical Perspective	6
Land Use Changes, 2000-2010.....	7
Land Use and Zoning	13
Creating the generalized zoning Map of the Region.....	20
Future Conditions.....	24
Creating the Future Land Use Map.....	24
Identified Future Growth Areas by municipality.....	29
Scenario planning.....	42
Conclusions and Recommendations.....	55
Goals.....	55
Recommendations.....	55

LIST OF TABLES

Table 1 Land Use: What's Best	2
Table 2 New Boston, Candia, and Derry Workshop Comments	4
Table 3 Existing Land Use Data From 2010 Generalized Land Use Map	8
Table 4 SNHPC Region Land Use as a Percent of Total Acreage, 2000-2010	10
Table 5 Growth Management Ordinances by Municipality.....	14
Table 6 Economic Development Tools and Zoning Ordinances	16
Table 7 Environmental Characteristics Zoning	18
Table 8 Incentive Based Zoning.....	19
Table 9 Master Plans in the SNHPC Region	25
Table 10 Non-Exempt Transportation Projects SNHPC Region.....	44
Table 11 Projected 2035 Traffic Assignments Woodmont Common Development	51
Table 12 Projected 2035 Traffic Assignments Pettengill Road Development	52
Table 13 Projected 2035 Traffic Assignments Raymond Development	53
Table 14 Projected 2035 Traffic Assignments Manchester Sand & Gravel Development	58

LIST OF FIGURES

Figure 1 Traditional Settlement Patterns/ Development Design: What's Best	2
Figure 2 Total Land Area Developed and Vacant by Municipality	12

LIST OF MAPS

Map 1 Generalized Land Use in the SNHPC Region	9
Map 2 Generalized Existing Zoning in the SNHPC Region	23
Map 3 Generalized Future Land Use in the SNHPC Region	26
Map 4 Identified High Growth Areas in the SNHPC Region	40
Map 5 Current Condition Population by TAZ in the SNHPC Region	56
Map 6 Scenario 1: Current Rate of Growth (0.5%) SNHPC Region.....	57
Map 7 Scenario 2: Moderate Rate of Growth (1.0%) SNHPC Region.....	58
Map 8 Scenario 3: Moderate Rate of Growth with Build Out of Four Large Proposed Mixed Use Development Projects SNHPC Region.....	59
Map 9 Roadway Deficiency Map Based on Scenario 3 SNHPC Region.....	60



LAND USE – EXISTING AND FUTURE

PURPOSE

The purpose of this report is to provide the public and decision makers with a strategic analysis and evaluation of our region's land use. This includes existing and future land use conditions as well as key land use issues and needs as identified through the public outreach efforts of this plan; and the key goals and recommendations of the plan. This chapter is not meant to serve as a comprehensive land use plan. Rather, it is a strategic evaluation of land use, taking into consideration the sustainability and livability principles and themes outlined in Volume 1 of the Plan.

The type, intensity and distribution of current land use activities have a significant influence on future development patterns. Transportation, water and sewer services, utilities and other infrastructure play an important role in shaping land use. Natural resources and environmental constraints also directly influence where growth and development can and cannot occur. In addition, the marketplace, economic conditions, local zoning policies, as well as the availability of developable land are all important factors in where and how land use patterns emerge.

VISION

The Land Use Chapter is founded upon the following value statement:



Historical settlement patterns, such as downtowns, villages, and neighborhoods, vary from city to country and regional values reflect appreciation for this diversity; residents want future development to largely occur in areas that are already developed, such as renewing or redeveloping downtown areas, villages and neighborhoods.

PUBLIC INPUT FROM SNHPC OUTREACH

Public input from across the region was collected through various public outreach efforts, such as regional visioning workshops, comments submitted online, and a telephone survey conducted by the University of New Hampshire. The public responses received through these efforts all demonstrate widespread public support for community development, environmental protection, energy policies and emergency preparedness.

As captured in SNHPC's Public Outreach Report, Traditional Settlement Patterns and Development Design, preservation of New Hampshire's downtowns, villages, and neighborhoods, as well as protection of farm land, forest land and other rural resource lands is highly valued by all New Hampshire residents.

The "Traditional Settlement Patterns & Development Design" livability principle received only positive feedback. See **Figure 1** for the three categories of comments on what the public feels is best and most important.

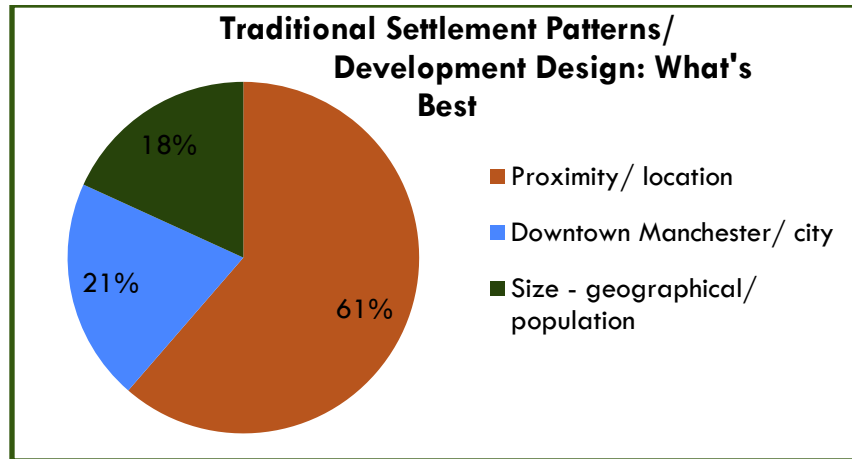


FIGURE 1 TRADITIONAL SETTLEMENT PATTERNS/ DEVELOPMENT DESIGN: WHAT'S BEST

Source: SNHPC

The proximity and location of the SNHPC's region received the highest public responses. Respondents said they enjoyed being close to Boston and other urban areas while living in a rural area. The location of cultural resources and community services was also cited, including nearby oceans and beaches, mountains and ski slopes, and places for fishing and woodland recreation. Downtown Manchester also received praise, with one comment highlighting its unique features, such as the old mill buildings and nearby Merrimack River. See a selection of some of the specific public comments regarding "what's best" about the SNHPC Region, as summarized in **Table 1**.

TABLE 1 LAND USE: WHAT'S BEST

Categories	Comments
1. Proximity/ location	Proximity to Boston, but still away from the rat race
	Close to everything — Beach, snow skiing, and urban areas too
	Proximity to outdoor, recreational and cultural resources
	Rural yet close to culture and services
	I love it here. In an hour I can get to the ocean, the mountains, or the city of Boston.
	The variety available within a few hours — ocean, mountains, fishing, woodlands
2. Downtown Manchester/ city	Manchester — great downtown area!
	I live away, but Manchester will always be home. I've loved watching its revitalization over the last 15 years or so, as the downtown and Millyard have taken off. And I can't think of anywhere else in New Hampshire—maybe even New England—where the natural landscape and urban space coexist so dramatically, as when I see Ste. Marie's lit against the sunset behind Uncanoonuc, or when the Merrimack roars past hulking, 150-year-old mills.
3. Size – geographical/ population	Not too big and not too small; No traffic
	Good size city, Upper West Side (Rimmon Heights) is a nice part of town. Rail trail is a nice addition.

Source: SNHPC

REGIONAL VISIONING WORKSHOPS

The SNHPC held three regional visioning workshops throughout the region. The first workshop focused on the towns of New Boston, Weare, Goffstown and Bedford. The second workshop addressed the towns of Candia, Deerfield, Hooksett, Chester, Raymond and the City of Manchester. The third workshop focused on the towns of Derry, Londonderry and Windham. A summary of the public comments received at these workshops, as related to existing and future land use, is provided below.

NEW BOSTON WORKSHOP:

Workshop participants mentioned their strong preference for preserving rural character and a desire to keep Southern New Hampshire rural. Participants also spoke about how Southern New Hampshire is changing as the population has grown and newcomers from other states continue to move to the area. Farms have disappeared over the years, and the amount of traffic has increased. One comment noted that “none of us like regulations, but as we get denser, [we] need control.” Participants suggested cluster zoning be considered for conserving green space. Other participants wanted to avoid building multi-family structures in concentrated areas. The public also expressed fear that if development is more and more automobile dependent, communities will lose social opportunities for connection with each other.

CANDIA WORKSHOP:

Workshop participants emphasized that their communities are rural and they want to keep them that way. Comments suggested there are differences between communities in the region, such as between Manchester and rural communities, and these differences should be embraced. Participants talked about finding a balance between preserving rural character and encouraging development, and there being a conflict between economic interests and residential values. Workshop participants also identified quality schools as a spur for growth, while uncertainty regarding school funding as a detriment to growth.

Conversations focused on how some communities allow cluster development, while others do not and may have a tendency toward sprawl. While some were in favor of cluster development and didn’t think that “bowling alley” style lots are wise, others were opposed to cluster development. One participant noted that Candia may not be legally able to keep their large lot sizes under state law because of an obligation to provide housing to police, teachers, firefighters, etc. One comment suggested perhaps adopting agricultural zones, and another advised reconsidering permitted uses in the zoning districts, such as Rt. 28 Bypass and used cars dealerships. The link between road system design and land use was noted as well.

DERRY WORKSHOP:




Workshop participants identified three different kinds of communities in the SNHPC Region: urban communities such as Manchester, commuter towns, and rural towns. When asked if their communities were using land wisely, some participants said they are trying, while multiple others answered no- there is development that doesn’t fit or doesn’t work in their communities. Some participants noted not everybody wants to live on a large lot, but in Windham the minimum lot size is one acre. A person in another group commented that subdivisions with large houses are cut off from the rest of an area and not sustainable. Zoning, as guided by master plans, was identified by one group as a key determinant of a town’s characteristics. Some comments were that zoning needs to consider the surrounding neighborhoods and that flexible zoning causes difficulty with abutter issues. Participants also do not want sprawl.

In addition, many participants at the Derry workshops wanted to see increased mixed-use development within the Southern New Hampshire Region. These participants named a variety of reasons why they are in

favor of mixed-use development, or recreating a downtown-style area. With the aging population especially they see walkability, accessibility, and livability as important characteristics; additionally, they consider mixed-use development as a solution to transportation challenges and a wise way to use the land. However, participants noted that even though zoning for mixed-use development has already been in place for years, it has not yet been built and incentives are needed.

Table 2 provides a summary of the major public comments received from the three workshops.

TABLE 2 NEW BOSTON, CANDIA, AND DERRY WORKSHOP COMMENTS

Livability Principles	Comments
 Traditional Settlement Patterns & Development Design	People coming from Massachusetts –[there is development pressure on the region from as far away as Boston]
	Cluster zoning can be considered for conserving green space – [may cause] increase(d) school children population– should be a town decision/ vote
	Avoid building multi-family structures in concentrated areas
 Traditional Settlement Patterns & Development Design	Should we have agricultural zones?
	As neighboring towns are built out, will there be increased pressure on our community, Candia, to build?
	Long range, I don't think that "bowling alley" [style] lots with a small frontage and far back is wise in Candia
 Traditional Settlement Patterns & Development Design	I don't want clusters, [I] want a rural feel
	Some [people] don't want to live on big lots
	[We should] increase mixed-use, especially with the aging population-walkability, livability
	[The] zoning is there, but nobody builds mixed-use—need incentives

PUBLIC INPUT FROM UNH SURVEY

The UNH Telephone Survey results provide further insight into SNHPC residents' land use preferences:

- When asked "where should future development occur in your part of the state?" More than two-thirds (67%) of residents think that future development should occur in areas that are already developed. This suggests residents are in favor of revitalizing their communities.

67%
want future development to occur in areas that are already developed
- Fewer residents (26%) support development in undeveloped areas and 7 percent did not know where future development should occur.

89%
want local agriculture to be encouraged in the community
- A majority of residents (89%) say that promoting local agriculture should be actively encouraged in the community, followed by protecting historic buildings & neighborhoods (90%), promoting safe places to walk or bike (89%) and expanding or promoting current businesses (85%)

- About four-fifths of residents (82%) stated that promoting other recreational activities, attracting more non-polluting light industry (74%) and increasing access to forests and trails (76%) should be encouraged in the community.
- About half of SNHPC residents (51%) think tourism and attracting more stores and shops (48%) should be promoted in the community. Those who are non-white and households earning less than \$20,000 are more likely to say communities should actively encourage attracting more stores and shops. Residents who live or work in Northern and Central NH are more likely to say communities should actively encourage promoting tourism.

KEY ISSUES & CONCERNS

Key Issues and Concerns

1. The SNHPC Region is the largest populated region of the state and is now home to 261,262 residents as recently reported by the 2010 U.S. Census. This is slightly less than the 263,389 residents reported by the NH Office of Energy and Planning for the region in 2009.
2. Between 2000 and 2010, the SNHPC region experienced a slow overall rate of growth of 0.5%, reflecting a total increase of only 12,424 people. The towns of Bedford, Manchester, Hooksett, New Boston and Weare experienced the majority of this population increase while several towns, such as Derry and Candia, actually lost population. The balance of the region's towns experienced only modest population gains, except the Town of Windham, which experienced the highest rate of growth given its proximity to MA.
3. By 2035, the SNHPC Region is projected to add more than 40,000 people.¹ Despite the social, fiscal and economic impacts resulting from the last recession and economic downturn, the region is consuming land at a steady and constant rate.
4. In 1995, approximately 38 percent of the region was developed. By 2009, the total amount of developed acres increased to 44 percent. At this rate, it is estimated that roughly 156,487 acres, or approximately 50 percent of the region, will be developed by 2015. Of this total, there will be approximately 63,000 acres of non-residential developed land and 102,821 acres of residential developed land. This will leave roughly 145,973 acres, or 50 percent of the region, as open/undeveloped lands.
5. The total amount of industrial developed land continues to experience a steady decline. Between 2000 and 2009 there was a large decrease of 11.5 percent.
6. The total amount of commercially developed lands experienced the greatest percentage increase over this nine-year period (141.1 percent) of any land use classification, jumping from 4,050 acres in 2000 to 9,766.5 acres in 2009.

¹ SNHPC Population Projections 2035

EXISTING CONDITIONS

The type, intensity and distribution of existing land use activity have a significant influence on future development patterns. Transportation, water and sewer services, utilities and infrastructure play an important role in shaping land use. Natural resources and environmental constraints also directly influence where growth and development can and cannot occur. In addition, the marketplace, economic conditions, local zoning policies, as well as the availability of developable land and utilities are all important factors in where and how existing and future land use patterns emerge.

This chapter examines the major land use changes that have taken place within the SNHPC Region since 2000 and describes and analyzes the existing residential, commercial, industrial and public land use patterns that have emerged. Additionally, it compares the land use and zoning patterns that have developed in each of the region's communities.

HISTORICAL PERSPECTIVE

Founded as agricultural communities, the existing land use distribution we see today in the SNHPC Region does not illustrate a predictable pattern of development. Why did some communities shift rapidly from rural to urban and, more importantly, why did others transition from urban to suburban and rural? The patterns of existing land use seen today can be explained by the region's economic development and historic events.

In the early 19th century, the SNHPC Region was poised to develop in a different direction, with communities such as Weare and Derry emerging potential centers for urban expansion. In 1820, the communities with the greatest populations were Londonderry/Derry, 3,127, Weare, 2,781, Chester, 2,262, and Deerfield, 2,133. The town with the lowest population at this time was Manchester, with 761 residents.

The opening of the Amoskeag Mills in Manchester in 1830 signaled a dramatic population shift and land use development changes. In 1830, Auburn, Bedford, Candia, Goffstown, Manchester, and Raymond all experienced population increases. The population landscape of the region was vastly different from today. In the 1820s, many of the smaller towns in the region were growing. Surprisingly, these towns had total populations and larger growth rates than Manchester, the largest city in the region today.

While the population changes were not immediately evident in 1830, by 1840, significant changes were taking place. Manchester's population grew by 269 percent from 1830 to 1840. The following decade it grew by an additional 331 percent. In fact, Manchester experienced population increases every decade from 1820 to 1920. Furthermore, towns that were population leaders in 1820, or were at least experiencing population increases between 1820 and 1830, experienced regular declines over the same 100-year period, indicating a migration to the growing urban center of Manchester.

Widespread population decreases over much of the region are evident during war years, from 1860 to 1870, and from 1910 to 1920. Bedford, Hooksett and Manchester, however, still experienced growth during the Civil War decade. Bedford, Hooksett, Derry and Manchester all experienced growth during the decade marked by World War I and the 1918 influenza pandemic. The town of Derry experienced regular population increases from 1870 to 1920, with increases between 5 and 43 percent each decade.

Auburn, Bedford, and Candia are described in the New Hampshire Municipal Abstracts of 1944 as agricultural communities whose residents commute to Manchester for work. Chester and New Boston are described as agricultural communities with up to 25 percent seasonal residences. Weare is also described as agricultural with a small summer colony. Deerfield is described as agricultural and Londonderry as 25 percent agricultural. Raymond is described as a manufacturing town, while Hooksett's residents are

believed to commute to either Manchester or Suncook since Hooksett is contiguous to Manchester. Goffstown is described as suburban with an important agricultural area. Derry and Manchester are the only towns to be described as urban. These descriptions from 1944 more approximate what the region looks like today, but still are not compatible with today's existing land use.

Agriculture has declined in importance to the region's communities since 1944. There are fewer seasonal residences now also. Existing land use today is predominantly residential. These patterns of existing land use are evidence of the historic legacy of economic growth and decline in the region, as well as the expanding urban center of Boston and the resultant bedroom communities in the SNHPC region. With the expansion of Interstate 93, the region can expect more growth in both residential and non-residential uses. With good planning and land use tools, the communities in the SNHPC Region can help to guide this growth in the best way possible.

The existing land use patterns of today will shape the future land use of the region. Continued population growth will require still more acres to be devoted to residential and non-residential uses. Additional acres will be consumed for expanded utilities and streets. More and more communities are creeping ever closer to tipping the scale and having more developed acres than vacant acres. By examining the existing land use patterns in the region, we can identify potential imbalances of use ahead of time and plan for future land use issues.

LAND USE CHANGES, 2000-2010

There are two sources of information documenting existing land use within the SNHPC Region. These include a land use map which was created and digitized utilizing 2010 aerial photography of the region (see Map 1-1: Generalized Land Use in the SNHPC Region) and SNHPC's Land Use Report – 2010 Update.

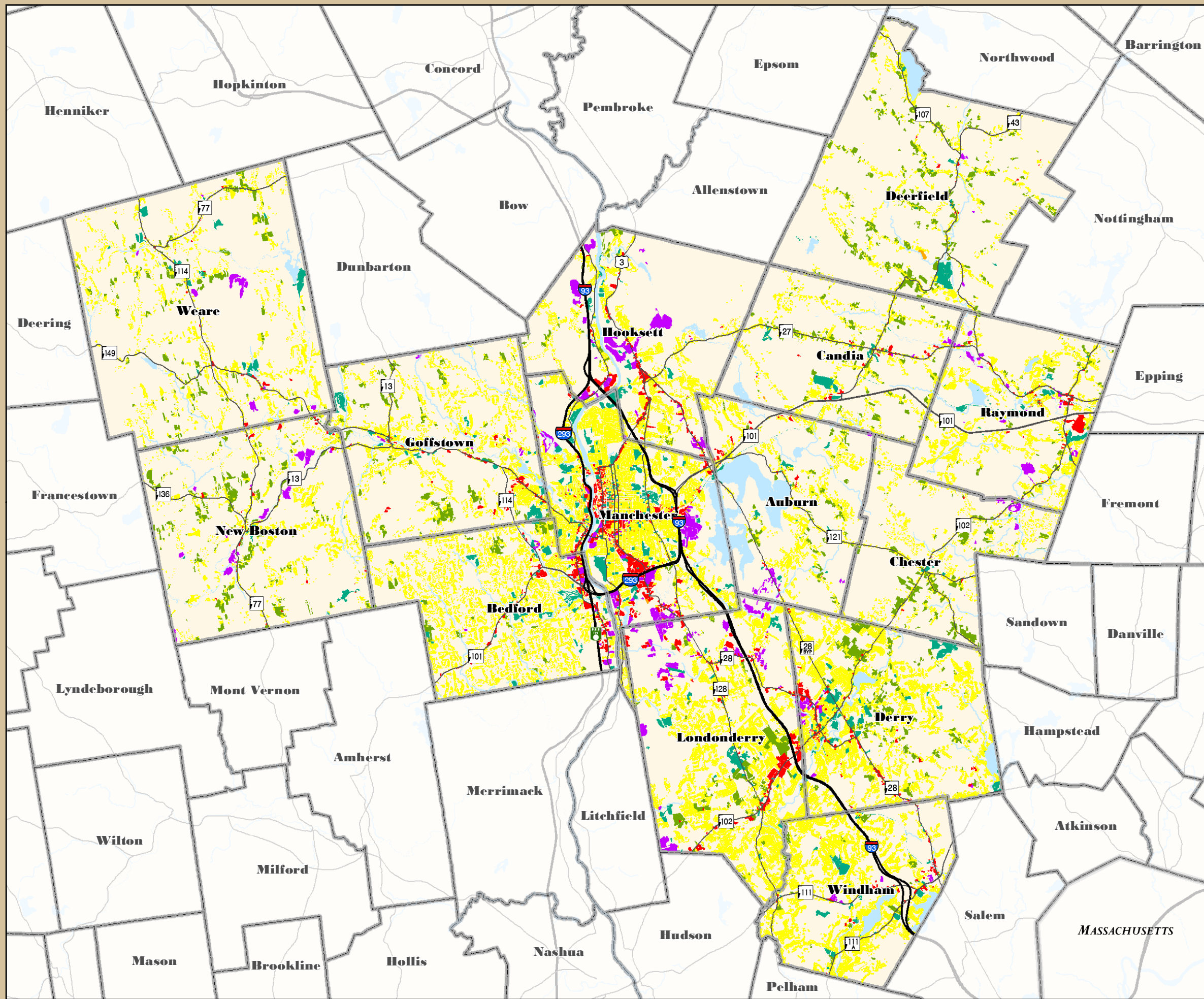
Generalized 2010 Land Use Map: The existing land use of the region as depicted on Map 1-2 is summarized in the following

Table 3.

TABLE 3 EXISTING LAND USE DATA FROM 2010 GENERALIZED LAND USE MAP, SNHPC REGION

Land Use Category	Acres	Total Regional Acreage	Percentage
Residential	55676.2	332414.1	16.70%
Commercial	6649.5	332414.1	2.00%
Industrial	1763.6	332414.1	0.50%
Transportation, Communications, Utilities	13100.3	332414.1	3.90%
Industrial and Commercial Complexes	1035.2	332414.1	0.30%
Mixed Developed Uses	193.0	332414.1	0.10%
Outdoor, other Urban Built-up land	3375.0	332414.1	1.00%
Vacant	91.1	332414.1	0.10%
Agriculture	10266.5	332414.1	3.20%
Transitional	7452.0	332414.1	2.10%
Forest	199610.0	332414.1	60.00%
Water	12491.1	332414.1	3.80%
Barren	16610.5	332414.1	5.10%
Tundra	4100.1	332414.1	1.20%
	332414.1	332414.1	100.00%

Source: SNHPC



Map # 1 - 1

Granite State Future

Land Use

Generalized Existing
Land Use in
Southern NH Region



Existing Land Use*

- Agriculture
- Residential
- Mixed Uses
- Commercial
- Industrial
- Public/Quasi Public
- Interstates
- State and US Routes
- Town Boundary
- Rivers
- Lakes

*Existing Land Use based off 2010 aerial imagery.

Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
All SNHPC Communities

The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2014.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5
Miles



SNHPC Land Use Report – 2010: The SNHPC relies on reported land use for the region as reported by the municipality on an annual basis. This data is based on actual building permit data collected by each municipality in the region on a cumulative basis.

As documented in the SNHPC Land Use Report – 2010 Update, there have been substantial changes in the total land use profile of the region over the past ten years. Overall, the amount of developed land in the region increased 16.4 percent between 2000 and 2010 (see Table 4). Out of the total 314,003 acres of land area in the SNHPC Region, approximately 139,011.6 (44%) were developed by 2010. The term “developed” means land in use for residential, public, commercial, or industrial purposes, as well as land used for utilities and streets.

Between 2000-2010, all land use categories in the region except for industrial, increased. The largest amount of developed acreage in 2010 is residential, makes up approximately 81,138.7 acres and represents an increase of 18.7 percent since 2000. Public and Semi-Public land, in both 2000 and 2010, comprised the second largest category; in 2000 – 27,469 acres were developed and by 2010, approximately 28,606.5 acres were developed. The third largest amount of land, both in 2000 and 2010, is dedicated to streets and utilities and in 2010 totaled 15,482 acres.

Industrial land use has experienced a steady decline since 1995 and the numbers from 2000 to 2010 follow this trend showing an 11.5 percent decrease in total acres. Commercial development recorded the greatest increase since 2000 (14.1 percent) of any other land use category, jumping from 4,050 acres in 2000 to 9,766.5 acres in 2010 (Land Use Report Update – 2010).

TABLE 4 SNHPC REGION LAND USE AS A PERCENT OF TOTAL ACREAGE, 2000-2010²

Category	2000		2010		2000 to 2010	
	Acres	% of Region	Acres	% of Region	Absolute Change	% Change
Residential	68,366.90	21.80%	81,491.80	26.00%	13,124.90	19.20%
Commercial	4,050.00	1.30%	9,932.50	3.20%	5,882.50	145.20%
Industrial	4,542.00	1.40%	4,017.80	1.30%	-524.2	-11.50%
Semi-Public and Public	27,469.00	8.70%	28,635.70	9.10%	11,66.70	4.20%
Utilities and Streets	14,965.00	4.80%	15,510.80	4.90%	545.8	3.60%
Total Undeveloped Land	194,609.70	62.00%	174,413.90	55.50%	-20,195.70	-10.40%
Total Developed Land	119,392.9	38.00%	139,588.70	44.50%	20,195.80	14.50%
SNHPC Region	314,002.60	100.00%	314,002.60	100.00%	-	0.00%

Source: SNHPC Annual Land Use Updates³

Undeveloped land is defined as vacant land left in its natural, un-built state. Undeveloped land made up 62 percent of the region, totaling 194,609.7 acres in 2000. Since then, however, undeveloped land has dropped to 55.7 percent within the region, at a total of approximately 174,991 acres. This represents an

² SNHPC in the process of adding the Town of Windham to the 2012 and 2013 Update to the SNHPC Land Use Report. This data is not yet available and is not reported in this table.

³ Land Use totals based on 1) building permits (new structures, conversions and demolitions); and 2) lot sizes (acreage) associated with new, converted or demolished structures. Data is annually entered into a Microsoft Access database that has been maintained since 1996.

overall decrease of 10.1 percent. As of 2010, the percentage of undeveloped land (55.7 percent) is gradually becoming equal to the percentage of developed land (44.2 percent). It is a very real possibility that these numbers will cross each other, meaning that developed land, not undeveloped land, will be the most common land use in the SNHPC Region in the very near future.

Active agricultural lands are areas without physical structures, but are actively used as agricultural land. While agricultural land is considered an active land use, it is not considered developed land when considering future development possibilities.

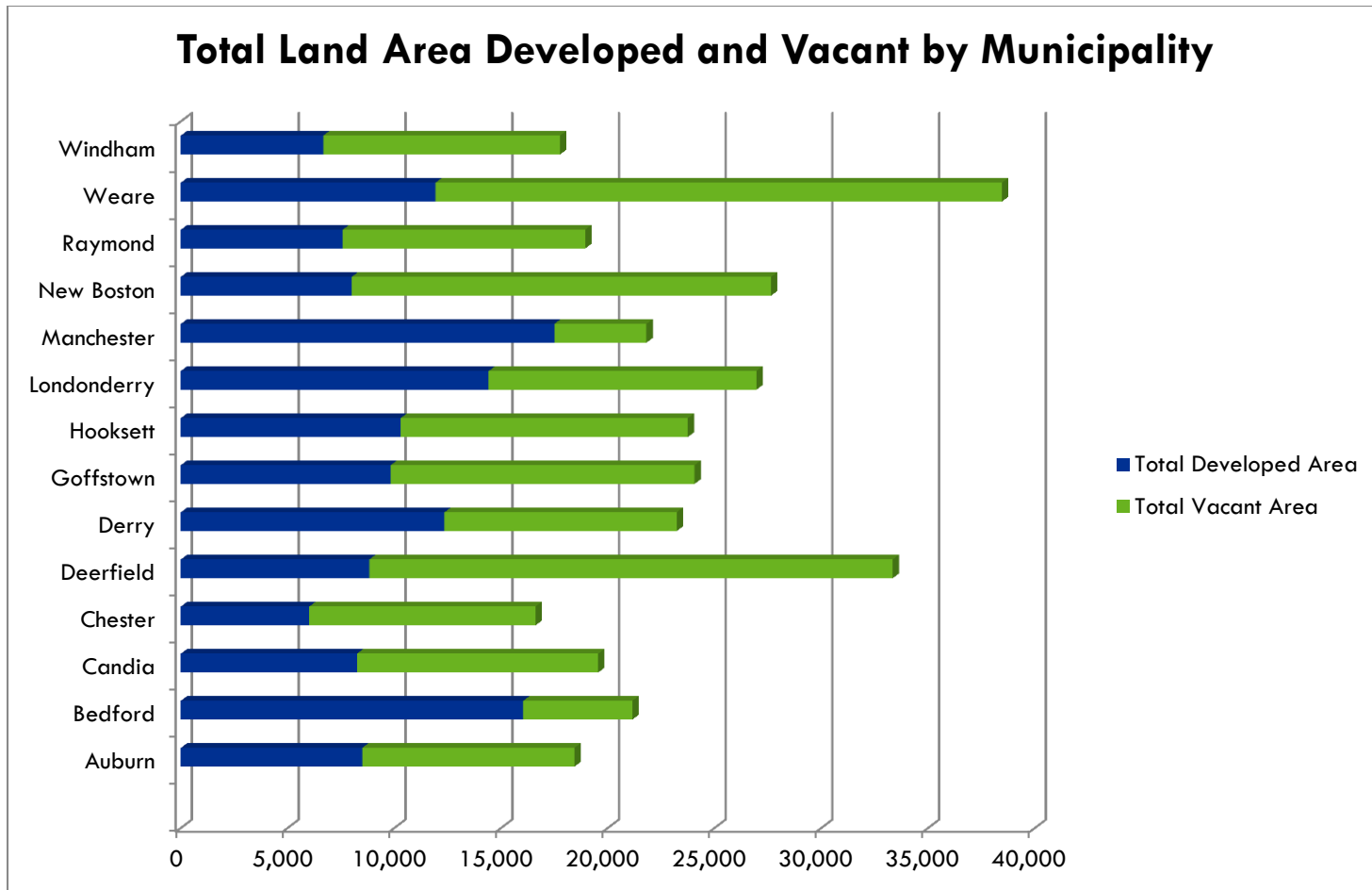
The region as a whole, however, is the sum of its parts. A better understanding of the regional land use picture can be obtained by the individual communities' land use profiles. The region's more rural communities, currently experiencing increased growth, can benefit from examining land use changes in the more developed neighboring communities. An understanding of these patterns would help the growing municipalities anticipate and plan for their own future.

The towns of Weare (38,464.3 acres) and Deerfield (33,347.7 acres) are the largest towns in the region and have the greatest total land area (see Figure 1). Conversely, the towns of Windham (17,772.4 acres) and Chester (16,618 acres) are the region's two smallest communities in terms of total land area. However, total land area alone is not enough to get an accurate feel for what the community is like. Even though the Town of Weare has the largest total land area in the region, 26,579.3; approximately 70 percent of those acres are undeveloped. The Town of Bedford (21,156.13 acres) on the other hand is one of the smaller communities in the region in terms of total land area, but it is approximately 75.5 percent developed at 15,970.1 acres.

The City of Manchester is the region's leader in overall developed land area with approximately 17,456.6 acres. The Town of Bedford has grown substantially in recent years containing a total of approximately 15,970.1 developed acres. Manchester and Bedford are the only two municipalities in the region with fewer than 5,200 undeveloped acres. Other than Auburn, which has approximately 9,983 undeveloped acres, no other municipality has fewer than 10,000 undeveloped acres.

The Town of Bedford had the highest regional share of developed commercial square footage in 2009 (36.4 percent) while Manchester posted the highest percentage of semi-public development (62.5 percent). New Boston accounted for 59 percent of the region's positive public development growth (Manchester recorded a loss of public square footage). No SNHPC region municipality recorded any completions in industrial development. Auburn, Hooksett and Raymond all recorded no appreciable non-residential growth in 2009.

Manchester is the leader in land used for utilities and streets, with approximately 3,567.5 acres. This is slightly less than half the utilities and streets area in Londonderry, whose approximately 1,847.0 acres ranks second in the region. Goffstown is barely behind Londonderry in this category, with approximately 1,538.6 acres.



Source: SNHPC

FIGURE 2 TOTAL LAND AREA DEVELOPED AND VACANT BY MUNICIPALITY

LAND USE AND ZONING

Local governments employ their zoning powers as a means of accommodating various land use activities within their borders and controlling the growth and development of the community for the public good. Specifically, these zoning powers are used to minimize the impact of conflicting land uses on adjacent property; to limit unplanned, premature and scattered development; and to protect sensitive natural and cultural resources. These public objectives are achieved through a variety of land use regulations, including site plan, subdivision and zoning ordinances.

All 14 communities in the SNHPC Region have adopted a Zoning Ordinance of one form or another. Most communities in the region are concerned with balancing residential growth with economic development efforts. New Hampshire RSA 674:21 Innovative Land Use Controls and RSA 674:22 Growth Management; Timing of Development also permit municipalities to enact ordinances to regulate and manage growth. Innovative Land Use Controls also provide municipalities with a number of tools to encourage economic development.

Zoning tools used to manage growth include growth management ordinances, impact fees, and phased development. A growth management ordinance limits the number of building permits in any given year to a predetermined number and must be based on statistical data that demonstrates the municipality is growing faster than it can provide municipal services to serve its population. Impact fees allow municipalities to assess new development for its share in the cost or increase in new capital facilities and services necessary to serve new growth. The fees must be used to build new facilities that are directly proportional and have a direct rational nexus to new development. Phased development is a tool that allows new development to occur in phases over time, but in manageable stages and not all at once. Municipalities in the SNHPC Region that have enacted a growth management ordinance, impact fees, or require phased development are shown in **Table 5**.

TABLE 5 GROWTH MANAGEMENT ORDINANCES BY MUNICIPALITY

Municipality	Growth Management Ordinance	Impact Fees	Phased Development
Auburn	Yes	No	No
Bedford	No	Yes, School & Recreation	Yes, Not required but allowed
Candia	No	Yes	No
Chester	Yes	Yes	Yes
Deerfield	No	Yes	No
Derry	Yes	No	Yes
Goffstown	No	Yes	Yes
Hooksett	No	Yes	Yes
Londonderry	Yes	No	Yes
Manchester	No	Yes	No
New Boston	No	No	Not mandatory
Raymond	No	Yes	No
Weare	No	No	Yes
Windham	No	Yes	No

Source: Municipal Zoning Ordinances

Growth management ordinances, impact fees and phased development can also be used to help preserve the rural character of communities along with other land use regulations. There are also additional non-growth management tools available to communities help preserve rural character. Some of these tools include, but are not limited to, the village plan alternative subdivision, historic district zoning, and establishing historic and site plan design standards.

The village plan alternative is a unique land use control that can be used to accomplish many public objectives. It promotes more efficient and economical development, which minimizes sprawl, preserves open space and retains village character. Any application under the village plan alternative is required to devote 80 percent of the total site area to conservation or open space purposes.

Designated historic districts and historic district zoning can help to both preserve and revitalize areas of historic significance within a community. Development and/or demolitions within a historic district may be required to be reviewed by a design committee to ensure that historic preservation interests are met. Additionally, permitted uses within a historic district could be adjusted to allow historic homes to be used for commercial or office space rather than solely as residential. Currently, the towns of Bedford, Goffstown, Londonderry, Raymond, Weare, Windham and the City of Manchester have designated historic districts (also see the Cultural and Historic Resources chapter of this plan).

Design standards range from providing a general clause requiring the preservation and protection of historic features to location specific guidelines for new development. The guidelines can specify locally desired architectural styles, construction materials, building scale, window and door design, sign size and design, awnings and canopies, lighting fixtures, landscaping, fencing, and screening methods. In the SNHPC Region, the towns of Chester, Goffstown, Hooksett, Londonderry, Windham and the City of Manchester have established design guidelines to ensure future growth and development in their historic

centers is compatible with its surroundings. Often these standards or guidelines are found in the Site Plan Review or Subdivision Regulations rather than the municipal Zoning Ordinance.

While growth and development is essential for economic vitality; the consequences of haphazard commercial and industrial development are undesirable and have a negative impact on growth. Some of the zoning tools available to attract economic growth and ensure that growth is compatible with the goals of the municipality include performance zoning, tax increment financing (TIF) districts, planned unit development and mixed-use development shown in **Table 6**.

Rather than listing permitted uses, performance zoning focuses on the intensity of land use allowed. Additionally, performance zoning looks at the performance of the parcel and how it impacts nearby community services and other parcels, rather than the specific land use. Since variances, appeals and rezoning are not needed, it can help landowners and developers obtain faster approvals with less additional local review. However, there can also be a larger learning curve because it is less rigid than traditional zoning.

Economic development districts – or TIF districts - are allowed under NH RSA 162. In such a district, the incremental taxes - or the difference in property tax resulting from an increase in property value on new, expanded or renovated development - are given to the municipality to use for infrastructure or other community services improvements within the district. The tax revenues associated with increased property values for existing buildings will continue to be allocated as normal for all community assets outside the TIF district.

Planned unit development is a combination of open space or conservation subdivisions and mixed-use development on a larger scale. A planned unit development is a return to the neighborhood concept, with all types of residential uses in close proximity to one another and to community services such as schools, hospitals, businesses and shopping facilities. Planned unit developments are very similar to the village plan alternative, with the exception of the required conservation land set aside. Certainly planned unit development offers an effective means to developing pedestrian friendly neighborhood centers.

Mixed-use zoning allows for commercial and residential uses on the same building or lot. By allowing mixed use zones, vehicle trips are reduced because residents can access services right in their neighborhood. Design standards within the mixed-use zone can ensure the desired image of the town remains despite any new development.

TABLE 6 ECONOMIC DEVELOPMENT TOOLS AND ZONING ORDINANCES

Municipality	Performance Zoning	TIF District	Planned Unit Development	Mixed-Use Development
Auburn	No	No	No	No
Bedford	Yes	Yes	No	Yes*
Candia	No	No	No	No
Chester	No	No	No	No
Deerfield	No	No	No	No
Derry	No	Yes	No	Yes
Goffstown	No	No	No	Yes
Hooksett	Yes	Yes	No	Yes
Londonderry	Yes	Yes	Yes	Yes
Manchester	No	No	Yes	Yes
New Boston	No	No	No	No
Raymond	No	Yes	No	Yes
Weare	Yes	No	No	Yes
Windham	No	No	No	Yes

*No specific zoning but it is allowed

Source: Municipal Zoning Ordinances

Environmental characteristics zoning focuses on protecting natural resources by limiting development within critical natural areas. Additionally, some ordinances, such as floodplain regulations, serve not only to protect natural resources, but to protect property.

Open space or cluster development is a popular choice for communities concerned about maintaining rural character and open space. In this type of development, the number of homes that would fit on a parcel of land in a traditional subdivision is built on a smaller portion of the same land, with the remaining land protected as common open space. The communities employing environmental characteristics zoning are outlined in **Table 7**.

Wetlands protection provisions may range from an established overlay district based on a prime wetlands study the community completed to just a buffer around any wetlands established in the community's dimensional standards. These standards can be implemented through Zoning Ordinances, Site Plan Review and Subdivision Regulations. Incorporating wetland protections into all three sets of regulations improves consistency in implementation.

Steep slopes protections are often implemented much like wetland protections and within many communities in the SNHPC Region these provisions are more often found in Subdivision and Site Plan Review Regulations rather than in Zoning. Steep slope provisions target land over a certain gradient, typically 25 percent but sometimes 15 percent. The most common and straightforward mechanism for regulating steep slopes is to remove the defined slopes from the calculation of buildable area.

Floodplain regulations must strictly follow state and national standards to ensure compliance with the National Flood Insurance Program. Floodplain regulations prohibit development in the floodway or from creating an increased risk of flooding, such as raising flood water heights, in the 100-year floodplain. The

regulations not only serve to protect the floodplain, but to protect property and reduce communities' risk to flood related disasters.

Aquifer and watershed protections work to protect groundwater supplies from adverse development and minimize the hazards related to the storage or disposal of solid and hazardous waste. They may review and inspect on site drainage systems and their associated groundwater impacts. They are designed to encourage uses that can be safely located within the direct and indirect aquifer recharge areas.

Soil based lot sizing establishes a minimum lot size based a site specific analysis of soil capacity to support development. The lot size is determined by the type of soil, its development potential as determined by drainage or erosion capabilities, or the presence of steep slopes. When combined, these factors establish the soil classification for which lot sizes are assigned to allow the least detrimental impact to the environment. Soil based lot sizing also is connected to septic design standards and ensuring adequate land area is available to provide a system that will not contaminate drinking water supplies.

There are a number of incentive based zoning techniques that communities can employ to achieve their defined Master Plan goals. Timing incentives, impact zoning, performance standards, dimensional incentives, transfer of density or development rights, flexible or discretionary zoning, inclusionary zoning, and accessory dwelling unit standards can all be used by municipalities to encourage preservation of open space or historic resources and the creation of workforce housing, among many other objectives. The primary function of these tools is to induce developers and the free market to carry out a community's vision without a direct mandate. **Table 8** lists the communities that carry out incentive based zoning.

Timing incentives typically involve expediting the permitting process. In New Hampshire, timing incentives are unlikely because towns are bound to a 65 day clock and faster review periods are unrealistic. Impact zoning is a form of zoning that regulates the consequential impacts of development. Rather than defining a zone as commercial, industrial, residential, or some mixture, impact zoning defines standards development must meet within the zone such as noise, traffic, and visual appearance. Currently no communities in the SNHPC Region utilize timing incentives or impact zoning.

Performance standards are used to control development while minimizing impacts to the natural or surrounding environment. Many uses may be allowed, provided developers can meet certain standards relating to density, impervious surface coverage, open space, noise level, or other defined criteria.

Dimensional incentives are typically bonuses in the form of increased density; reduced minimum lot sizes, frontage, or setback requirements; or impervious surface coverage. Density bonuses can be given in return for a certain percentage of dwelling units being reserved as affordable or a certain percentage of land preserved as open space. Some towns allow an impervious surface bonus in return for easements in certain areas of the property.

TABLE 7 ENVIRONMENTAL CHARACTERISTICS ZONING

Municipality	Wetlands Protection Provisions	Steep Slope Protection Provisions	Floodplain Regulations	Aquifer or Watershed Protection District	Soil Based Lot Sizing	Open Space or Cluster Development
Auburn	Yes	No	Yes	Yes	No	Yes
Bedford	Yes	Yes	Yes	No	Yes	Yes
Candia	Yes	Yes	Yes	Yes	Yes	No
Chester	Yes	No	Yes	No	No	Yes
Deerfield	Yes	No	Yes	Yes	No	Yes
Derry	Yes	Yes	Yes	Yes	Yes	No
Goffstown	Yes	Yes	Yes	Yes	No	Yes
Hooksett	Yes	Yes	Yes	Yes	No	Yes
Londonderry	Yes	Yes	Yes	No	Yes	Yes
Manchester	Yes	Yes	Yes	Yes	Yes*	No
New Boston	Yes	Yes	Yes	Yes	No	Yes
Raymond	Yes	Yes	Yes	Yes	no	Yes
Weare	Yes	No	Yes	Yes	Yes	Yes
Windham	Yes	No	Yes	Yes	Yes	Yes

* For lots on septic systems

Source: Municipal Zoning Ordinances

Transfer of development rights (TDR) allows owners to separate the right to develop land from the land itself and re-allocate the development right of one parcel to another parcel of land. TDRs are similar to the provisions of a cluster development ordinance, where a developer forgoes the right to develop the entire parcel in return to higher density on a portion of the parcel with the remaining portion preserved as open space. In a TDR, however, the right to develop a parcel of land can be transferred to a different parcel, which could be non-contiguous and far apart, rather than the transaction being confined to one parcel as in cluster development. TDRs generally define “sending” and “receiving” sites in the ordinance.

Flexible or discretionary zoning is generally the same. This type of zoning can take a variety of forms including many of the things NH RSA 674:21 allows as innovative land use controls such as planned unit development and transfer of development rights. Flexible or discretionary zoning may also take shape as special permits, floating zones, conditional rezoning, and subdivision exactions, but most commonly is known as overlay zoning. With overlay zoning, communities can protect, encourage development, or discourage certain types of development within certain areas. Typically flexible zoning is applied to the entire community and not just to certain districts. It can also allow for mixed-use and densities. The discretionary portion provides for more negotiation between the developer and the community.

Inclusionary zoning provides incentives to developers that create housing for moderate, low, and very low-income households. Incentives could be zoning exemptions and/or density bonuses if a portion of the proposed development is reserved for elderly, handicapped, or targeted lower-income households. Accessory dwelling units, while not an incentive for affordable housing, can help provide a more diverse and affordable housing stock in a community. Most communities in the SNHPC Region define standards for accessory dwelling units.

TABLE 8 INCENTIVE BASED ZONING

Municipality	Performance Standards	Dimensional Incentives	Transfer of Density or Development Rights	Flexible and Discretionary Zoning	Inclusion-ary Zoning	Accessory Dwelling Unit Standards
Auburn	No	No	No	No	No	Yes
Bedford	Yes	Yes	No	No	Yes	Yes
Candia	Yes	No	No	No	No	Yes
Chester	No	No	No	No	No	No
Deerfield	Yes	No	No	No	No	Yes
Derry	No	No	No	Yes	Yes	Yes
Goffstown	No	No	No	Yes	No	Yes
Hooksett	Yes	No	No	PZ	Yes	Yes
Londonderry	Yes	Yes	No	No	No	Yes
Manchester	No	No	No	No	No	Yes
New Boston	No	No	No	No	No	Yes
Raymond	No	No	No	No	No	No
Weare	Yes	No	No	No	Yes	Yes
Windham	Yes	Yes	No	No	Yes	Yes

Source: Municipal zoning ordinances

An additional form of zoning that has not taken hold in our region but should be evaluated for future master plans is form based codes. Form-based codes use the physical form to establish predictable built results and a high-quality public, rather than separation of uses, as the organizing method for the code. Form-based codes address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks. They are regulations, not mere guidelines that would need to be adopted into municipal law.

While there are similarities between most ordinances, almost every community within the SNHPC region has adopted a zoning ordinance that is uniquely crafted to address the particular land use issues and concerns confronting their jurisdiction. At first glance, there is very little cross over or regional zoning consistency. However, there are pockets visible on the regional composite zoning map that illustrates instances of regional consistency. In particular, there are some industrially zoned areas that combine across municipal lines to form larger zones, such as on the borders of Derry and Londonderry and the border between Auburn and Hooksett. These areas might give the impression of a large regional industrial zone, but dimension, design, permitted uses and a host of other considerations could differ between each town's ordinance resulting in developers preferring one town over another.

An additional situation that might result in uneven development patterns along municipal boundaries includes differences in residential zoning types along borders. For instance, the border between Chester and Derry and portions of Auburn reveals conflicting residential zoning provisions. The zoning in Chester is less restrictive (allows for smaller lot sizes) than that of Auburn or Derry in that area and as a result, development might be forced into Chester. Chester's desire to preserve its outskirts as rural will be challenged by development spilling over into the town along those borders. Similar situations are evident along Weare's borders with New Boston and Goffstown, and again along Candia's border with Auburn.

As the SNHPC Region continues to grow and develop in the future, the need for compatibility between zoning ordinances from one community to the next will increase in importance. Property owners and developers, as well as the state's legal system demand predictability and consistency in building and land use practices. Additionally, the impacts of development are not limited solely within the boundaries of individual communities – they cross municipal lines, just as transportation networks and natural resources do. Much of the industrial and commercial development in the region follows existing transportation routes, which often follow existing natural features, such as rivers. To better protect these facilities and resources and to provide for greater predictability in building practices, there is a need for zoning compatibility within the region.

CREATING THE GENERALIZED ZONING MAP OF THE REGION

The following Map 1-2 Generalized Existing Zoning in the SNHPC Region is a composite map reflecting all of the current zoning maps of each municipality in the region. It was prepared by developing a best fit set of common zoning categories and inserting the appropriate zoning districts from each municipality into the appropriate zoning category. As a result, the map provides a composite overview of how each municipal zoning is common throughout the region.

The map also may have value to municipalities and planning boards in evaluating the impacts of zoning with their neighbors, as well as considering zoning changes which might have regional impacts. In addition, the map sets up a baseline or framework for considering regional zoning ordinance development. The common zoning categories developed for the map are shown in **Error! Reference source not found.** and re described as follows.

RESIDENTIAL ZONING CATEGORIES

Rural, Agriculture Residential

This zoning category includes agricultural uses, such as scattered farmland and related activities, and low-density residential development, primarily single-family. In comparing the existing land use patterns and zoning ordinances within the region, an overall density or minimum lot size of greater than three acres.

Low Density Residential

This zoning category includes low density, single family residential with a minimum lot size of one-half to three acres of residential uses.

Medium Density Residential

Medium density residential refers to lot sizes ranging from a quarter to one-half acre in size. This type of development may include both detached and attached single-family, duplex and multi-family development.

Medium-High Density Residential

Medium-High density residential includes both detached and attached single-family, duplex and multi-family development much like Medium Density Residential development. However, lot sizes are typically less than a quarter acre. Medium-High density residential is restricted to areas that have access to municipal water and sewer systems.

High Urban Density Residential

Found primarily within the City of Manchester, high urban residential development consists of walkable areas that are urban in character with high density residential densities (including one-family, two-family and multi-family housing) which allow for a mix of uses such as limited retail and services that support the area.

Manufactured Housing Zone

A Manufactured Housing zone includes those homes as defined in RSA 674:31.

COMMERCIAL ZONING CATEGORIES

Neighborhood Commercial

This zone typically represents many existing smaller villages or centers located throughout the region where, locally, smaller commercial growth should be focused and encouraged. These areas are typically mixed-use in nature with commercial, residential, and occasionally public uses side by side.

Central Business District

This zone represents larger areas that include a mix of office and commercial, most notably located within the hub/core of the municipality. Often times these areas are also served by higher density housing. Infill, redevelopment and adaptive reuse are desirable within these areas.

Commercial

This generalized designation includes all types of commercial and business land uses including limited commercial areas to more intensive highway commercial corridors and shopping centers. Generally, areas identified are near municipal centers or along major corridors.

Business Parks

This zone represents separate large office, research parks that do not incorporate heavy industrial.

PUBLIC, INSTITUTIONAL, SEMI-PUBLIC ZONING CATEGORIES

This generalized grouping of public uses represents significant existing features, such as municipal lands, colleges and universities, arts and civic centers, airport, medical centers and nursing facilities.

INDUSTRIAL/RESEARCH & DEVELOPMENT ZONING CATEGORIES

All types of industrial land use, from light industrial, manufacturing, research and technology development to heavy industrial development are included in this generalized land use classification.

MIXED-USE ZONING CATEGORIES

Mixed Use

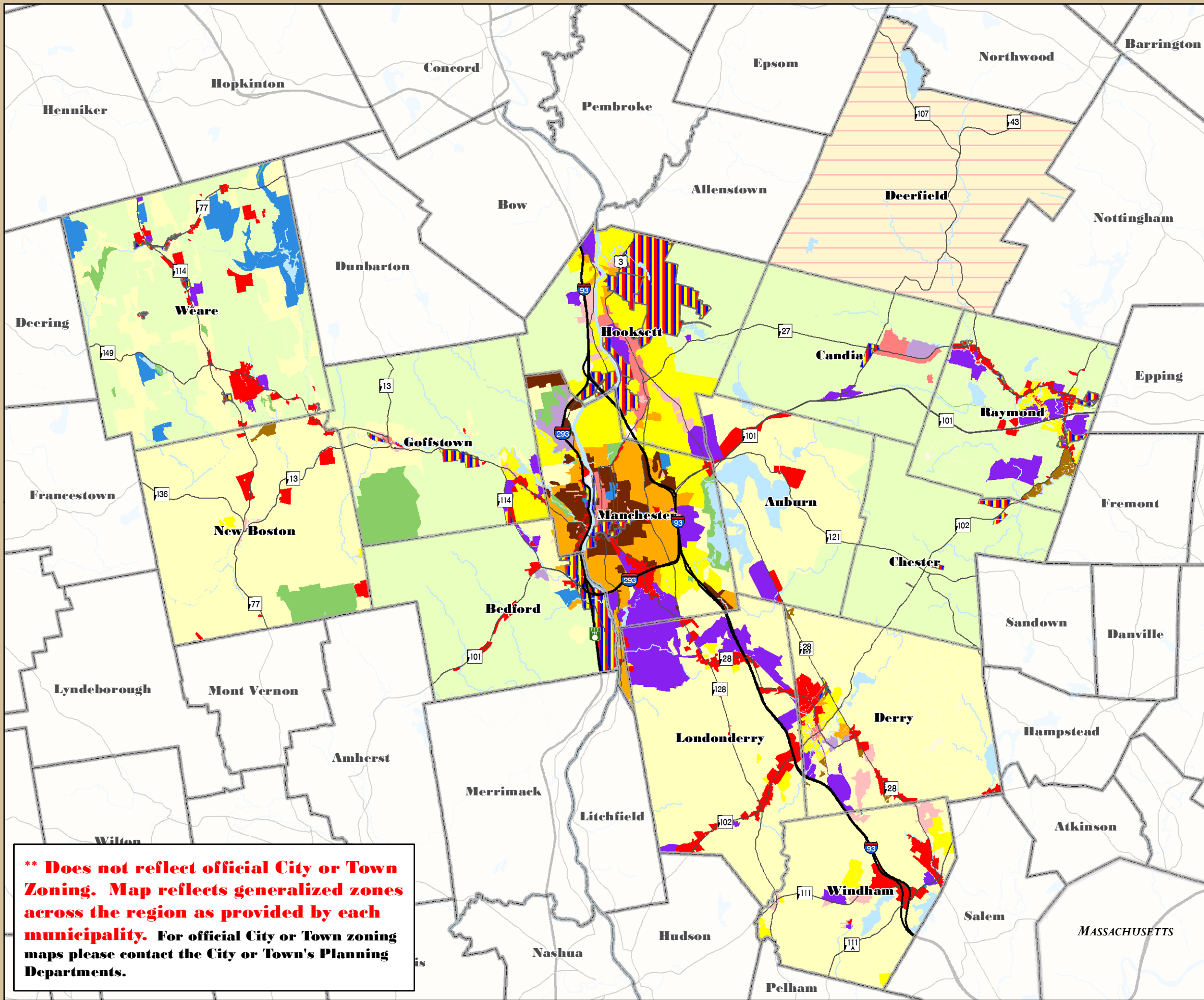
This category reflects a mix of commercial, light industrial, and residential land uses commonly found along a major corridor, such as a rail corridor, a central business district, or transitional areas between predominantly commercial and residential areas. Mixed use zoning may also include the preservation of historic districts.

Rural/Agriculture

This category reflects a mix of light commercial, light industrial, residential and agricultural uses commonly found in rural communities with predominantly commercial, agricultural and residential uses.

CONSERVATION ZONING CATEGORY

This zone allows for increased protection to the natural landscape, and discourages development that would be contrary to the character of the property with limited development purposes that support conservation.



**** Does not reflect official City or Town Zoning. Map reflects generalized zones across the region as provided by each municipality. For official City or Town zoning maps please contact the City or Town's Planning Departments.**

Map # 1 - 2

Granite State Future

Land Use

Generalized Existing Zoning** in Southern NH Region



- Generalized Zoning**
- Rural, Agriculture, Mixed-Use
 - Rural, Agriculture, Residential
 - Low Density Residential
 - Medium Density Residential
 - Medium-High Density Residential
 - High Urban Density Residential
 - Manufactured Housing Zone
 - Neighborhood Commercial
 - Commercial
 - Central Business District
 - Business Parks
 - Industrial
 - Mixed-Use
 - Public, Institutional, Semi-Public
 - Conservation
- Legend:**
- Interstates
 - State and US Routes
 - Town Boundary
 - Rivers
 - Lakes

Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
All SNHPC Communities

The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2014.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5 Miles

Location Map

Page 23

FUTURE CONDITIONS

To gain a better understanding of the future growth and land use patterns of the SNHPC Region several planning tools have been created for this plan. These tools include a composite Future Land Use Map for the region (see Maps 1-3: Generalized Future Land Use in the SNHPC Region); identified future growth areas by municipality (see Maps 1-4: Identified High Growth Areas in the SNHPC Region); and scenario planning (see Map 5: Scenario 1 Current Rate of Growth (0.5%); Map 6: Scenario 2 Moderate Rate of Growth (1.0%); Map 7: Scenario 3 Moderate Rate of Growth with Build Out of Four Large Proposed Mixed Use Developments Projects) Future Growth Scenarios.

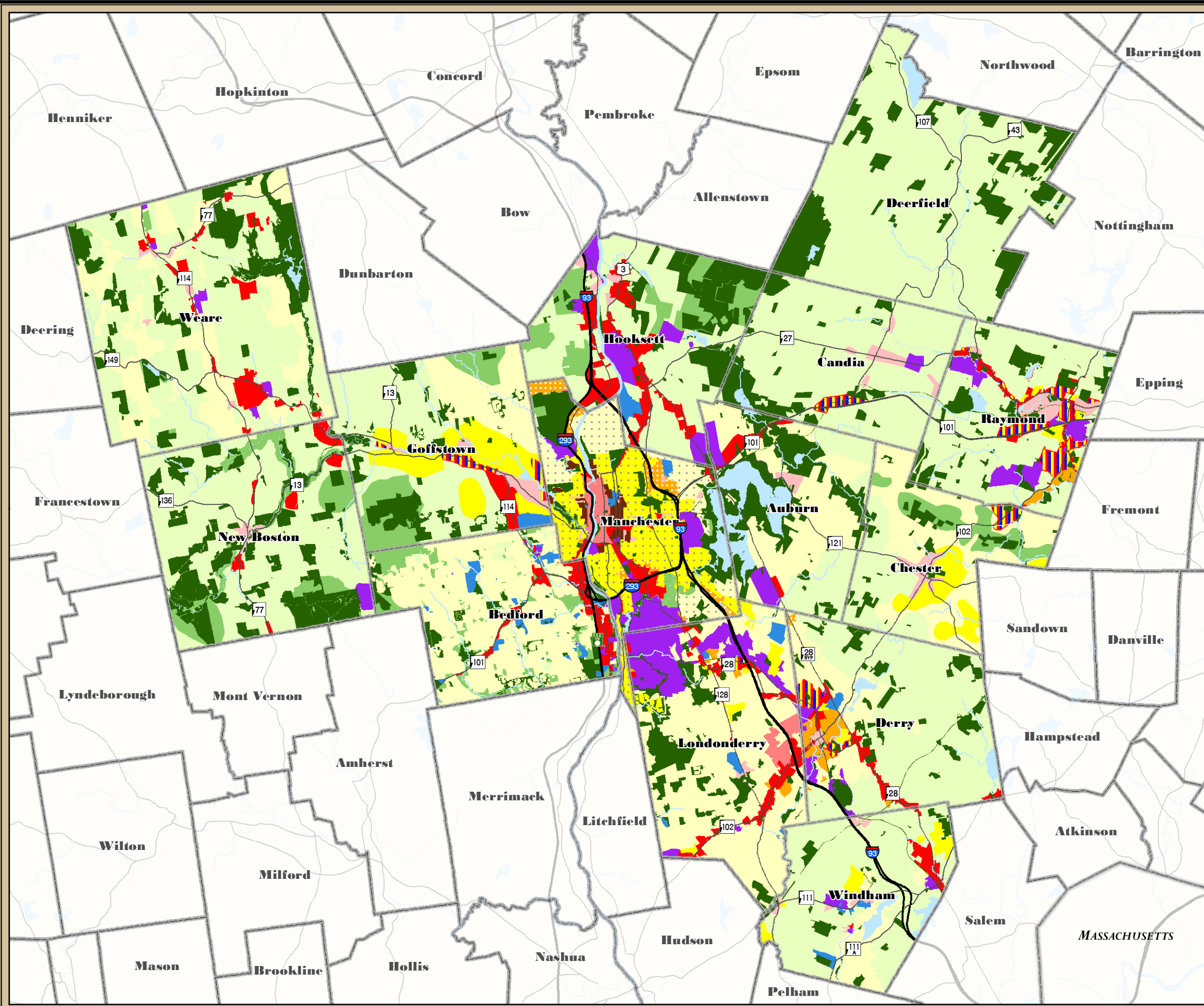
CREATING THE FUTURE LAND USE MAP

The Future Land Use Map represents a composite summary of all the future land use maps prepared and adopted by the Planning Boards, as part of each municipality's master plan (see Table 9 Master Plans in the SNHPC Region). As such, it is a visionary and an advisory tool that can be used to help guide future growth and development. In addition, it offers municipalities and planning boards a view of the broader future land use vision of adjacent municipalities.

TABLE 9 MASTER PLANS IN THE SNHPC REGION

Master Plans in the SNHPC Region		
Town	Year Adopted	Produced By
Auburn	2007	SNHPC
Bedford	2010	VHB
Candia	2004	Burnt Rock Inc.
Chester	2006	SNHPC
Deerfield	2008	SNHPC
Derry	2010	SNHPC
Goffstown	2006	Wilbur Engineering
Hooksett	2004	Fougere Planning & Development, Inc., Keach–Nordstrom Associates, Inc. and Dufresne-Henry.
Londonderry	2013	Town Planning and Urban Design Collaborative LLC
Manchester	2009	Manchester Planning Board
New Boston	2006	SNHPC
Raymond	2009	SNHPC
Weare	2005	SNHPC
Windham	2005	Taintor & Associates Inc.

Source: SNHPC



Map # 1 - 3

Granite State Future

Land Use

Generalized Future

Land Use in

Southern NH Region



- Future Land Use****
- Rural, Agriculture Residential District
 - Low Density Residential
 - Low Density Urban Residential
 - Moderate Density Residential
 - Medium Density Urban Residential
 - Medium-High Density Residential
 - High Density Urban Residential
 - Core Urban Residential
 - Mixed-Use
 - Commercial
 - Industrial/Research & Development
 - Town and City Centers (Larger Centers)
 - Village/Neighborhood Centers (Small Centers)
 - Public, Institutional, and Semi-Public
 - Potential Conservation Zone
 - Existing Conservation and Town Owned Lands
 - Interstates
 - State and US Routes
 - Town Boundary
 - Rivers
 - Lakes

****** Future Land Use was created by taking the Future Landuse maps from each Town/City's current Master Plan. Each Town/City's categories were reviewed and placed into the best fitting generalized category. Each Town/City was given the opportunity to review and adjust future landuse.

Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
All SNHPC Communities

The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2014.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5
Miles



Future Land Use Categories: Every municipality (with the exception of the towns of Londonderry and Windham) included a future land use map as part of their town master plan. The Town of Londonderry developed a vision map that highlighted specific goals for selected areas of the community. This vision map was converted to a future land use map by SNHPC staff working with Londonderry planners. SNHPC also worked with Windham staff to generate a future land use map of the town for use in this plan. For all other municipalities, SNHPC was able to obtain the GIS files used to create their future land map. These files were then combined to create the composite future land use map used in this plan.

A total of 12 generalized land use categories are shown on the Future Land Use map. These categories are described in detail below. By aggregating similar land use categories from each municipality's future land use map common categories have emerged across municipal boundaries in certain areas throughout the region. While these categories are not meant to be all-inclusive, they attempt to identify the range, type and intensity of the possible arrangement and distribution of future land use patterns for the region.

RURAL, AGRICULTURE RESIDENTIAL

This land use category includes agricultural uses, such as scattered farmland and related activities, and low-density residential development, primarily single-family. In comparing the existing land use patterns and zoning ordinances within the region, an overall density or minimum lot size of greater than two acres.

LOW DENSITY RESIDENTIAL

This land use category includes low density, single family residential with an overall density or minimum lot size of one to two acres of residential uses. This density is common throughout the communities in the region.

LOW DENSITY URBAN RESIDENTIAL

Located primarily within the City of Manchester this land use category consists of and provides for a higher urban residential density than typically found in surrounding communities.

MEDIUM DENSITY RESIDENTIAL

Medium density residential refers to lot sizes ranging from one-half acre to one acre in size. This type of development can include both detached and attached single-family, duplex and multi-family development. Most medium density residential is located in the communities and land surrounding I-93 and Manchester. Limited medium density residential is found within Manchester, but outside the I-93 and 293 loops.

MEDIUM DENSITY URBAN RESIDENTIAL

Located primarily within the City of Manchester this land use category consists of and provides for a higher medium urban residential density than typically found in surrounding communities.

MEDIUM-HIGH DENSITY RESIDENTIAL

Medium-High density residential includes both detached and attached single-family, duplex and multi-family development much like Medium Density Residential development. However, lot sizes are typically less than one-half acre. Medium-High density residential is restricted to areas that have access to municipal water and sewer systems. This land use classification is primarily located in more densely populated communities such as Bedford, Derry, Hooksett and Londonderry.

HIGH DENSITY URBAN RESIDENTIAL

Located primarily within the City of Manchester this land use category consists of and provides for a higher density urban residential development than typically found in surrounding communities.

CORE URBAN RESIDENTIAL

Located primarily within the City of Manchester, core urban residential development consists of walkable areas that are urban in character with high residential densities (including one-family, two-family and multi-family housing), which allow for a mix of uses such as limited retail and services that support the area.

COMMERCIAL

This generalized designation includes all types of commercial and business land uses ranging from neighborhood and limited commercial areas to more intensive highway commercial corridors and shopping centers. All communities in the region have some area designated as commercial. Generally, areas identified are near municipal centers or along major corridors.

INDUSTRIAL/RESEARCH & DEVELOPMENT

All types of industrial land use from light industrial, manufacturing, research and technology development to heavy industrial development are included in this generalized land use classification. Not all of the 14 communities in the region have designated future industrial areas. The areas designated as industrial are consistent with existing industrial areas and include some expansions or plans for future industrial development based on infrastructure developments, such as the Airport Connector Road and the proposed Exit 4A in Derry and Londonderry.

MIXED-USE

This category reflects a mix of commercial, industrial, and residential land uses commonly found along a major corridor, a central business district, or transitional areas between predominantly commercial and residential areas. These areas typically feature small lots with mixed residential and commercial uses, allowing for a very livable, walkable, close-knit environment.

VILLAGE/NEIGHBORHOOD CENTERS (SMALL CENTERS)

Village and Neighborhood Centers represents many of the existing smaller villages or centers located throughout the region where, locally, growth in general should be focused and encouraged. Containing or encouraging growth in or around these village or neighborhood centers represents one of the smart growth principles of this plan. Manchester has identified four neighborhood centers and Goffstown has its Grasmere Village that are all planned to be neighborhood scale community centers. These centers are typically mixed-use in nature with commercial, residential, and occasionally public uses side by side.

TOWN AND CITY CENTERS (LARGER CENTERS)

The larger centers include existing and planned major town and city centers, which are much larger centers of development activity. These centers may already host municipal offices and other public facilities such as schools, but also function as the local downtown or central business district. Often times these areas are also served by higher density housing. Infill, redevelopment and adaptive reuse are desirable within these areas.

POTENTIAL CONSERVATION ZONE

This category represents areas designated by a municipality's master plan as either existing and/or potential conservation or protected lands. This category, however, does not depict any or all future conservation and/or protection priorities of any one community or the region as a whole.

PUBLIC, INSTITUTIONAL, AND SEMI-PUBLIC

This generalized grouping of public uses represents significant existing features, such as municipal lands, colleges and universities, arts and civic centers, airport, medical centers and nursing facilities, as well as future lands devoted to the development of new municipal services. While most future public areas are contained within the community centers and other mixed-use districts, there are a few isolated locations across the region that will exist exclusively as public lands and are large enough to be identified on a regional scale.

IDENTIFIED FUTURE GROWTH AREAS BY MUNICIPALITY

The second planning tool used in this plan is a description and map of each municipality's identified future growth areas (see description and following

Map 3: Identified High Growth Areas in the SNHPC Region identifies geographic areas, corridors, districts or parts of the community which have experienced growth in the past and/or are anticipated to continue to experience increased growth and development in the future. In identifying these areas, draft copies of a previously prepared future growth map was distributed to planning boards and town planners in the region to review and update. Map 4 reflects the most current revisions which received from the towns identified below. This information is useful in helping to identify where the region's future growth will occur and what may need to occur to prepare and manage this growth. Municipalities can also benefit from this information in relationship with neighboring communities.

TOWN OF AUBURN

The Town of Auburn is divided into six planning areas. These areas are: Northwest Planning Area; Route 28 Bypass Planning Area; Village Center Planning Area; Residential Planning Area; Rural Planning Area; and Watershed Protection Planning Area.

The Northwest Planning Area is intended to allow for continued industrial and commercial expansion. However, the area should continue to allow single-family housing within the commercial zones.

The Route 28 Bypass Area supports current industrial and commercial zoning. While there is interest in expanding the extents of the zone, doing so would threaten the watershed it lies within. The Master Plan recommends that the Town investigate and pursue the installation of water and sewer service.

The Village Center Area is intended to build upon the few existing public and commercial facilities in the historic center of Auburn to create a central focus in town for social and community activities. The Village Center Area could also serve as a viable location to accommodate affordable or more moderately priced forms of housing, in addition to other small-scale retail and professional establishments.

The Residential Planning Area are those areas currently zoned as Residential 1 and Residential 2 and predominantly is the area adjacent to Lake Massabesic, Little Lake Massabesic and the proposed Village Center area. While there are no changes proposed to the zoning in this area, the Town would like to explore planning tools and design techniques that would reduce the visual and environmental impacts of development and maintain the natural and rural character of the area.

The Rural Planning Area generally includes areas in the southeast and northeast corners of Town. The Master Plan recommends that techniques encouraging preservation of the Town's rural character, encourage cluster subdivision and discourage rural sprawl be pursued in this area. However, the primary intent for this area is to retain the natural environment, fields and wooded areas.

The Watershed Protection Area is an overlay that covers much of the Town. Manchester Water Works owns a significant portion of the land in the watershed and surrounding Lake Massabesic and influences land use decisions through policies in the Watershed Protection Plan.

TOWN OF BEDFORD

The Town is broken up into five main development areas: Town Center; Route 101 Corridor; Residential and Agricultural Areas; River Corridor (Route 3); and Route 114 (Donald Street) Area. Also shown are areas with important features, including potential Priority Conservation Parcels; Gateway Entrances; Manchester Airport Connector Road; and Bedford Heritage Trail, which will all impact future land use developments. The Town identified a goal and objectives for each of these development areas.

The Town Center area is ideally a place where residents can come together and meet for social and community events. It should be a “people place,” serving the needs of the townspeople.

The Route 101 Corridor needs to be studied and a design developed to propose changes to the corridor that would prevent further division of Bedford into north and south sectors. The new plan will need to create a positive visual image for the area while re-establishing the cohesion of north and south Bedford. Plans for further commercial development are recommended to be at existing traffic lights.

The Residential and Agricultural Areas are recommended by the Master Plan to continue their pattern of low density residential development and agriculture with emphasis on conservation of valued open space, recreational facilities, and pedestrian and bicycle facilities, while working to retain the quality of life in these areas. These areas are approximately 80 percent of Bedford.

The Bedford Master Plan recommends that the River Corridor maximize commercial and industrial development, while upgrading infrastructure plans to ensure adequate capacity to support future growth. Mixed use, higher density development, and form based zoning is recommended for consideration. This area would ideally host economic generators of benefit to the Town supporting residents, businesses, community services, and helping to maintain a stable tax base.

The Route 114 (Donald Street) Area needs to capitalize on the potential for redevelopment opportunities, encourage affordable housing options and advance existing commercial and industrial development. This area, like the Route 3 Corridor, can be another home to economic generators of benefit to the whole town.

TOWN OF CANDIA

In the update of their Master Plan, residents of the Town of Candia participated in numerous public forums in 2003. The last of these forums, held in November of that year, allowed residents to express their visions for the future of Candia. The Candia Master Plan Committee generally agreed that continued population growth and development pressures needed to be managed so future growth could be guided appropriately.

Residents were given the opportunity to identify their own visions for future development in Candia. Nearly half of the land use types desired in this discussion were residential uses. The group was divided evenly three ways, with single-family, senior and work-force or multi-family housing the three top choices.

Commercial and Industrial development was identified as needed at Four Corners and the Exit 3 area off of Route 101. The “mom and pop” operations ideally would be focused at Four Corners, and the more “quality retail” developments focused around Exit 3.

The mixed use centers feature excellent vehicle access. Moderate-density residential and limited commercial development will ideally remain concentrated in the four village areas, and be accessible to good-quality roads. The surrounding countryside area is preferably characterized by low-density housing, in addition to a working landscape that features scattered farms and forests. Lastly, the Master Plan recommends that undeveloped fragile areas should remain as such due to their low accessibility.

TOWN OF CHESTER

The Board aimed to create a balance throughout the community, acknowledging that while many would like to stop growth from occurring in Chester, it is not possible. The focus is on where that development

should occur, so Chester can remain a rural New England community and protect the natural environment. Chester's draft Future Land Use Map contains five generalized and location based planning themes.

Conservation and Agriculture Corridor – The corridor encompasses many existing conservation lands within the town, connecting them with adjacent areas. By maintaining connections between existing conservation lands, the town can maximize the benefits of this large expanse of un-fragmented land and preserve the natural wildlife corridor. The region selected has many co-occurring natural features, such as steep slopes, floodplains, wetlands, wildlife habitat, and others.

Historic Village – The Historic Village area is identified as a potential future mixed-use area, permitting both commercial and higher density residential development, consistent with the existing town center instead of the current two-acre residential zoning. This new designation would allow for small scale commercial development.

Moderate Density Residential – Three locations were selected where residential development would be consistent with existing development and would not significantly impact the natural or rural qualities of the Town. The intent is to permit enough room for anticipated growth, while preserving rural character. These areas would either function as an extension of the town center or as smaller satellite villages, channeling new growth away from valued open space or rural areas.

Conservation and Agriculture with Low Density Residential – This future land use area matches the efforts and zoning in adjacent portions of Auburn and Derry to create a larger green pocket of land, transcending municipal boundaries that could be retained as rural and lessen potential development pressures.

Commercial and Light Industrial – This area expands the towns existing commercial and light industrial zoning districts, increasing opportunities for such development. Additionally, proximity to Raymond and similar developed uses will allow for a larger pool of potential “customers”, making commercial development more viable in this location than in others.

TOWN OF DEERFIELD

In the Town of Deerfield Master Plan, the Town is divided into the following major land use categories: Critical Resource Areas; Sensitive Natural Resources; Conservation and Recreation; Rural Forestry Areas; Agricultural Areas; Shorelands; Rural Residential; Villages; Commercial and Industrial; and Existing Public Lands.

Critical Resource Areas include wetlands, surface waters, steep slopes over 25 percent, and floodplains. These areas should be protected and not developed. Sensitive Natural Resources include slopes 15-25 percent and flood hazard areas. Flood hazard areas (100-year floodplains) are currently protected and need to remain so in the future. Lower density development, however, may take place on slopes of 15-25 percent. The town identifies three goals under slope development guidelines: minimize visual impact, retain woodland features and minimize site disturbance.

The Conservation Commission identified conservation and Recreation lands as areas that should be considered for future open space protection, conservation, and low impact recreation. It is recommended that Rural Forestry areas only be developed at a very low density, as commercial forestry operations are dependent on large tracts of land. Developing these areas could also lead to “scattered and premature” growth problems.

Agricultural land needs to be protected in order to prevent development. This can be done through the purchase of development rights, but more feasible could be the use of innovative land use planning and development practices. The guidelines for protecting agricultural land are to minimize visual impact, retain rural features and to minimize site disturbance. Additional measures are also needed in order to protect the agricultural land, with one option being the creation of an agricultural overlay district.

Shorelands in Deerfield are heavily developed; however the potential remains for further development. The Shoreland Protection Act enables towns to adopt zoning regulations that complement the state law, providing for further protection. The goals for shoreland protection in Deerfield are to minimize visual impact, retain water quality and minimize site disturbance.

The Master Plan recommends that Rural Residential areas only be developed at a density that can support the on-site septic and well. Also, innovative land use planning strategies, such as cluster development, are suggested. Many of the Rural Residential lands abut Agricultural Lands. Villages are ideal for preservation and protection, and if proper land use controls are put into effect, new development can assimilate and the villages can benefit from it. The Master Plan suggests the Town encourage a compatible mix of land uses including residential, commercial, public and surrounding agricultural lands.

Commercial/Industrial development should be allowed, but in a manner that is compatible with a rural setting. The accepted place for this growth is in the current commercial zone. Future development is suggested to take place in certain sections of the village areas.

Existing Public Lands should remain in their current state of use, without any dramatic changes taking place. Creation of additional public lands is encouraged, particularly in areas adjacent to existing public lands. The Town needs to ensure that enough land is available for the expansion of public facilities, if necessary.

TOWN OF DERRY

Rapid population and housing growth during the 1970s and 1980s led to a relatively large imbalance between development, services and the environment in Derry. The overwhelming imbalance of residential development had placed a strain on the Town's municipal resources, leading to a temporary moratorium on growth in Derry in 1994.

A Growth Management Plan emerged following this moratorium, and in 1999, a Growth Management Ordinance (GMO) was adopted by the Town to regulate the timing and phasing of major development proposals. During the development of the 2000 Master Plan, Derry has established four goals for land use and growth in their Master Plan. These goals are:

- Preserve Derry's overall patterns of land use that concentrates development in the Downtown and west-central sections of the Town, with open lands and sparser development in the east section of the community, avoiding the tendency toward suburban sprawl.
- Continue to guide the amount of growth that is sustainable, given Derry's environment, level of service, and to its desired character, as outlined in its growth management ordinance.
- Integrate Town goals for open space, recreation, economic development and downtown revitalization with land use policies and regulatory tools where appropriate.
- Continue to review zoning regulations to assure consistency with Town objectives and evolving policies on land use.

Since that time, Derry worked to implement those goals. Land use patterns have been preserved so development and density are concentrated in the downtown and west central section of the Town and open lands and low density remains in the outlying and mainly in the east sections of Town. The Town

strives to integrate goals into land use policies and regulatory tools where appropriate zoning regulations are reviewed and revised as necessary to maintain consistency with Town objectives and evolving land use policies. Additional zoning designations have been added to allow commercial expansion on Route 28 in the area of the Robert Frost Farm, while maintaining the unique character of the area. A zoning change ensured the preservation of character in one of the original neighborhoods in the downtown area, and the town has purchased additional land for open space. Each of these actions implemented goals outlined in the 2000 Master Plan.

TOWN OF GOFFSTOWN

On October 2 and 3, 2009, the Hillsborough County Board of Commissioners held an important Design Charrette to engage public input and discussion regarding the future use and development of the County's large land holdings located between Rt. 114/114A within the Town of Goffstown. An executive summary of the Charrette was prepared and made available to the public and the Town of Goffstown.⁴

The executive summary identifies a number of design principles and recommendations for the future development of this land and as such, this summary and any further planning products to be proposed, should be included in future updates to the Town of Goffstown's Master Plan.

The Town of Goffstown is broken up into eight possible planning districts. These districts are: Parker Station; Pattee Hill; Northeast; Grasmere Village; Goffstown Village; Uncanoonuc Mountains; Bypass Area; and Pinardville Village. While these districts are the ones identified within the Master Plan, it should be noted that these eight districts are just a sample and are not necessarily the end result. Other districts could still emerge, or the districts outlined in the Master Plan could be altered. In any case, each district area would ideally share comparable characteristics or a common history.

The Parker Station area contains mostly conservation subdivisions. These are smaller clustered lots, developed as open space subdivisions. They are high priority areas for preserving natural resources and creating functional open spaces.

Pattee Hill shares conservation subdivision area with suburban residential, which are two-acre lots that are developed as open space subdivisions. These areas have private water and sewer, as well as public recreation facilities.

The Northeast area features a suburban residential area along with conservation open space, which consists of large lots that encourage open space uses. There is a low density of development, and these areas are high priority for conservation easement or public ownership.

Grasmere Village mainly features village residential, which is an area of a village design context. These are small lots with public water and sewer service, and single-family or attached single-family homes that are integrated into the neighborhood. In addition to this, Grasmere Village also contains a small area of village commercial mixed-use. This consists of a village design with small lots, public water and sewer service with village scaled single-family, single-family attached and apartment uses mixed with village scaled service and retail uses.

Goffstown Village has some village residential uses, as well as some village commercial mixed-use and also a small residential mixed-use area, which is single-family, attached single-family and multi-family homes in small projects mixed with retail or office uses, serviced by public water and sewer.

⁴ <http://extension.unh.edu/counties/hillsboro/Docs/CharretteExecutiveSummary.pdf>

The Uncanoonuc Mountain area is simply a mixture of conservation open space alongside conservation subdivisions. The Bypass Area features a combination of conservation subdivision area with a village residential mixed-use area, which is an area of village design having small lots served by public water and sewer service. The area features single-family, and single-family attached, and apartment areas that are mixed with village scaled service and retail uses.

Pinardville Village contains a healthy mix of village residential, commercial mixed-use, and also a campus mixed-use area that is comprised of institutional and college uses with compatible commercial and residential areas.

TOWN OF HOOKSETT

The Town of Hooksett is not divided into sectors or planning areas for the Future Land Use map in its Master Plan. Rather, the Town identified a number of goals, strategies and implementation actions that should be pursued in order to attain the greatest success with future land use planning. Recommendations were made in a series of nine specific categories, with each category detailing specific items that should be acted upon as opportunities arise. Areas in which recommendations were made are:

- Potential Preservation of Open Space (passive recreation)
- Potential New Active Recreation Areas
- Potential Zone Changes
- Potential New Public Roadways
- Potential Bridge Locations for Crossing the Merrimack River
- Potential New Public Safety Locations
- Potential New School Sites
- Potential Commercial/Retail Sites
- Potential New Industrial Sites

In addition to these, more specific recommendations were made for an additional eight areas. These were:

- Natural Resources and Conservation Lands
- Community Facilities
- Recreation
- Transportation
- Economic Development
- Housing
- Education
- Population

The Town's Future Land Use map is based upon the recognition of four guiding principles. These are (1) the acquisition and protection of open space lands; (2) location of intensive land uses with access to major arterial highways; (3) implementation of transportation solutions; and (4) formalizing economic development. Each of these guiding principles is explained, and suggestions provided as to what could be done to set forth each principle.

TOWN OF LONDONDERRY

The Town of Londonderry is divided into seven planning areas. These areas are the Airport Area; Northwest of Route 28 (Jack's Bridge); Exit 4a; Exit 5; Town Center; Exit 4 (Route 102); and the Paige Road Area.

The Airport Area is undeveloped for the most part, however upon completion of the airport connector road, this is likely to change. Completion of the road will open up approximately 800 acres of industrial-zoned land to development. The town held an Airport Area Charrette regarding the future use of this land and that vision should be adhered to.

The area northwest of Route 28 (Jack's Bridge) is also a largely undeveloped area. The Master Plan recommends that the Town review their current zoning designations in order to ensure the desired type and amount of development occurs. Incorporating a mix of uses with a low environmental impact could serve this area well.

The completion of Exit 4a off of Interstate 93 will open up new opportunities for the lands that are located in the central portion of Londonderry as planned as part of the proposed Woodmont Commons development. These lands are currently characterized by forests surrounded by pockets of residential development located in the vicinity of nearby apple orchards. Once highway access is provided, the value of these lands will likely increase for commercial and industrial development. As a result, the town should begin to plan and create a vision for this area, as recommended by the Master Plan.

The Exit 5 area is already a commercial hotbed, and is continuing to develop and grow. Currently, this area features a wide array of development that includes light industry, office, warehouse and hotel uses. The Londonderry Master Plan suggests the town should persuade the continuation of mixed-use development in this area.

The Town Center area is likely to remain stable in the future, however it would be wise for Londonderry to add a town center zoning district to their zoning ordinance. Any development that is to occur here ought to maintain and reflect the character of the area.

The Exit 4 (Route 102) area is the primary retail and commercial district in town. As a result, the Master Plan recommends that increased pedestrian measures be explored (sidewalks, crosswalks, benches, lighting, etc.). The Master Plan also recommends the Town should be willing to explore development proposals that utilize compact site designs, integrate mixed-uses and include pedestrian amenities.

The Page Road Area is located just east of Route 28. This area is viewed as a great economic development opportunity for the town to explore. The Master Plan recommends the establishment of a new residential/mixed-use growth center with design elements that are based on traditional New England hamlets be investigated.

To help facilitate future growth along Route 28 within the Jack's Bridge area, the town recently adopted a Tax Increment Financing District (TIFD) to provide necessary public services and utilities. The town is also considering establishing TIFDs in the future for the Exit 5 gateway commercial district and within the airport area at Exit 4a.

CITY OF MANCHESTER

The City of Manchester updated its Master Plan in 2009. While there are not any new visions or goals available in the 2009 update, the City has done an exceptional job at implementing visions from the 1993 plan. These visions included a continued revitalization and transition for the Amoskeag Millyard from

manufacturing to mixed-use, core neighborhood revitalization projects and completion of both the Verizon Wireless Arena and the Fisher Cats Ballpark, just to name a few.

The Future Land Use Map for Manchester in 1993 was divided into 12 planning districts. These districts are the Central Business District; Inner-city Transitional Area; Core Residential; Commercial Centers; South Willow Commercial; Medium Density Residential (divided into duplex and single-family districts); Suburban Multi-family; Low Density Residential; Industrial Areas; Special Development Area; Recreation/Open Space and Civic/Institutional. Rather than summarize and describe goals, visions and zoning ideas that are over 20 years old, the few suggested changes that were raised in discussions with the Planning Department will be highlighted here.

A large area located in the northwestern part of the City was previously labeled as a Special Development Area. This location has now been split into three parts. The northernmost part along the Hooksett border has been labeled as Medium Density Residential, as well as Suburban Multi-Family. The area just south of this has been re-designated as Recreational/Open Space, and finally, the remainder of the area will retain the Special Development Area designation.

The Planning Department suggests the Millyard and Elm Street areas continue to be the Central Business District (CBD), with the borders expanding further south to the Queen City Bridge area. Currently, these areas are designated as Inner-city Transitional Areas. The Planning Department is proposing to shift these designations to areas just outside of the newly expanded CBD.

The third innovation is the neighborhood revitalization project areas located on Kelley Street, Second Street, Massabesic Street and Wilson Street. Each of these locations has been identified as Special Development Areas to reflect the revitalization efforts that are taking place. All four areas are planned to strengthen the existing mixed-use neighborhood and neighborhood downtown feel.

The last of the highlighted areas is the location around the Mall of New Hampshire. Previously planned as an Industrial Area, the Planning Department further expanded the South Willow Commercial designation into this area.

TOWN OF NEW BOSTON

The Town of New Boston updated its Master Plan in 2006. The Master Plan Steering Committee identified seven Land Use Districts in the town for the future. These Land Use Districts are: Village District; Residential, Agricultural, Open Space District; Small Scale Planned Commercial District; Scenic Corridor Overlay; Limited Light Industrial; Multi-Family Residential; and Conservation District.

Creation of a Village District would help to regulate development in the Village Center area in order to preserve its rural character. In order to attain this goal, new zoning provisions would have to be established that promote a planned mix of uses in the area. Also, the Steering Committee recommended that the Town seek involvement in the New Hampshire Main Street Program.

The establishment of one Residential, Agricultural, and Open Space District would eliminate the Town's current Residential and Agriculture District, as well as the Residential One District. This new district would encourage development patterns that preserve open space through cluster development, as opposed to large lot zoning practices.

A Small Scale Planned Commercial District would replace the town's existing Commercial District. The purpose of the new district would be to designate specific areas that would be suitable for commercial development. In addition, architectural guidelines would be designed to ensure any new development resembles the traditional rural New England style. The new district area's ideal location is in the same

area as the current district, along Routes 77 and 114. It could also be considered along parts of Route 13, and near the southern entrance to town.

Establishment of a Scenic Corridor Overlay District would preserve the Piscataquog River corridor. Any existing development would be grandfathered, however, no new development would be allowed in this area so that future generations can enjoy the same scenic beauty as residents today.

A Limited Light Industrial District would replace the current Industrial District in the Town. The goal of the new district is to only allow light industry that does not require any additional transportation amenities and that does not compromise the Town's architectural character. A set of guidelines would have to be created to complement this new district.

A Multi-Family Residential Overlay District would provide affordable housing options in New Boston while also preserving open space and wildlife corridors. The Town would have to identify locations where such development could occur. The Town also needs to include incentives for developers to participate in such development within the Town's Cluster Ordinance.

The new Conservation District would replace the existing Forestry and Conservation District. The sole intent of this district would be the protection and preservation of New Boston's natural resources. The Town would need to identify and inventory areas they believe to be of natural, environmental and scenic importance and then an ordinance must be created that would establish this district, thus protecting those areas.

TOWN OF RAYMOND

The Town of Raymond considered existing zoning, topography, developable acreage, roadway corridors, housing diversity and infrastructure, as well as the existing land use pattern, when formulating their Future Land Use map. The result is eight land use categories for the Town's future land use. These categories are: Open Space and Recreation; Rural Residential; Low Density Residential; Medium Density Residential; Commercial and Residential; Highway Commercial; Village Mixed-Use and Industrial.

Open Space and Recreation lands are either town or publicly-owned, and are generally concentrated in the northern half of town, to the north of the Route 27 corridor. Other large open areas can be found to the west of Onway Lake, as well as in the southwest corner of town close to the Candia and Chester borders.

Rural Residential lands are associated with the open space areas in northern Raymond from Route 27 to the borders with Nottingham, Deerfield and Candia. In addition, there is an area in southern Raymond to the west of the current Coastal Materials operation and south to the Chester border.

Low Density Residential areas include much of the existing residential areas that are located outside the village district. Also, this includes areas north of Route 27 in the northeastern quadrant of Town.

Medium Density Residential areas are located to the west of Route 102, just to the south of the intersection of Route 102 and 107. Commercial and Residential areas are located along the major roadway corridors of Route 102 and 107, as well as Route 27. This area would allow for low and medium density residential, as well as low density commercial areas that are compatible with residential used located in the area. Also, these uses would not generate traffic safety concerns.

Highway Commercial areas consist of commercial nodes located both at the junction of Route 102 and Route 107 and the area associated with the Route 102/107 intersection with Route 27 southward to the Exit 5 interchange of Route 101.

The Village Mixed-Use area integrates the current village area. Also, it is proposed to border Route 27 to the north, the Lamprey River to the east, Lamprey River Elementary School to the west and would extend close to Route 101 to the south.

The Industrial area incorporates the Wal-Mart and Coastal Materials sites, current gravel operations along Route 27 (except for the pit currently owned by the Town), an area located to the south and west of the village extending along Route 101 including the Exit 4 area, and also the existing industrial area formerly called the Raymond Industrial Park located to the north of Exit 5 behind the Raymond Shopping Center on Route 107.

TOWN OF WEARE

There are four components on which the Town of Weare's Future Land Use map is based. These are expanding and connecting the villages; protecting the rural character and natural environment of the community; enhancing opportunities for planned future commercial and industrial development; and implementing the principles of smart growth.

There are four main villages identified in the Town. These are the Integrated Town Center, Clinton Grove, Tavern Village and Riverdale Village. The Master Plan recommends that each of these village areas feature several characteristics:

- Walkability
- Civic Core and Mix of Neighborhood Uses
- Interconnected Street Network
- Sensitivity to the Human Scale
- Neighborhoods
- Efficient Land Use
- Encourage Mixed Use
- Address People's Needs
- Promote Good Design
- Enhance Environmental Benefits

The residents of Weare have had a long commitment to protecting their natural environment. As such, the Town would be wise to seek out ways of continuing to promote the protection of their valuable natural resources. Some options for pursuing this effort include completion of the Open Space Plan, acquisition of conservation easements, either through donation or other means, altering the current zoning to better protect the natural areas, or initiating a study to identify and designate prime wetlands in Weare.

The Town also has a need to enhance opportunities for commercial and industrial development. Currently, there is little developable land that is zoned commercially or industrially. Options for addressing this need can include the expansion of existing industrial zones in appropriate locations, creation of a planned business/office park zone, or the creation of a gateway transition overlay district, which would encourage appropriate commercial or small business development.

TOWN OF WINDHAM

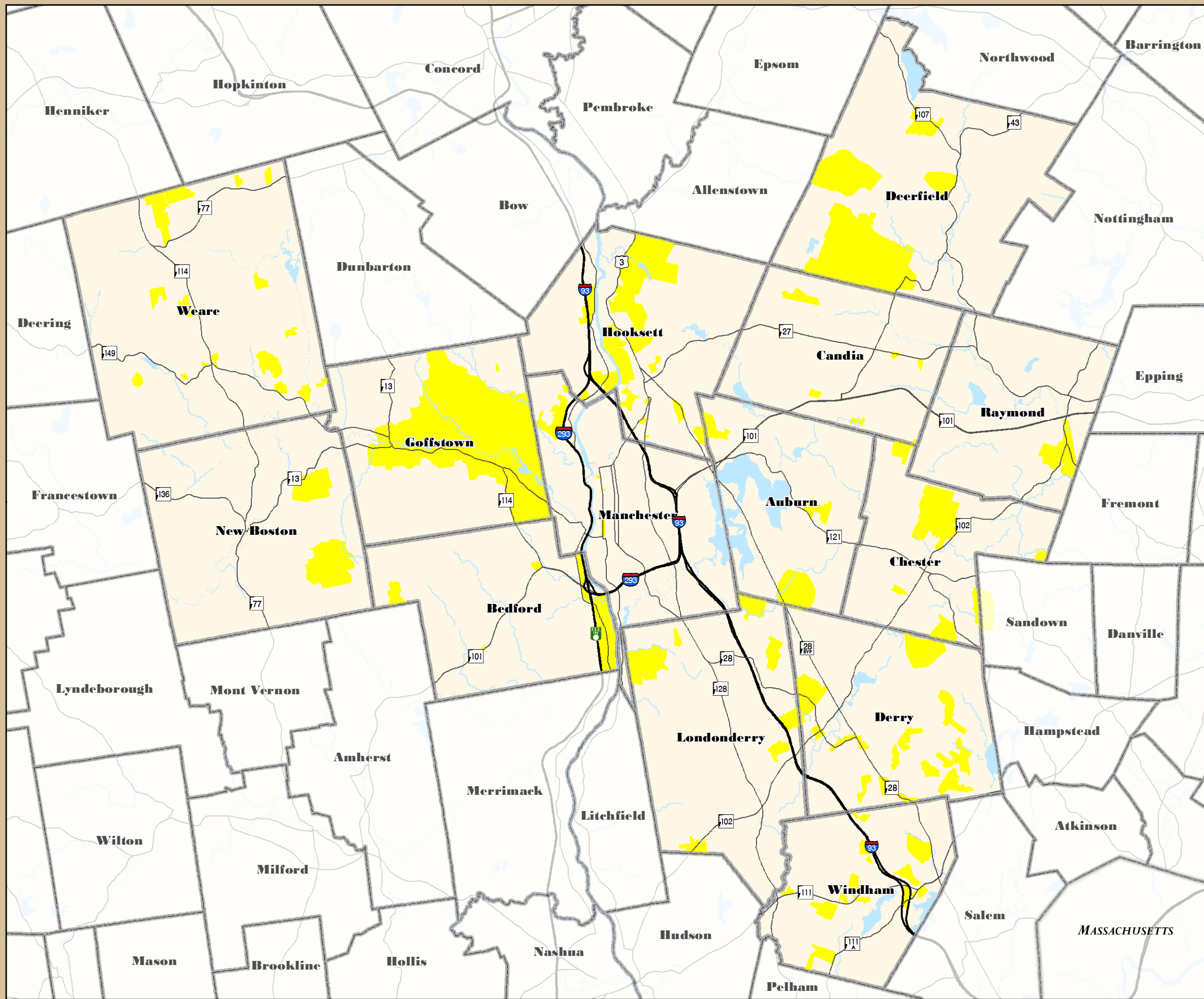
The Town of Windham's rapid growth has caused the Town to be vigilant in its planning efforts to adequately provide public services and facilities for its growing population. In some instances, the Town has been hard-pressed to keep pace with increasing demands, which have been the result of direct growth compounded by indirect consequences of growth, regulatory mandates, and changing public expectations.

Windham's Community Development Department, along with its Planning Board, have been active in fine tuning the Town's Zoning Ordinance in response to changing conditions. The 2005 Master Plan land use chapter primarily focused on supporting existing policies that have served the Town well – e.g. open space subdivisions, soil based lot sizing, wetland protection, etc. This plan likewise promotes the preservation of well-regarded policies, but will also address several fundamental issues with regard to future land use:

- Planning for the Development of a village center in Windham, and shaping its development to foster a vibrant place that connects to the existing, nearby built environment (the historic town center, Fellows Road, the post office, the Town Commons);
- Fostering economic development, especially around Exit 3 and Route 28 areas;
- Ensuring that the future of Route 111 will complement the community's character; and
- Managing growth in a manner that will address the need for expanded community facilities and services in a timely manner.⁵

The fundamental issues with regard to future land use, listed above, are based on the Town of Windham's Master Plan 2005. The Southern New Hampshire Planning Commission and the Town of Windham are currently updating the Master Plan.

⁵ Town of Windham Master Plan (2005)









Map # 1 - 4

Granite State Future

Land Use

Identified High
Growth Areas in
Southern NH Region



-  Major Growth Areas
-  Interstates
-  State and US Routes
-  Town Boundary
-  Rivers
-  Lakes

Data Sources:

Granit Digital Data (1:24,000)
NH Department of Transportation
All SNHPC Communities

The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2014.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5
Miles



(This Page Left Blank Intentionally)

SCENARIO PLANNING

The final planning tool included in this chapter is scenario planning. Scenario planning provides communities, public officials and planners with a glimpse of what a community or region's future growth might look like under different sets of assumptions. The scenario planning carried out for this plan is specifically designed to show what the SNHPC Region's future growth, population distribution, and traffic patterns might look like by the year 2035 under three different scenarios. These scenarios build upon the existing 2010 land use, population, housing, and employment data collected within each Traffic Analysis Zone (TAZ) contained within SNHPC's 2010 Travel Demand Model. The population data for each TAZ is shown on Map 4 Current Condition Population by TAZ in the SNHPC Region. This map forms the base map for each of the three growth scenarios. These scenarios are described as follows:

Scenario 1: Continued Slow Growth: This scenario assumes the SNHPC Region will continue to grow between 2015 and 2035, but at an average rate of growth of **0.5 percent per year**. Historically between 2000 and 2010, the SNHPC Region experienced relatively slow growth averaging only 0.5 percent per year. During this time period, there was a total population increase of only 12,424 people. The towns of Bedford, Hooksett, New Boston, Weare, Windham, and the City of Manchester experienced the majority of this population increase while several towns, such as the towns of Derry and Candia actually lost population. The Town of Windham experienced the highest annual rates of population growth during this time period given its proximity to MA and a new high school. Under this scenario, the following assumptions are made:

- The SNHPC Region will continue to experience slow population growth between 2015 and 2035 at average rates of growth of 0.5 percent per year;
- All the transportation projects included in the state's proposed FY 2015-2024 Ten Year Improvement Plan (TYP), including the widening of I-93 will be completed by the year 2035/2040; and
- All of the transportation projects identified in SNHPC's Regional Transportation Plan as regionally significant will be completed by the year 2035.

See **Error! Reference source not found.** and see **Error! Reference source not found..**

Scenario 2: Improved Growth: This scenario assumes that between 2015 and 2035, the SNHPC Region will experience growth at an average rate of **1.0 percent per year**. Under this scenario, the following assumptions are made:

- The SNHPC Region's population will continue to grow between 2015 and 2035 at an average rate of growth of 1.0 percent per year;
- All of the transportation projects identified in the state's proposed FY 2015-2024 Ten Year Transportation Improvement Plan (TYP), including widening of I-93 will be completed by the year 2035/2040; and
- All of the transportation projects identified in SNHPC's Regional Transportation Plan as regionally significant will be completed by the year 2035.

See **Error! Reference source not found.** and see **Error! Reference source not found..**

Scenario 3: Faster Growth with Build Out of Proposed Developments of Regional Impact: This scenario assumes that between 2015 and 2035, the SNHPC Region will experience faster growth at an average rate of growth of **1.0 percent per year and build out of developments of regional impact**. Under this scenario the following assumptions are made:

- The SNHPC Region's population will continue to grow between 2015 and 2035, but at faster rates of growth assuming 1.0 percent per year and build out of the following developments of regional impact:
 1. Woodmont Commons Master Plan, Londonderry
 2. Pettengill Road Area, Londonderry
 3. Manchester Sand and Gravel Master Plan, Hooksett
 4. Development at Exit 4, NH 101, Raymond;
- All of the transportation projects identified in the state's proposed FY 2015-2024 Ten Year Transportation Improvement Plan (TYP), including widening of I-93 will be completed by the year 2035; and
- All of the transportation projects identified as regionally significant in SNHPC's Regional Transportation Plan will be completed by the year 2035.

See **Map 7 Scenario 3: Moderate Rate of Growth with Build Out of Four Large Proposed Mixed Use Development Projects SNHPC Region**

Approach/Methodology:

In developing the three scenarios, SNHPC carried out the following steps:

1. Update SNHPC's Regional Travel Demand Model: SNHPC's travel demand model is used to estimate future traffic growth and traffic distribution within the region based upon future population, housing units and employment growth estimates at the TAZ level. The first step in the scenario planning involved updating SNHPC's 2010 travel demand model to include the Town of Windham; the Town of Windham was added to the SNHPC Region during the development of this plan.

2. Run Updated Travel Demand Model: With the addition of the Town of Windham to the model, SNHPC established the updated 2010 travel demand model for each of the three growth scenarios utilizing the following two average annual growth rates: 0.5 and 1.0 percent. These rates were applied across the board to all the TAZs in the model to estimate future traffic growth, population and housing increase in each TAZ to the year 2035. The existing employment numbers in the model were held constant, except for the last scenario where future employment data was obtained directly from an economic impact analysis that was conducted for the proposed developments of regional impact (see Scenario Three above).

In running the travel demand model for each of the three scenarios, it was assumed that all the proposed transportation improvements currently included in the proposed FY 2015-2024 statewide Ten Year Transportation Improvement Plan (TYP) would be completed by the year 2035. In addition, all the transportation projects identified in SNHPC's Regional Transportation Plan (see **Table 10 Non-Exempt Transportation Projects SNHPC Region** and **Map 7 Scenario 3: Moderate Rate of Growth with Build Out of Four Large Proposed Mixed Use Development Projects SNHPC Region**) were also included and assumed to be built by 2035.

3. REMI Modeling: The final step in the scenario planning methodology involved the economic impact analysis, which was carried out by the NH Employment Security Economic and Labor Market Information Bureau utilizing the New Hampshire's Econometric Model - REMI Policy Insight Model tool. Specifically, this tool was used to estimate future employment and job growth projected to occur by the year 2035 as a result of the build out the proposed developments of regional impact. The estimated number of employees and job growth projected to occur for each

development of regional impact was then added to the appropriate TAZs in SNHPC's travel demand model run for the third scenario. SNHPC staff worked directly with town planners and the owners/developers of the proposed developments of regional impact to obtain the input data required to run the REMI model. Because the Manchester Sand and Gravel project is basically all residential, except for limited commercial development, this project was not included in the REMI modeling. The results of this economic analysis are summarized in the following report available at the SNHPC office: *"Economic Impact of Mixed Use/Commercial Developments in Rockingham County, March 2014"*, as well as in the Economic Analysis section of this chapter. (See pages 53-56).

4. Population Growth Maps: The last step involved displaying the projected total population increase and distribution by TAZ for each scenario. To obtain consistency in comparing these changes, a total of five population ranges were developed to display the population differences by TAZ throughout the region. The five population ranges used are: 0-720; 721-1,400; 1,401 – 2,425; 2,426-4,344; and 4,345-7,774.

TABLE 10 NON-EXEMPT TRANSPORTATION PROJECTS SNHPC REGION

Community¹	Project	Project #	Included in the Model	Proposed Completion Year
BE	Widen NH 101 to 5 Lanes from NH 114 up to Wallace Rd.	13953	Yes	2017
BE	Widen NH 101 to 5 Lanes from Wallace Rd. up to Amherst TL ²		Yes	2024
BE	Widen US 3 to 5 Lanes from Bridge over FEET to Merrimack TL ²		Yes	2027
BE-ME	Improvement to Bedford mainline toll plaza to institute open road tolling	16100	Yes	2018
BE-NA	Widen existing 2-Lane sections of the turnpike to a 3-Lane typical from Exit 8 in Nashua to I-293 in Bedford		Yes	2024
DE-LO	I-93 - Construction of I-93 Exit 4A	13065	Yes	2024
GO	Improve Two Intersections Along the NH 114 & NH13 Corridor Through Down Town	20246	No	2015
HO	Widen US3/NH28 to 5 Lanes from Martins Ferry Rd to West Alice Ave.		Yes	2024
HO	Construct Southern Segment of US3/NH28 Alternate Bypass ²		Yes	2036
HO	Construct Northern Segment of US3/NH28 Alternate Bypass ²		Yes	2037
HO	Widen US3/NH28 to 5 Lanes from Legends Dr. to Hunt Street ²		Yes	2033
HO	Hackett Hill Road - Reconstruction at NH 3A and Turnpike Ramp	14950	No	2015
HO	Reconstruction of exit 11 ramp tolls to implement all electronic tolling on I-293	9015	No	2016
HO	Reconstruct and Widen from Commerce Road north to Goona Road		Yes	2017
LO	Widening NH 28 from NH 128 to Page Rd.		Yes	2026
LO	Widen NH 102 to 4 lanes from Hudson Town Line to NH 128 ² - Lower Corridor		Yes	2032
LO	Widen NH 102 to 5 lanes from I-93 East to Londonderry Road ² - Upper Corridor		Yes	2031
LO	Widen NH 102 to 6 lanes from I-93 to NH 128 ³ - Central Corridor		Yes	2028
LO	Intersection Improvements at NH28/NH128 for Safety and Traffic Flow		Yes	2026
LO	Pettengill Rd - Locally Funded Based on Recommendations of Town Study		Yes	2017
MA	Reconstruction of Exit 4 on I-293		Yes	2031
MA	Reconstruction of FEE Turnpike Exit 6/7 Interchange	16099	Yes	2025

Community¹	Project	Project #	Included in the Model	Proposed Completion Year
MA	Construct 600 Space Park and Ride Structure	13512	No	2030
MA	Traffic Operation and Safety Improvements to 3 Congested Intersections - US Rt.3 & Campbell Street	20162	No	2013
RA	Dudley Road - Removal of bridge, wings, and pier over Lamprey river	20818	Yes	2016
PO - MA	Bus service between Portsmouth and Manchester, Connecting Portsmouth, Downtown Manchester and BR Airport	20222	No	2013
SA-MA	I-93 Programmatic Mitigation (CTAP, NHDES Land Protection Program) (PE& ROW needs only)	10418	No	2013
SA-MA	I-93- Reconstruct and Widen Mainline, Environmental Impact Study and Final Design From Mass S/L IN Salem to I-293 in Manchester. Capacity Improvements, Reconstruction, and Widening from North of Exit 3 to I-293	10418C	Yes	2014
SA-MA	I-93 - Implement Expanded Bus Service & New Commuter Incentive Program. Purchase 14 Commuter Coaches & Provide 3 Years of Operating Support.	10418L	No	2014
SA-MA	I-93 - Exit 5 Reconstruct Interchange	14633F	Yes	2014
SA-MA	I-93 - NB & SB Mainline Weigh Station to Kendall	14633B	Yes	2018
SA-MA	I-93 - NH 102 Bridge and Approaches	14633C	Yes	2018
SA-MA	I-93 - Exit 4 Ramps + NB & SB Mainline	14633D	Yes	2018
SA-MA	I-93- NB & SB Mainline, Pillsbury to Exit 5	14633I	Yes	2019
SA-MA	I-93 - NB & SB Mainline Station 1840 to I-293 Split	14633H	Yes	2020
SA-MA	Phase II Capacity improvements, reconstruction and widening from North of Exit 3 to I-293	10418C#	Yes	2019
SA-MA	I-93 - Exit 3 NB Mainline, NH 111, and NB on and off ramps	13933H		2016
SA-MA	I-93 - Exit 3 SB mainline construction from Salem town line through Exit 3 area; New Exit 3 NB ramps and SB on-ramp; relocate NH 111; two new SB bridges over NH 111 & 111A	13933I	Yes	2016
SA-MA	I-93 - Construction of a new park-and-ride at Exit 3.	10418	No	2016

Source: FY 2013-2016 Transportation Improvement Program, FY 2015-2024 Ten-Year Plan, and 2013-2040 SNHPC Regional Transportation Plan

¹ AU= Auburn, BE= Bedford, CA=Candia, DE=Derry, HO=Hooksett, LO=Londonderry, MA=Manchester, NB=New Boston, NA=Nashua

² These projects are taken from various studies and are part of the Regional Transportation Plan

(This Page Left Blank Intentionally)

Outputs/Results

The primary outputs and results of this future scenario planning are summarized below:

Future Growth Patterns: A total of three maps were generated at the TAZ level depicting future population increases and population distribution under each of the three scenarios (see Map 5; Map 6 and Map 7). By comparing these maps with **Map 4 Current Condition Population by TAZ in the SNHPC Region**, the following changes in population distribution within the region are identified.

- Scenario 1: Continued Slow Growth Map 5 reveals that under the continued slow growth scenario, the largest population increases projected to occur within the region by 2035 will be concentrated within the I-93 corridor which includes the City of Manchester and the towns of Hooksett to the north and the towns of Derry, Londonderry and Windham to the south; Map 5 indicates the region's population will continue to spread out beyond the City of Manchester within the towns of Auburn to the east and the towns of Goffstown and Bedford to the west; and Map 5 shows that as the region's population continues to expand outward into the town's rural communities, Chester, New Boston, Weare and Raymond; the towns of Deerfield and Candia will not grow as much as other communities in the region.

Scenario 2: Improved Growth

- Map 6 reveals that with improved growth, the region's largest population increases by the year 2035 are projected to continue to be concentrated within the I-93 corridor – e.g. the City of Manchester and the towns of Hooksett to the north, and the towns of Derry, Londonderry and Windham to the south. However, overall there will be greater population increases occurring within the corridor and particularly the towns of Derry, Hooksett, Londonderry and Windham;
- Map 6 shows that the region's population is projected to continue to increase and spread out beyond the City of Manchester to the east and west of the city, including the towns of Auburn, Bedford, Goffstown, New Boston, Weare and Raymond; and
- Map 6 also shows there will be increased population growth and expansion outward into the towns of Chester, New Boston, Weare and Raymond, with less population increase and expansion in the towns of Candia and Deerfield.

Scenario 3: Faster Growth with Build Out of Developments of Regional Impact

- Map 7 reveals the largest population increase occurs primarily within the Town of Hooksett (TAZ 78). This is due to the proposed Manchester Sand and Gravel residential master plan development;
- In comparing Map 6 and Map 7 there are very few if any differences in population increase and distribution among the towns between the two scenarios, except for increased population in the towns of Londonderry and Derry. This is due to the proposed Woodmont Commons master plan development; and
- In addition, there is no major difference between the two scenarios, as a result of the proposed Pettengill Road development or the NH 101 Exit 4, Development in Raymond.

Economic Analysis: The economic impact analysis conducted by the NH Employment Security Economic and Labor Market Information Bureau in March 2014 using the REMI Policy Insight model provided the following estimates of both the number of direct jobs added to Rockingham County as well as the indirect and induced jobs gained in the region for the following three developments of regional impact:

Woodmont Commons, Londonderry; Pettengill Road Development, Londonderry; and NH 101, Exit 4 Development, Raymond. The Manchester Sand and Gravel Master Plan in Hooksett was not included in the model as it is mostly residential in character.

For all three development scenarios, it was assumed that the anticipated job creation would not displace existing employment in the county or region. Each scenario results include the direct jobs generated at the development, as well as secondary (in-direct and induced) jobs added in Rockingham County, where the three developments of regional impact are located. Indirect jobs are those created from the ripple effect of the direct jobs from inter-industry purchases (business to business services). The induced jobs are those generated from an increase in consumer spending and from the increase in population. Indirect and induced jobs, combined are also referred to as secondary jobs.⁶ The results also include impacts that an expansion would have on the region, in terms of added gross domestic product, personal income, and population.

Woodmont Commons, Londonderry

Jobs:

- A total of 3,776 direct jobs would be created in Rockingham County between 2015 and 2026, if construction on the proposed development started in 2015.
- Of these 3,776 direct jobs, approximately 2,177 (57%) would be in professional and business services; 1,010 (28%) would be in retail trade; 404 (10%) in health care and social assistance; and 185 (3%) in accommodation and food services.
- Approximately 1,558 construction jobs would be created with the start of the project in 2015.
- By 2035 assuming full build out of the residential development, total job creation will be 5,226 jobs above the employment baseline in the county.

Gross Domestic Product:

- If the project started in 2015, the first year of the development, the GDP in Rockingham County would increase by \$97.0 million (in fixed 2005 dollars) above the baseline.
- By 2026, the GDP in the region would grow to \$350.6 million above the baseline and would continue to grow throughout the forecast period.
- The economic activity from the development of Woodmont Commons would account for 1.4 percent of total GDP in Rockingham County by 2035.

Personal Income:

- Total real personal income would increase by \$79.7 million (in fixed 2005 dollars) in 2015. By 2026, the increase in real personal income would grow by \$268.3 million.

Population:

- Rockingham County's population would gain 247 persons above baseline in 2015. By 2026, the county would gain 3,903 residents above the forecast baseline. By 2035, the population of the

⁶ Jobs in the REMI model are based on Bureau of Economic Analysis (BEA) definition of employment. The BEA estimates of employment and wages differ from covered employment data because BEA makes adjustments to account for self-employment. So the employment count in the REMI model is larger than what is reported by the Economic and Labor Market Information Bureau (ELMIB), New Hampshire Employment Security. The REMI model does not distinguish between full-time and part-time jobs.

county would gain close to 6,000 persons above the projected population baseline (an increase of 1.6 percent above forecasts).

Job Multiplier:

- The multiplier effect on Rockingham County of each job created at Woodmont Commons is, on average, 1.4 jobs – including the direct job created annually over the entire model period.⁷ The impact of construction costs on the region is excluded.

Pettengill Road Development, Londonderry

Jobs:

- A total of 2,250 direct jobs would be created in Rockingham County over a 20-year build out from 2015 to 2035 due to the Pettengill Road development.
- In 2035, at an estimated full build out of the Pettengill Road development, total job creation would be 3,206 jobs above the employment baseline in the region.
- Of these 2,250 jobs, approximately 1,750 (78%) would be in transportation and warehousing; 475 (21%) in professional and business services; and 25 (1%) in accommodation and food services.
- In 2015, assuming construction starts on the development, a total of 685 direct, indirect and induced jobs would be created in the county.

Gross Domestic Product:

- In 2015, the first year of the development, the GDP in the county would increase by \$32.3 million (in fixed 2005 dollars) above the baseline. By 2035, the county GDP would grow to \$191.3 million above baseline.
- Economic activity from the development would account for 0.7 percent of total GDP in the county by 2035.

Personal Income:

- Total real personal income would increase by \$24.5 million (in 2005 fixed dollars) in 2015. By 2034, the increase in real personal income will peak at \$223.9 million above projected baseline.

⁷ A job multiplier of more than one indicates the new job created in the local economy has a ripple effect that generates more employment in the region. A multiplier less than one indicates some of the current employment in the region would be eliminated due to the competition from the expanding businesses.

Population:

- Rockingham County's population would gain 96 persons above baseline in 2015. By 2034, the county would gain 3,876 residents above the forecasted baseline. By 2035, county population would gain close to 4,000 persons above the projected baseline, a 1.1 percent increase above the forecast.

Job Multiplier:

- The multiplier effect on Rockingham County of each job created at Pettengill Road development is on average between 1.3 and 1.4 jobs – including the direct job created annually over the entire forecast period. The impact of construction costs on the region is excluded.

NH 101, Exit 4 Development, Raymond**Jobs:**

- A total of 403 direct jobs would be created by this development between 2015 and 2035 if construction started in 2015.
- Of these jobs, approximately 192 (47%) would be administrative and waste management services; 156 (38%) retail trade; and 55 (13%) accommodation and food services.

Gross Domestic Product:

- If the development begins in 2015, the GDP in Rockingham County will increase by \$18.6 million in fixed 2005 dollars above the baseline. By 2035, the GDP in the region will have grown to \$45.8 million above the baseline.
- The economic activity from this development will account for 0.2 percent of total GDP in Rockingham County by 2035.

Personal Income:

- Total real personal income would increase by \$12.7 million (in fixed 2005 dollars) in 2015 and by 2035, the increase in personal income would grow by \$58.1 million.

Population:

- Rockingham County's population would gain 60 persons above baseline in 2015 and by 2035, the population of the county would gain close to 1,124 persons above the projected baseline, a 0.3 percent increase.

Job Multiplier:

- The multiplier effect on Rockingham County of each job created at this development is, on average, between 1.5 and 1.6 jobs – including the direct job created annually over the entire forecast period. The impact of construction costs on the county is excluded.

Future Traffic Patterns: The following tables: Table 11, Table 12, Table 13, Table 14 and **Map 8 Roadway Deficiency Map Based on Scenario 3 SNHPC Region** shows the projected 2035 traffic assignments under the three growth scenarios and existing AADT counts at specified locations along the

road networks surrounding the proposed developments of regional impact. Based upon these traffic modeling results, the following general observations can be made:

The surrounding road network has adequate capacity to address the projected increase future traffic growth as a result of the proposed developments, except for the following road segments and continuing roadway deficiencies:

- At Interstate 93 Exit 4 along NH 102 in Derry;
- Londonderry Road between Pillsbury and West Broadway;
- NH 3A Hazelton Avenue between Airport and Manchester/Merrimack town line;
- Rt. 111 in Windham;
- Rt. 114 in Goffstown and Bedford;
- I-293 and I-93 around Manchester;
- South Willow Street in Manchester;
- Bridge Street and Wellington Road in Manchester;
- US 3 Webster Street between Elm and Hooksett Road;
- Rt. 3, Hooksett;
- Rt. 101 east of I-93 in Raymond;
- NH 3A Hazelton Avenue between Airport and Manchester/Merrimack town line.

TABLE 11 PROJECTED 2035 TRAFFIC ASSIGNMENTS WOODMONT COMMON DEVELOPMENT

Woodmont Commons (WC)										
			SNHPC 2010 Traffic Model		2035 Assignments			% Growth	% Change	
Development	Count Location	Location Description	Count	Assignment	Scenario 1	Scenario 2	Scenario 3	S1 - 2010	S2-S1	S3-S2
WC	19	NH 28 at Derry - Londonderry line	15,000	16,196	10,197	11,777	11,622	-1.83%	15.49%	-1.32%
WC	20	NH 102 at Derry - Londonderry line	23,000	15,402	17,106	17,944	19,430	0.42%	4.90%	8.28%
WC	37	I-93 north of Stonehenge Rd; Londonderry	74,000	71,958	122,691	129,382	128,565	2.16%	5.45%	-0.63%
WC	54	NH 28 south of Rollins ST; Derry	14,000	10,272	10,168	11,161	11,160	-0.04%	9.77%	-0.01%
WC	58	NH 28 north of Tsienneto Rd; Derry	22,000	15,813	7,534	8,465	8,283	-2.92%	12.36%	-2.15%
WC	67	NH 102 west of Young Rd (West end); Londonderry	23,000	16,318	20,841	22,277	26,683	0.98%	6.89%	19.78%
WC	72	NH 28 North of Berry RD ; Derry	12,000	14,261	10,553	11,683	11,875	-1.20%	10.71%	1.64%

Source: SNHPC

TABLE 12 PROJECTED 2035 TRAFFIC ASSIGNMENTS PETTENGILL ROAD DEVELOPMENT

Pettengill Road (PR)										
			SNHPC 2010 Traffic Model		2035 Assignments			% Growth	% Change	
Development	Count Location	Location Description	Count	Assignment	Scenario 1	Scenario 2	Scenario 3	S1 - 2010	S2-S1	S3-S2
PR	4	US 3 at Bedford - Merrimack line	12,000	12,528	14,209	14,901	15,332	0.50%	4.87%	2.89%
PR	5	F.E.E.T. at Bedford - Tolls	48,000	50,160	51,559	54,045	55,303	0.11%	4.82%	2.33%
PR	44	US 3 south River Road South of Club Acre Lane; Bedford	30,000	30,885	20,078	22,659	22,763	-1.71%	12.85%	0.46%
PR	62	NH 28 south of NH 28A at Manchester - Londonderry line	12,000	19,933	11,691	12,736	12,660	-2.11%	8.94%	-0.60%
PR	69	NH 28 south of Sanborn RD; Londonderry	13,000	18,156	14,720	16,321	16,166	-0.84%	10.88%	-0.95%

Source: SNHPC

TABLE 13 PROJECTED 2035 TRAFFIC ASSIGNMENTS RAYMOND DEVELOPMENT

Raymond Development (RD)										
			SNHPC 2010 Traffic Model		2035 Assignments			% Growth	% Change	
Development	Count Location	Location Description	Count	Assignment	Scenario 1	Scenario 2	Scenario 3	S1 - 2010	S2-S1	S3-S2
RD	48	NH 101 at the Raymond-Epping line	41,000	43,020	48,700	51,142	52,730	0.50%	5.01%	3.11%
RD	68	NH 101 east of exit 4, Raymond	37,000	41,386	47,454	49,400	50,781	0.55%	4.10%	2.80%
RD	91	NH 27 at Raymond - Epping line	4,800	5,851	5,767	6,116	6,379	-0.06%	6.05%	4.30%
RD	92	NH 107 at Raymond - Fremont line	5,700	6,026	6,804	7,229	7,495	0.49%	6.25%	3.68%

Source: SNHPC

TABLE 14 PROJECTED 2035 TRAFFIC ASSIGNMENTS MANCHESTER SAND & GRAVEL DEVELOPMENT

Manchester Sand & Gravel (MSG)										
			SNHPC 2010 Traffic Model		2035 Assignments			% Growth	% Change	
Development	Count Location	Location Description	Count	Assignment	Scenario 1	Scenario 2	Scenario 3	S1 - 2010	S2-S1	S3-S2
MSG	14	US 3/NH 28 at Hooksett - Allenstown line	14,000	14,741	17,754	18,696	19,312	0.75%	5.31%	3.29%
MSG	33	US 3/ NH 28 north of NH Bypass 28; Hooksett	25,000	25,180	17,827	19,755	20,849	-1.37%	10.82%	5.54%
MSG	42	US 3/ NH 28 south of NH 27 and Martins Ferry RD; Hooksett	18,000	11,760	11,818	14,175	14,827	0.02%	19.94%	4.60%
MSG	43	US 3/NH 28 south of Main St; Hooksett	19,000	15,362	17,772	18,882	19,217	0.58%	6.25%	1.77%
MSG	50	US 3/ NH 28 north of I-93 and south of Alice Ave; Hooksett	18,000	8,129	9,994	12,408	12,754	0.83%	24.15%	2.79%
MSG	57	US 3/ NH 28 south of Granite St; Hooksett	13,000	13,084	15,419	16,253	16,520	0.66%	5.41%	1.64%

Source: SNHPC

(This Page Left Blank Intentionally)

CONCLUSIONS AND RECOMMENDATIONS

GOALS

Overall Goal:

Promote a cohesive regional land use pattern that is founded on sound planning principles and is regionally diverse, sustainable, and equitable to all communities. Encourage business and residential development patterns that are sustainable and discourage sprawl.

Key Goals:

1. Support existing municipal centers, traditional village centers and compact growth patterns.
2. Guide growth to existing developed lands and sustainable areas with existing infrastructure.
3. Promote a diversity of land uses to support and strengthen local tax base.
4. Encourage agricultural uses in zoning.
5. Reduce development pressures on existing agricultural lands and agriculturally important soils.
6. Encourage redevelopment of existing residential, commercial and industrial areas where there is existing public infrastructure.
7. Support regional and local centers by guiding growth and providing the tools needed for successful mixed use.
8. Promote inter-community communications through the Regional Planning Commission.

RECOMMENDATIONS

Key Recommendations for SNHPC:

1. Continue to monitor and map the region's land use.
2. Continue to provide land use and zoning ordinance assistance to communities, including master planning.
3. Provide assistance to communities in community development, including preparing and administering community development block grants.
4. Support and assist planning boards in developing village center overlay zoning districts, site plan and subdivision regulations which provide for appropriate and traditional growth and walkable development in keeping with the historic character of the community.
5. Assist communities and planning boards in evaluating compact walkable development to encourage higher density development to take place within areas where water and sewer infrastructure and services exist or are scheduled in the near future.
6. Assist communities in conducting Cost of Community Services Studies (COCS) that can be used as land use planning and policy tools in evaluating local communities' land use and zoning to support and strengthen local tax base.
7. Provide assistance among abutting communities in evaluating and developing compatible zoning ordinances and zoning maps between municipal/town lines. Utilize the regional zoning map and regional existing land use maps in this chapter to assist with these efforts.
8. Support and assist local agricultural commissions and planning boards in identifying local agricultural needs and opportunities, which can be integrated into local zoning ordinances and site plan regulations. Conduct agricultural zoning audits to identify ways to make local zoning more agriculturally friendly.
9. Assist planning boards in mapping and evaluating existing and potential new suitable areas for mixed use development, such as specific highway corridors and transportation centers within the community.

(This Page Left Blank Intentionally)

Granite State Future



Land Use
Current Conditions
2010 Population

2010 Popultaion

Total Population

0 - 720

721 - 1400

1401 - 2425

2426 - 4344

4345 - 7774

Traffic Analysis Zones

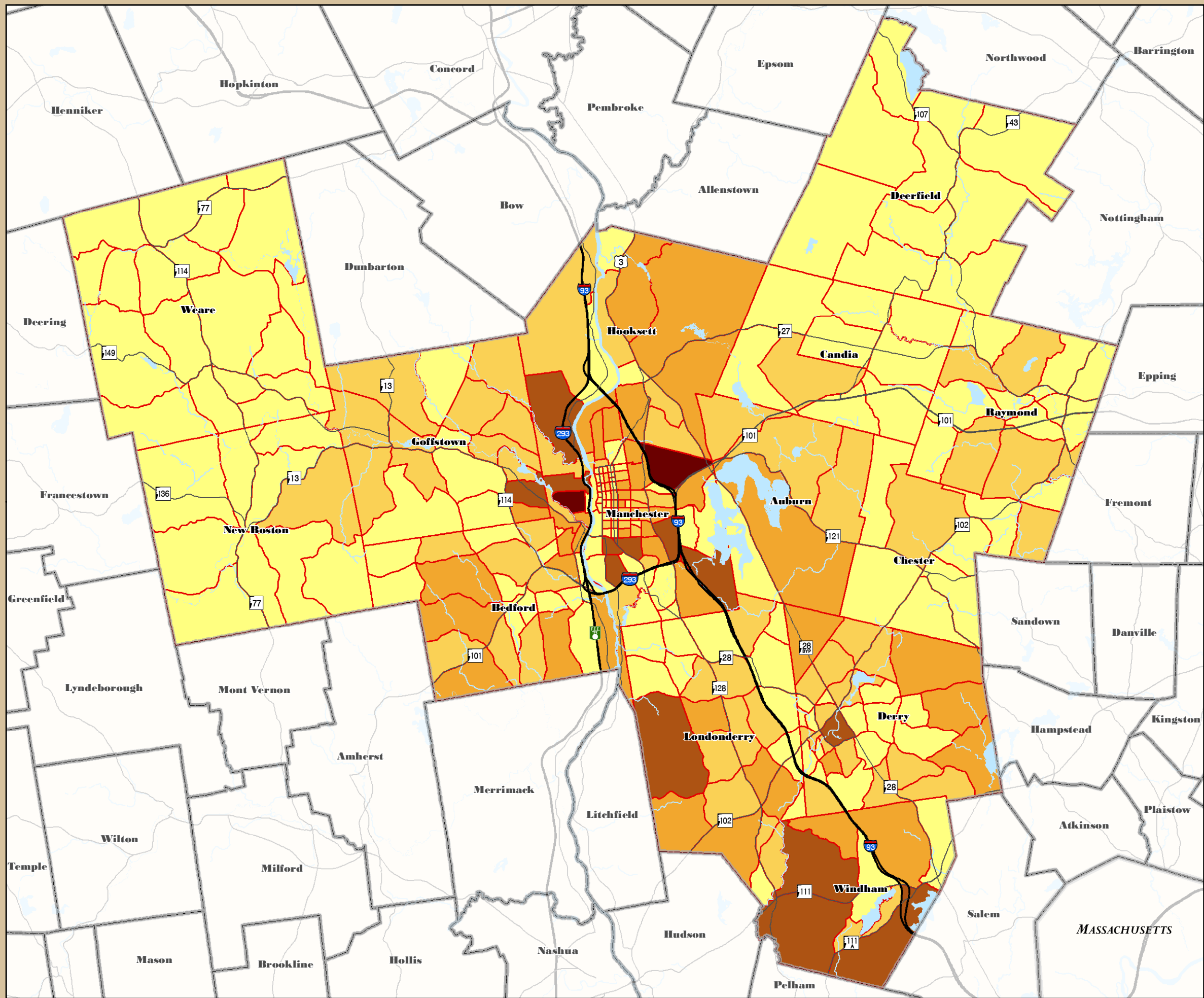
Interstates

State and US Routes

Town Boundary

Rivers

Lakes



Data Sources:

Granit Digital Data (1:24,000)
NH Department of Transportation
US Census Bureau - 2010 Census Data
All SNHPC Communities

The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2014.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5
Miles



Granite State Future



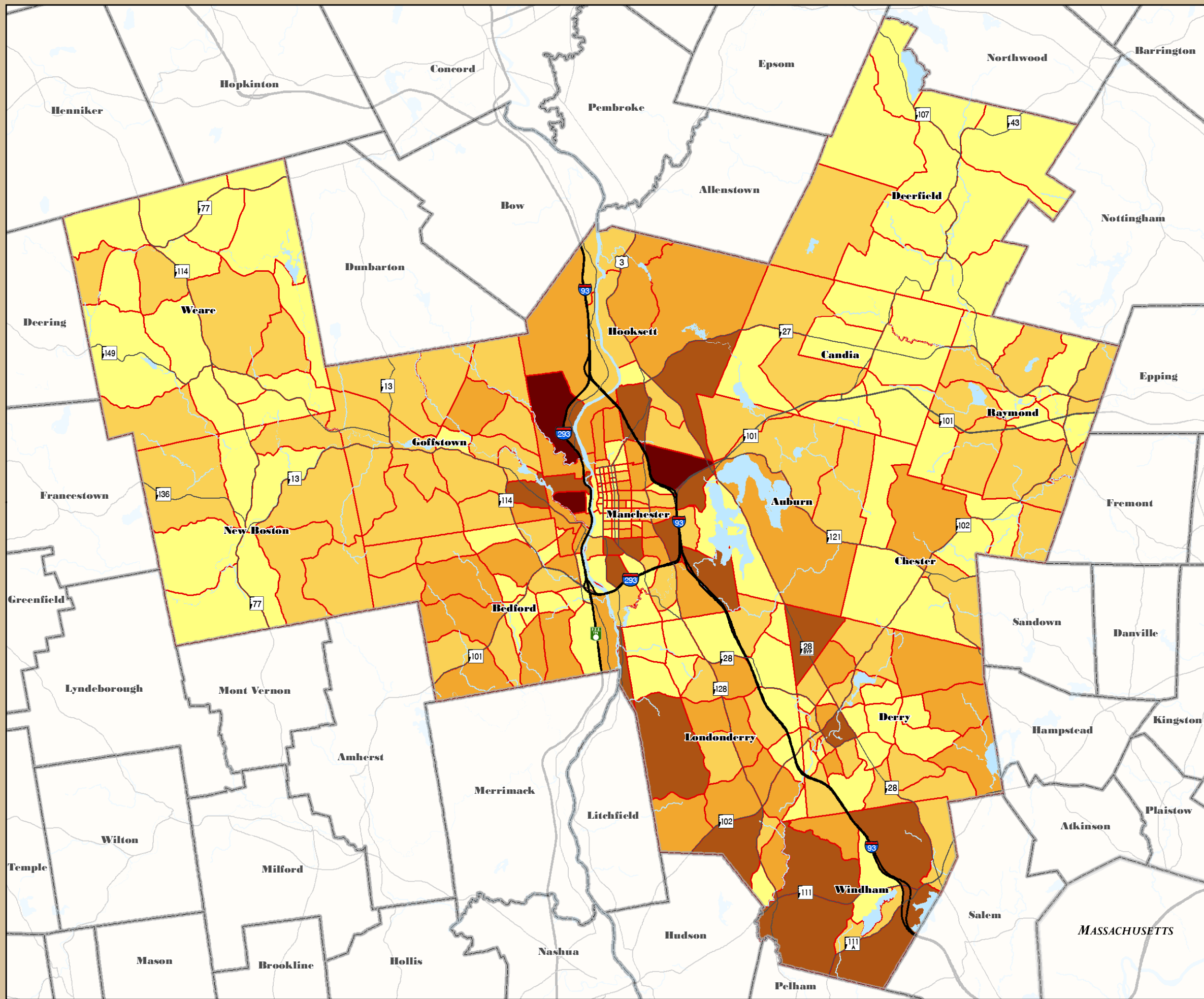
Land Use
Scenario 1
Current Rate of Growth

Scenario 1 - Current Growth Rate (0.5%)

Total Population

- 0 - 720
- 721 - 1400
- 1401 - 2425
- 2426 - 4344
- 4345 - 7774

- Traffic Analysis Zones
- Interstates
- State and US Routes
- Town Boundary
- Rivers
- Lakes



Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
US Census Bureau - 2010 Census Data
All SNHPC Communities

The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2014.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5
Miles



Granite State Future



Land Use
Scenario 2
Moderate Rate of Growth

Scenario 2 - Moderate Rate of Growth (1.0%)

Total Population

- 0 - 720
- 721 - 1400
- 1401 - 2425
- 2426 - 4344
- 4345 - 7774

- Traffic Analysis Zones
- Interstates
- State and US Routes
- Town Boundary
- Rivers
- Lakes

Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
US Census Bureau - 2010 Census Data
All SNHPC Communities

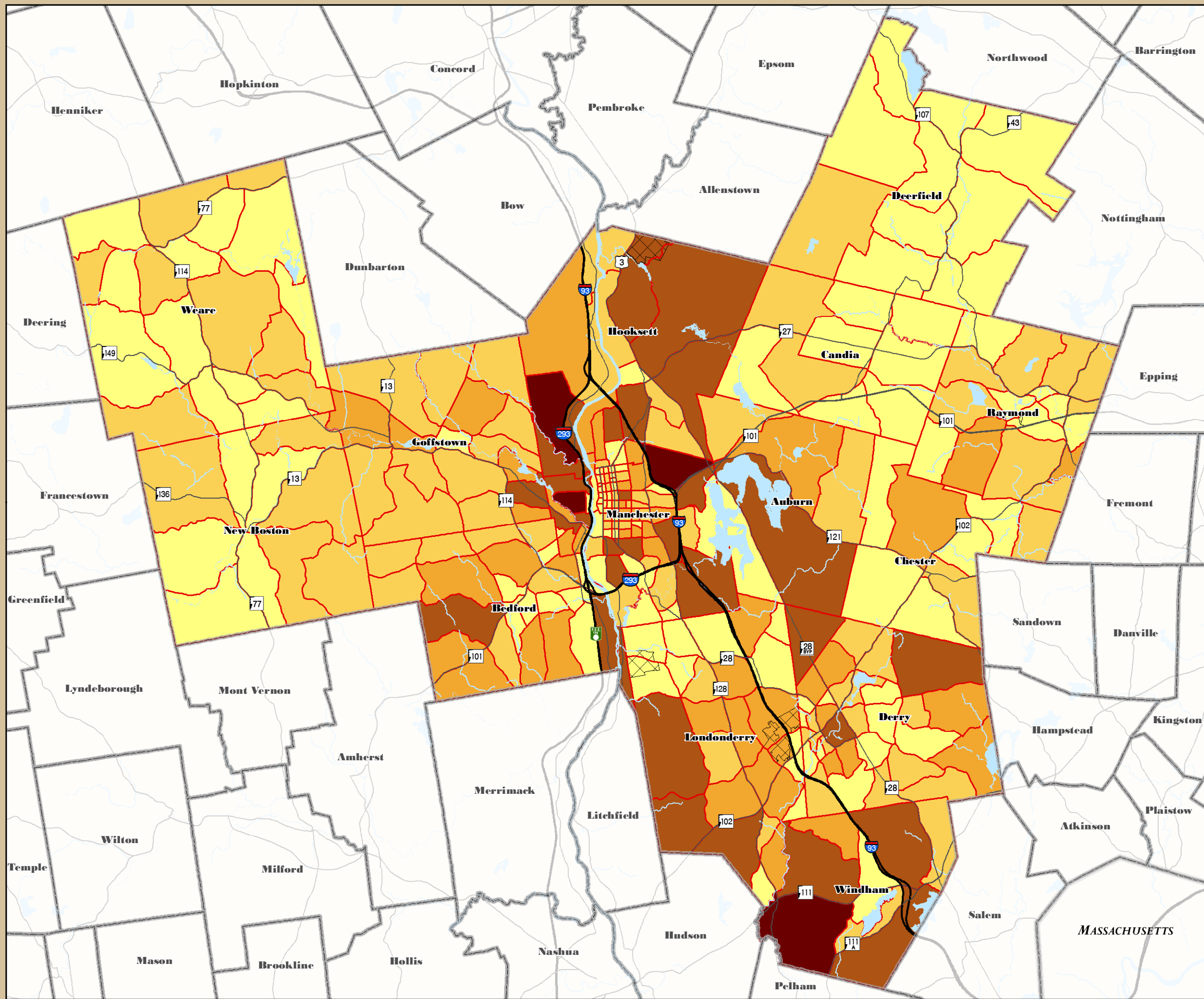
The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2014.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5
Miles





Map # 1 - 8

Granite State Future

Land Use

Scenario 3

Moderate Rate of Growth
With Additional Build Out



Scenario 3 - Moderate Rate of Growth (1.0%) with Build Out of 4 Large Proposed Mixed Use Developments

Total Population

- 0 - 720
- 721 - 1400
- 1401 - 2425
- 2426 - 4344
- 4345 - 7774

Proposed Mixed Use Developments

Traffic Analysis Zones

Interstates

State and US Routes

Town Boundary

Rivers

Lakes

Data Sources:

Granit Digital Data (1:24,000)
NH Department of Transportation
US Census Bureau - 2010 Census Data
All SNHPC Communities

The individual municipalities represented on this map
and the SNHPC make no representations or guarantees
to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and
is not to be used for legal boundary determinations
or for regulatory purposes.

Map Produced by GIS Service SNHPC 2014.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5
Miles



Location
Map

Scenario 3 Roadway Capacity Deficiencies



-  Deficient Roads
-  Proposed Mixed Use Developments
-  Interstates
-  State and US Routes
-  Town Boundary
-  Rivers
-  Lakes



This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

nap.

**Location
Map**



0 1.25 2.5 5

Miles

B

(HOUSING)

MOVING SOUTHERN NH FORWARD

VOLUME 2:
Housing



2015-2035

Regional Comprehensive Plan 2015



Southern New Hampshire Planning Commission works to make our region better by facilitating cooperative and long term decision making. We believe a promising future can be achieved through fiscally sound and responsible planning and development decisions that improve the economy, efficiency and health of our region.

June 2014

TABLE OF CONTENTS



HOUSING.....	1
Purpose	1
Vision.....	1
Public Input From SNHPC Outreach	1
Written Comment Cards.....	2
Visual Preferences Survey	2
Regional Visioning Workshops and Forums.....	3
Public Input from UNH Telephone Survey.....	3
Introduction.....	5
Key Issues and Concerns	6
Analysis of Existing Conditions and Trends	7
Demographic and Socioeconomic Trends	7
Communities of Interest.....	20
Segregation.....	25
Racial/Ethnic Concentrations of Poverty	29
Housing Unit Trends and Characteristics	33
Housing Cost and Affordability Factors.....	40
Access to Opportunity.....	49
Housing Supply Projections.....	51
Fair Share Distribution Analysis	53
Affordable and Equitable Housing Choice Opportunities and Barriers.....	59
Fair Housing Infrastructure	60
Conclusion.....	76
Goals and Recommendations.....	76

LIST OF FIGURES

Figure 1 - Public Comments on Improving Housing Choices.....	2
Figure 2 – Visual Preferences Housing Choices.....	2
Figure 3 – Housing Choices: Visual Preference Survey	3
Figure 4 – SNHPC Region Total Population By Race 2010	8
Figure 5 – Geographical Population by Race*.....	9
Figure 6 – SNHPC 2000-2010 Population by Age Group – Percent Change	11
Figure 7 – New Hampshire Rental Vacancy Rates By county, 2013	34
Figure 8- Number of Units Authorized by Building Permit, 2000-2010	35
Figure 9 – SNHPC Region Median Household Income.....	41
Figure 10 – SNHPC Purchase Price Trends 1990-2013.....	42
Figure 11 – SNHPC Rental Cost Trends 1990-2012.....	42
Figure 12- NHHFA 2013 Rental Cost Survey.....	43
Figure 13 – 2010 SNHPC Region Household Cost burden by Tenure	44
Figure 14 – SNHPC Region Property Tax Rates, 2000-2013	46
Figure 15 – 2013 SNHPC Region Property Tax Rates.....	47
Figure 16 - 2010 New Hampshire Home Mortgage Loan Denials	73
Figure 17 - New England Home Mortgage Denial Rates by Race/Ethnicity, 2006-2010.....	74

LIST OF TABLES

Table 1- SNHPC Region Total population by Municipality 1990-2010.....	7
Table 2 - Population by Age Group - SNHPC Region.....	10
Table 3 – SNHPC 2010 Households.....	12
Table 4 – SNHPC Households by Tenure - 1990-2010	14
Table 5 - Annual Average Covered Employment - 2000-2011	16
Table 6 - Labor Force, 2000-2011	17
Table 7 – SNHPC region Commuting Patterns 2000.....	18

Table 8 - SNHPC region Commuting Patterns 2010	19
Table 9 – SNHPC Region Language Spoken At Home	24
Table 10 – SNHPC Region Dissimilarity Index.....	26
Table 11 – NH Dissimilarity Index Rankings.....	27
Table 12- Predicted Racial/Ethnic Composition By Town.....	28
Table 13 – Predicted Racial/Ethnic Composition Value Description.....	28
Table 14 – SNHPC Region Housing Unit Trends	33
Table 15 – Count of Housing Units by Tenure and Age Built, 2010.....	37
Table 16 – Household Income, Home Value and Cost	40
Table 17 – HUD Area Median Family Income	41
Table 18 – SNHPC Region Cost Burden by Tenure	45
Table 19 – SNHPC Region Opportunity Index Measures	50
Table 20 – SNHPC Region Population Projections, 2010-2050.....	51
Table 21 – SNHPC region Housing Unit Projections, 2010-2050	52
Table 22- SNHPC Region Projected Households, 2010-2020.....	56
Table 23 – SNHPC Region Estimated Workforce Households, 2010-2020	56
Table 24 - SNHPC Region Estimated Proportionate Fair Share WorkForce Household Distribution, 2010-2020	57
Table 25 – SNHPC Region Fair Housing Cases, 2008-2013	72
Table 26 - New England Home Mortgage Denial Rates by Income and Race/Ethnicity, 2006-2010.....	75

LIST OF MAPS

Map 2-1- SNHPC Region Low-Moderate Income Household Concentrations	23
Map 2-2 – SNHPC Region Areas of Minority Concentration.....	30
Map 2-3 – SNHPC Region Poverty Levels.....	31
Map 2-4 – Racially/Ethnically Concentrated Areas of Poverty	32
Map 2-5 - SNHPC Region Assisted Housing	39



HOUSING

PURPOSE

The purpose of the Housing Chapter is to identify and analyze baseline conditions for fair housing, equity, opportunity and housing needs in the Southern New Hampshire Planning Commission region. This housing needs and fair housing equity assessment identifies and outlines key goals and recommendations for addressing housing needs in the region. These goals and recommendations are supported by the issues and needs identified through the Granite State Future public outreach process, in addition to the evaluation and analysis of background information and key data.

VISION

The Housing Chapter is founded upon the following Value Statement, as derived from public input from residents of the region:

Housing Choices

Residents demonstrate a preference for a range of different housing types and neighborhoods, but everyone values housing choices that are safe and affordable for all.

This Value Statement is also in line with New Hampshire's Livability Principles, which provide:



"Housing Choices ensure that everyone, no matter what their income level, has convenient and affordable choices in where they live. This includes a variety of housing options and ownership types that appeal to people at any stage of life and is convenient to where they work, shop, and play."

Public input collected through the Granite State Future (GSF) public outreach efforts, includes: regional visioning workshops; comments submitted online; and a telephone survey conducted by the University of New Hampshire. All of the public input received demonstrates widespread support for expanded housing choices.

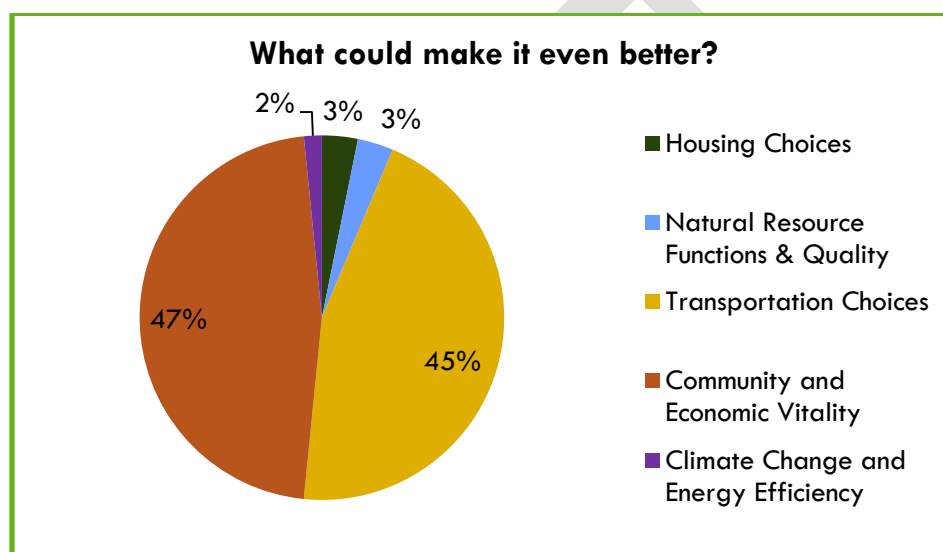
PUBLIC INPUT FROM SNHPC OUTREACH

As captured in SNHPC's Public Outreach Report, Housing Choices was an important issue discussed for the region. Input was received during the SNHPC Granite State Future outreach process from various methods, including written comment cards, an online comment portal, focus groups and community events. Although only a few written comments were received for the topic of housing, this issue rose to the top as one of the most important issues the region needs to address when looking at the input received across all of the outreach methods.

WRITTEN COMMENT CARDS

One of the main sources of input for the SNHPC outreach process included responses to the questions, “What is best about the Southern New Hampshire region?” and “What could make it even better?” These responses were received on written comment cards and through the project website and analyzed by livability principles. Responses received centering around housing choices were all under the “What could make it even better?” question. As can be seen in **Figure 1**, housing choices were less of a focus in the input received for this outreach method as opposed to other issues, including Transportation choices and Community and Economic Vitality.

FIGURE 1- PUBLIC COMMENTS ON IMPROVING HOUSING CHOICES



VISUAL PREFERENCES SURVEY

SNHPC undertook a visual preferences survey at the community events attended as part of the SNHPC Granite State Future outreach process. The results of the Visual Housing Preferences survey indicate a preference for rural (37 percent), suburban (26 percent), and in-town single family (21 percent) homes in the region. At the Deerfield Fair nearly half the participants indicated they preferred rural housing. However, at both PeopleFest and Community Harvest Festival, which were located in the City of Manchester, the most participants showed a preference for in-town single family housing (27 percent and 31 percent), with rural housing coming in second (26 percent and 27 percent). The least preferred three housing choices were mixed-use (6 percent), urban townhouse (6 percent), and apartment complex (4 percent). The results of the survey seem to reflect preferences for the rural, suburban and in-town single family housing choices. This survey methodology was not scientific and therefore results should be analyzed within the larger context of the entire outreach and planning process to develop goals and recommendations that encompass a wider range of input and data.

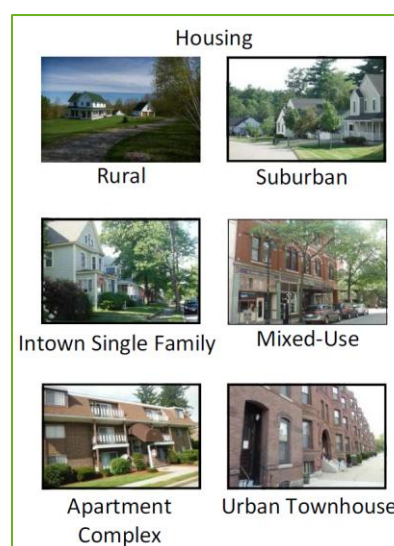
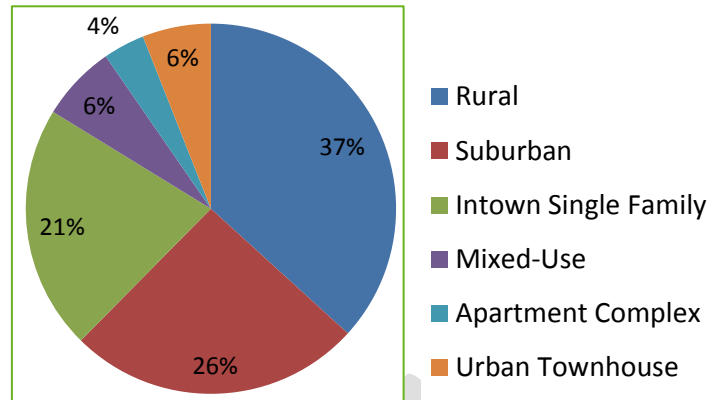


FIGURE 2 – VISUAL PREFERENCES HOUSING CHOICES

FIGURE 3 – HOUSING CHOICES: VISUAL PREFERENCE SURVEY



REGIONAL VISIONING WORKSHOPS AND FORUMS

Public input collected at the regional visioning workshops and forums was more in depth than other outreach methods for issues surrounding housing choices and it was often stated as important. Some mentioned that people have a hard time finding jobs close to where they live. Others noted rental costs did not go down during recent economic downturn and that something needs to be done to address housing costs. There were also some who did not feel that housing costs were a big concern.

Housing choices were mentioned in conjunction with the trend of young people leaving the state and communities. Single family homes were perceived to be the predominant form of housing available, although some communities offer more choices than others. Other comments included there needs to be a balance in housing types – condominiums and apartments, single family, and mixed use. Comments suggested young people are challenged by the lack of apartments they can afford, as well as the car-dependent transportation system and thus are attracted to cities where these are not as much of an issue.

Housing Choices was a major topic of discussion at other public forums. In the Neighborhood Conversations, members of Liberty House (a homeless shelter for veterans in Manchester) said there is a lack of community understanding of homelessness, and they want to improve the community's perception of it, as well as end perceived discrimination. Participants want to see housing costs lowered and the availability of affordable housing increased. Housing is also a big problem for refugees in the southern region, who identified a shortage of suitable housing, and trouble working with landlords to make sure their housing is clean, safe, and that they get their security deposits back. Other comments from neighborhood conversations included that investment was needed in affordable housing so housing costs do not keep people from meeting other needs.

PUBLIC INPUT FROM UNH TELEPHONE SURVEY

UNH Telephone survey results provide further insight into residents' housing preferences:

- Residents view safe and affordable housing as the third most important priority for investing public dollars. The development of single family housing and assisted living facilities were particularly favorable to residents, while development of manufactured housing and apartments were the least favorable.

- Residents think that future development should occur in areas that are already developed (70 percent).
- Over a third of residents (37 percent) describe where they live as a neighborhood close to a town center, followed by those in a rural location away from the town center (28 percent), a development away from a town center (27 percent), in downtown or a town center (7 percent) and those who would classify their neighborhood in another way (1 percent).
- A majority of residents (56 percent) would prefer to live in a strictly residential neighborhood while others would prefer a mixed residential/commercial neighborhood (42 percent) and few did not know (1 percent).
- Over three-fourths (78 percent) of residents think their town should encourage single family detached housing, followed by senior housing (74 percent), housing for adults over 55 (66 percent), clusters of single family homes (62 percent), accessory apartments (60 percent), housing in areas with business/residential mix (53 percent), townhouses (51 percent), attached homes (47 percent), apartment buildings (42 percent), and manufactured housing (36 percent).
- Only 9 percent of respondents find housing to be very affordable in their town, 56 percent find it somewhat affordable, 24 percent find it not very affordable, 5 percent find it not affordable at all and 6 percent don't know. When it comes to renting, only 7 percent find it very affordable, 39 percent find it somewhat affordable, 19 percent find it not very affordable, 7 percent find it not affordable at all and 27 percent don't know.

Households earning less than \$40,000, those aged 18 to 39 and those who are non-white are more likely to want their town to encourage apartments.

INTRODUCTION

The economic downturn of the late 1980s caused residential purchase prices to plummet, rents to stabilize, and vacancy rates to increase. Much of this was due to over speculation and construction levels that exceeded demand. The region's housing market began to recover around 1994, at which time housing costs began to increase and vacancy rates decrease. High levels of in-migration during the 90s further increased housing demand levels. Housing developers, however, continued to build new units at a slower rate than demand required due to the lasting impacts of the 1980's housing crash. The result of this was a shortage of housing units affordable to all income levels, particularly low to moderate-income families.

Following an economic recession in 2001, there was an unprecedented increase in nationwide house prices, which led to booms in both residential construction and consumption from 2001-2006. This time period, referred to as the "housing bubble," burst at some point between 2006 and 2007. In late 2007 it was determined that the United States economy was having a financial crisis and was in what is now called the "Great Recession." The National Bureau of Economic Research declared the end of the Great Recession in June 2009 and the U.S. economy and housing market recovery continues presently. From 2013-2014 the New Hampshire Housing market has seen a slow and steady recovery with foreclosures declining and home prices on the upswing.

Over the past decade, numerous changes have taken place in the SNHPC region. The number of dwelling units in the region has increased by 11,577 from 2000 through 2010, an approximate 11.53 percent increase. There are now approximately 111,993 dwelling units in the SNHPC region (2010). All communities in the region contributed to this growth, some seeing higher increases than others. New Boston had the greatest percent increase in units (34.54 percent) and Derry had the least (4.26 percent). In comparison, the region's population increased by an estimated 15,171 persons from 2000 to 2010. This is an increase of 5.8 percent.

Single-family residences continue to be the predominant type of units constructed in the region. Of the 11,520 residential building permits issued from 2000 through 2010, 7,542 were for single-family homes. The average purchase price of a new home in the region during the first half of 2013 was \$312,713. This is second only to a high of \$325,958 for a new home in 2005 and indicates that purchase prices are on an upward trend again after a rapid decline during the economic recession. Median home values range from a high of \$391,500 in Windham to a low of \$212,000 in Raymond. The cost of renting an apartment in the region has also increased in the past few years. The median gross rent, across the region, has risen approximately 34 percent from \$744 in 2000 to \$997 in 2012. The highest median gross rents can be found in Bedford, Candia and Windham, all over \$1,300 per month. A number of factors may contribute to high rents in these communities, including low availability of rental units.

For individuals who have difficulty attaining homeownership or affording rent, the number of rent-assisted units in the region has increased slightly since 2010, bringing the total number of units to 3,763 in 2013, up from 3,162 units in 2010. However, it must be noted that 76.85 percent of these rent-assisted units are located in Manchester and 47.7 percent of those units are reserved for elderly or senior households.

Within the SNHPC Region, it is estimated there are 27,339 workforce households paying 30 percent or more of their monthly income for housing. For 2010, it is estimated that of the 103,730 total households in the SNHPC region, there were an estimated 37,963 workforce households, or 36.6 percent of the total households. For 2020, it is estimated there will be 110,048 total households in the region and consistent with the estimated 36.6 percent in 2010, the estimated workforce households will number 40,276. The fair share analysis in **Table 24**, page 57, distributes these households to the 14 communities in the region based on their 2010 share of the region's total housing units.

KEY ISSUES AND CONCERNS

- Our region is showing signs of an aging population, along with trends at the State level, and planning will need to focus on meeting the housing needs of an older population, while also increasing choices and opportunities for the younger population in order to attract and retain them in our region and the State
- New housing development continues to increase in the region, but not equally among all communities
- Affordable housing options for workforce households are largely in the City of Manchester, the Town of Derry and the Town of Raymond. Outside of these communities, the options are limited.
- Affordable rental units are becoming scarce in some communities as rental costs continue to rise in the region
- New home and apartment construction is not keeping pace with trends prior to the recession – recovery is and continues to be very slow
- Housing affordability and cost burden for workforce households continues to be an issue in the region (23.1 of owner households earning 100 percent or less of the Median Area Income are paying 30 percent or more for housing, 33.7 percent of renter households earning 60 percent or less of the Median Area Income are paying 30 percent or more for housing)
- Housing affordability is further challenged by high per capita property tax collections in the state
- Analysis reveals there is evidence of discrimination and patterns of segregation; more education, training and information is needed on fair housing rights, as well as increasing housing choices
- Racially concentrated areas of poverty exist within the SNHPC region and regional coordination and cooperation is needed to address this issue
- Opportunities and barriers to fair housing in the Southern New Hampshire region choice include:
 1. Housing Costs and Affordability
 2. Housing Types (Choices)
 3. Local Zoning Ordinances
 4. Multi-family Housing Units
 5. Minimum lot sizes
 6. Age-restricted Housing
 7. Cluster Housing
 8. Employment Opportunities
 9. Economic Factors
 10. Educational Opportunities
 11. Crime and Perceptions of Safety
 12. Discrimination and Patterns of Segregation
 13. Physical Infrastructure
 14. Water
 15. Sewer
 16. Natural Gas
 17. Transportation/Public Transportation
 18. Access to Healthy Food
 19. Access to Services and Civic Infrastructure

ANALYSIS OF EXISTING CONDITIONS AND TRENDS

DEMOGRAPHIC AND SOCIOECONOMIC TRENDS

TOTAL POPULATION

The total population of the SNHPC Region was 274,854 people in 2010. As shown on Table 1, the region grew by close to 22 percent from 1990 to 2010, with an annualized growth rate of 1.09 percent. Communities that experienced the largest population growth over this time period were Chester (77.18 percent change), Bedford (68.77 percent change), New Boston (65.56 percent change), Windham (50.69 percent change) and Hooksett (49.42 percent change). Communities that experienced the least percent population growth were Candia (9.90 percent change), Manchester (10.30 percent change) and Derry (11.84 percent change).

TABLE 1- SNHPC REGION TOTAL POPULATION BY MUNICIPALITY 1990-2010

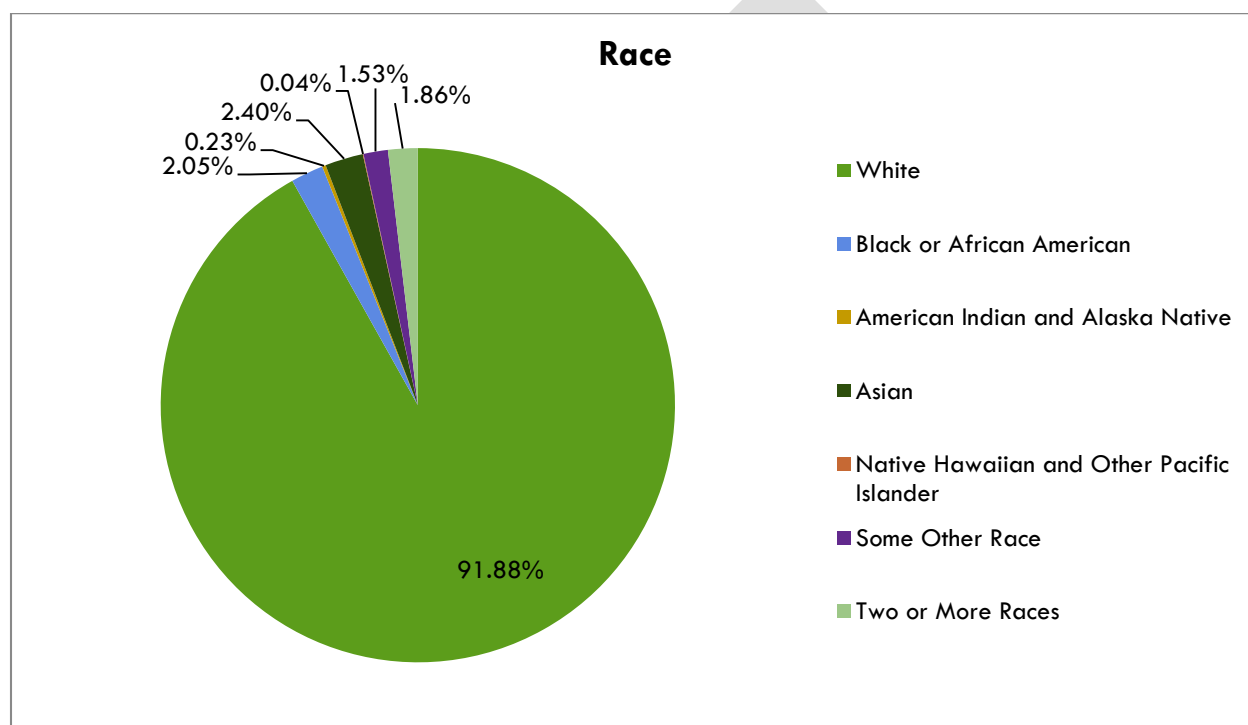
Municipality	Census			1990-2010		
	1990	2000	2010	Absolute Change	Percent Change	Growth Rate
Auburn	4,085	4,682	4,953	868	21.25%	1.06%
Bedford	12,563	18,274	21,203	8,640	68.77%	3.44%
Candia	3,557	3,911	3,909	352	9.90%	0.49%
Chester	2,691	3,792	4,768	2,077	77.18%	3.86%
Deerfield	3,124	3,678	4,280	1,156	37.00%	1.85%
Derry	29,603	34,021	33,109	3,506	11.84%	0.59%
Goffstown	14,621	16,929	17,651	3,030	20.72%	1.04%
Hooksett	9,002	11,721	13,451	4,449	49.42%	2.47%
Londonderry	19,781	23,236	24,129	4,348	21.98%	1.10%
Manchester	99,332	107,006	109,565	10,233	10.30%	0.52%
New Boston	3,214	4,138	5,321	2,107	65.56%	3.28%
Raymond	8,713	9,674	10,138	1,425	16.35%	0.82%
Weare	6,193	7,776	8,785	2,592	41.85%	2.09%
Windham	9,020	10,845	13,592	4,572	50.69%	2.53%
Total	225,499	259,683	274,854	49,355	21.89%	1.09%

Source: U.S. Census 1990, 2000, 2010

POPULATION BY RACE

As shown on Figure 4, the SNHPC Region continues to be predominantly white in 2010 at 91.88 percent. This compares to 94.9 percent in 2000 and illustrates that the region is becoming slightly more diverse and the minority population is slowly growing here. The SNHPC minority population was 5.1 percent in 2000 and 8.12 percent in 2010. The Hispanic population (of any race) grew more than any other population in the region, going from 2.69 percent of the population in 2000 to 4.42 percent of the population in 2010.¹ The second largest for population growth in the region was the Black or African American population, going from 1.20 percent of the population in 2000 to 2.05 percent of the population in 2010. The third largest growth rate in the region was the Asian population, going from 1.50 percent of the population in 2000 to 2.40 percent of the population in 2010.

FIGURE 4 – SNHPC REGION TOTAL POPULATION BY RACE 2010

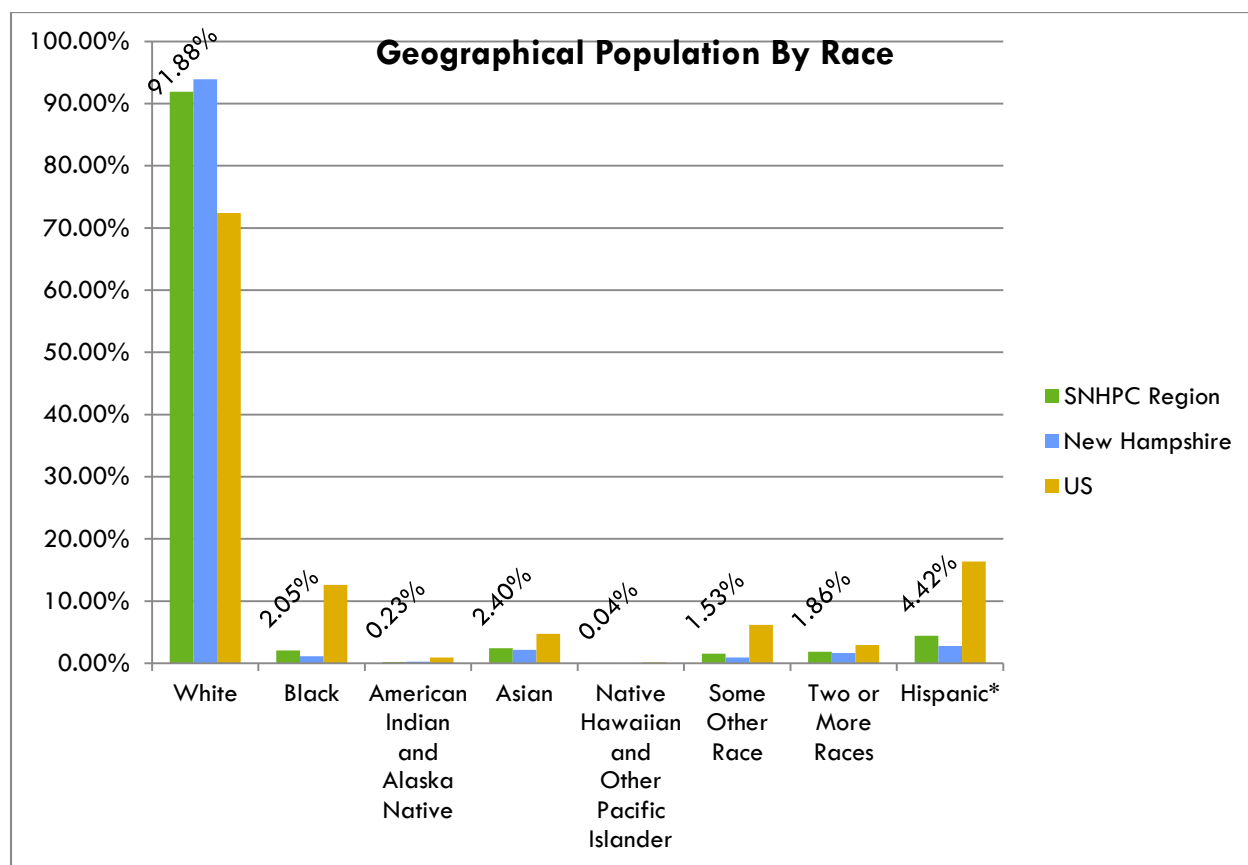


Source: U.S. Census Bureau, 2010 Census.

The SNHPC Region's population is slightly more diverse than the state as whole. The white population in the state of New Hampshire comprises 93.89 percent of the population compared to 91.88 percent for the region. Overall the nation is much more diverse than both the state and the region, with every race besides white comprising a much greater percentage of the population (see **Figure 5**). Further analysis on racial distribution within the region is outlined in the following sections: Communities of Interest, Segregation and Concentrations of Poverty.

¹ Note: Hispanic is reported as ethnicity across all races and does not constitute an individual race as reported in the census. Therefore it is not depicted in **Figure 4**.

FIGURE 5 – GEOGRAPHICAL POPULATION BY RACE*



Source: U.S. Census Bureau, 2010 Census.

*The Hispanic population is reported as ethnicity in the US census and does not constitute a percentage of the total population by race. It is reflected in **Figure 5** for comparison purposes only.

POPULATION BY AGE

An analysis of the SNHPC Region population by age group (**Table 2**) reveals there has been a significant increase in the 45-54 and 55-64 age cohorts, whereas there has been a significant decrease in the 25-29 and 30-34 age cohorts. Additional age cohorts that decreased from 2000-2010 include the 10-14 age cohort, 5-9 age cohort and under 5 years age cohort. All other age cohorts saw modest increases during the same time period. **Figure 6** (on page 11) illustrates the change for each age cohort graphically to show the aging of the region's population.

This is in line with trends seen at the state level, where the 45+ age cohorts have seen large increases in the past 10 years and the young adult cohort has seen a large decrease, after relatively no change in the 1990's. New Hampshire is growing older and the Southern New Hampshire region is in line with that trend. In a state-wide analysis on demographic trends in the twenty-first century, the Carsey Institute explains that "migration contributes to this situation, but the primary driver is the aging in place of those currently residing in New Hampshire. Age structure changes have important implications for policymakers, as well as for the state's business, service, and nonprofit communities. The state's youngest and oldest residents are big consumers of government services, such as education and health care. In contrast, the working-age population provides human capital and the skilled labor force needed to fuel economic growth, as well as much of the consumer base for goods and services. There is also an ongoing concern in New Hampshire

about the state's ability to retain and attract young adults and about whether the state has an old population."²

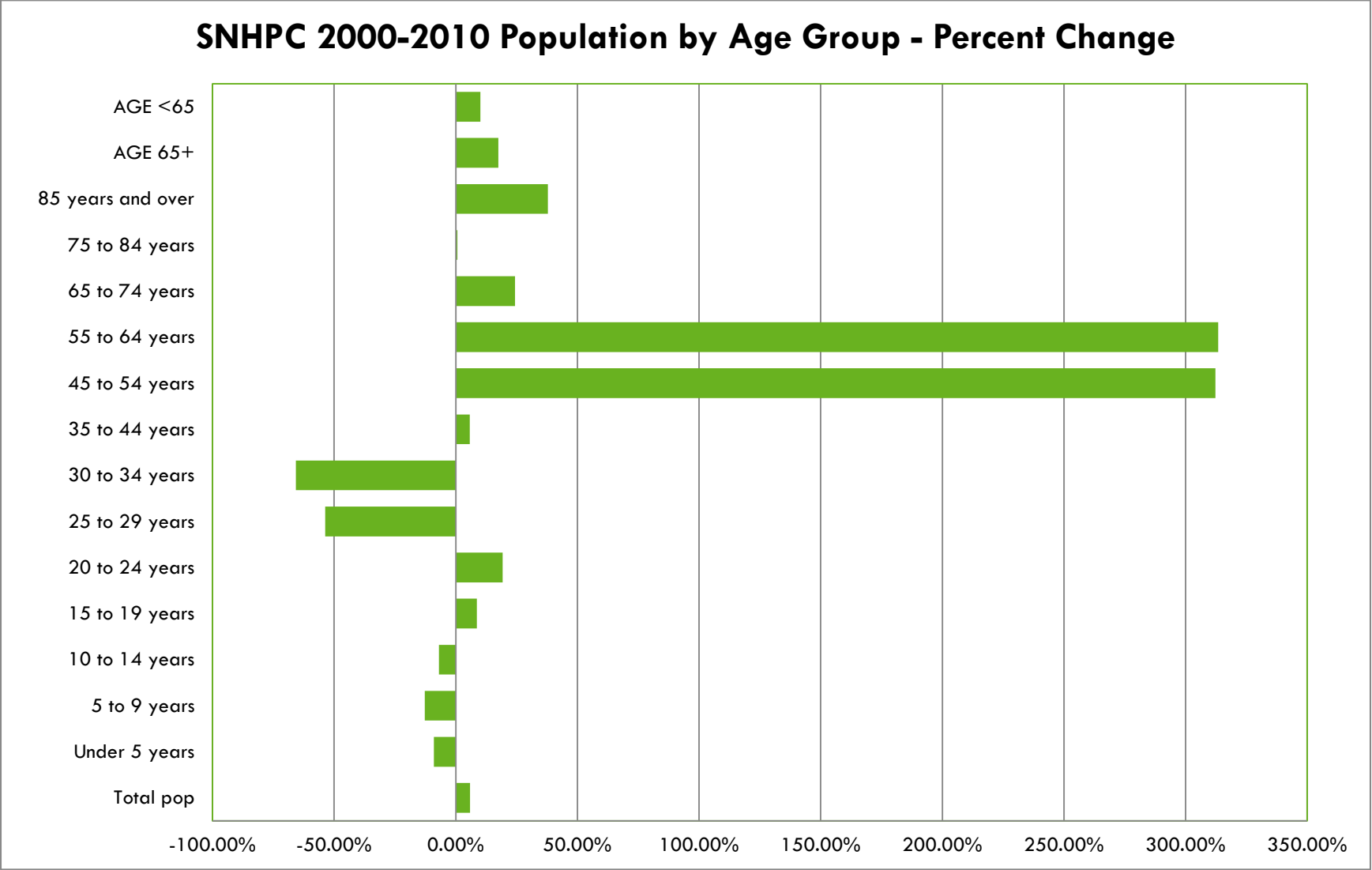
TABLE 2 - POPULATION BY AGE GROUP - SNHPC REGION

			2000-2010		
Age Cohort	2000	2010	Absolute Change	Percent Change	Growth Rate
Total population	259,547	274,854	15,307	5.90%	0.59%
Under 5 years	17,840	16,237	-1,603	-8.99%	-0.90%
5 to 9 years	20,260	17,674	-2,586	-12.76%	-1.28%
10 to 14 years	20,370	18,952	-1,418	-6.96%	-0.70%
15 to 19 years	18,078	19,651	1,573	8.70%	0.87%
20 to 24 years	14,725	17,566	2,841	19.29%	1.93%
25 to 29 years	36,882	17,066	-19,816	-53.73%	-5.37%
30 to 34 years	48,619	16,655	-31,964	-65.74%	-6.57%
35 to 44 years	37,676	39,838	2,162	5.74%	0.57%
45 to 54 years	11,511	47,457	35,946	312.28%	31.23%
55 to 64 years	8,212	33,948	25,736	313.40%	31.34%
65 to 74 years	13,024	16,200	3,176	24.39%	2.44%
75 to 84 years	9,184	9,244	60	0.65%	0.07%
85 years and over	3,166	4,366	1,200	37.90%	3.79%
AGE 65+	25,374	29,810	4,436	17.48%	1.75%
AGE <65	234,173	257,889	23,716	10.13%	1.01%

Source: U.S. Census Bureau, 2000 and 2010 Census.

² Johnson, K. 2012. New Hampshire Demographic Trends in the Twenty-first Century. *Reports on New England*. Number 4. Carsey Institute, University of New Hampshire.

FIGURE 6 – SNHPC 2000-2010 POPULATION BY AGE GROUP – PERCENT CHANGE



Source: U.S. Census Bureau, 2000 and 2010 Census.

HOUSEHOLD TRENDS

Total households in 2010 for the SNHPC Region numbered 105,045 with an average household size of 2.56 and an average family size of 3.11. The difference between the household and the family is that a household may consist of only one person but a family must contain at least two members and that the members of a multi-person household need not be related to each other, while the members of a family are related. Households also differ from housing units, where they are defined as occupied housing units. In 2010, Manchester had the highest number of households at 45,766, followed by Derry at 12,537. Chester had the largest average household size at 3.04 and the largest average family size at 3.28. Total households in the SNHPC region have increase just over 31 percent from 80,000 households in 1990.

TABLE 3 – SNHPC 2010 HOUSEHOLDS

HOUSEHOLD SIZE	Total households	Average household size	Average family size	Percent Owner Occupied Households	Percent Renter Occupied Households
Auburn	1,765	2.81	3.08	91.8%	8.2%
Bedford	7,364	2.81	3.19	86.6%	13.4%
Candia	1,450	2.70	3.04	92.3%	7.7%
Chester	1,534	3.04	3.28	92.7%	7.3%
Deerfield	1,537	2.78	3.09	87.4%	12.6%
Derry	12,537	2.62	3.10	66.7%	33.3%
Goffstown	6,068	2.56	3.00	80.3%	19.7%
Hooksett	4,926	2.59	3.01	82.7%	17.3%
Londonderry	8,438	2.86	3.21	88.0%	12.0%
Manchester	45,766	2.34	2.99	47.3%	52.7%
New Boston	1,883	2.83	3.15	85.7%	14.3%
Raymond	3,925	2.58	2.98	81.7%	18.3%
Weare	3,128	2.81	3.13	86.2%	13.8%
Windham	4,724	2.87	3.25	91.5%	8.5%
Total SNHPC Region	105,045	2.56	3.11	67.0%	33.0%

Source: U.S. Census Bureau, 2010 Census.

In 2010, owner-occupied households in the SNHPC Region totaled 67 percent and renter-occupied households totaled 33 percent. The City of Manchester has more renter-occupied households than owner-occupied at 52.7 percent. Derry also has a large population of renter-occupied households at 33 percent. Chester has the lowest amount of renter-occupied households at 7.3 percent.

The change in households by tenure in the SNHPC Region from 1990 – 2010 is illustrated on **Table 4** (page 14). The region saw a 25.9 percent increase in owner-occupied units from 1990 – 2000 compared to an 11.9 percent increase from 2000-2010. Renter-occupied unit increases saw the same trend with an increase of 12.63 percent from 1990-2000 and 2.4 percent from 2000-2010.

Communities that saw the greatest increase in owner-occupied units from 2000-2010 were New Boston (29.7 percent), Windham (28.9 percent), and Chester (26 percent). Communities that experienced the

greatest increase in renter-occupied units during this time period were Windham (87.4 percent), Deerfield (52 percent) and New Boston (42.1 percent).

In 2014, New Hampshire Housing Finance Authority engaged the New Hampshire Center for Public Policy Studies and Applied Economic Research to conduct a comprehensive Housing Needs study in NH titled *Shifting Demographics Challenge New Hampshire's Housing Market* (for a full copy of the study see www.nhhfa.org). The first part of the study, titled "Big Houses, Small Households: Perceptions, Preferences and Assessment," concludes that the state's current housing stock will not fit the evolving market demands and needs of the state's population if no steps are taken to accommodate these changes.

Specifically, New Hampshire's senior population is expected to nearly double between 2010 and 2015, and they have a strong preference for staying in their current homes and aging in place. However, the character of their New England homes – large, rural, multi-level houses with narrow doors and stairs – will pose a challenge to making this possible. Rural locations will make the delivery of services that help seniors age in place more difficult, while the design of traditional New England homes exacerbate mobility challenges. Most homeowners also lost home equity during the Great Recession, limiting their ability, for now, to downsize.

In addition, the larger, rural homes built and purchased by Baby Boomer residents will appeal to a smaller number of young households. Nationally, members of the Generation Y (also known as Millennials), show a preference for mixed-use communities and housing that fits with a more urban lifestyle. New Hampshire young professionals interviewed for the study showed more interest in rural living, but are concerned about the availability of jobs in those areas and showed an overall wariness toward homeownership. With the highest average level of student debt in the country at \$32,900 and little wage growth, New Hampshire young professionals said they are finding unique strategies, such as doubling up in rentals and leasing out portions of their home, to overcome the financial pinch they are experiencing.

Compounding the challenge of high student debt and stagnant wages are stricter lending requirements for mortgages. Homebuilders reported that starter homes priced at around \$179,000 still are not selling due to financing requirements that prevent first-time homebuyers from entering the market. This impact is felt especially by low to moderate income borrowers as they have fewer financial resources to manage these stricter lending requirements. This lack of financing options is pushing younger generations out of the ownership market. When this coupled with Boomers staying in place rather than downsizing, the result is a housing market where fewer people are looking to buy.

New Hampshire residents, most of who are homeowners, view housing affordability as the third most important priority when it comes to utilizing public funds, but obstacles still stand in the way of meeting the needs. Homebuilders reported in the study that excessive regulations and impact fees often make building affordable apartments prohibitively expensive. In addition, town planners report there are still concerns about the impact of multi-family housing may have on taxes and school systems. Also, public perception remains that a lack of affordable workforce housing is not a problem, despite high rents and low vacancy rates that cause some renters to pay well over 30 percent of their income toward housing costs.

TABLE 4 – SNHPC HOUSEHOLDS BY TENURE - 1990-2010

Municipality	1990 Census	2000 Census	2010 Census	Percent Change 1990-2000	Absolute Change 1990-2000	Percent Change 2000-2010	Absolute Change 2000-2010
Owner Occupied							
Auburn	1,192	1,460	1,620	22.5%	268	11.0%	160
Bedford	3,720	5,507	6,374	48.0%	1787	15.7%	867
Candia	1,076	1,255	1,339	16.6%	179	6.7%	84
Chester	778	1,129	1,422	45.1%	351	26.0%	293
Deerfield	905	1,098	1,344	21.3%	193	22.4%	246
Derry	6,761	7,978	8,362	18.0%	1217	4.8%	384
Goffstown	3,778	4,505	4,874	19.2%	727	8.2%	369
Hooksett	2,551	3,304	4,073	29.5%	753	23.3%	769
Londonderry	5,497	6,637	7,426	20.7%	1140	11.9%	789
Manchester	18,571	20,367	21,661	9.7%	1796	6.4%	1,294
New Boston	904	1,244	1,613	37.6%	340	29.7%	369
Raymond	2,314	2,724	3,206	17.7%	410	17.7%	482
Weare	1,864	2,278	2,697	22.2%	414	18.4%	419
Windham	2,590	3,353	4,321	29.5%	3353	28.9%	968
SNHPC Region	49,911	62,839	70,332	25.9%	12,928	11.9%	7,493
Renter Occupied							
Auburn	110	120	145	9.1%	10	20.8%	25

Municipality	1990 Census	2000 Census	2010 Census	Percent Change 1990-2000	Absolute Change 1990-2000	Percent Change 2000-2010	Absolute Change 2000-2010
Bedford	277	744	990	168.59%	467	33.1%	246
Candia	84	104	111	23.81%	20	6.7%	7
Chester	84	85	112	1.19%	1	31.8%	27
Deerfield	94	127	193	35.11%	33	52.0%	66
Derry	4,006	4,349	4,175	8.56%	343	-4.0%	-174
Goffstown	981	1,136	1,194	15.80%	155	5.1%	58
Hooksett	702	843	853	20.09%	141	1.2%	10
Londonderry	889	986	1,012	10.91%	97	2.6%	26
Manchester	21,767	23,880	24,105	9.71%	2113	0.9%	225
New Boston	150	190	270	26.67%	40	42.1%	80
Raymond	685	769	719	12.26%	84	-6.5%	-50
Weare	260	340	431	30.77%	80	26.8%	91
Windham	240	215	403	-10.42%	215	87.4%	188
SNHPC Region	30,089	33,888	34,713	12.63%	3799	2.4%	825

Sources: 1990 U.S. Census SF1-H12 and 2000 U.S. Census SF1-H16, 2010 U.S. Census SF1-DP-1

EMPLOYMENT

Employment and wage data for the SNHPC Region in 2011 reveals a total of 122,472 workers (covered by unemployment insurance laws).³ Of those, 108,131 were in the private sector and 14,341 were in government. The number of workers from 2000-2011 increased by only 2.55 percent. The Southern New Hampshire region felt the effects of the recession during this time period along with the rest of the state and a number of communities saw a large decrease in workers including Deerfield, Derry, Manchester and Raymond.

TABLE 5 - ANNUAL AVERAGE COVERED EMPLOYMENT - 2000-2011

Municipality	2000			2011			2000-2011 change Total
	Private Sector	Government	Total	Private Sector	Government	Total	
Auburn	870	116	986	1,430	154	1,584	60.65%
Bedford	12,667	611	13,278	12,862	1,162	14,024	5.62%
Candia	494	108	602	641	121	762	26.58%
Chester	249	86	335	464	172	636	89.85%
Deerfield	318	131	449	311	52	363	-19.15%
Derry	7,869	944	8,813	6,528	1,022	7,550	-14.33%
Goffstown	2,523	538	3,061	2,201	1,261	3,462	13.10%
Hooksett	6,264	491	6,755	7,310	624	7,934	17.45%
Londonderry	10,221	987	11,208	12,200	1,146	13,346	19.08%
Manchester	59,386	7,418	66,804	57,777	7,090	64,867	-2.90%
New Boston	369	105	474	462	188	650	37.13%
Raymond	2,771	387	3,158	2,253	406	2,659	-15.80%
Weare	928	305	1,233	1,138	431	1,569	27.25%
Windham	1,936	332	2,268	2,554	512	3,066	35.19%
SNHPC Region	106,865	12,559	119,424	108,131	14,341	122,472	2.55%

Source: NH Employment Security, Local, State and County data for 2000 and 2011

³ As part of the Unemployment Insurance compensation system, New Hampshire Employment Security (NHES) collects quarterly data on number of people employed and total wages from those employers subject to the unemployment law. This data is called Quarterly Census of Employment and Wages (QCEW) but is often referred to as covered employment or ES-202 data. The Economic and Labor Market Information Bureau uses QCEW data to benchmark the nonfarm employment estimates produced by the Current Employment Statistics (CES) program.

The labor force in the SNHPC Region increased by 4.16 percent from 2000-2011. Communities that had a decrease in their labor force during this time period were Derry and Raymond. These two communities also have the highest unemployment rates (as of 2011) at 6.3 percent and 6 percent, respectively. The New Hampshire unemployment rate in 2011 was 5.5 percent. Nationally the unemployment rate in 2011 was 8.9 percent. The economy is slowly improving and unemployment rates continue to decrease slowly in the region, the state and the nation.

TABLE 6 - LABOR FORCE, 2000-2011

Municipality	2000			2010 (2009*)			2000-2010 change employed
	Civilian Labor Force	Employed	Unemploy- ment Rate	Civilian Labor Force	Employed	Unemploy- ment Rate	
Auburn	2,728	2,667	2.2%	3,180*	3,005*	5.5%*	12.67%*
Bedford	9,466	9,296	1.8%	11,320	10,800	4.6%	16.17%
Candia	2,253	2,197	2.5%	2,626*	2,495*	5.0%*	13.56%*
Chester	2,308	2,249	2.6%	2,706*	2,560*	5.4%*	13.82%*
Deerfield	2,228	2,173	2.5%	2,373*	2,228*	6.1%*	2.53%*
Derry	22,161	21,401	3.4%	19,780	17,040	7.0%	-20.37%
Goffstown	9,263	9,016	2.7%	10,210	9,670	5.3%	7.25%
Hooksett	5,812	5,660	2.6%	7,920	7,470	5.6%	31.97%
Londonderry	13,521	13,142	2.8%	14,220	13,380	5.9%	1.81%
Manchester	58,829	57,385	2.5%	62,120	57,760	7.0%	.65%
New Boston	2,283	2,240	1.9%	3,058*	2,900*	5.2%*	29.46%*
Raymond	6,085	5,869	3.5%	6,140	5,710	7.0%	-2.7%
Weare	4,205	4,104	2.4%	5,080	4,770	6.2%	16.22%
Windham	6,110	5,891	3.6%	7,710	7,280	5.5%	23.57%
Total	147,252	143,290	2.7%	158,443	147,068	7.73%	2.63%

Source: NHNetwork, Labor Force, Employment and Unemployment Data

COMMUTER PATTERNS

Commuting patterns have changed over the past decade along with employment and labor force. The percentage of the labor force commuting out of town (OOT) to work dropped in each of our communities and the total percentage in the region dropped from 66.32 percent in 2000 (**Table 7**) to 58.76 percent in 2010 (**Table 8**). Most of our labor force in the region still commutes to the City of Manchester, the center and hub of employment in the SNHPC region. Mean travel time varies in our communities from 21.3 minutes in the City of Manchester to 35.1 minutes in the Town of Weare.

TABLE 7 – SNHPC REGION COMMUTING PATTERNS 2000

Municipality	Commuting Out of Town- 2000					Mean Travel Time To Work
	Total OOT Commuters	% of Labor Force Commuting OOT	Most Common Commute To	2nd Most Common Commute To	3rd Most Common Commute To	
Auburn	2,312	87.44%	Manchester	Londonderry	Hooksett	26.7
Bedford	6,674	73.62%	Manchester	Nashua	Merrimack	27.2
Candia	1,960	89.25%	Manchester	Hooksett	Bedford	28.3
Chester	1,686	83.76%	Manchester	Derry	Salem	32.2
Deerfield	1,602	83.92%	Manchester	Concord	Raymond	33.9
Derry	14,515	79.53%	Salem	Manchester	Londonderry	31.1
Goffstown	6,971	78.22%	Manchester	Bedford	Nashua	26.1
Hooksett	4,992	79.43%	Manchester	Concord	Bedford	25.7
Londonderry	9,772	78.08%	Manchester	Nashua	Derry	29.7
Manchester	26,139	47.69%	Nashua	Bedford	Londonderry	21.3
New Boston	1,940	83.95%	Manchester	Goffstown	Nashua	32.7
Raymond	4,344	82.29%	Manchester	Exeter	Londonderry	31.6
Weare	3,516	85.34%	Manchester	Concord	Goffstown	35.1
Windham	5,070	87.73%	Salem	Boston, MA	Andover, MA	31.5
Total	86,423	66.32%				

Source: U.S. Census 2000 MCD-to-MCD Worker Flow Files, State of New Hampshire, Residence MCD

TABLE 8 - SNHPC REGION COMMUTING PATTERNS 2010

Municipality	Commuting Out of Town- 2010					Mean Travel Time to Work
	Total OOT Commuters	% of Labor Force Commuting OOT	Most Common Commute To	2nd Most Common Commute To	3rd Most Common Commute To	
Auburn	2,455	81.48%	Manchester	Nashua	Londonderry	27.2
Bedford*	7,622	70.18%	Manchester	Nashua	Merrimack	25.6
Candia	1,863	75.52%	Manchester	Salem	Raymond	27.3
Chester*	2,117	79.80%	Manchester	Derry	Salem	33.5
Deerfield	1,941	75.26%	Manchester	Concord	Salem	36.3
Derry	14,064	70.36%	Manchester	Londonderry	Salem	30.7
Goffstown	7,589	72.75%	Manchester	Bedford	Concord	24.1
Hooksett*	5,651	71.26%	Manchester	Concord	Bedford	24.7
Londonderry	9,623	66.27%	Manchester	Nashua	Salem	29.6
Manchester	29,291	47.36%	Bedford	Nashua	Londonderry	22.8
New Boston	2,287	74.11%	Manchester	Bedford	Merrimack	30.1
Raymond	4,110	68.42%	Manchester	Exeter	Epping	33.8
Weare	4,253	79.73%	Manchester	Concord	Nashua	36.2
Windham	5,510	75.12%	Salem	Boston, MA	Manchester	34.3
Total	92,866	58.76%				

Source: U.S. Census 2010 MCD-to-MCD Worker Flow Files, State of New Hampshire, Residence MCD

*Most Common Commute stayed the same from 2000-2010

COMMUNITIES OF INTEREST

One of the overall goals for the SNHPC Regional Comprehensive Plan is to engage residents and stakeholders substantively and meaningfully in the development of a shared vision for the region and its implementation. This also includes communities traditionally marginalized from such processes. In order to ensure we are engaging every sector of the community, it is important to identify those populations that have not traditionally been a part of the plan-making and visioning process. The following communities of interest were identified by the SNHPC Granite State Future Leadership Team to ensure the visioning, analysis and recommendations that come out of this process address their needs and concerns as well as the community as a whole.

SENIOR POPULATION

The senior population (75+) in the SNHPC region was 13,610 according to the 2010 U.S. Census. This is a 10.2 percent increase from 2000, where the senior population was 12,350. Almost half of the senior population resides in Manchester (49 percent); another 10 percent resides in Bedford, 8.7 percent in Derry, 8.6 percent in Goffstown and the remaining 23.7 percent is distributed fairly evenly across the remaining SNHPC communities.

PHYSICALLY DISABLED POPULATION

The civilian non-institutionalized population with a disability in the SNHPC Region is 24,234 or approximately 8.9 percent of the population.⁴ Close to 60 percent of the disabled population in the region resides in the City of Manchester currently (14,234 individuals).

VETERANS

Of the civilian population 18 years and older in the region (210,824) there are 20,420 civilian veterans making up 9.69 percent of that population.⁵ The City of Manchester is home to a majority of these veterans (38 percent) and the only Veteran's Administration Medical Center (VAMC) in the State. Outpatient Clinics and Vet Centers are located throughout the State, but veteran services are met in the City of Manchester for a large portion of New Hampshire's veterans. In addition to medical services, the VAMC Manchester provides homeless veterans with housing, employment and recovery services. Several housing programs and transitional homes are located in the City because of the proximity to veteran's services.

YOUTH

From 2000 to 2010 the youth population in the SNHPC Region increased slightly with an 8.7 percent increase in the 15-19 age cohort and a 19.29 percent increase in the 20-24 age cohort. At the same time, there were major decreases in the 25-29 and 30-34 age cohorts, which indicate trends of youth leaving the region (and the state) as they become young adults. At the lower age cohort range, there were also decreases during this time period, which indicate a shift in birth rates/family size and is reflective of the out-migration of young adults/families at the same time.

Overall, youth (ages 15-24) comprises approximately 13.5 percent of the SNHPC population with 37,217 individuals. In terms of housing, issues with youth involve both homeless youth and cases of rental discrimination against households with children and youth.

⁴ Table S1810. 2008-2012 ACS 5 Year Estimates. U.S. Census Bureau.

⁵ Table DP02. 2008-2012 ACS 5 Year Estimates. U.S. Census Bureau.

The New Hampshire Department of Education, which is required under the Federal McKinney-Vento Act to ensure that homeless students have equal access to an education, reported 3,306 homeless students enrolled across the state in New Hampshire public schools for the 2011-2012 school year. This number continues to increase each year and is up over 50 percent from 2008-2009 when it was 2,132.⁶

New Hampshire school districts continue to report many remaining barriers to the education of homeless children and youth. Lack of affordable housing, difficulty identifying homeless students, transportation to the school of origin, and meeting basic needs are the greatest concerns reported by local homeless education liaisons as they try to meet the educational needs of students facing homelessness.⁷

HOMELESS POPULATION

The Manchester, NH Continuum of Care 2013 point-in-time count reports a total of 669 homeless persons in the City of Manchester.⁸ This compares to the state figure of 2,576 homeless persons reported for 2013.⁹ Significant numbers of the homeless individuals counted in the City of Manchester were reported as severely mentally ill and/or challenged with chronic substance abuse. Homeless persons include those who were currently sheltered, unsheltered and temporarily doubled-up. Strategies outlined in the 10-year plan to end homelessness in Manchester include:

- Build more affordable housing and subsidize costs to make it affordable to more people with low incomes;
- Help people increase their incomes through education, training, and employment at housing-wage jobs; and
- Provide permanent housing and intensive case management and supportive services for those with severe mental health and substance use disorders to stabilize them in housing first and then make recovery treatment services available.

FORMERLY INCARCERATED & CONVICTED POPULATION

The prisoner population in the State of New Hampshire for 2013 was 2,799, down slightly from a high of 2,870 in 2007.¹⁰ With a new larger women's prison set to open in 2016 in the City of Concord and the crime rate increasing in recent years, this number is set to increase even further. Since the 1970s, the prison population in New Hampshire has risen nine fold.

In the SNHPC Region, there are currently two correctional facilities: the State Women's Prison in Goffstown and the Hillsborough County Correctional Facility in Manchester. These facilities located within the region also mean there are many related services and transitional housing programs for the prisoner population. Housing issues for formerly incarcerated or convicted individuals center on housing discrimination which prevents these individuals from easily transitioning back into society; and employment discrimination, which contributes to a lack of housing choices.

⁶ The U.S. Dept. of Education uses a broad definition of homelessness including those who are "doubled up."

⁷ NH DHHS. *Homelessness in New Hampshire: A Report*. July 1, 2011 – June 30, 2012.

⁸ Manchester NH Continuum of Care. *2013 Manchester Point-in-Time Report*. <http://www.mcoconh.org/blog/wp-content/uploads/2011/01/MCoC-2013-PIT-Report-UPDATED.pdf>. January 28, 2014.

⁹ NH DHHS. 2013 Point-in-Time Count January 23, 2013.

<http://www.dhhs.state.nh.us/dcbcs/bhhs/documents/pointintime2013.pdf>. January 28, 2014.

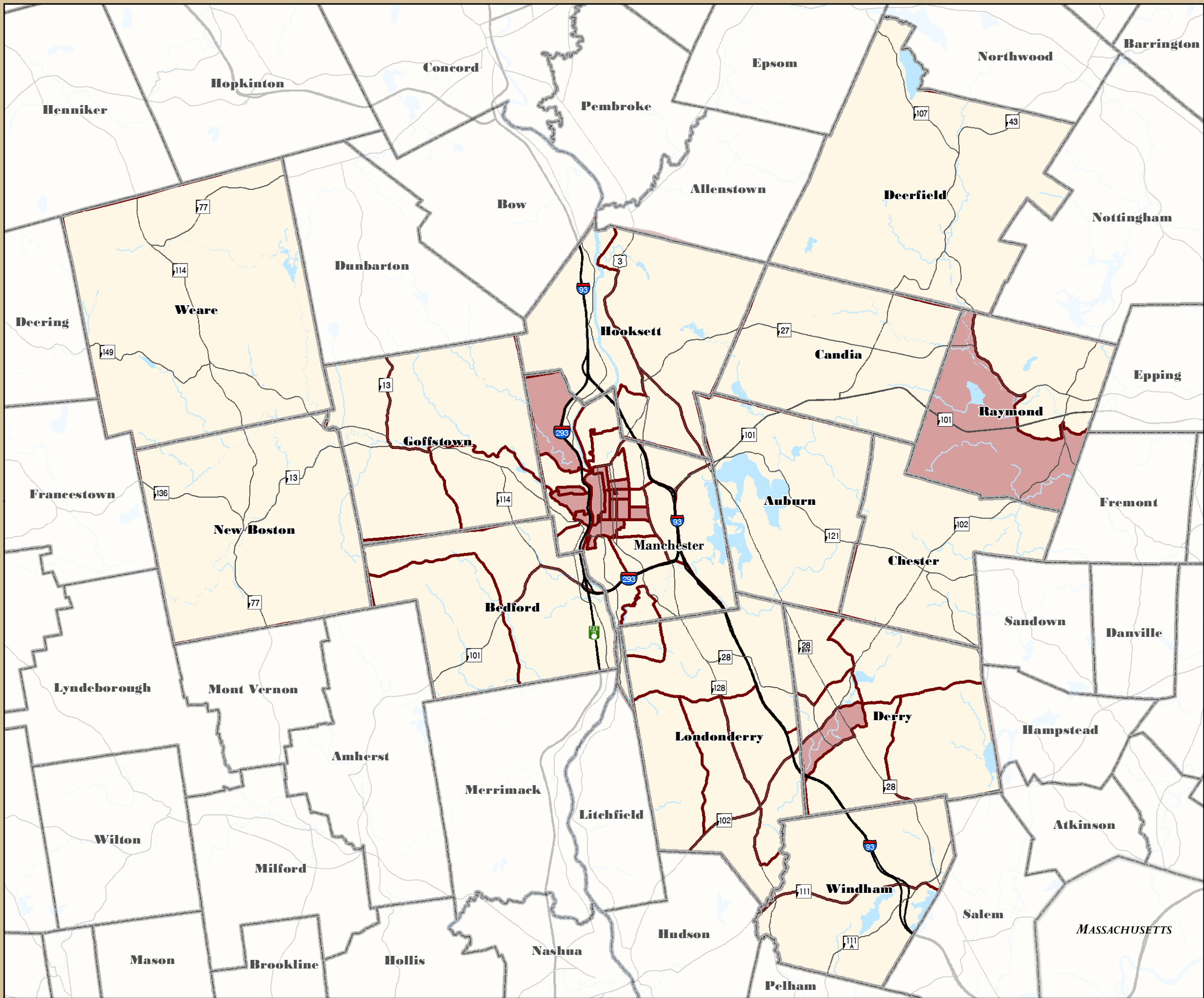
¹⁰ NH Dept. of Corrections. <http://www.nh.gov/nhd/doc/population.html>. January 28, 2014.

LOW-MODERATE INCOME HOUSEHOLDS

Low-moderate income households are defined as those whose annual income is at or below 80 percent of the Area Median Family Income (as defined by HUD).¹¹ Almost 34 percent of the households in the SNHPC Region are low-moderate income (34,895 households).¹² This compares to the State where just over 36 percent of the households are considered low-moderate income overall. Census tracts in the SNHPC region where there is a concentration (50 percent or more) of low-moderate income households are shown on **Map 2-1** on page 23. Concentrations of low-moderate income households are mainly in the City of Manchester, with small pockets in both Derry and Raymond as well. Housing affordability is a challenge for these households in the SNHPC Region. The Housing Cost and Affordability Factors section on page 40 outlines these affordability challenges that low-moderate income households face.

¹¹ U.S. Dept. of Housing and Urban Development. Office of Sustainable Housing and Communities. Guidance on Performance Measurement and Flagship Sustainability Indicator Fact Sheets.

¹² 2006-2010 CHAS Data.



Map # 2 - 1

Granite State Future Housing



SNHPC Region
Low - Moderate Income
Household Concentrations

- Census Tracts
- Low to Moderate Income Areas*
- Interstates
- State and US Routes
- Town Boundary
- Rivers
- Lakes

* Low to Moderate Income Areas represent 50 percent and 80 percent of the Area Median Family Income respectively.

Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
US Census Bureau 2010
American Community Survey 2006-2010

The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2014.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5
Miles



RECENT IMMIGRANT AND REFUGEE POPULATIONS

New Hampshire took in more than 3,500 refugees over the past decade, with 61 percent or 2,148 of those being resettled in the City of Manchester. Two national agencies work with refugees through the resettlement process in New Hampshire: Lutheran Social Services and the International Institute of New Hampshire, which resettles most of the newly arriving refugees in Manchester.¹³

Language barriers are cited by recent immigrants and refugees as an issue when it comes to obtaining housing in the region. Approximately 4 percent of the SNHPC Region population (5 years and older) or 10,403 individuals speak English “less than very well.” **Table 9** below outlines the primary languages spoken at home for the region, as a whole, and the individual communities in the SNHPC region. The City of Manchester has the greatest percentage of individuals that speak a language other than English, followed by Hooksett and Bedford. In these communities “other Indo-European languages” are the majority behind English for language spoken at home. This includes languages such as French, Italian, Portuguese, Polish and German, among others.

TABLE 9 – 2010 SNHPC REGION LANGUAGE SPOKEN AT HOME

	Population 5 years and over	English only	Language other than English	Spanish	Other Indo- European languages	Asian and Pacific Islander languages	Other languages
Auburn	4,660	96.52%	3.48%	1.05%	2.42%	0.00%	0.00%
Bedford	20,037	91.86%	8.14%	0.94%	5.27%	0.99%	0.94%
Candia	3,808	94.77%	5.23%	0.60%	4.62%	0.00%	0.00%
Chester	4,486	93.09%	6.91%	4.03%	2.70%	0.18%	0.00%
Deerfield	3,991	93.13%	6.87%	2.31%	4.56%	0.00%	0.00%
Derry	31,592	92.14%	7.86%	2.04%	4.19%	1.26%	0.36%
Goffstown	17,097	95.06%	4.94%	0.57%	4.07%	0.29%	0.00%
Hooksett	12,763	91.69%	8.31%	1.36%	6.54%	0.41%	0.00%
Londonderry	23,101	93.67%	6.33%	1.48%	3.76%	1.02%	0.07%
Manchester	102,992	81.26%	18.74%	5.74%	8.73%	2.32%	1.96%
New Boston	5,036	94.10%	5.90%	0.81%	4.75%	0.34%	0.00%
Raymond	9,436	94.60%	5.40%	2.15%	2.18%	0.55%	0.52%
Weare	8,041	97.94%	2.06%	0.44%	1.63%	0.00%	0.00%
Windham	12,717	92.14%	7.86%	1.22%	3.04%	2.28%	1.32%
SNHPC Region	259,757	88.57%	11.43%	3.13%	5.90%	1.42%	0.98%

Source: Table DP02. 2008-2012 ACS 5 Year Estimates. U.S. Census Bureau.

¹³ Jeff Mucciarone. *Unwelcome?* Hippo Press. August 25, 2011. Data provided by the City of Manchester Mayor’s Office.

MINORITY POPULATION

As outlined in the *Population By Race* section on page 8, the region is becoming more diverse and the minority population is growing. In total, the minority population is 8.12 percent of the SNHPC region population, or 22,309 individuals. The SNHPC region is also more diverse than the state as a whole. The Statewide Analysis of Impediments to Fair Housing Choice found that “racial and ethnic minorities disproportionately reside in Manchester and Nashua, with median family incomes of Blacks and Latinos much lower than Whites or Asians, particularly in Manchester and Nashua.” This analysis also found that almost 30 percent of the black population of New Hampshire resides in Manchester and that the difference in racial composition of Nashua and Manchester, as compared to the rest of New Hampshire, is highly statistically significant.¹⁴

Map 2-2 (page 30) highlights areas of minority concentration in the SNHPC region, defined as those census tracts where the minority population (all minority race populations combined) percentage was double or more (16.24 percent or more) that of the overall regional minority population percentage (8.12 percent).

SEGREGATION

Segregation is defined as “the separation or isolation of a race, class, or ethnic group by enforced or voluntary residence in a restricted area, by barriers to social intercourse, by separate educational facilities, or by other discriminatory means.”¹⁵ In the early 1900’s, American industrialization, along with World Wars I and II created new demands for labor and migration to the Northern United States for industrial jobs. This migration produced a rapid growth in the African American population in the northern states and incited racially motivated communal riots between 1900-1920. Patterns of racial segregation are rooted in this communal violence that took place, pushing African Americans living in White neighborhoods into predominantly African American neighborhoods. After the 1920’s, racial segregation patterns were persisted by methods such as collective neighborhood action, and racially discriminatory covenants and real estate practices. In many areas, neighborhood improvement associations organized to prevent African Americans from entering white communities. These associations used various methods to achieve their goal, such as lobbying city councils for zoning restrictions, but their most important function was implementing racially restrictive covenants to prevent property owners from transferring their properties to African Americans. Local real estate boards also encouraged the use of restrictive covenants, and threatened to discipline agents whose practices contravened the preservation of segregated communities. The Federal Housing Administration’s racially discriminatory mortgage finance policies further institutionalized residential segregation practices by encouraging the use of restrictive covenants to preserve the value of neighborhood property values until 1950.¹⁶

Shortly after the Civil Rights Act of 1964, the Fair Housing Act of 1968 was passed which aimed to bring equal opportunity in housing choice, and integrated living. Since that time, more laws, presidential orders and court cases have opened the path to integration, but in many places, especially large cities and metropolitan areas, residential segregation patterns still exist.

One measure of analyzing the distribution of racial or ethnic groups across a geographic area is the index of dissimilarity. A dissimilarity index represents a summary measure of the extent to which the distribution

¹⁴ NHHFA. Analysis of Impediments to Fair Housing Choice in New Hampshire. 2010. *Comparison of racial composition across Manchester, v. Nashua v. the rest of New Hampshire yields a highly significant chi-square statistic.*

¹⁵ “Segregation.” Merriam-Webster.com. Merriam-Webster, n.d. Web. 21 Feb. 2014. <<http://www.merriam-webster.com/dictionary/segregation>>.

¹⁶ Natasha M. Trifun. *Residential Segregation after the Fair Housing Act*. Human Rights Magazine. Vol. 36, No. 4. Fall 2009

of any two groups (frequently racial or ethnic) differs across census tracts or block-groups.¹⁷ A value of 0.40 or less indicates low segregation; 0.41-0.54 indicates moderate segregation and >0.55 indicates high segregation. For the Black/African American population in the SNHPC region segregation is moderate, along with the Hispanic population. For all other races in the region it is low according to the dissimilarity index. **Table 10** outlines the racial share of the population for 2000 and 2010 in the SNHPC region, along with the dissimilarity index for each race. Of particular significance is that the index for the Black/African American population has increased slightly over the past decade, while for all other races it has gone down. The data indicates that 49 percent of the Black/African American Population would have to move to other census blocks in the region for the Black/African American Population and the White Population to match in terms of geographic distribution.

TABLE 10 – SNHPC REGION DISSIMILARITY INDEX

	Share of Population		Dissimilarity Index	
	SNHPC Region (2000)	SNHPC Region (2010)	SNHPC Region (2000)	SNHPC Region (2010)
	(1)	(2)	(3)	(4)
Non-White/White	7%	11%	0.36	0.35
Black-African American/White	1%	2%	0.44	0.49
Hispanic/White	3%	4%	0.45	0.43
Asian/White	1%	2%	0.37	0.34
Pacific-Islander/White	0%	0%	0.00	0.00
Native-American/White	0%	0%	0.00	0.00

Source: 2013 HUD FHEA Data Tables, 2010 U.S. Census Race/Income data

DISSIMILARITY INDEX DATA INDICATES THAT SEGREGATION HAS INCREASED SLIGHTLY FOR THE BLACK/AFRICAN AMERICAN POPULATION OVER THE PAST DECADE IN THE SNHPC REGION, WHILE FOR ALL OTHER RACES IT HAS GONE DOWN.

¹⁷ The Dissimilarity Index is a statistic used to measure the overall difference between two percentage distributions. It is calculated by summing the differences between the numbers in each pair of corresponding values and dividing by 2. The result lies in the range 0 to 100; is always positive; and indicates the proportion of cases that would need to be reallocated in order to make the two distributions the same.

Of the five southern-most regions in New Hampshire, the SNHPC Region has the highest segregation for the Black/African American population (rated moderate) according to the dissimilarity index for 2010 (**Table 11**). All other regions in the state rank low for segregation when using this index for quantification.

TABLE 11 – NH DISSIMILARITY INDEX RANKINGS

	2010 Black/African American Population Share	Dissimilarity Index
SNHPC Region	2.00%	0.49
RPC	1.00%	0.38
NRPC	1.00%	0.36
SRPC	1.00%	0.30
SWRPC	0.00%	0.00

Source: 2013 HUD FHEA Data Tables, 2010 U.S. Census Race/Income data

PREDICTED RACIAL/ETHNIC COMPOSITION BY TOWN

Another measure used for analyzing segregation is the “Predicted Racial/Ethnic Composition Ratio.” For very small communities, there are generally too few census block-groups or minorities for statistical metrics, such as a dissimilarity index, to be particularly informative. Instead, the predicted racial/ethnic composition ratio calculates a predicted value for the racial/ethnic minority share for a jurisdiction and compares this to the actual composition. Predicted values are based on a region’s income distribution by race and ethnicity. For a jurisdiction, the regional racial share for each income category is multiplied by the number of households the jurisdiction has in that category. The totals are summed to determine the predicted number of minorities in a jurisdiction. This total is then compared with the actual number of minorities in a community by calculating a ratio of actual to predicted. This measure is useful for determining reasons, other than income, for racial/ethnic segregation. Ratios near 1 (or 100 percent) indicate that the jurisdiction is close to its predicted level of minority composition. Those far less than 1 (or 100 percent) show that the jurisdiction has many fewer minorities than one might expect given income levels.

TABLE 12- PREDICTED RACIAL/ETHNIC COMPOSITION BY TOWN

Town	Actual	Predicted	Actual/ Predicted
Auburn	5.07%	5.09%	99.67%
Bedford	5.75%	5.08%	113.23%
Candia	2.99%	5.25%	56.98%
Chester	5.34%	4.98%	107.30%
Deerfield	0.97%	5.34%	18.09%
Derry	12.83%	10.57%	121.42%
Goffstown	3.88%	10.36%	37.47%
Hooksett	7.26%	10.58%	68.59%
Londonderry	11.28%	10.35%	108.97%
Manchester	11.95%	5.55%	215.32%
New Boston	2.08%	5.13%	40.58%
Raymond	5.48%	11.05%	49.61%
Weare	2.12%	5.14%	41.22%
Windham	5.12%	5.09%	100.52%

Source: 2013 HUD FHEA Data Tables, U.S. Census
Race/Income data

TABLE 13 – PREDICTED RACIAL/ETHNIC COMPOSITION VALUE DESCRIPTION

Values	Description
0-50%	Non-white share extremely below predicted
50-70%	Non-white share moderately below predicted
70-90%	Non-white share slightly below predicted
90-110%	Non-white share approximates predicted
110%+	Non-white share above predicted

Five communities in the SNHPC Region are way below the predicted non-white share of the population (Deerfield, Goffstown, New Boston, Weare and Raymond) and two communities are “moderately below” their predicted non-white share (Candia and Hooksett). The other half of the communities in the SNHPC Region are either at the predicted non-white share or above their predicted share according to the predicted racial/ethnic composition ratio.

RACIAL/ETHNIC CONCENTRATIONS OF POVERTY

Overall levels of poverty in the SNHPC Region are depicted on **Map 2-3**, page 31. The highest concentrations of individuals at or below the poverty level can be seen in the City of Manchester, with some outlying census tracts at low levels. Derry has an area with a poverty level of just under 20 percent and Raymond, Goffstown and Londonderry have some areas where the poverty level is just above five percent, but otherwise the rest of the region is under five percent for individuals at or below the poverty level. Within the SNHPC Region racial/ethnic concentrations of poverty are all located in the City of Manchester. **Map 2-4** on page 32 illustrates those areas where there are racially/ethnically concentrated areas of poverty (RCAP/ECAP). HUD defines an area of racial concentration as census tracts that have a non-white population of 50 percent or more and an area with concentrations of poverty as census tracts with 40 percent or more of individuals living at or below the poverty line. Because overall poverty levels are much lower in many parts of the country, HUD supplements this with an alternate criterion. Thus, a neighborhood can be an RCAP/ECAP if it has a poverty rate that exceeds 40 percent or is three times the average tract poverty rate for the metro/micro area, whichever threshold is lower. Census tracts with this extreme poverty that satisfy the racial/ethnic concentration threshold are deemed RCAPs/ECAPs.

Although the State of New Hampshire and the SNHPC Region are becoming more diverse and the minority population is growing, it is still predominantly a white population (91.88 percent). For this reason there are no census tracts in the State of New Hampshire that have a minority population of 50 percent or more. It has been identified that almost 30 percent of the black/African American population of New Hampshire resides in Manchester¹⁸ and therefore we are aware of a racial concentration within our state. In order to further analyze this issue an alternate definition of racial concentration was determined. For this assessment, areas of racial concentration are defined as any census tract where the non-white population (all minority race populations combined) percentage was double or more (16.24 percent or more) that of the overall regional non-white population percentage (8.12 percent).

A racially concentrated area of poverty (RCAP) is therefore defined as any census tract that meets the non-white population threshold¹⁹ and the poverty level is three times the average tract poverty rate for the region (9.1 percent). In the SNHPC Region there are four census tracts in the center of Manchester that meet this definition. Outside of this area there are also areas of racial concentration with higher levels of poverty, but they don't rise to the level of poverty that exists in these census tracts in Manchester (30.9 percent and above). Ethnically concentrated areas of poverty (ECAP) were also analyzed for this assessment. An ethnically concentrated area of poverty is defined as any census tract where there is a Hispanic population concentration²⁰ and the poverty level is three times the average tract poverty rate for the region (9.1 percent). For the SNHPC region the same four census tracts in the City of Manchester identified as RCAPs are also identified as ECAPs. Access to Housing Opportunity (page 48) is analyzed in this assessment as a factor in fair housing equity in the region and the poverty index data shows that there low levels of disparities for the Black and Hispanic populations in terms of families who live in poverty when compared to all other races.

The Affordable and Equitable Housing Choice Opportunities and Barriers section (page 58) attempts to analyze the physical and social infrastructure that may affect fair housing equity and in turn may be perpetuating these areas in Manchester as RCAPs/ECAPs.

¹⁸ 2010 State of New Hampshire Analysis of Impediments to Fair Housing Choice. NHHFA.

¹⁹ Racial concentration is defined as those census tracts where the non-white population (all minority race populations combined) percentage was double or more (16.24 percent or more) that of the overall regional minority population percentage (8.12 percent).

²⁰ Ethnic concentration is defined as those census tracts where the Hispanic population (of any race) percentage was double or more (8.84 percent or more) that of the overall regional Hispanic population percentage (4.42 percent).

Granite State Future

Housing

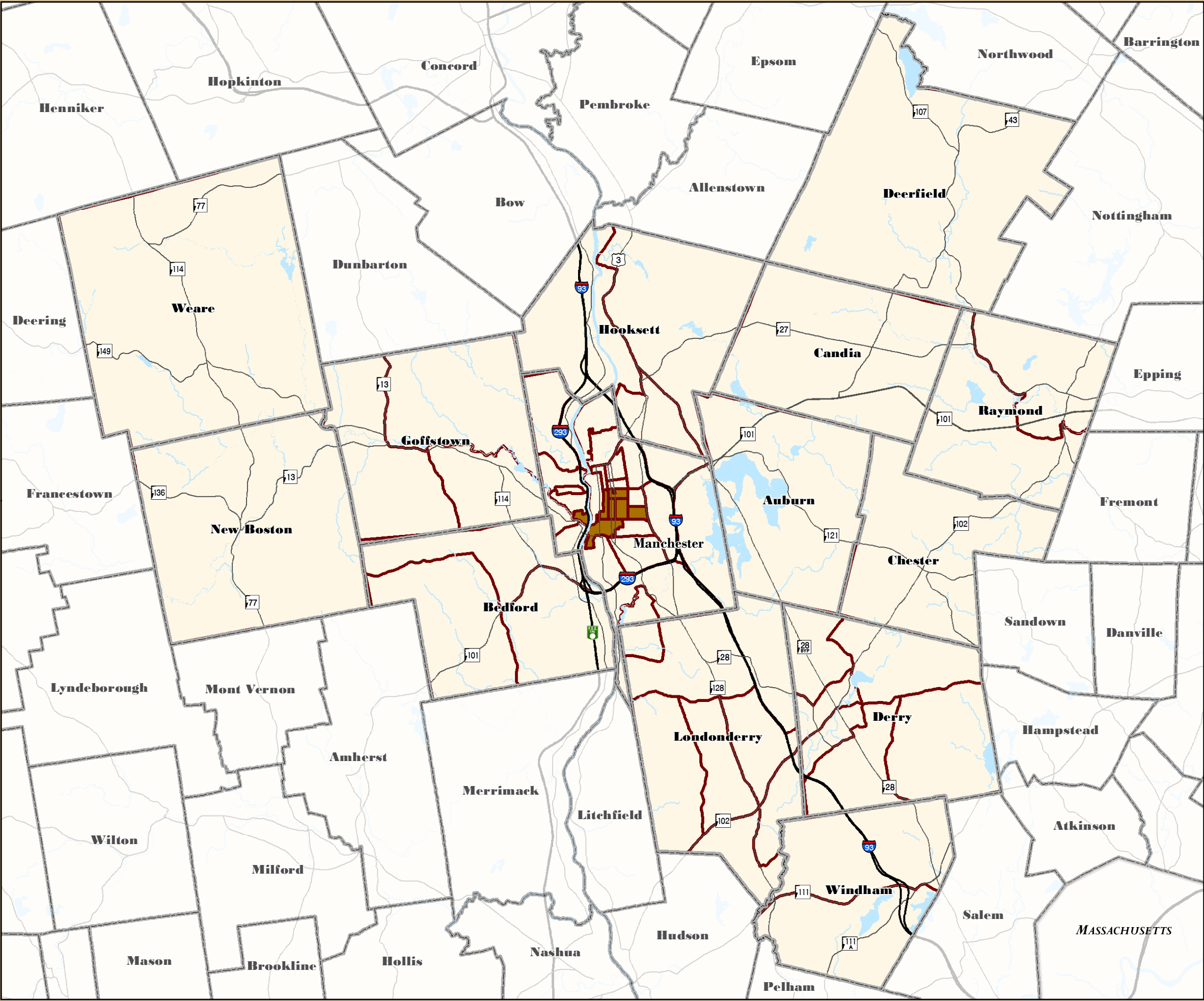
SNHPC Region
Areas of Minority
Concentration



Census Tracts

- Other Census Tracts
- All Minority Races (16.2% or more)*
- Interstates
- State and US Routes
- Town Boundary
- Rivers
- Lakes

* Minority Race areas represent double or more the minority percentage for what is featured in the region as defined by the 2010 Census.



Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
US Census Bureau 2010



The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2014.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5
Miles

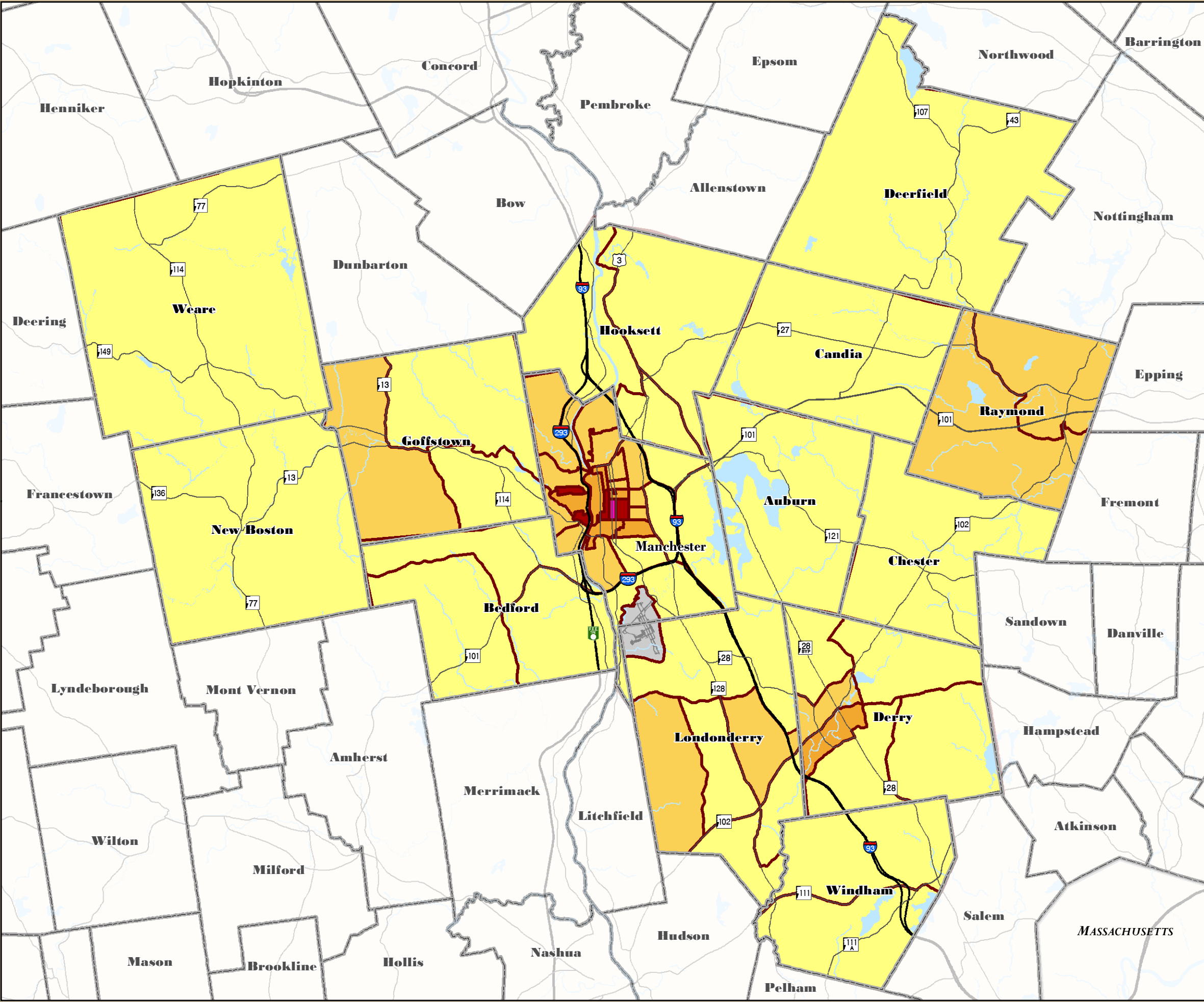


Granite State Future



Housing SNHPC Region Poverty Levels

- Census Tracts
- Percentage of Individuals
Below the Poverty Level**
- 0 - 5 %
 - 5.1 - 15 %
 - 15.1 - 25 %
 - 25.1 - 40 %
 - 40.1 - 46.4 %
- Interstates
- State and US Routes
- Town Boundary
- Rivers
- Lakes
- Manchester-Boston Regional Airport



Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
US Census Bureau 2010
American Community Survey 2011 5Yr Estimate

The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2014.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

Location Map

0 1.25 2.5 5 Miles

Page 31

Granite State Future

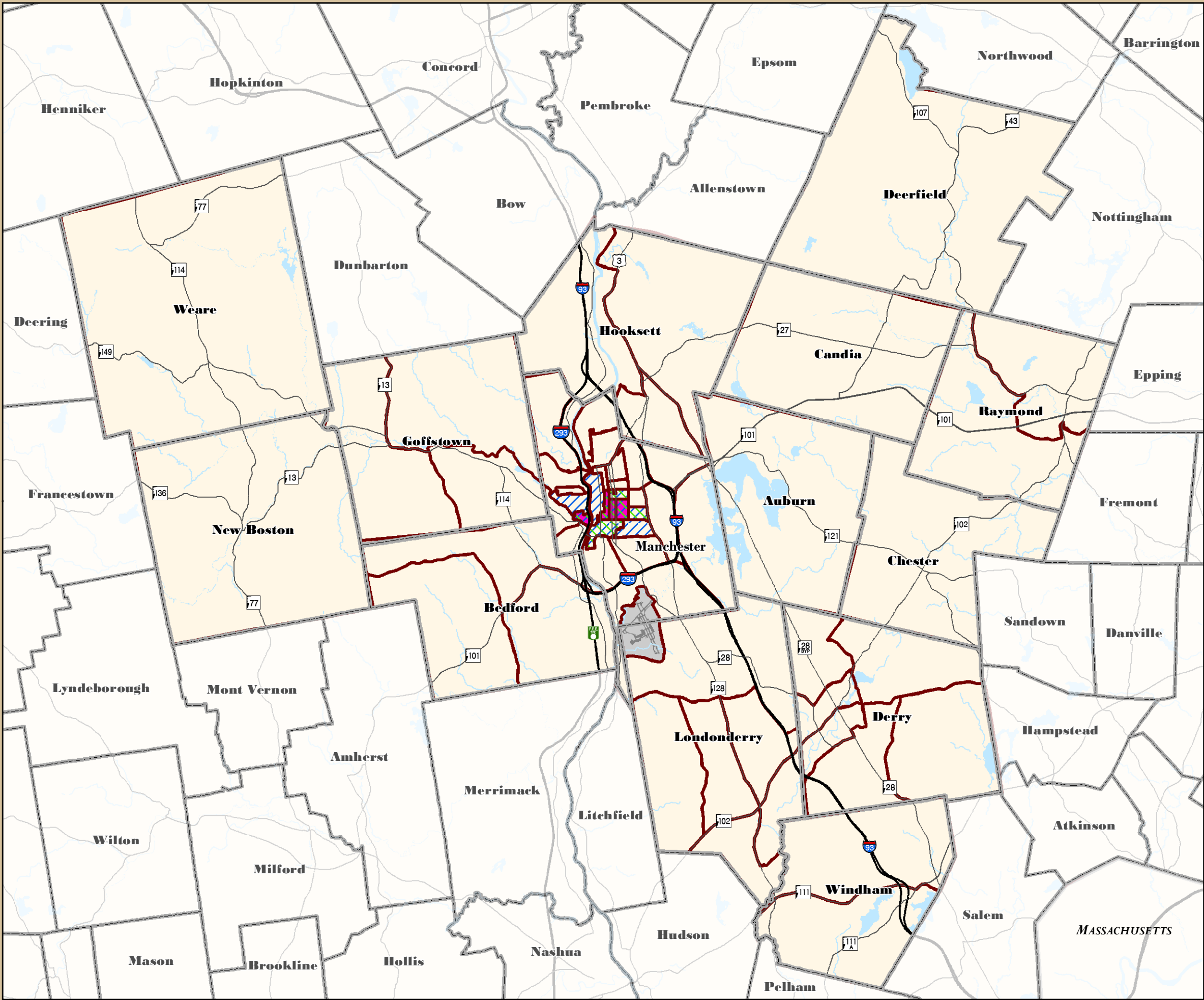


Housing
Racially / Ethnically
Concentrated
Areas of Poverty

Percentage of Individuals

Below the Poverty Level

- Other Census Tracts
- Tracts at or Below Poverty Level (27.3% or more)
- All Minority Races (16.2 % or more)
- Hispanic Population (8.84% or more)
- Interstates
- State and US Routes
- Town Boundary
- Rivers
- Lakes
- Manchester-Boston Regional Airport



Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
US Census Bureau 2010
American Community Survey 2011 5Yr Estimate

The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2014.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5
Miles



HOUSING UNIT TRENDS AND CHARACTERISTICS

TOTAL HOUSING UNITS

The fourteen-community SNHPC Region, as of 2010, hosts 111,993 housing units. These are comprised of single-family, two-family or duplex, or multi-family homes, as well as condominiums and manufactured homes. This is just about 17 percent of the homes in the State of New Hampshire. The region's communities vary in size from Candia, the smallest, with an estimated 1,494 units to Manchester, the largest, with 49,288 units (**Table 14**).

The greatest numerical increase in housing units from 1990 to 2010 occurred in Manchester (+4,927 units), Bedford (+3,478 units), and Londonderry (+2,032 units). The communities with the lowest numerical increase in units were Candia (+302 units), Auburn (+459), and Deerfield (+516 units). Just over 44 percent of the region's housing units were located in Manchester in 2010, compared to 51 percent in 1990. During the 20 years examined here, the communities immediately bordering Manchester – Auburn, Bedford, Goffstown, Hooksett, and Londonderry, in addition to the town of Derry – accounted for approximately 82 percent of the region's housing unit increase. Manchester and the surrounding six towns, listed above, accounted for 71 percent of the regions housing units in 2010. The total increase in housing units for the whole region between 1990 and 2010 was 21,432.

TABLE 14 – SNHPC REGION HOUSING UNIT TRENDS

Number of Housing Units				Percent change	
Town	1990	2000	2010	1990-2000	2000-2010
Auburn	1,355	1,622	1,814	19.70%	11.84%
Bedford	4,156	6,401	7,634	54.02%	19.26%
Candia	1,192	1,384	1,494	16.11%	7.95%
Chester	924	1,247	1,596	34.96%	27.99%
Deerfield	1,227	1,406	1,743	14.59%	23.97%
Derry	11,869	12,735	13,277	7.30%	4.26%
Goffstown	5,022	5,798	6,341	15.45%	9.37%
Hooksett	3,484	4,307	5,184	23.62%	20.36%
Londonderry	6,739	7,718	8,771	14.53%	13.64%
Manchester	44,361	45,892	49,288	3.45%	7.40%
New Boston	1,138	1,462	1,967	28.47%	34.54%
Raymond	3,350	3,710	4,254	10.75%	14.66%
Weare	2,417	2,828	3,466	17.00%	22.56%
Windham	3,327	3,906	5,164	17.40%	32.21%
Total SNHPC Region	90,561	100,416	111,993	10.88%	11.53%

Source: 2010 U.S. Census

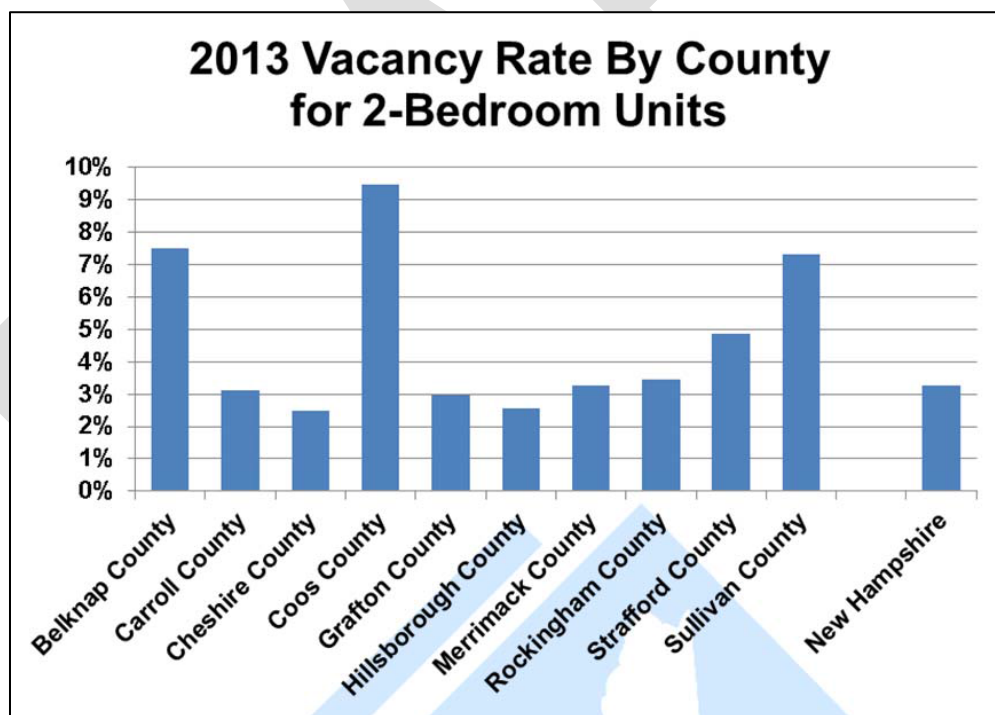
HOUSING VACANCY RATES

Average homeowner vacancy rates (HVR) for Hillsborough, Merrimack and Rockingham Counties were 1.2 percent, 1.5 percent and 1.5 percent, respectively for the period 2008-2012.²¹ The HVR is useful for gauging excess housing supply, the higher the number, the greater the excess. The average State HVR was 1.6 percent over this same time period. Average HVR for the 20-year period 1992-2012 in New Hampshire is 1.5 percent, which indicates the State and the counties in this region have maintained a relatively balanced housing market, despite the economic downturn and housing market crash during the mid-2000's. It is important to take into account that foreclosures are not necessarily reflected in the homeowner vacancy rate calculations. Foreclosure deeds peaked in New Hampshire at 3,953 in 2010 and have seen a steady decline to 2,702 in 2013.²²

National HVR increased starting in early 2005 and peaked at 2.9 percent in 2008. Since late 2010, it has been dropping almost as quickly as it shot up in 2005.²³ Most recently, the U.S. Census Bureau reported that the national HVR was 2.1 percent in the fourth quarter of 2013.

Rental vacancy rates for two-bedroom units for all three counties covered in the SNHPC Region (Hillsborough, Merrimack and Rockingham) were all under 4 percent in 2013. NHHFA reports a 2.6 percent vacancy rate for Hillsborough County for 2013, 3.3 percent for Merrimack County and 3.4 percent for Rockingham County.

FIGURE 7 – NEW HAMPSHIRE RENTAL VACANCY RATES BY COUNTY, 2013



Source: NHHFA, 2013 Residential Rental Cost Survey

²¹ 2008-2012 American Community Survey. U.S. Census Bureau.

²² NHHFA. Foreclosure and Housing Market Update, February 6, 2014.

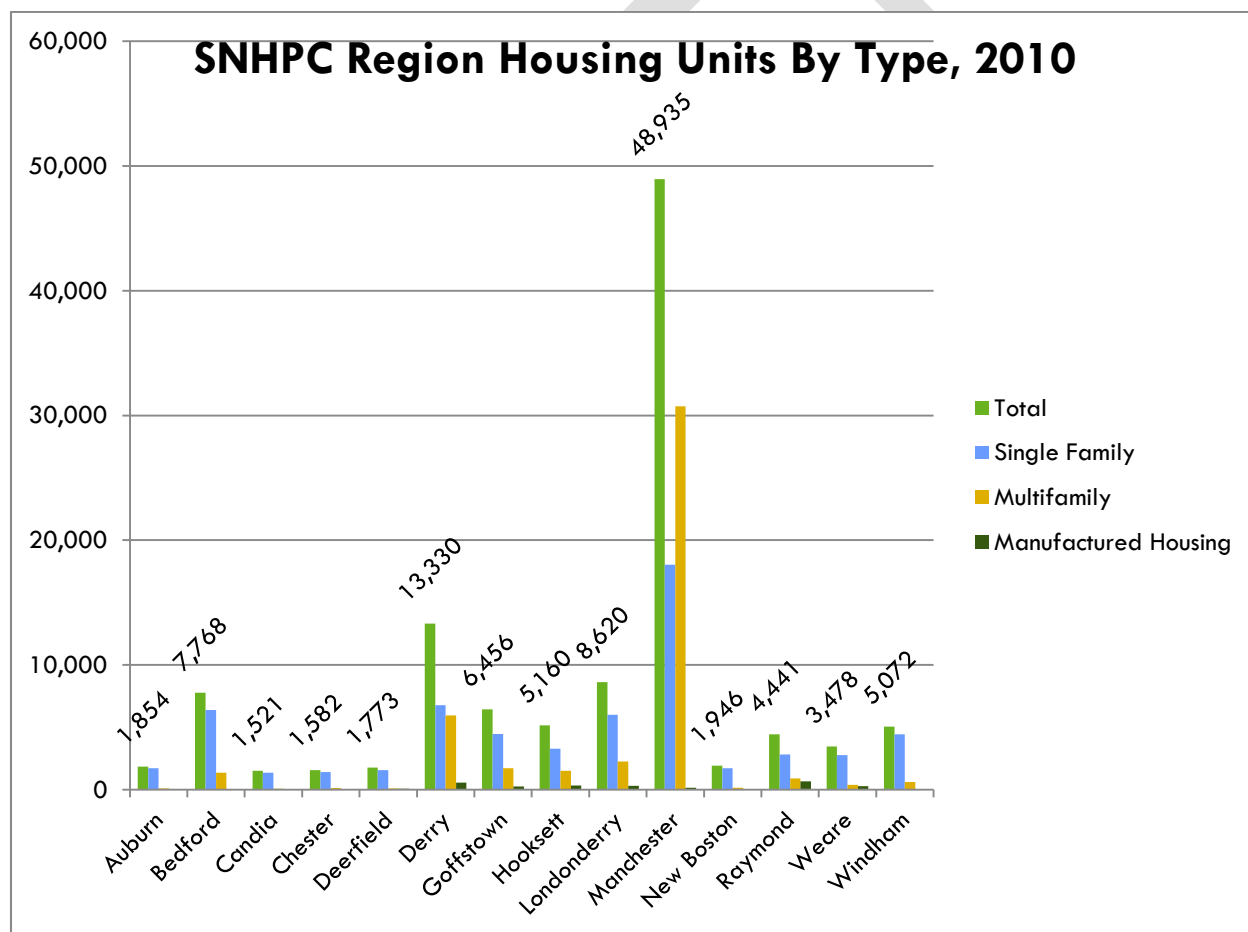
²³ Newport, P. November 5, 2012. Homeowner vacancy rate is at a seven-year low. IHS Global Insight.

Vacancy rates are calculated by dividing the number of vacant for sale or for rent units by the total of owner occupied and vacant for sale units or renter occupied and vacant for rent units. Other units, such as those that are awaiting occupancy (rented or sold and unoccupied), seasonal or vacation homes, and other forms of vacant housing, are not calculated in the vacancy rate as they do not contribute to the available year-round housing supply. Vacancy rates under five percent generally indicate a tighter market with fewer options for renters than in a balanced rental market.

HOUSING UNIT TYPES

Figure 8 shows that, overall, single family housing units in the Southern New Hampshire Planning Commission region are the predominant housing type comprising 56.19 percent of the housing units. Duplex and multi-family units account for 41.19 percent of the living accommodations, while manufactured homes and other housing types provide 2.62 percent of all housing units. The SNHPC Region contains 18.2 percent of the total housing units found in the State (614,754 statewide units).

FIGURE 8- NUMBER OF UNITS AUTHORIZED BY BUILDING PERMIT, 2000-2010



Source: 2000 U.S. Census, NH OEP 2009 Housing Estimates and Trends, NH OEP 2010 Building Permit Data

GROUP QUARTERS

Group quarters population for the SNHPC Region in 1990 was 5,109, increasing by 24.8 percent to 6,375 in 2000 and decreasing by 3.2 percent to 6,173 in 2010. A group quarters is a place where people live or stay, in a group living arrangement that is owned or managed by an entity or organization providing housing and/or services for the residents. This is not a typical household-type living arrangement. These services may include custodial or medical care, as well as other types of assistance, and residency is commonly restricted to those receiving these services. People living in group quarters are usually not related to each other. Group quarters include such places as college residence halls, residential treatment centers, skilled nursing facilities, group homes, military barracks, correctional facilities, and workers' dormitories.

AGE OF HOUSING STOCK

The age of residential buildings can help describe the potential housing needs for a region. In general, a large proportion of older residences may serve as an indication of the need for rehabilitation and/or renovation. In addition, an analysis of older units may also reveal that certain community districts have a high degree of historic significance. In order to preserve the housing supply represented by older buildings, municipalities may need to focus on inspections, maintenance, and upgrading of these units throughout the municipality.

Table 15 (page 37) shows tenure and age built for the housing stock in the SNHPC Region. As of 2010, 20.96 percent of the housing units in the SNHPC Region are at least 70 years old (pre-1940). At 35.10 percent, Manchester contains the largest number of units that were built before 1940. Communities having the lowest percentage of housing units constructed before 1940 are Bedford (3.44 percent) and Londonderry (3.81 percent).

Across the SNHPC Region, 9.90 percent of all owner occupied housing units predate 1940. Manchester's greatest percentage of owner occupied housing was built pre-1940, 26.66 percent of all homes in the City, and this is the greatest within the region.

A greater share of renter occupied homes in the SNHPC Region were built prior to 1940, 11.06 percent, compared to owner occupied homes. Candia has the greatest share of its rental stock built pre-1940, 83.78 percent, although they also have a very small total number of rental units (74). Manchester had the second highest share of its stock built before 1940, with 43.75 percent.

TABLE 15 – COUNT OF HOUSING UNITS BY TENURE AND AGE BUILT, 2010

	Auburn	Bedford	Candia	Chester	Deerfield	Derry	Goffstown	Hooksett	Londonderry	Manchester	New Boston	Raymond	Weare	Windham
Total:	1,695	7,219	1,505	1,573	1,448	12,542	5,954	4,660	8,374	45,370	1,874	4,014	2,975	4,514
Owner occupied:	1,599	6,275	1,431	1,533	1,283	8,723	4,673	3,962	7,555	22,977	1,664	3,398	2,766	4,249
2005 or later	57	124	10	41	44	183	74	174	356	456	42	216	136	495
2000 to 2004	181	817	105	348	189	276	439	587	454	1,144	292	382	403	639
1990 to 1999	268	1,494	195	393	191	1,147	558	732	1,256	1,781	515	253	529	566
1980 to 1989	379	1,284	228	271	324	2,866	1,224	830	2,226	3,501	328	1,014	828	1,121
1970 to 1979	178	1,178	386	75	175	1,755	724	652	2,282	2,406	139	801	415	710
1960 to 1969	105	418	114	81	89	1,096	450	367	455	1,918	42	251	167	322
1950 to 1959	68	633	84	54	55	467	378	209	131	3,649	9	152	43	68
1940 to 1949	123	159	0	21	31	92	328	118	104	1,996	13	71	0	50
1939 or earlier	240	168	309	249	185	841	498	293	291	6,126	284	258	245	278
Percent Pre-1940	15.01%	2.68%	21.59%	16.24%	14.42%	9.64%	10.66%	7.40%	3.85%	26.66%	17.07%	7.59%	8.86%	6.54%
Renter occupied:	96	944	74	40	165	3,819	1,281	698	819	22,393	210	616	209	265
2005 or later	0	0	0	0	0	71	14	0	40	389	4	68	0	0
2000 to 2004	0	215	0	0	33	72	40	80	62	908	0	0	0	11
1990 to 1999	0	286	0	12	39	190	79	119	63	1,196	9	60	0	29
1980 to 1989	34	65	12	0	29	1,021	183	183	134	2,587	110	177	82	56
1970 to 1979	0	136	0	0	23	1,086	203	102	276	2,734	29	92	28	33
1960 to 1969	0	46	0	0	0	424	141	88	166	2,023	20	86	0	95
1950 to 1959	40	60	0	0	6	184	53	21	50	1,178	0	0	11	14
1940 to 1949	0	56	0	28	18	165	62	13	0	1,580	0	27	0	0
1939 or earlier	22	80	62	0	17	606	506	92	28	9,798	38	106	88	27
Percent Pre-1940	22.92%	8.47%	83.78%	0.00%	10.30%	15.87%	39.50%	13.18%	3.42%	43.75%	18.10%	17.21%	42.11%	10.19%
Total Pre-1940	15.46%	3.44%	24.65%	15.83%	13.95%	11.54%	16.86%	8.26%	3.81%	35.10%	17.18%	9.07%	11.19%	6.76%

Source: 2006-2010 American Community Survey 5-Year Estimates, B25036: TENURE BY YEAR

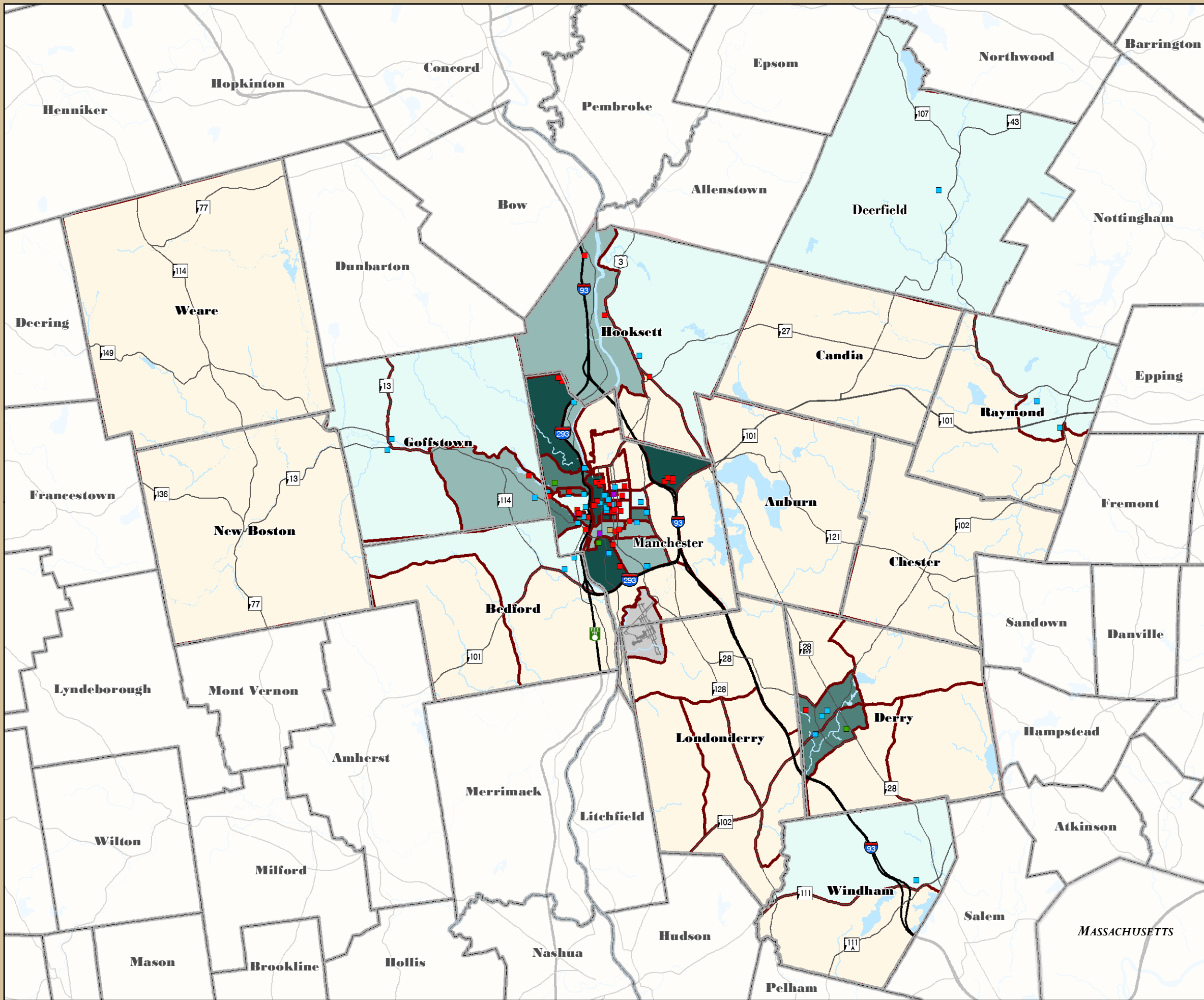
SUBSIDIZED HOUSING

An analysis of subsidized housing provides an indication of the existing inventory of designated affordable housing units in the region. Assistance comes in the form of rental subsidies, low-interest loans, vouchers covering all or a portion of the housing allowance, and/or mortgage payment assistance to encourage the development of units for low-income households. **Map 2-5** illustrates the relative density of assisted housing units in the region. These are units that have been financially assisted with public funds to assure that affordable housing units are provided to qualifying households. The primary population served by the housing units is also depicted in **Map 2-5**, page 39.

Of the 14 communities that comprise the Southern New Hampshire Planning Commission region, Bedford, Deerfield, Derry, Goffstown, Hooksett, Manchester, Raymond and Windham have rent-assisted housing facilities. With a total of 3,763 units in 2013, up from 3,162 units in 2010, 76.85 percent of the rent-assisted housing units in the region are located in Manchester. The 442 units available in Derry are split nearly evenly between elderly households (174) and elderly-family units (170) with the remaining units devoted to strictly family (98 units).

All of the rent-assisted units in Bedford (52), Deerfield (20), Raymond (30) and Windham (24) are available exclusively to elderly households. Hooksett has approximately 4.12 percent of the region's rent-assisted housing units, of which 72, or 46 percent, are available to the elderly, while the remaining 83 or 54 percent are available to family households. Assisted units, outside of the City of Manchester, available exclusively to families total 206, or just 17 percent of the 1,192 family units available in the region.

Three-hundred and twenty-four, or about 8.6 percent of units, are in place to accommodate elderly handicapped individuals. For handicapped families, there are 239 units, or approximately 6.4 percent of places, available. For Elderly-family units, 30 or 0.8 percent are handicapped accessible and just under 1 percent of the assisted housing units that exist are available to house those who are handicapped and need group home, congregate, transitional, and special needs housing.



Map # 2 - 5

Granite State Future Housing

SNHPC Region Assisted Housing



Assisted Housing

- Elderly Housing
- Elderly-Family Housing
- Family Housing
- Special Needs Housing
- Transitional Housing
- Interstates
- State and US Routes
- Town Boundary
- Rivers
- Lakes
- Manchester-Boston Regional Airport
- Census Tracts

Assisted Housing Units

Number of Units

- 1 - 50
- 51 - 100
- 101 - 250
- 251 - 508

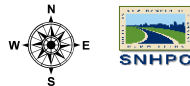
Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
US Census Bureau 2010
NH Housing Finance Authority
Assisted Housing Report September 2013

The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2014.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5 Miles



HOUSING COST AND AFFORDABILITY FACTORS

HOUSEHOLD INCOME, HOME VALUES AND RENTS

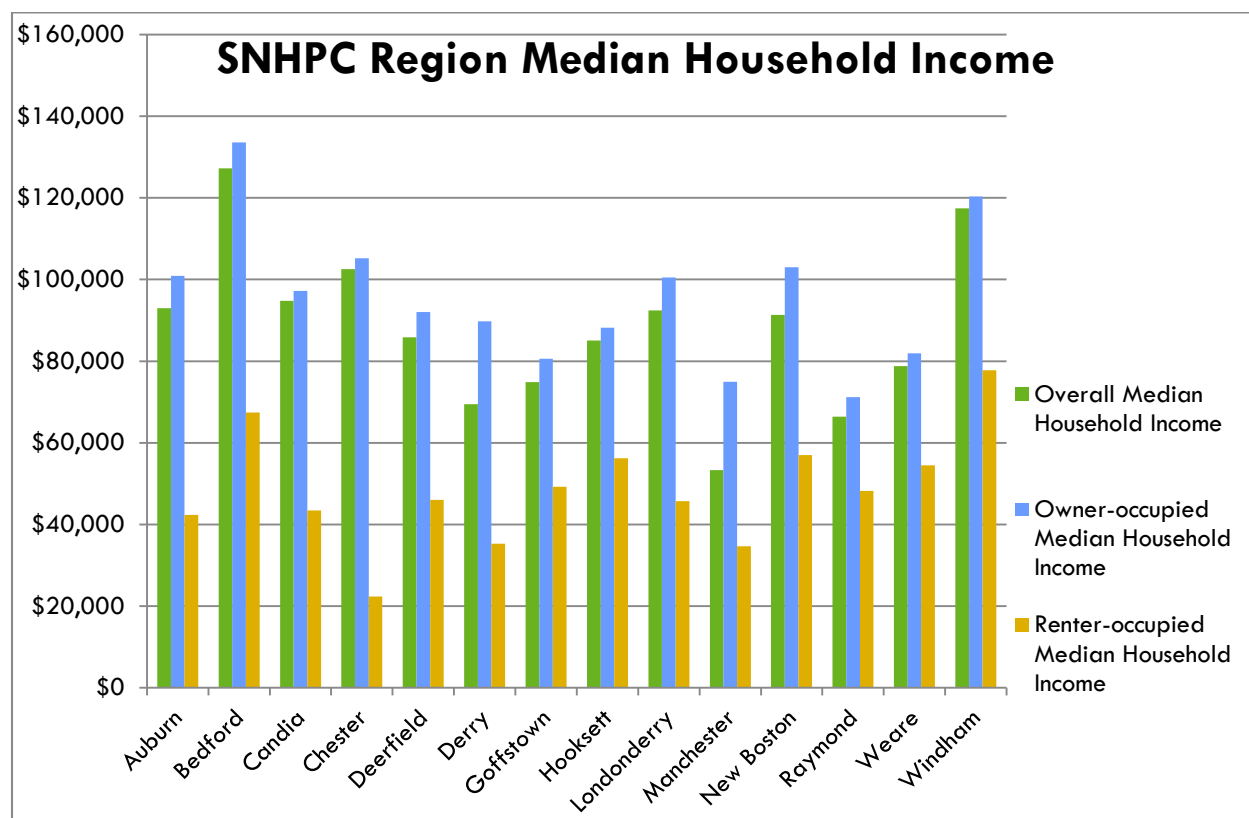
Overall Median Household Incomes range from \$53,278 in Manchester to \$127,208 in Bedford. **Figure 9** (page 41) illustrates median household income ranges for the SNHPC region. Home values in the SNHPC region declined rapidly during the recent economic downturn and housing market crash, but appear to be on the rise again in 2013-2014. Median home values in 2010 ranged from \$212,000 in Raymond to \$391,500 in Windham. Median gross rent ranged from \$895 in Chester to \$1,576 in Bedford. Overall median household incomes reported in the census differ slightly from HUD reported Area Median Family Income (AMFI) or Median Area Income (MAI). **Table 17** (page 41) outlines HUD AMFI for the SNHPC Region.

TABLE 16 – HOUSEHOLD INCOME, HOME VALUE AND COST

Overall Median Household Income		Owner Occupied Housing			Renter Occupied Housing	
Municipality	Overall Median Household Income	Median Household Income	Median Home Value	Median Monthly Cost w/ a Mortgage	Median Household Income	Median Gross Rent
Auburn	\$92,938	\$100,929	\$327,400	\$2,188	\$42,344	\$1,095
Bedford	\$127,208	\$133,566	\$386,000	\$2,633	\$67,453	\$1,576
Candia	\$94,755	\$97,227	\$277,600	\$1,970	\$43,420	\$1,619
Chester	\$102,527	\$105,236	\$342,900	\$2,454	\$22,379	\$895
Deerfield	\$85,815	\$92,031	\$296,900	\$2,258	\$46,050	\$1,060
Derry	\$69,477	\$89,767	\$231,400	\$2,109	\$35,273	\$990
Goffstown	\$74,904	\$80,625	\$239,200	\$1,997	\$49,266	\$1,067
Hooksett	\$85,064	\$88,179	\$355,300	\$2,221	\$56,181	\$1,063
Londonderry	\$92,438	\$100,509	\$292,900	\$2,240	\$45,719	\$1,259
Manchester	\$53,278	\$74,926	\$231,200	\$1,892	\$34,653	\$963
New Boston	\$91,367	\$102,986	\$332,700	\$2,305	\$57,009	\$1,119
Raymond	\$66,438	\$71,205	\$212,000	\$1,961	\$48,234	\$1,099
Weare	\$78,810	\$81,943	\$257,300	\$1,855	\$54,493	\$960
Windham	\$117,402	\$120,351	\$391,500	\$2,697	\$77,734	\$1,434

Source: 2010 U.S. Census SF3 Tables P53, H63, H85, H91 and HCT12

FIGURE 9 – SNHPC REGION MEDIAN HOUSEHOLD INCOME



Source: 2010 U.S. Census SF3 Tables P53, H63, H85, H91 and HCT12

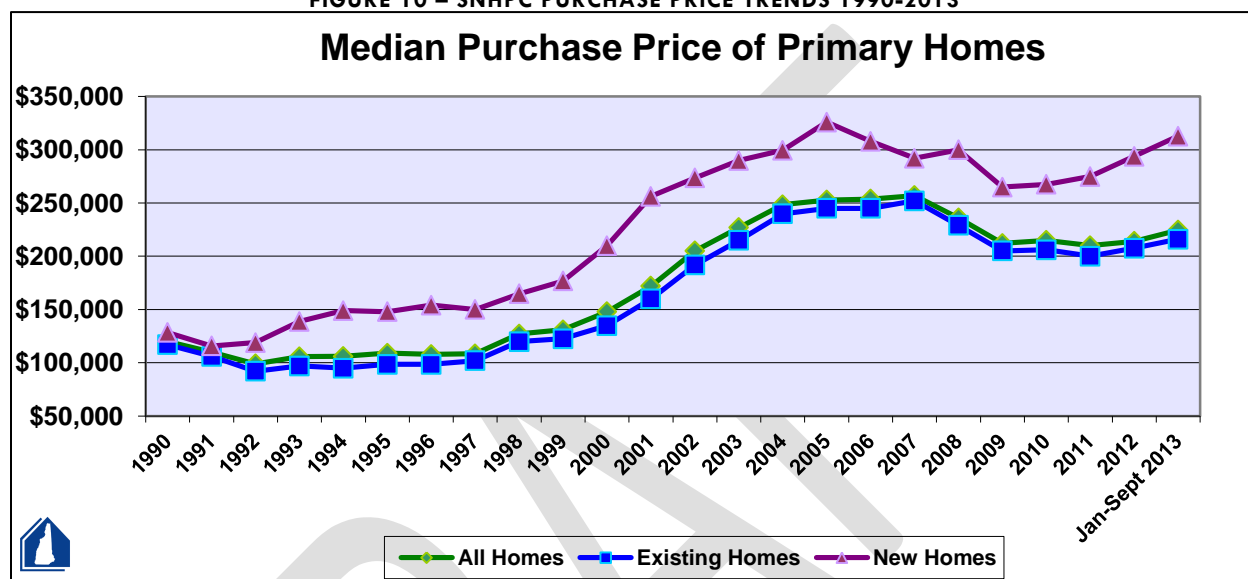
TABLE 17 – HUD AREA MEDIAN FAMILY INCOME

Community	HUD HMFA Area	100% Area Median Family Income (AMFI)
Auburn	Western Rockingham	\$106,300
Bedford	Manchester	\$76,500
Candia	Western Rockingham	\$106,300
Chester	Lawrence MA-NH	\$82,800
Deerfield	Western Rockingham	\$106,300
Derry	Lawrence MA-NH	\$82,800
Goffstown	Manchester	\$76,500
Hooksett	Merrimack Co	\$83,300
Londonderry	Western Rockingham	\$106,300
Manchester	Manchester	\$76,500
New Boston	Hillsborough Co	\$82,600
Raymond	Lawrence MA-NH	\$82,800
Weare	Manchester	\$76,500
Windham	Lawrence MA-NH	\$82,800

Source: HUD FY 2014 Income Limits

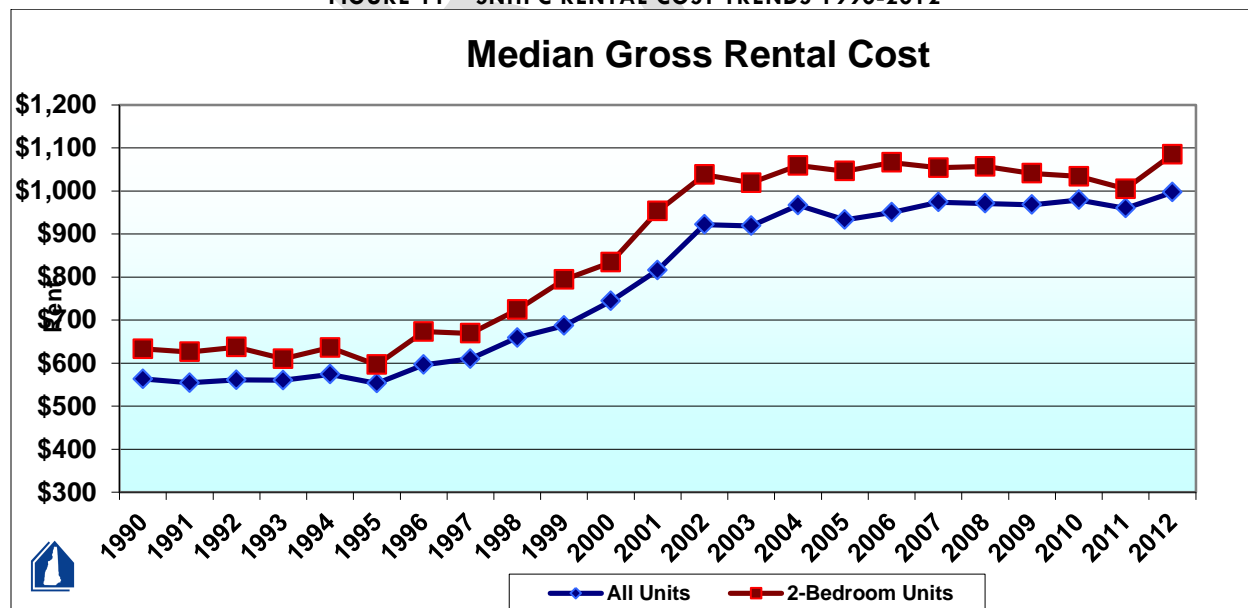
Starting in 1998, median gross rental costs started to rise dramatically in the SNHPC Region (**Figure 11**). In the past 10 years median gross rental costs for a 2-bedroom unit peaked in 2006 at \$1,066 and then dipped down again until 2012 when they peaked again at \$1,085. During this same time period median purchase price of primary homes also rose dramatically from 1998 until 2007, when the effects of the housing market crash and economic recession were first seen (**Figure 10**). From 2007 to 2013 median purchase price of all homes fell back to pre-housing bubble levels and have been generally consistent since approximately 2009. For households that can no longer afford the costs of owning a primary home, the consistently high rental costs make for a tough situation in the SNHPC region currently.

FIGURE 10 – SNHPC PURCHASE PRICE TRENDS 1990-2013



Source: NHHFA, 2013 Purchase Price Data. 01-24-14.

FIGURE 11 – SNHPC RENTAL COST TRENDS 1990-2012



Source: NHHFA, 2013 Rental Cost Survey Data. 01-24-14.

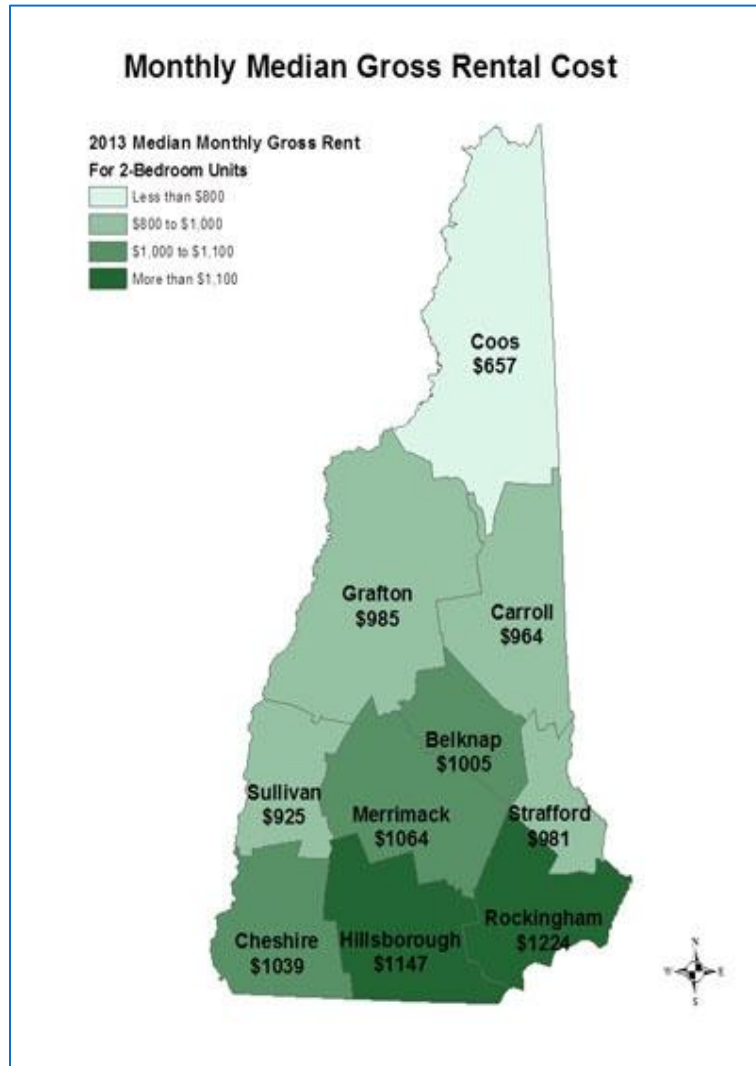


FIGURE 12- NHHFA 2013 RENTAL COST SURVEY

In early 2013, the New Hampshire Housing Finance Authority released its annual “Residential Rental Cost Survey.” The survey reflects that rental costs across the state have increased and apartment vacancy rates have generally decreased. Vacancy rates have dropped to 3.2 percent statewide for two-bedroom apartments, which represent the largest category of rental units in the state. A balanced rental market would have vacancy rates at between 4-5 percent, thus vacancy rates in the low 3 percent range indicate a situation where available units are becoming more difficult to find. Increased demand and limited availability of two-bedroom units has prompted an increase in rents. The median monthly gross rent has risen just over 3 percent in the past year to \$1,085 per month, including utilities, statewide. The most significant increases appear in Grafton, Carroll and Belknap counties, and in the cities of Manchester and Nashua.

The national apartment vacancy rate fell 0.1 percentage point to 4.2 percent in the third quarter of 2013 from the second quarter. It was the lowest vacancy rate since the third quarter of 2001 when it was 3.9 percent.²⁴

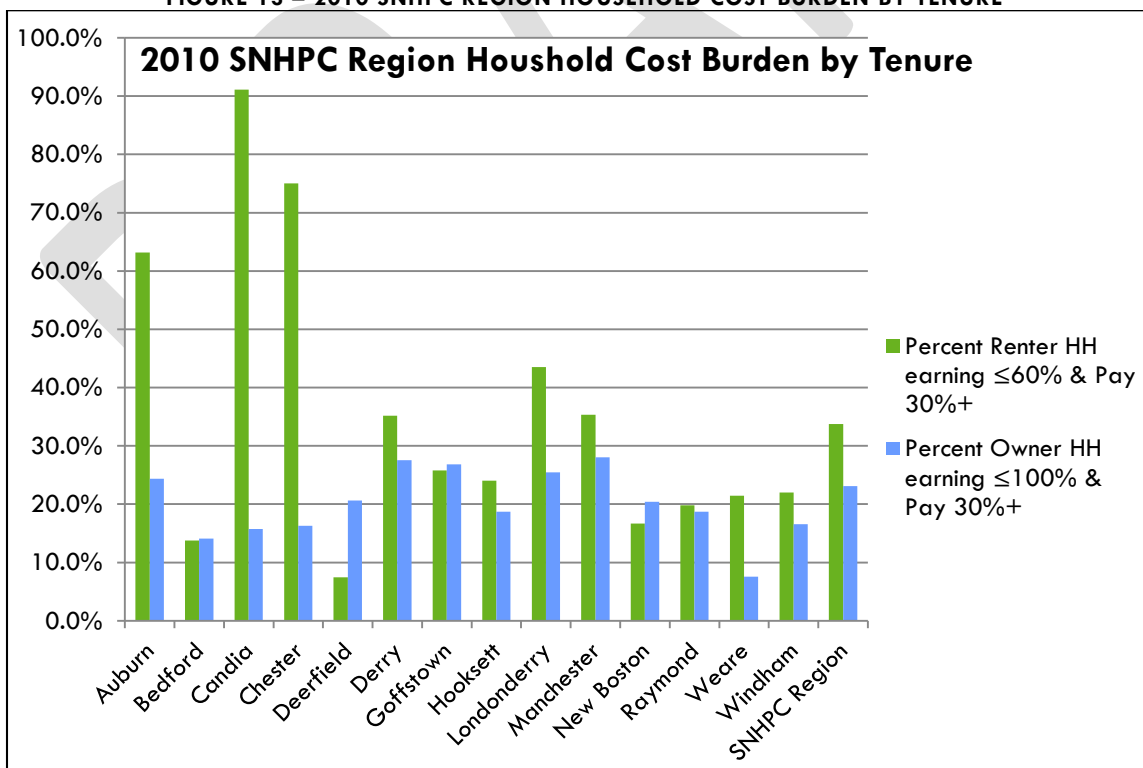
²⁴ [Reis Inc.](#)

SNHPC REGION HOUSING COST BURDEN

Housing cost burden by tenure is depicted in **Figure 13** for the SNHPC Region. NH RSA 674:58 defines workforce housing as “housing which is intended for sale and which is affordable to a household with an income of no more than 100 percent of the median income for a 4-person household for the metropolitan area or county in which the housing is located as published annually by the United States Department of Housing and Urban Development. “Workforce housing’ also means rental housing which is affordable to a household with an income of no more than 60 percent of the median income for a 3-person household for the metropolitan area or county in which the housing is located as published annually by the United States Department of Housing and Urban Development. Affordable is defined as housing with combined rental and utility costs or combined mortgage loan debt services, property taxes, and required insurance that do not exceed 30 percent of a household's gross annual income. Cost burden data has been analyzed using these definitions in **Figure 13** and **Table 18** (page 45).

In the SNHPC Region **23.1 percent of owner households** that earn 100 percent or less of the median income are paying 30 percent or more of their income for housing. For **renter households** that earn 60 percent or less of the median income, **33.7 percent** are paying 30 percent or more of their income for housing. Communities that have the greatest number of owner households meeting the income thresholds and paying 30 percent or more of their income for housing are Derry, Goffstown and Manchester. Communities that have the greatest number of renter households meeting the income thresholds and paying 30 percent or more of their income for housing are Auburn, Candia and Chester. Communities that have the greatest number of workforce households in the region are Derry, Manchester and Raymond. **Overall the SNHPC Region has 37,963 households (both renter and owner) that meet the workforce housing definition in New Hampshire.**

FIGURE 13 – 2010 SNHPC REGION HOUSEHOLD COST BURDEN BY TENURE



Source: 2006-2010 US Census Bureau ACS, 2006-2010 HUD Comprehensive Housing Affordability Strategy (CHAS)

TABLE 18 – SNHPC REGION COST BURDEN BY TENURE

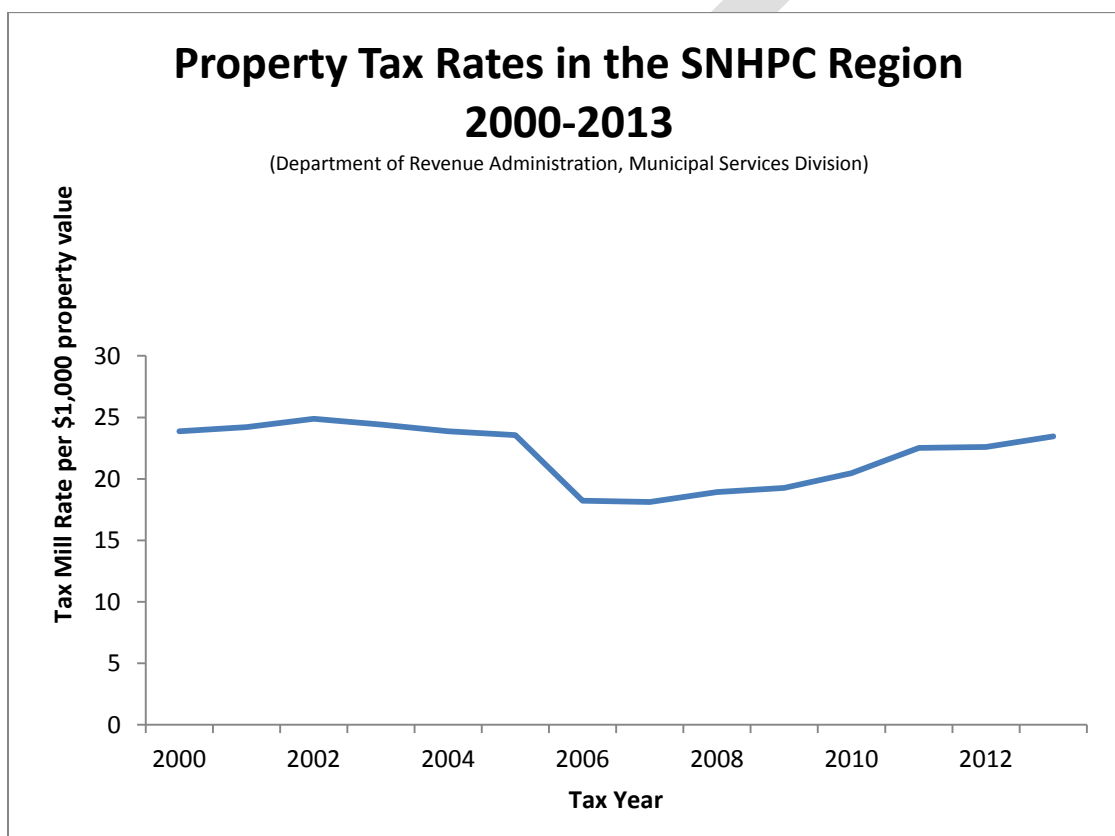
Municipality		Renter Occupied Households						Owner Occupied Households					
	Total Households	Total # of Renter Households	Renter Households earning ≤60% MAI	Renter HH earning ≤60% & Pay 30%+	Percent Renter HH earning ≤60% & Pay 30%+	Renter HH earning ≤60% & Pay 50%+	Percent HH earning ≤60% & Pay 50%+	Total # of Owner Households	Owner Households earning ≤100% MAI	Owner HH earning ≤100% MAI & Pay 30%+	Percent Owner HH earning ≤100% & Pay 30%+	Owner HH earning ≤100% MAI & Pay 50%+	Percent HH earning ≤100% & Pay 50%+
Auburn	1,695	95	60	60	63.2%	40	42.1%	1600	530	390	24.4%	300	18.8%
Bedford	7,220	945	170	130	13.8%	80	8.5%	6275	1130	885	14.1%	465	7.4%
Candia	1,505	75	68	68	91.1%	15	20.0%	1430	360	225	15.7%	90	6.3%
Chester	1,575	40	30	30	75.0%	0	0.0%	1535	310	250	16.3%	180	11.7%
Deerfield	1,450	165	40	12	7.5%	0	0.0%	1285	375	265	20.6%	145	11.3%
Derry	12,545	3820	1,808	1343	35.2%	575	15.1%	8725	3005	2405	27.6%	1585	18.2%
Goffstown	5,955	1280	495	330	25.8%	195	15.2%	4675	1610	1255	26.8%	615	13.2%
Hooksett	4,660	700	263	168	24.0%	55	7.9%	3960	1225	740	18.7%	350	8.8%
Londonderry	8,375	820	440	357	43.5%	150	18.3%	7555	2240	1925	25.5%	1160	15.4%
Manchester	45,370	22395	10,868	7912	35.3%	4480	20.0%	22975	8610	6440	28.0%	3510	15.3%
New Boston	1,875	210	58	35	16.7%	20	9.5%	1665	430	340	20.4%	170	10.2%
Raymond	4,015	615	287	122	19.8%	100	16.3%	3400	1580	635	18.7%	360	10.6%
Weare	2,975	210	67	45	21.4%	30	14.3%	2765	835	208	7.5%	128	4.6%
Windham	4,515	265	73	58	22.0%	38	14.5%	4250	995	705	16.6%	570	13.4%
SNHPC Region	103,730	31,635	14,728	10,671	34%	5778	18.3%	72,095	23,235	16,668	23.1%	9,628	13.4%

Source: 2006-2010 US Census Bureau ACS, 2006-2010 HUD Comprehensive Housing Affordability Strategy (CHAS)
Note: As with the CHAS 2000, rounding rules applied to all special tabulation data. This causes discrepancies when adding up smaller geographies. It has a similar effect when creating your own subtotals within a table.
As a result, HUD recommends using the largest geographies possible, and the fewest number of table dimensions possible. In addition, the ACS can have very large margins of error, particularly with cross-tabulated data such as the CHAS. HUD realizes that some in some jurisdictions, for certain data elements, the ACS data may show unexpected results.

PROPERTY TAX RATES

Another element of housing cost and affordability factors in the Southern New Hampshire region is the property tax rate. The State of New Hampshire does not have an income or sales tax and therefore communities rely heavily on property taxes to fund public services and infrastructure. Average property tax rates over the past 13 years in the SNHPC region were approximately \$22.00 per \$1,000 property value, with the 2013 average at \$23.44 per \$1,000. Average property tax rates from 2000-2013 fluctuated down to an average low of \$18.11 per \$1,000 in 2007.

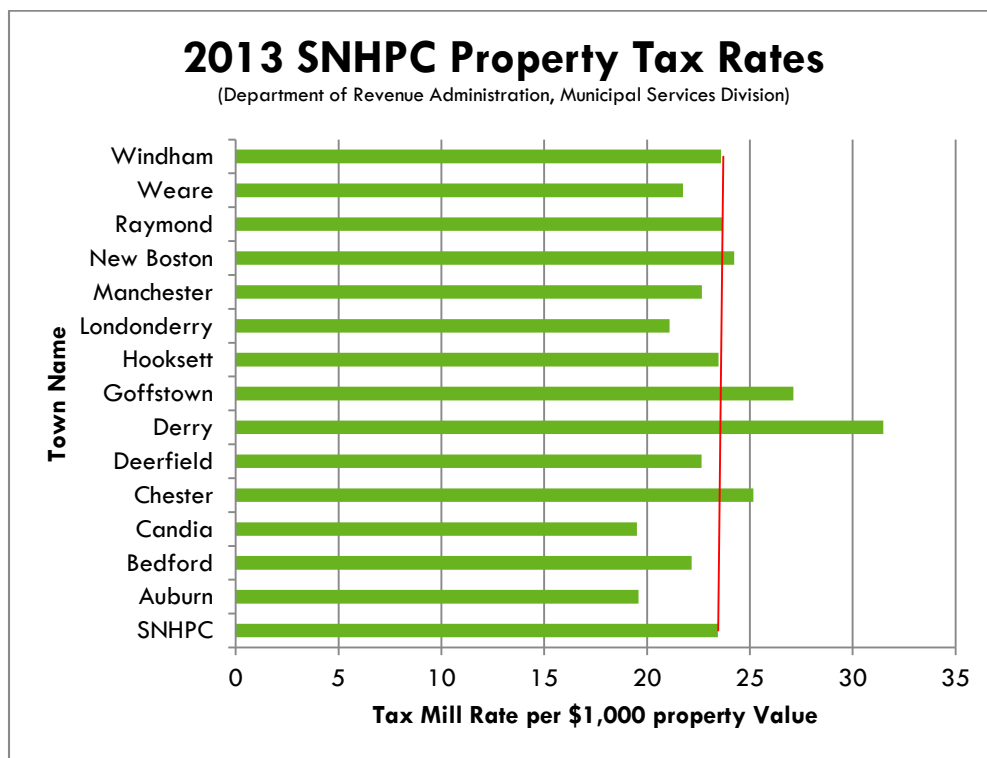
FIGURE 14 – SNHPC REGION PROPERTY TAX RATES, 2000-2013



Source: Department of Revenue Administration 2000-2013, Municipal Services Division

Property tax rates by municipality for the SNHPC Region in 2013 are shown on **Figure 15** (page 47). The Town of Derry has the highest rate in 2013 at \$31.49 per \$1,000. Derry has had the highest rate in the region since 2008. The highest tax rate in any town from 2000-2013 was in Goffstown in 2002 at \$32.92 per \$1,000.

Figure 15 – 2013 SNHPC Region Property Tax Rates



Source: Department of Revenue Administration 2000-2013, Municipal Services Division

“Although property taxes are an important piece of New Hampshire’s revenue picture, the state government obtains funds from a diverse set of sources. While New Hampshire has the lowest total per capita revenues in the region, its per capita property tax collections are high compared with most other New England states. Per capita combined state and local property taxes in the Granite State were more than \$300 (or 16 percent) higher than the regional average in FY 2007. Property taxes also represented a larger share of total state and local revenues than elsewhere in the region. However, New Hampshire’s state government revenue system is considerably more diverse than those of its regional counterparts. Indeed, no single revenue source accounted for more than 20 percent of combined unrestricted general and education fund revenues in FY 2007. The statewide property tax was the state’s largest revenue source that year (16 percent), followed by the state’s two major business taxes, the business profits tax (15 percent) and the business enterprise tax (11 percent). New Hampshire state government also obtains revenue from a variety of other sources, including taxes on meals and rooms, tobacco, communications, real estate transfers, and interest and dividends, as well as various non-tax sources.”²⁵

²⁵ Jennifer Weiner. *How Does New Hampshire Do It? An Analysis of Spending and Revenues in the Absence of a Broad-based Income or Sales Tax*. New England Public Policy Center. Research Report 11 – 1. April 2011.

ACCESS TO HOUSING OPPORTUNITIES

Fair housing equity involves an analysis of areas of opportunity within a region and where disparities might exist for racial/ethnic minorities. Access to opportunity has been found to be a factor in individual outcomes and improving fair housing in any area will depend on equalizing access to opportunity. To focus analysis, HUD developed methods to quantify a select number of the important “stressors” and “assets” in every neighborhood. In particular, HUD has selected six dimensions upon which to focus:

1. Neighborhood School Proficiency
2. Poverty
3. Labor Market Engagement
4. Job Accessibility
5. Health Hazards Exposure
6. Transit Access

NEIGHBORHOOD SCHOOL PROFICIENCY INDEX

The neighborhood school proficiency index uses school-level data on the performance of students on state exams to describe which neighborhoods have high-performing elementary schools and which have lower performing elementary schools.

When looking at the neighborhood school proficiency index for the SNHPC Region, low levels (21-40) of disparities exist for the Black/African American and Hispanic populations. Very low levels (<1-20) exist for the Asian and Native American populations.

POVERTY INDEX

HUD created a simple poverty index to capture the depth and intensity of poverty in a given neighborhood. The index uses family poverty rate and public assistance receipt to operationalize both aspects. The index is a linear combination of two vectors: the family poverty rate (pv) and the percentage of households receiving public assistance (pa).

When looking at the poverty index for the SNHPC region, low levels (21-40) of disparities exist for the Black/African American and Hispanic populations. Very low levels (<1-20) exist for the Asian and Native American populations.

OF NOTE IS THAT THERE ARE SIMILAR DISPARITY LEVELS FOR BOTH
NEIGHBORHOOD SCHOOL PROFICIENCY AND POVERTY LEVELS.

LABOR MARKET ENGAGEMENT INDEX

The labor market engagement index provides a summary description of the relative intensity of labor market engagement and human capital in a neighborhood. This is based upon the level of employment, labor force participation, and educational attainment in that neighborhood. Formally, the labor market engagement index is a linear combination of three standardized vectors: unemployment rate, labor force participation rate, and percent with a bachelor's or higher.

For labor market engagement, very low levels (<1-20) of disparities exist for the Black/African American, Hispanic, Asian and Native American populations in the SNHPC region.

JOBS ACCESS INDEX

The job access index summarizes the accessibility of a given residential neighborhood as a function of its distance to all job locations, with distance to larger employment centers weighted more heavily. Specifically, a gravity model is used, where the accessibility of a given residential block-group is a summary description of the distance to all job locations, with the distance from any single job location positively weighted by the size of employment (job opportunities) at that location and inversely weighted by the labor supply (competition) to that location.

Jobs Access in the SNHPC region is more favorable to all of the minority populations²⁶ in the SNHPC region.

TRANSIT ACCESS

HUD has constructed a transit access index where available data exists to support local analysis. HUD uses data on over 200 transit agencies that provide data through General Transit Feed Specification (GTFS) Exchange to assess relative accessibility within metro areas (or balance of state).²⁷

The only transit provider in the State of New Hampshire that reports to the GTFS exchange is in Nashua. Therefore the data provided for the Transit Access Index is not relevant to the analysis for the SNHPC region. The Manchester Transit Authority (MTA) provides bus transit services within the City of Manchester, but outside of the City there are relatively little public transit options for this region.

ENVIRONMENTAL HEALTH HAZARD EXPOSURE INDEX

HUD has constructed a health hazards exposure index to summarize potential exposure to harmful toxins at a neighborhood level. Potential health hazards exposure is a linear combination of standardized EPA estimates of air quality carcinogenic, respiratory and neurological with indexing census tracts.

Health hazard exposure in the SNHPC Region is more favorable to all of the minority populations²⁸ in the SNHPC Region.

²⁶ All minority populations with the exception of Pacific Islander where there is not enough data to support the calculations in the indices for this analysis.

²⁷ The General Transit Feed Specification (GTFS) defines a common format for public transportation schedules and associated geographic information. GTFS "feeds" allow public transit agencies to publish their transit data and developers to write applications that consume that data in an interoperable way.

²⁸ All minority populations with the exception of Pacific Islander and Native American where there is not enough data to support the calculations in the indices for this analysis.

TABLE 19 – SNHPC REGION OPPORTUNITY INDEX MEASURES

Panel A - All Persons (All Households)								Disparities				
Opportunity Dimensions: Poverty Index*** School Proficiency Index*** Labor Market Engagement Index*** Job Access Index*** Transit Access Index ²⁷ Health Hazards Exposure Index*** Counts	All Persons	White Persons	Black /African American Persons	Hispanic or Latino Persons	Asian Persons	Native American Persons	Pacific Islldr. Persons	Black - White	Hispanic - White	Asian - White	Native Amer. - White	Pacific Islldr. - White
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	55	57	32	33	46	49	0	25	25	11	8	0
	44	45	21	23	36	35	0	24	22	9	10	0
	50	51	34	33	46	44	0	17	18	5	7	0
	40	39	43	43	44	41	0	-4	-4	-5	-2	0
	1	1	1	1	1	1	0	0	0	0	0	0
	87	87	90	88	89	87	0	-3	-1	-2	0	0
	273,561	245,022	5,072	11,894	6,522	487	85					

Source: 2013 HUD FHEA Data Tables, U.S. Census. Data on the populations in Panel A is from the 2010 Decennial Census SF1. Data on impoverished population in Panel B comes from the American Community Survey (ACS) 2006-2010 five year estimates. Population groups smaller than 250 people (in census 2010) or 1,000 people for ACS-sourced data are coded as zero. The higher minimum population threshold for the ACS data is motivated by concerns about sampling error. Disparity columns (8-12) have associated significance flags for statistically significant differences. *** 0.01 significance level **0.05 significance level *0.1 significance level.

	Very Low	<1-20
	Low	21-40
	Moderate	41-60
	High	61-80
	Very High	81-100
	Positive	<-1

HOUSING SUPPLY PROJECTIONS

An understanding of future needs for housing units is invaluable to the planning process. Future housing projections are utilized both in transportation modeling, as well as growth management and future land use planning. SNHPC produces population projections based on the cohort-component method and dwelling unit projections based on historical annual average increase in units since 1970. Population and housing supply projections from this analysis are presented in **Table 20** and **Table 21** below. The SNHPC region population is projected to increase by 61,131 individuals by 2050 to a total population of 335,985. This represents an increase of approximately 22 percent. Communities projected to have the greatest amount of growth in the region from 2010-2050 are Weare (1.19 percent growth rate), New Boston (1.17 percent growth rate) and Londonderry (1.10 percent growth rate). Communities projected to have the least amount of growth from 2010-2050 are Derry (0.12 percent growth rate), Manchester (0.32 percent growth rate) and Goffstown (0.42 percent growth rate).

TABLE 20 – SNHPC REGION POPULATION PROJECTIONS, 2010-2050

Municipality	2010	2015	2020	2025	2030	2035	2040	2045	2050
Auburn	4,953	5,137	5,288	5,519	5,712	5,983	6,226	6,569	6,937
Bedford	21,203	22,242	23,243	24,121	24,816	25,409	25,886	26,226	26,689
Candia	3,909	4,191	4,420	4,601	4,726	4,810	4,855	4,896	4,949
Chester	4,768	5,097	5,404	5,711	5,982	6,239	6,437	6,613	6,759
Deerfield	4,280	4,571	4,839	5,114	5,344	5,561	5,740	5,888	6,061
Derry	33,109	33,881	34,400	34,931	35,195	35,416	35,215	34,821	34,473
Goffstown	17,651	18,171	18,663	19,162	19,583	19,942	20,142	20,301	20,435
Hooksett	13,451	14,159	14,809	15,431	15,961	16,432	16,790	17,113	17,157
Londonderry	24,129	25,132	26,082	27,267	28,438	29,925	31,477	33,354	35,435
Manchester	109,565	112,395	114,895	117,555	119,351	120,724	121,235	121,960	122,723
New Boston	5,321	5,582	5,796	6,120	6,403	6,795	7,201	7,578	7,990
Raymond	10,138	10,593	11,424	11,918	12,261	12,705	13,000	13,427	13,767
Weare	8,785	9,497	10,183	10,857	11,464	12,013	12,472	12,888	13,275
Windham	13,592	14,502	15,320	16,239	17,061	17,774	18,375	18,890	19,335
Total	274,854	285,151	294,765	304,548	312,296	319,725	325,049	330,524	335,985

Source: 2010 U.S. Census, SNHPC Population Projections

In terms of housing, communities projected to have the greatest amount of growth in the region from 2010-2050 are New Boston (1.22 percent growth rate), Raymond (1.22 percent growth rate) and Weare (1.21 percent growth rate). Communities projected to have the least amount of growth from 2010-2050 are Derry (0.33 percent growth rate), Manchester (0.55 percent growth rate) and Bedford (0.74 percent growth rate).

In addition to the SNHPC housing unit projections, the New Hampshire Housing Finance Authority has recently released relatively new housing production projections by county and regional planning commission region utilizing a headship model which projects population by age group; owner households and rental households to the year 2025 (see more at: <http://www.nhhfa.org/housing-data-needs.cfm>). This information will be used by the SNHPC in its next update of the fair housing needs assessment for the region.

TABLE 21 – SNHPC REGION HOUSING UNIT PROJECTIONS, 2010-2050

	Census	Projected Housing Units								Growth Rate		ABS.
Municipality	2010	2015	2020	2025	2030	2035	2040	2045	2050	2010-2050	2010-2020	2010-2050
Auburn	1,814	1,860	1,967	2,075	2,183	2,291	2,399	2,507	2,615	1.05%	0.82%	801
Bedford	7,634	7,787	8,087	8,387	8,687	8,987	9,287	9,587	9,887	0.74%	0.58%	2,253
Candia	1,494	1,537	1,609	1,682	1,755	1,828	1,900	1,973	2,046	0.90%	0.75%	552
Chester	1,596	1,635	1,731	1,826	1,922	2,017	2,113	2,208	2,304	1.05%	0.81%	708
Deerfield	1,743	1,808	1,913	2,018	2,124	2,229	2,334	2,439	2,544	1.09%	0.94%	801
Derry	13,277	13,459	13,668	13,878	14,088	14,297	14,507	14,716	14,926	0.33%	0.29%	1,649
Goffstown	6,341	6,613	6,939	7,266	7,592	7,919	8,245	8,572	8,898	0.97%	0.91%	2,557
Hooksett	5,184	5,348	5,606	5,864	6,122	6,380	6,638	6,896	7,154	0.92%	0.78%	1,970
Londonderry	8,771	9,019	9,594	10,169	10,744	11,319	11,894	12,469	13,044	1.14%	0.90%	4,273
Manchester	49,288	49,980	51,357	52,735	54,113	55,491	56,869	58,247	59,624	0.55%	0.41%	10,336
New Boston	1,967	2,081	2,213	2,345	2,477	2,609	2,741	2,872	3,004	1.22%	1.19%	1,037
Raymond	4,254	4,460	4,751	5,042	5,332	5,623	5,914	6,204	6,495	1.22%	1.11%	2,241
Weare	3,466	3,610	3,847	4,085	4,322	4,560	4,797	5,035	5,272	1.21%	1.05%	1,806
Windham	5,164	5,477	5,790	6,103	6,416	6,666	6,916	7,166	7,416	1.04%	1.15%	2,252
												-
Total	111,993	114,671	119,073	123,474	127,875	132,213	136,551	140,890	145,228	0.75%	0.61%	33,235

Source: 2010 U.S. Census, SNHPC Dwelling Unit Projections

FAIR SHARE DISTRIBUTION ANALYSIS

An unusually strong economy and unprecedented population growth in the mid-1980's pushed housing values to levels in 1990 that were two-to-three times their market value ten years earlier. High housing demand, resulting from the influx of new businesses, job increases, higher salaries and more people, caused demand to outstrip supply, resulting in a rapid increase in housing prices. For the majority of the population whose income kept pace, this presented no problem and increased their net worth. However, many people lacking appropriate education, training, and experience found only limited job opportunities and modest wages during this period. Affordable housing soon became a critical issue for a substantial segment of New Hampshire's residents.

As a result of this shortage of affordable housing units, beginning in 1988 regional planning commissions were required to establish a *housing needs assessment* that reviews housing for families of all income levels. One suggested component of the housing needs assessment is a fair share distribution analysis, which projects the estimated future need for affordable housing across the region. **Table 24** presents the estimated proportionate fair share workforce housing need for the Southern New Hampshire Planning Commission region.

BACKGROUND

Adequate, affordable housing for everyone is an important factor that is vital to the welfare and security of those residing in the SNHPC Region. Such housing enables the region to attract and retain residents that contribute to its overall economic success and maintain the quality of life residents have come to appreciate. In recognition of this need, a local "fair share" distribution is determined for each municipality in the region as part of the Housing Needs Assessment presented in this chapter.

In 2008 (effective January 1, 2010) the New Hampshire legislature enacted RSA 674:59, which states that:

"I. In every municipality that exercises the power to adopt land use ordinances and regulations, such ordinances and regulations shall provide reasonable and realistic opportunities for the development of workforce housing, including rental multi-family housing. In order to provide such opportunities, lot size and overall density requirements for workforce housing shall be reasonable. A municipality that adopts land use ordinances and regulations shall allow workforce housing to be located in a majority, but not necessarily all, of the land area that is zoned to permit residential uses within the municipality. Such a municipality shall have the discretion to determine what land areas are appropriate to meet this obligation. This obligation may be satisfied by the adoption of inclusionary zoning as defined in RSA 674:21, IV (a). This paragraph shall not be construed to require a municipality to allow for the development of multifamily housing in a majority of its land zoned to permit residential uses."

It is also important to note the definitions in RSA 674:58, where affordable housing is defined as "housing with combined rental and utility costs or combined mortgage loan debt services, property taxes and require insurance that do not exceed 30 percent of a household's gross annual income." Multi-family housing is defined as "a building or structure containing 5 or more dwelling units." Workforce housing is defined as "housing which is intended for sale and which is affordable to a household with an income of no more than 100 percent of the median income for a 4-person household for the metropolitan area or county in which the housing is located as published annually by the United States Department of Housing and Urban Development. Workforce housing also means rental housing which is affordable to a household with an income of no more than 60 percent of the median income for a 3- person household for the metropolitan area or county in which the housing is located as published annually by the United States Department of Housing and Urban Development. Housing units that exclude minor children from more than

20 percent of the units, or in which more than 50 percent of the dwelling units have fewer than two bedrooms, shall not constitute workforce housing for the purposes of this subdivision.”

METHODOLOGY

The distribution developed in this assessment²⁹ reflects municipal-level estimates of the current and reasonably foreseeable future workforce housing need, as defined in RSA 674:58-59.

Table 24, page 57, distributes the total workforce housing units estimated for the region in **Table 18** (2010) and **Table 22** (2020) to each community in proportion to their share of the housing units in the region. The workforce housing estimate is stated as a total number for each community and does not distribute the housing estimate between owner vs. renter units. Determining these ratios is left up to the community to determine, based on their local knowledge and data on owner and rental units. Each community can utilize this analysis to determine the distribution of owner vs. renter housing units as appropriate for their community. It should also be noted that adequate and accurate rental data does not exist to provide guidance to the region and each municipality. It will have to be the responsibility of each municipality to determine their rental/owner housing status and to collect that data in their community going forward in order to determine if they are meeting their fair share of the regional workforce housing estimated distribution for both owners and renters.

The housing numbers shown in **Table 24** represent the total proportionate distribution per municipality, including any existing housing that fits within the affordability definitions. It is likely that some communities in the region already have the indicated number of units that are affordable within these income limits, while many others may not. This analysis makes no attempt to ascertain whether a community is presently meeting its proportionate share of the regional workforce housing need. It states what the estimated distribution is today (base year 2010) and what it is estimated to be in 2020. It is the responsibility of each community to determine whether or not their existing housing stock supplies the number of units, both owned and rented, to meet their share of the region’s workforce housing fair share distribution.

A housing affordability analysis is an exercise that each community should undertake in order to make this determination. Town assessor databases can be used to estimate the number of homes that have an assessed value that is less than the maximum purchase price of homes needed to qualify as “workforce housing” (see **Table 24**, pg. 57 for estimated maximum purchase and rental prices in the SNHPC Region). The New Hampshire Housing and Finance Authority has an affordability calculator on their website that can be used to determine this maximum purchase price as well. If the number meeting this criteria is equal to or greater than that shown on **Table 24** (for current conditions – 2010) the town can be assumed to be meeting its proportionate share for owner housing. SNHPC can conduct, as requested by each municipality, an owner-occupied affordable housing audit. This audit does not address rental data and that piece will need to be collected and analyzed by each individual community.

Determining rental values is more difficult, as this information is not collected or maintained comprehensively at the town level. NHHFA provides some useful data, especially for larger communities, in its annual rental price survey. For others it may be necessary to use NH Housing’s County, regional or HUD HFMA estimates of rental prices, together with locally derived estimates of the number of rental units available in order to determine how many workforce housing qualified units exist in the community.

²⁹ Methodology derived from the Rockingham Planning Commission Regional Housing Needs Assessment, October 2008.

WHILE IT IS IMPORTANT FOR COMMUNITIES TO PERIODICALLY EVALUATE WHETHER THEY ARE MEETING THEIR FAIR SHARE OF THE REGION'S ESTIMATED WORKFORCE HOUSING DISTRIBUTION, IT SHOULD BE UNDERSTOOD THAT WITH RESPECT TO RSA 674:59, IT IS ONLY NECESSARY TO DEMONSTRATE THAT THEY ARE PROVIDING REASONABLE AND REALISTIC OPPORTUNITIES FOR THE DEVELOPMENT OF WORKFORCE HOUSING. A COMMUNITY NEEDS ONLY TO DEMONSTRATE THAT THEY REACH OR EXCEED THEIR FAIR SHARE IF THE COMMUNITY INTENDS TO CLAIM THAT IT HAS MET ITS FAIR SHARE OBLIGATIONS AND IS THEREFORE EXEMPT FROM CERTAIN ASPECTS OF THE NEW LAW.

The significance of this methodology is it represents one means of establishing an estimate of the number of standard affordable housing units, from a theoretical standpoint, that would be needed to accommodate workforce housing income households by the year 2020. This calculation allows communities five years beyond the publication of this report to plan for needed increases in the distribution of workforce housing units in the region. The estimate produced by using the fair share models should be considered as a guide or goal for each community striving to increase the housing supply and provide decent, affordable housing for all levels of income. It provides a mechanism by which each community can assess its fair share need relative to other communities in the Southern New Hampshire region. Further, it provides a framework for the establishment of a cohesive affordable housing policy at the regional level.

WORKFORCE HOUSING UNIT PROJECTIONS

Future projections of households in the SNHPC Region are outlined in **Table 22** in order to determine future workforce housing and fair share distribution. Current (2010) regional workforce household percentages (**Table 18**, page 45) are used along with the housing unit projection growth rates for 2010-2020 outlined in **Table 21**, page 52, to estimate future workforce households in 2020.

TABLE 22- SNHPC REGION PROJECTED HOUSEHOLDS, 2010-2020

Municipality	2010	2020	Growth Rate
	Total Households		2010-2020
Auburn	1,695	1,834	0.82%
Bedford	7,220	7,639	0.58%
Candia	1,505	1,618	0.75%
Chester	1,575	1,703	0.81%
Deerfield	1,450	1,586	0.94%
Derry	12,545	12,909	0.29%
Goffstown	5,955	6,497	0.91%
Hooksett	4,660	5,023	0.78%
Londonderry	8,375	9,129	0.90%
Manchester	45,370	47,230	0.41%
New Boston	1,875	2,098	1.19%
Raymond	4,015	4,461	1.11%
Weare	2,975	3,287	1.05%
Windham	4,515	5,034	1.15%
SNHPC Region	103,730	110,048	0.61%

TABLE 23 – SNHPC REGION ESTIMATED WORKFORCE HOUSEHOLDS, 2010-2020

	2010 Percent Total HH	2010 WF HH	2020 WF HH
Renter Households earning ≤60% MAI	14.20%	14,728	15,625
Owner Households earning ≤100% MAI	22.40%	23,235	24,650
Total WF HH		37,963	40,276

Source: 2006-2010 U.S. Census Bureau ACS, 2006-2010 HUD Comprehensive Housing Affordability Strategy (CHAS), 2012 SNHPC Dwelling Unit Projections

TABLE 24 - SNHPC REGION ESTIMATED PROPORTIONATE FAIR SHARE WORKFORCE HOUSEHOLD DISTRIBUTION, 2010-2020

A	B	C	D	E	F	G	H	I		J	K
Community	2010 Households*	Town Share of Regional Households	HUD HMFA Area	100% Area Median Family Income (AMFI)	Max. Monthly Payment, Owner	60% AMFI (3-person Household)	Max Monthly Payment, Renter	Estimated Workforce Housing Distribution		Increase in Distribution 2010-2020	
								2010	2020		
Auburn	1,695	1.6%	Western Rockingham	\$106,300	\$2,658	\$56,280	\$1,407	620	658	38	
Bedford	7,220	7.0%	Manchester	\$76,500	\$1,913	\$41,340	\$1,034	2,642	2,803	161	
Candia	1,505	1.5%	Western Rockingham	\$106,300	\$2,658	\$56,280	\$1,407	551	584	34	
Chester	1,575	1.5%	Lawrence MA-NH	\$82,800	\$2,070	\$47,580	\$1,190	576	612	35	
Deerfield	1,450	1.4%	Western Rockingham	\$106,300	\$2,658	\$56,280	\$1,407	531	563	32	
Derry	12,545	12.1%	Lawrence MA-NH	\$82,800	\$2,070	\$47,580	\$1,190	4,591	4,871	280	
Goffstown	5,955	5.7%	Manchester	\$76,500	\$1,913	\$41,340	\$1,034	2,179	2,312	133	
Hooksett	4,660	4.5%	Merrimack Co	\$83,300	\$2,083	\$45,000	\$1,125	1,705	1,809	104	
Londonderry	8,375	8.1%	Western Rockingham	\$106,300	\$2,658	\$56,280	\$1,407	3,065	3,252	187	
Manchester	45,370	43.7%	Manchester	\$76,500	\$1,913	\$41,340	\$1,034	16,605	17,616	1,011	
New Boston	1,875	1.8%	Hillsborough Co	\$82,600	\$2,065	\$44,640	\$1,116	686	728	42	
Raymond	4,015	3.9%	Lawrence MA-NH	\$82,800	\$2,070	\$47,580	\$1,190	1,469	1,559	89	
Weare	2,975	2.9%	Manchester	\$76,500	\$1,913	\$41,340	\$1,034	1,089	1,155	66	
Windham	4,515	4.4%	Lawrence MA-NH	\$82,800	\$2,070	\$47,580	\$1,190	1,652	1,753	101	
TOTAL	103,730	100.0%	NA	NA	NA	NA	NA	37,963	40,276	2,312	

TABLE KEY	
Column	Explanation
A	RPC Community
B	Total number of households, (single, multi, and manufactured), OEP estimate.
C	Town's share of the region's (13 town RPC region) total households.
D	The town's federally assigned HUD-Fair Market Rent Area Housing Market
E	HUD Fair Market Rent Area's "100%" Median Area Income (MAI) for a 4-person family. Amount called out in SB 342
F	Maximum payment (mortgage, Insurance and taxes) for a ownership unit to qualify as Workforce Housing
G	60% of HUD Fair Market Rent Area's Median Area Income (MAI) for a 3-person family. Amount called out in SB 342.
H	Maximum payment (Rent and Utilities) for a rental unit to qualify as Workforce Housing
I	Estimated Workforce Housing need for 2008
J	Estimated Workforce Housing need for 2015
K	Increase in Workforce Housing need between 2008 and 2015

*CHAS/ACS 2006-2010

INCOME LIMIT CALCULATION			
HOME OWNERSHIP			
100% MAI, 4 pers. Hsld		Est. Max Purchase	
		\$10k down	\$20k down
W-Rock	\$106,300	\$373,534	\$381,615
Lawr MA-NH	\$82,800	\$292,793	\$300,925
Manchester	\$76,500	\$271,103	\$279,205
Hillsborough Co	\$82,600	\$292,016	\$300,153
Merrimack Co	\$83,300	\$294,500	\$302,621
HOME RENTAL			
60% MAI, 3 pers. Hshld		Estimated Max Rent/mo.	
W-Rock	\$56,280	\$1,407	
Lawr MA-NH	\$47,580	\$1,190	
Manchester	\$41,340	\$1,034	
Hillsborough Co	\$44,640	\$1,116	
Merrimack Co	\$45,000	\$1,125	

AFFORDABLE AND EQUITABLE HOUSING CHOICE OPPORTUNITIES AND BARRIERS

As housing costs continue to rise and incomes remain nearly stagnant, the reality of those who need affordable housing is very different from the perception of affordable housing. These perceptions are deeply ingrained and severely flawed. Many people think that affordable housing will not blend into their neighborhoods and are only large, ugly projects, which reduce surrounding property values and raise taxes. It is perceived that affordable housing will lead to increased crowding and social problems, as well as higher crime.

In truth, affordable housing today is none of these things. A wide range of incomes and backgrounds need quality affordable housing. Likely the people who could most benefit from affordable housing are our neighbors, co-workers, friends, or family, our firefighters, teachers, and nurses to name a few. Affordable housing is housing that is affordable to all income levels when spending 30 percent or less of household income toward housing costs. Affordability and the need for affordable housing affect many different groups of people in various ways.

In addition to affordability, equity and patterns of segregation are also a concern that need to be addressed in the region and the state in order to ensure that every resident is considered in land use and housing plans, no matter their race, color, nationality, disability, sex, religion, familial status, age, marital status or sexual orientation.³⁰

Within the SNHPC Region there are a number of opportunities and barriers to affordable and equitable housing choices. Outlined below are the key opportunities and barriers that have been identified from the Granite State Future public outreach process and the housing analysis within this chapter.

1. Housing Costs and Affordability
2. Housing Types (Choices)
3. Local Zoning Ordinances
 - a. Multi-family Housing Units
 - b. Minimum lot sizes
 - c. Age-restricted Housing
 - d. Cluster Housing
 - e. Co-Housing (built by community land trusts and housing trusts)
 - f. Redevelopment of older parts of downtowns and cities
 - g. Workforce Housing
 - h. Mobile Homes
4. Employment Opportunities
5. Economic Factors
6. Educational Opportunities
7. Crime and Perceptions of Safety
8. Discrimination and Patterns of Segregation
9. Physical Infrastructure
 - a. Water
 - b. Sewer
 - c. Natural Gas
 - d. Transportation/Public Transportation
 - e. Access to Healthy Food
 - f. Access to Services and Civic Infrastructure

³⁰ NH RSA 354-A: Law Against Discrimination.

Perhaps foremost in our consciousness are the high costs of real estate. Most residents would agree that the purchase price of homes and condos in the region is quite high. Creative financing options such as reverse amortization, interest-only, and adjustable-rate (ARMs) mortgages have enabled more people to achieve the “American Dream” of homeownership despite rising prices. These types of mortgages allow people to finance more and to outbid others for the house of their dreams, but the dangers down the road are numerous. While these types of mortgages can offer an initial period of low payments and fixed interest rates, once this period expires, the subsequent readjustment can mean a significant hike in monthly payments. The result can be an inability to meet the financial obligations of the loan and eventually foreclosure. The impacts on communities due to rising number of foreclosures can be a significant burden.

Rental properties in the SNHPC Region are extremely scarce outside Manchester and rent assisted units are subject to waiting lists hundreds of people long. The current practice of converting apartments to condominiums further exacerbates the problem, displacing people who cannot afford to own homes for the sake of supplying less expensive owner occupied homes.

With such a large percentage of renters below the median area income, communities need to provide more affordable rental units. Both the public and community planners need to be educated that apartments are positive additions, and the people who live in apartments are viable members of the community. Apartments can benefit communities by reducing sprawl, conserving open space, reducing traffic congestion and the burden to area schools, and improve economic success by providing housing for employees and customers of local businesses.

Workforce housing provides opportunities to the people that fulfill jobs vital to a community’s existence, such as teachers, health care workers, and police and fire personnel who may fall within this income bracket. Workforce housing should be a goal of communities in the SNHPC Region. Communities depend on service providers to perform at their best all the time. By not providing affordable workforce housing, these essential personnel are hampered by undue stress, long commutes, and disenfranchisement from the community.

The over-55 demographic in the SNHPC Region is growing and creating new housing needs as well. In the past decade the region has gained 35,605 citizens 55 or older. While aging populations do not add to school enrollment, there is the possibility that healthcare services will be impacted to a larger degree, but these services are generally not financed through property taxes and thus do not pose an undue hardship for the towns. Many communities are addressing this increase in elder population through age-restricted housing. Ten communities in the SNHPC Region permit elderly housing in community zoning – Bedford, Candia, Deerfield, Derry, Goffstown, Hooksett, Londonderry, Manchester, Raymond and Windham. In Auburn, Chester, New Boston, and Weare, elderly housing is not specifically noted in zoning.

Age-restricted housing benefits communities by enabling older residents to remain in the community and providing tax income without added pressure on school enrollment. In the short-term, affordable housing for seniors makes sense economically. However, age-restricted housing should not be favored over other forms of affordable housing; a balance needs to be achieved to foster continued economic growth. Working families are more likely to attract new businesses or support existing ones than are seniors. As a result, an over-production of age-restricted units could lead to negative long-term economic impacts.¹

FAIR HOUSING INFRASTRUCTURE

FAIR HOUSING LAW

Federal Law

Fair Housing Act Overview

In 1968 the U.S. Congress made efforts to end housing segregation in the U.S. At this time the Chicago Open Housing Movement had raised awareness regarding fair housing problems over the previous three years and Martin Luther King Jr. had recently been assassinated, causing much civil unrest. Title VIII of the Civil Rights Act of 1968, commonly known as the Fair Housing Act, made acts of housing discrimination based upon race, sex, national origin, religion or ethnicity illegal. In 1988 the Act was amended in order to make acts of discrimination against families with children and people with mental or physical disability illegal as well. To ensure fair housing requirements are being met, states and local governments must have an Analysis of Impediments to Fair Housing Choice (AI). The U.S. Department of Housing and Urban Development (HUD) is designated by statute to administratively enforce federal housing discrimination laws such as the federal Fair Housing Act. Estimates of housing discrimination which are in violation of the Fair Housing Act range from two to four million cases a year.

Westchester County Case

While states and local governments must have an AI in order to certify they are meeting legal requirements to affirmatively further fair housing, these requirements have historically been overlooked by HUD. The Westchester County, New York case marks a turning point of new attention from HUD under the Obama administration. In a lawsuit brought by the Anti-Discrimination Center alleging racial segregation, a U.S. District Court ruled in 2009 that Westchester County's AI had "utterly failed" and all of Westchester's certifications that it had or would affirmatively further fair housing were "false or fraudulent." Rather than furthering integration and fair housing, Westchester County policies were actively causing racial segregation by locating affordable housing developments in areas where African-Americans were already highly segregated. A court settlement was reached requiring the county to spend over \$51 million to develop new affordable housing, with the majority of this housing in areas with low ratios of people of color. In 2010 and in 2011, Westchester's AI's were once again rejected by HUD when they did not meet the agency's detailed requirements, resulting in the 2011 temporary suspension of more than \$7 million in Community Development Block Grant (CDBG), HOME, and Emergency Shelter Grant (ESG) funds.³¹ The Westchester County case establishes that state and local governments that are recipients of HUD funds must conduct meaningful AIs and ensure their ordinances and policies do not result in racial segregation or other discriminatory outcomes.

Civil Rights Act

The Civil Rights Act of 1964 is widely recognized as landmark federal legislation which made discrimination on the basis of race, ethnicity, nationality, religion, and gender illegal. The groups of people who benefit from the Act are referred to as "protected classes." Dissent in the 1960s regarding the widespread discrimination against persons of African descent led to the enactment of the Act, which was originally called for by President Kennedy and successfully signed into law under President Johnson. Title VI of the Act sets forth explicit legal obligation to provide equal access to housing for the protected classes. The Act also imparts equal rights for these protected classes in the following areas: voting, public accommodations, public facilities and public education, federally assisted programs, and employment.

³¹ National Low Income Housing Coalition. "2012 Advocates' Guide to Housing & Community Development Policy." NLIHC. 2012. Web. 18 March 2009.

2007 Limited English Proficiency Guidance

The Civil Rights Act of 1964, under Title VI, states that no person “on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.” Since persons with limited English proficiency (LEP) have a limited ability to speak, read, write, or understand English as a result of national origin, they are protected under the Act. LEP persons received further protection from federal case law, Executive Order 13166, a U.S. Department of Justice regulation and guidance, as well as HUD’s own proposed guidance issued in 2003. All of these documents establish that federal agencies and recipients of their financial assistance must examine the services they provide, identify any need for services to LEP persons and develop and implement a system to provide those services so LEP persons can meaningfully access them.³²

To assist grantees that receive direct or indirect HUD funding in carrying out their responsibilities to LEP persons, HUD issued a notice in 2007 titled “Final Guidance to Federal Financial Assistance Recipients Regarding Title VI Prohibition Against National Origin Discrimination Affecting Limited English Proficient Persons.” This Final LEP Guidance clarifies the compliance standards that grantees must follow to ensure accessibility to LEP persons. Information in appropriate languages must be provided to LEP individuals in order to allow equal access to information, services and programs. Recipients must conduct a four-part analysis and draft a Language Access Plan to determine their obligations to LEP persons and determine the extent and methods of providing information in languages other than English and set forth policies and practices consistent with the Final LEP Guidance.³²

ADA

In 2010, 18.7 percent of the U.S. civilian non-institutionalized population had a disability, representing 56.7 million people.³³ The Americans with Disabilities Act of 1990 (ADA) ensures that this sizeable part of the population is equally protected. The Act was drafted after years of campaigning by the disability rights movement and a series of legislation with disability protections such as Section 504 of the 1973 Rehabilitation Act, the Civil Rights Restoration Act of 1988, and the Fair Housing Act of 1988.³⁴ The ADA prohibits discrimination due to a person’s disability in employment, state and local government, public accommodations, commercial facilities, transportation, and telecommunications. As defined by the ADA, a person with a disability is someone who has a physical or mental impairment that substantially limits at least one major life activity, a person who has a history of such an impairment, or a person who is perceived by others as having such an impairment. The ADA also protects people who have a relationship or association with an individual with a disability.³⁵ With respect to housing accessibility, Title II of the ADA applies to housing provided by public entities such as state and local governments. Title III additionally states that public and common use areas at housing developments must be accessible to persons with disabilities.³⁶

VAWA

³² New Hampshire Legal Assistance. “Analysis of Impediments to Fair Housing Choice in New Hampshire: 2010 Update.” *NHHFA*. 2010. Web. 18 Jan. 2013.

³³ Brault, Matthew. “Americans With Disabilities: 2010.” *Census.gov*. U.S. Department of Commerce, U.S. Census Bureau. July 2012. Web. 18 March 2013.

³⁴ Mayerson, Arlene. “The History of the ADA: A Movement Perspective.” *DREDF*. Disability Rights Education and Defense Fund. 1992. Web. 18 March 2013.

³⁵ U.S. Department of Justice, Civil Rights Division. “A Guide to Disability Rights Laws.” *ADA.gov*. July 2009. Web. 18 March 2013.

³⁶ U.S. Department of Housing and Urban Development. “Accessibility Requirements for Buildings.” http://portal.hud.gov/hudportal/HUD?src=/program_offices/fair_housing_equal_opp/disabilities/accessibilityR

Extensive grassroots efforts in the late 1980s and early 1990s are credited with the development of the Violence Against Women Act (VAWA) of 1994. A variety of advocates and professionals from places such as the battered women's movement, law enforcement officers, and lawyers successfully lobbied Congress to adopt legislation to address domestic and sexual violence. In 2005 VAWA's focus expanded to also include dating violence and stalking. VAWA now incorporates protections into HUD funded housing programs for victims of all these types of crimes. These changes reflect the fact that domestic violence is a significant contributing factor to homelessness, for women especially.³⁷ In February 2013, Congress renewed VAWA with provisions that expanded these federal protections to include gays, lesbians, transgender individuals, Native Americans, and immigrants as well. VAWA provisions apply to the Public Housing Program, Section 8 Housing Choice Voucher Program, and Project-Based Section 8 Funding Programs. These housing programs may not be allowed to deny housing or evict applicants based on the status of their victimization. Federally subsidized housing providers must notify program participants of VAWA protections. Likewise, Section 8 Housing Choice Voucher Program Administrators must notify participating landlords of their obligations to victims of violence.

State Law

NH Fair Housing Law

New Hampshire provides state-specific fair housing protections as well. The NH Fair Housing Law is found under Title XXXI on Trade and Commerce in Chapter 354-A, the New Hampshire Law Against Discrimination. The Fair Housing Law consists of Revised Statutes Annotated (RSA) 354-A:8 to RSA 354-A:15. The Fair Housing Law declares that equal housing opportunity without discrimination is a civil right. It prohibits housing discrimination on the basis of age, sex, race, creed, color, marital status, familial status, physical or mental disability, national origin, or sexual orientation. The overall Law Against Discrimination also establishes a state agency, the Commission for Human Rights, to eliminate and prevent discrimination in housing accommodations, as well as in employment and public accommodations.³⁸ Housing discrimination refers to services relating to the business of selling or renting dwellings, including access to and membership in multiple-listing services and brokers' organizations.³⁹

Repeal of RSA 130-A:8

RSA 130-A:8 set forth a prohibition on the rental of housing with lead paint hazards to children. In 1997, the New Hampshire Legislature repealed RSA 130-A:8. The statute had stated that rental agents and landlords of housing found by the commissioner of the Department of Health and Human Services or a health authority to have a lead exposure hazard present could not rent that housing if it is to be occupied by a child less than six years of age. Misinterpretation of the section led to rejections of families with children from housing where any lead paint was located, essentially comprising discrimination against families with children. The repeal of RSA 130-A:8 ensured that New Hampshire law better matched federal and state housing discrimination law. The repeal also follows HUD guidance, which prohibits landlords from discriminating against families with children due to the existence of lead paint in their housing.⁴⁰

³⁷ National Law Center on Homelessness & Poverty. "The impact of the Violence Against Women Act 2005 (VAWA) on the housing rights and options of survivors of domestic and sexual violence." NCDSV.org. Web. 18 March 2013. <<http://www.ncdsv.org/images/ImpactVAWAHousing-TheProbandRemedy.pdf>>

³⁸ State of New Hampshire. "Title XXXI Trade and Commerce: Chapter 354-A State Commission for Human Rights." *New Hampshire General Court*. Web. 18 March 2013. <<http://gencourt.state.nh.us/rsa/html/xxxi/354-a/354-a-mrg.htm>>

³⁹ New Hampshire Commission for Human Rights. "Statute and Rules of the Commission for Human Rights." Web. 18 March 2013. <<http://www.nh.gov/hrc/laws.html>>

⁴⁰ New Hampshire Commission for Human Rights. "Frequently Asked Questions about Exceptions

Addition of Sexual Orientation as Protected Class

Sexual orientation is an important factor in discrimination. Though few cases of this type of housing discrimination are reported in New Hampshire, hate crimes motivated by sexual orientation bias represent over a quarter of all incidents reported by New Hampshire police departments to the FBI from 2004-2008, and were the second highest category after race.³² RSA 354-A:8 was adopted in 1997, adding protection from housing discrimination due to a person's sexual orientation to the NH Fair Housing law. This amendment also reaffirmed the opportunity to obtain housing without discrimination due to previously established protected classes of age, sex, race, creed, color, marital status, familial status, physical or mental disability, and national origin. Sexual orientation, as defined by RSA 354-A:2 refers to actual or perceived heterosexuality, bisexuality, or homosexuality.³⁹ On a federal level, the U.S. Fair Housing Act (FHA) does not yet specifically include sexual orientation and gender identity as prohibited bases. However, according to HUD, a lesbian, gay, bisexual, or transgender (LGBT) person's experience with sexual orientation or gender identity-based housing discrimination may still be covered by other protections in the Act, such as those concerning gender, disability, and allowed considerations in FHA-insured lending.⁴¹

RSA 354-A:15 – Housing for Older Persons

The Housing for Older Persons section, RSA-A:15, of the Fair Housing Act, is an amendment that disallows that provisions in this chapter regarding familial status or age apply with respect to housing for older persons.³⁸ Housing for older persons is considered to be one of the following three types of housing:

1. Housing provided under any state or federal program that HUD determines is specifically designed and operated to assist elderly persons as defined in the program;
2. Housing intended for and solely occupied by persons 62 years of age or older; or
3. Housing intended and operated for occupancy by at least one person 55 years of age or older per unit.⁴⁰

Before this amendment was adopted, housing for older persons was exempt only from familial status provisions. This meant that, previously, a qualified housing for older persons provider could legally refuse to rent to a family with children under 18, but not legally refuse to rent to a family with 19-year-olds or anyone else under 55 or 62 years of age. While the adoption of this amendment does allow additional legal discrimination, it is believed that this amendment helps better match the Fair Housing Act with legislative intent because "construing qualified housing for older persons as exempt from familial status but not age provisions would render the exemption meaningless."⁴²

RSA 540:2 – New Tenancy Protections for Victims of Domestic Violence

Data analysis of the New Hampshire Housing Finance Authority (NHHFA)'s 2010 Fair Housing Survey revealed that domestic violence status, among other factors, figured significantly in respondents' perceptions of discrimination and reports of unfavorable housing outcomes. Domestic violence survivors report being denied rental housing, denied a mortgage, and being evicted in higher numbers than those

to the N.H. Law Against Housing Discrimination." 12 Oct. 2005. Print.

⁴¹ U.S. Department of Housing and Urban Development. "LGBT Housing Discrimination." *HUD.gov*. Web. 18 March 2013.

<http://portal.hud.gov/hudportal/HUD?src=/program_offices/fair_housing_equal_opp/LGBT_Housing_Discrimination>

⁴² City of Manchester Planning and Community Development Department. "Impediments to Fair Housing Plan: 2010 Update." 2010. Print.

who did not report domestic violence status.³² RSA 540:2 aims to address discriminatory eviction due to status as a victim of domestic violence. It states that landlords may not terminate a tenancy solely based on a tenant or a household member of a tenant having been a victim of domestic violence, sexual assault, or stalking, with the condition that the victim provides the landlord with written verification that they have obtained a valid protective order against the perpetrator of the domestic violence, sexual assault, or stalking. As determined by definitions in RSA 540:1-a, this statute does not apply to the lessors or owners of: single-family houses if the owner currently owns 3 or fewer single-family houses, rental units in an owner-occupied building containing 4 or fewer dwelling units, and single-family houses acquired by banks or other mortgagees through foreclosure. RSA 540:2 also provides support for sole eviction of the tenant or household member accused of the domestic violence, sexual assault, or stalking, via a court process. The statute does not prevent eviction due to nonpayment of rent.⁴³

Civil Rights Act

New Hampshire's Civil Rights Act, or RSA 354-B, was enacted by the Legislature in 1999. This law followed the Human Rights Act and established new protections for the protected classes in that act – race, color, national origin, ancestry, sexual orientation, gender and disability.⁴² The Act states that all persons have the right to engage in lawful activities and to exercise and enjoy the rights in and laws of the United States and New Hampshire Constitutions without being subject to actual or threatened physical force or violence or trespass on property when such actual or threatened conduct is due to a bias against a protected class. The Civil Rights Act also gives the New Hampshire Attorney General authority to initiate civil actions on behalf of people for relief against any person believed to have violated the provisions. It also permits civil penalties, injunctive relief necessary to prevent continued or future violations, and restitution for out-of-pocket expenses.^{42,44}

Private Right of Action – RSA 354-A:21

RSA 354-A-21, effective as of 2000, sets forth a Procedure on Complaints that allows for expanded options for individuals seeking redress.³⁸ Before this amendment was passed, individuals alleging violations of the provisions of the New Hampshire Law Against Discrimination were limited to filing complaints with the Human Rights Commission and enforcement through the Attorney General's office. Adding upon extensive enforcement provisions concerning complaints before the Human Rights Commission, enforcement provisions established in RSA 354-A:21 allow an aggrieved individual to file a complaint in court. Parties alleging to be aggrieved by practices prohibited by RSA 354-A may bring an action in superior court for civil damages and/or injunctive relief. This provision "not only allows an individual to choose where he or she will seek relief for an alleged discriminatory act, but also allows him or her to seek remedies for alleged violations of other laws before a body which has jurisdiction to consider all claims."⁴²

Statewide Building Code

New Hampshire's first statewide building code, effective as of 2002, was created by RSA 155-A. The Code represented a way to standardize and modernize the pre-existing, varying local codes that were in use, in order to better serve the interests of public health, safety and welfare.⁴² The Code adds to the pre-existing state-wide requirements of the State Fire Code and the New Hampshire Barrier Free Design Code by adopting International Building Code 2009, International Energy Conservation Code 2009, International Existing Building Code 2009, International Mechanical Code 2009, International Plumbing Code 2009, International Residential Code 2009, National Electrical Code 2011, and State Fire Code

⁴³ State of New Hampshire. "Title LV Proceedings In Special Cases: Chapter 540. Actions Against Tenants." *New Hampshire General Court*. Web. 18 March 2013. <<http://www.gencourt.state.nh.us/rsa/html/LV/540/540-mrg.htm>>

⁴⁴ State of New Hampshire. "Title XXXI Trade and Commerce: Chapter 354-B Civil Rights Act." *New Hampshire General Court*. Web. 18 March 2013. <<http://gencourt.state.nh.us/rsa/html/xxxi/354-b/354-b-mrg.htm>>

Saf-C 6000.⁴⁵ In addition, the Code provides the Life Safety Code with precedence for requirements in regard to means of egress. While the Code supersedes all local codes that are less stringent, municipalities have freedom to adopt more restrictive codes if desired. RSA 155-A applies to all new buildings constructed by the state or a state agency, as well as all new public buildings in New Hampshire. According to the statute, public buildings are all buildings into which the general public is allowed entry as a normal part of the building's operation and use. Residential buildings such as apartment buildings and shelters are examples of buildings considered to be public and which must comply with the Code, while residential buildings such as one and two family dwellings are not considered public and are exempted from the Code requirements.^{42, 46}

The Code for (Architectural) Barrier Free Design (AB Code) for the State of New Hampshire is especially relevant to fair housing. Effective as of 2008,⁴⁷ the AB Code originates from RSA 275-C:11, which established a Committee on Architectural Barrier-Free Design (Abfd).⁴⁸ The Committee is a permanent committee of the Governor's Commission on Disability, and is responsible for the AB Code. The Committee's Chapter Abfd 300, Code For Barrier-Free Design, states that its purpose is to ensure, through the elimination of architectural barriers, that publicly funded public buildings and facilities are accessible to, and functional for, persons with disabilities. It names the 2010 ADA Standards for Accessible Design (as clarified or modified by Abfd 303.02) as the source of the provisions of the AB Code.⁴⁹ The AB Code incorporates by reference the International Building Code 2006 and Accessible and Usable Buildings and Facilities ANSI A117.1-2003.⁴⁷

Workforce Housing Law

In 2008, RSA 674:58-61 established New Hampshire's Workforce Housing Law, which mandates communities to provide workforce housing. Workforce housing is defined as housing opportunities that are affordable for moderate and low-income families, including rental multi-family housing.^{32, 50} The Workforce Housing law follows fair housing New Hampshire Supreme Court precedent by codifying the 1991 case of *Britton v. Town of Chester*, 134 N.H. 434. In the *Britton* case, the Court ruled that "all New Hampshire municipalities have an obligation to afford reasonable opportunities for the development of housing for low and moderate income families, including fair share of the regional need for such housing." Unfortunately, in the subsequent years, most municipalities disregarded their responsibilities under *Britton*, with significant effects upon families with children. The new Workforce Housing sections of Chapter 674 on Local Land Use Planning and Regulatory Powers now again mandate, this time via statute, that local governments provide meaningful opportunities for the development of affordable housing for moderate and low-income families.³² In Manchester, many working class residents are in need of affordable workforce housing, including entry level teachers, firefighters, police officers, artists, nursing assistants and medical workers, hospitality employees, retail and service employees.⁴²

⁴⁵ New Hampshire Department of Safety. "NH State Building Code (Current)." Web. 18 March 2013. <<http://www.nh.gov/safety/boardsandcommissions/bldgcode/nhstatebldgcode.html>>

⁴⁶ New Hampshire General Court. "Title XII Public Safety And Welfare: Chapter 155-A New Hampshire Building Code." Web. 18 March 2013. <<http://www.gencourt.state.nh.us/rsa/html/XII/155-A/155-A-mrg.htm>>

⁴⁷ New Hampshire Governor's Commission on Disability. "Accessibility Codes that Apply in New Hampshire Updated August 2010." Web. 18 March 2013.

<http://www.nh.gov/disability/information/architectural/documents/nh_accessibility_codes.pdf>

⁴⁸ New Hampshire General Court. "Title XXIII Labor: Chapter 275-C Governor's Commission On Disability." Web. 18 March 2013. <<http://www.gencourt.state.nh.us/rsa/html/XXIII/275-C/275-c-mrg.htm>>

⁴⁹ Architectural Barrier-Free Design Committee. "Chapter Abfd 100-300." Web. 18 March 2013.

<http://www.gencourt.state.nh.us/rules/state_agencies/abfd100-300.html>

⁵⁰ State of New Hampshire. "Title LXIV Planning And Zoning: Chapter 674 Local Land Use Planning And Regulatory Powers." *New Hampshire General Court*. Web. 18 March 2013.

<<http://www.gencourt.state.nh.us/rsa/html/lxiv/674/674-mrg.htm>>

Protection for Homeowners Against Predatory Foreclosure Schemes

In 2007, new laws concerning Chapter 479 on Mortgages of Realty were passed in New Hampshire, regulating foreclosure consultants and pre-foreclosure conveyances in order to protect homeowners from predatory foreclosure schemes.⁵¹ In the past few years many homeowners facing foreclosure, especially low-income and unsophisticated borrowers, were preyed upon by foreclosure “prevention” schemers even as the same predatory and unethical lending practices helped drive the U.S. housing crisis. The Analysis of Impediments to Fair Housing Choice in New Hampshire 2010 Update noted that members of many protected class groups were specially targeted. Schemes included “charging high fees for offers to intervene with foreclosing lenders or for referrals to bankruptcy attorneys; situations where the homeowner believes he or she is refinancing but unknowingly transfers ownership of her home to another party; and lease/buyback deals with terms that all but ensure that the homeowner will never be able to regain title to his home.” The new RSA 479 statutes importantly require that a foreclosure contract be implemented before services are provided. This contract must fully disclose and describe the terms, services to be provided, and costs of the contract; be notarized; and be accompanied by a notice of the right to cancel the contract. Requirements that aim to eliminate unknowing loss of homeownership are established as well. The statutes also provide specific protection of persons with limited English proficiency (LEP persons) by establishing that contracts for LEP persons must be written in their language.³²

FAIR HOUSING INFORMATION, TRAINING, EDUCATION AND OUTREACH

The City of Manchester recently updated their Analysis of Impediments to Fair Housing Choice. For this analysis the City conducted a survey and focus groups to receive input on what the impediments to fair housing choice were in the City. Survey results revealed that a majority of Manchester residents do not know where to find fair housing information and/or what their rights are in regard to fair housing. Discrimination data analyzed reveals there is a need for continued outreach and education to property owners/managers and landlords to increase awareness of fair housing laws and to reduce discriminatory practices. The following resources are available in the SNHPC region for fair housing information, education and training.

Federal

U.S. Department of Housing and Urban Development (HUD)

HUD administratively enforces federal housing discrimination laws such as the federal Fair Housing Act, as designated by statute. The Office of Fair Housing and Equal Opportunity (FHEO) is the HUD program office that specifically oversees fair housing. HUD produces many of the written fair housing materials distributed by state, local, and non-profit agencies in New Hampshire. The HUD Consolidation Plan's certification to “Affirmatively Furthering Fair Housing” requires entitlement communities to undertake Fair Housing Planning. The Analysis of Impediments to Fair Housing should be viewed as part of the City's Consolidated Plan.⁴² The AI report has been completed to meet requirements of the Fair Housing Planning Guide.

HUD also receives federally-based housing discrimination complaints from residents. The HUD Regional Office serving New Hampshire is located in Boston, Massachusetts and may be reached at (800) 827-5005 toll-free. The nearest FHEO Office is located in Boston as well and may be reached at (617) 994-8300 or (617) 994-8305. Anyone with housing discrimination complainants may file federally-based

⁵¹ State of New Hampshire. “Title XLVIII Conveyances and Mortgages of Realty: Chapter 479 Mortgages of Realty.” New Hampshire General Court. Web. 19 March 2013. <<http://www.gencourt.state.nh.us/rsa/html/XLVIII/479/479-mrg.htm>>

complaints directly with HUD in a variety of languages via toll-free voice (800)669-9777 and TTY (800)927-9275, online or by fax to (617) 565-7313 (the Boston FHEO office), or mail to the Boston FHEO Center at 10 Causeway Street, Suite 308, Boston, MA 02222.⁵² The HUD housing discrimination complaint form is available electronically at and is included as part of the 2008 HUD Fair Housing brochure.⁵³ HUD assumes all costs of processing and investigating the complaints.⁴²

U.S. Department of Justice, Civil Rights Division

The Housing and Civil Enforcement Section has the ability to prosecute civil violations of the federal Fair Housing Act. Located in Washington, D.C., there are several attorneys assigned to handle cases arising in the New England region. Although many of the cases handled are referred by other federal agencies, private citizens may also file complaints. Priority is given to “pattern and practice” cases involving ongoing violations affecting many people. There are no costs associated with lodging a complaint with the Department of Justice.⁴²

U.S. Federal District Court, District of New Hampshire

New Hampshire residents with housing discrimination complainants may bring a private lawsuit in federal court for violations of the federal Fair Housing Act. There are filing fees and other potential costs of litigation, some of which may be waived by the court for low-income litigants.⁴²

State

New Hampshire Commission for Human Rights (HRC)

The HRC is a state agency established by RSA 354-A for the purpose of eliminating discrimination in employment, public accommodations and the sale or rental of housing or commercial property, because of age, sex, sexual orientation, race, creed, color, marital status, familial status, physical or mental disability or national origin. The commission has the power to receive, investigate and pass upon complaints of illegal discrimination and to engage in research and education designed to promote good will and prevent discrimination. The New Hampshire "Law Against Discrimination" is contained in NH RSA 354-A, and covers employment, housing, and places of public accommodation. The Commission adopts rules pursuant to RSA 541-A, the Administrative Procedure Act, in accordance with the procedures set forth in the Act. The Commission's rules, once adopted in accordance with RSA 541-A, have the force of law unless they are amended or revised or unless a court of competent jurisdiction determines otherwise.⁴²

State Court System

New Hampshire residents with housing discrimination complainants may bring legal actions in state superior or district courts for violations of federal or state housing discrimination laws. State claims must be filed first with the HRC, which then may grant permission to remove the complaints to state court. There are filing fees and other potential costs of litigation, some of which may be waived by the court for low-income litigants.⁴²

⁵² U.S. Department of Housing and Urban Development. “Filing Your Housing Discrimination Complaint Online.” Web. 20 March 2013. <http://portal.hud.gov/hudportal/HUD?src=/program_offices/fair_housing_equal_opp/online-complaint>

⁵³ U.S. Department of Housing and Urban Development. “Fair Housing: Equal Opportunity for All.” Web. 20 March 2013. <http://portal.hud.gov/hudportal/documents/huddoc?id=DOC_11868.pdf>

State of New Hampshire, Office of the Attorney General

The New Hampshire Office of the Attorney General is available to serve the people of New Hampshire with diligence, independence and integrity by performing the constitutional, statutory and common law duties of the Attorney General. Duties of the Attorney General include to serve as the State's chief legal officer and chief law enforcement officer; to seek to do justice in all prosecutions; to provide the State with legal representation and counsel of the highest quality; to protect the State's environment and the rights of its consumers; and to provide supervision and leadership of New Hampshire law enforcement.⁴²

New Hampshire Housing Finance Authority (NHHFA)

New Hampshire Housing Finance Authority is a self-supporting public benefit corporation. Although established by statute as a public instrumentality, the Authority is not a state agency and receives no operating funds from the state government. The Authority administers a broad range of programs designed to assist low- and moderate-income persons and families with obtaining decent, safe and affordable housing. Their mission is to promote, finance and support affordable housing opportunities and related services for New Hampshire families and individuals through the efficient use of resources and the building of effective partnerships, thereby contributing to the economic and social development of the State and its communities.⁵⁴ NHHFA is associated with publications such as the Analysis of Impediments to Fair Housing Choice in New Hampshire 2010 Update.³²

New Hampshire Workforce Housing Council

The Workforce Housing Council coordinates and supports local, regional and statewide efforts that encourage communities to embrace a wide range of housing options to meet the needs of New Hampshire's diverse workforce. These efforts include assisting regional workforce housing groups, encouraging private sector engagement, educating and informing decision makers, encouraging research exploring housing's impact on economic vitality, and impacting statewide policy decisions and practices.

Non-profits

New Hampshire Legal Assistance and the Housing Justice Project (HJP)

New Hampshire Legal Assistance (NHLA) is a non-profit law firm offering legal services in civil matters to families, seniors and eligible low-income individuals. NHLA provides legal services to vulnerable low-income citizens, ranging from simple legal information and advice to representation in all of New Hampshire's courts and before many of the local, state and federal agencies.⁴²

Partially funded in the past by the City of Manchester, The Housing Justice Project (HJP) of New Hampshire Legal Assistance is a group of attorneys and paralegals who are committed to promoting equal access to housing for New Hampshire Legal Assistance (NHLA) clients. Focusing on the rapidly growing minority, immigrant, and refugee communities in Manchester, the HJP works closely with local public and private organizations that assist these particularly vulnerable populations in the struggle against housing discrimination. The HJP works with these populations by investigating complaints of discrimination involving section 8 or public housing issues, mortgage foreclosure, property taxes, mobile home park issues, fair housing/housing discrimination complaints and housing accessibility issues for persons with mobility disabilities. The HJP helps by providing full legal representation to lower income families and individuals in emergency situations who are either currently without shelter or are at imminent risk of becoming homeless. The individuals of HJP help ensure admittance to safe shelters and supply access to the proper resources to help families move out of homelessness. Additionally, the HJP also works to alleviate the steady stream of

⁵⁴ New Hampshire Housing Finance Authority. Web. 20 March 2013.

Manchester homeowners who are at risk of losing their homes to foreclosure by assisting them to file bankruptcy and save their home. As well as supplying legal assistances, the HJP does a considerable amount of community outreach to tenants, housing providers and social service agencies about tenants' rights and general fair housing law.⁵⁵

Disability Rights Center (DRC)

The DRC provides information, advice, and legal representation to individuals who have problems with housing and have been discriminated against due to their disability. The DRC provides workshops and educational events on Fair Housing Rights of People with Disabilities.⁵⁵

NeighborWorks Southern New Hampshire (NSNH)

NSNH is a non-profit organization dedicated to the improvement of the lives of individuals and families living in the Southern New Hampshire region by providing access to quality housing services, revitalizing neighborhoods and supporting opportunities for personal empowerment. NSNH has helped thousands of people break the cycle of poverty and improve their financial stability through either home ownership or providing quality affordable rental housing. In addition, NSNH conducts homeowner workshops designed to educate and prepare low-income renters for homeownership by providing them with the abilities and skills needed to purchase and maintain their own home.⁴²

The Way Home

The Way Home is a non-profit agency dedicated to helping low-income households obtain and succeed in safe, affordable housing. Since 1988, The Way Home has assisted more than 19,000 families and individuals with their housing needs. The Way Home has found that demand for its homeless prevention services has increased dramatically with the economic downturn. In addition, many families and individuals are at risk due to job losses: "In spite of the bursting of the housing bubble, housing remains too expensive for many families in Southern New Hampshire. In 2011, the affordable housing wage needed to rent a two-bedroom apartment in Manchester, NH was approximately \$20.37/hr. Low-wage workers continue to be one paycheck from homelessness, even as more apartments become vacant." The Way Home's Housing Resource Center at 214 Spruce Street in Manchester provides HUD-certified housing counseling for at-risk homeowners, renters, and homeless persons as part of their innovative homelessness prevention and intervention programs. Working with community partners, they offer resources to help make housing safe, to help secure rental housing, and to provide transitional shelter & permanent supportive rental housing. The Way Home also strives to prevent foreclosures, which hit homeowners and smaller landlords alike, since foreclosures drive demand for rental units while depressing home values.⁵⁶

Families in Transition (FIT)

Families in Transition is a non-profit organization located in Manchester and Concord, New Hampshire. It was founded in 1991 in response to the growing number of homeless individuals and families in the greater Manchester area and throughout the state. Since its inception, FIT has been committed to providing only the most innovative, comprehensive, and effective interventions specifically designed to help homeless individuals and families reach beyond the cycle of homelessness to lead healthy and successful lives. Their belief is that having a home is a basic human right and is fundamental to becoming an engaged and contributing member of the community.⁵⁷

⁵⁵ New Hampshire Legal Assistance. Web. 22 July 2013. <http://www.nhlegalaid.org/about/new-hampshire-legal-assistance>

⁵⁶ The Way Home. Web. 20 March 2013.

⁵⁷ Families in Transition. Web. 20 March 2013.

Family Promise of Greater Rockingham County

Family Promise of Greater Rockingham County is an interfaith hospitality network dedicated to helping homeless children in Derry, Salem and 14 surrounding communities in New Hampshire. The Network, or IHN, provides a safe place for homeless families with children to turn for food, shelter, and social services. Participating congregations of any faith offer guidance, encouragement, overnight stays, and meals, while preserving the dignity of families as they take steps to regain independence.

City of Manchester

Manchester Housing and Redevelopment Authority (MHRA)

MHRA is the largest public housing agency and largest landlord in Northern New England. An independent, public non-profit, MHRA was established by state legislation and confirmed by a referendum of Manchester citizens in 1941 and receives policy oversight from a five-member Board of Commissioners. MHRA owns and manages 1,271 public housing apartments for low income families, elderly, and adults with disabilities, and provides housing subsidies for over 1,800 households through the administration of the Section 8 Housing Choice Voucher Program. MHRA also offers the Homeownership Program conducted in conjunction with the Housing Choice Voucher Program and operated in partnership with New Hampshire Housing Finance Authority and NeighborWorks Southern New Hampshire. MHRA offers an array of supportive programming to residents, including a licensed after school child care program, teen educational and recreational activities, adult employment and vocational services, social activities for the elderly and adults with disabilities, and a seven-site Congregate Services Program which provides the supports needed (meals, housekeeping, etc.) to allow the elderly and persons with disabilities to maintain their independence.⁵⁸

In addition to housing services, MHRA also conducts redevelopment activities on behalf of the City of Manchester and is the primary redevelopment entity in the City. MHRA takes credit for creating jobs and increasing Manchester's tax base through various major redevelopment initiatives, such as the Verizon Center, Manchester Air Park, the Center of New Hampshire, and Amoskeag Millyard. MHRA efforts have recently produced new affordable housing development initiatives, resulting in over 600 new units at a total development cost of over \$70 million, which MHRA cites as evidence of its renewed emphasis on generating more low-income housing opportunities.⁵⁸

Manchester Welfare Department

The vision of the Manchester Welfare Department is to improve the quality of life for those disadvantaged members of their community, and to do so in the most professional and respectful manner. The Department's mission is to provide emergency assistance to individuals and families who lack adequate resources. They facilitate by directing less fortunate citizens to federal, state, and non-profit relief agencies to reduce the burden on their departmental budget and on Manchester taxpayers. They strive to promote self-reliance and independence in all whom the Department serves so they may become productive citizens.⁵⁹

City of Manchester Planning and Community Development Department

Financial assistance for housing activities in Manchester is primarily provided through the use of federal funds from the United States Department of Housing and Urban Development. The Federal funds include the Community Development Block Grant Program (CDBG), the HOME Investment Partnerships Program and to a lesser degree Emergency Solutions Grant (ESG) monies. The use of these funds is

⁵⁸ Manchester Housing and Redevelopment Authority. Web. 20 March 2013.

⁵⁹ City of Manchester Welfare Department. Web. 20 March 2013.

restricted to activities which provide affordable housing or shelter to low income people. Federal Funds also include Neighborhood Stabilization Program (NSP and NSP III) funding to address the effects of abandoned and foreclosed properties, in order to put them back into service for the benefit of rehabilitation and extended affordability options. In addition to Federal funds the City also has an Affordable Housing Trust fund which is available for housing initiatives. The City allocates all of these funds on an annual basis as a part of the Community Improvement Program (CIP) process and on a project specific basis throughout the year.

The City Housing Initiatives also include a Lead Hazard Control Program. The purpose of the program is to assist property owners in the control of Lead Hazards that constitute an imminent health threat in homes built prior to 1978 and to protect young children from lead poisoning.

In addition to City resources, Manchester housing initiatives leverage monies from other sources. The majority of the leveraged funds are administered by the New Hampshire Housing Finance Authority and they include but are not limited to HOME Investment Partnership funds, the Affordable Housing Fund, tax exempt bonds and Low Income Housing Tax Credits.⁶⁰

City of Manchester Consolidated Plan - The Consolidated Plan for the City of Manchester establishes the priorities for the use of Community Development Block Grant, HOME Investment Partnerships Program, and Emergency Solutions Grant funds granted to the City by the U.S. Department of Housing and Urban Development (HUD). It also serves as an application and performance reporting mechanism.⁴²

Other

Workforce Housing Coalition of the Greater Seacoast

The Workforce Housing Coalition of the Greater Seacoast (WHC) is an education and outreach initiative which hosts public forums and trainings to highlight solutions to the region's housing challenges; Offers municipalities research and technical assistance to help improve local housing policies; Provides developers with information and data to advance workforce housing projects. Through a united coalition of business, municipal and community leaders, the coalition's mission is to be a catalyst for the development of a range of housing options affordable for the diverse workforce in the Greater Seacoast region of New Hampshire and Maine.

CATCH Neighborhood Housing

CATCH Neighborhood Housing is a 501(c)3, non-profit organization offering a full spectrum of housing services in Merrimack County, New Hampshire. CATCH works to create innovative housing solutions for low- or moderate- income individuals and families.

⁶⁰ City of Manchester Planning and Community Development Department. Web. 20 March 2013.

DISCRIMINATION AND PATTERNS OF SEGREGATION

The following New Hampshire State Statute pertains to equal housing opportunity for the state: **RSA 354-A:8 Equal Housing Opportunity Without Discrimination a Civil Right.** – The opportunity to obtain housing without discrimination because of age, sex, race, creed, color, marital status, familial status, physical or mental disability or national origin is hereby recognized and declared a civil right. In addition, no person shall be denied the benefit of the rights afforded by this section on account of that person's sexual orientation.

Nationally, fair housing rights are protected under Title VIII of the Civil Rights Act of 1968 (Fair Housing Act). The federal Fair Housing Act makes it illegal to make, print or publish or cause to be made, printed or published housing ads that discriminate, limit or deny equal access to apartments or homes because of race, color, national origin, sex, religion, familial status and disability. The U.S. Department of Housing and Urban Development (HUD) handles fair housing complaints for individuals and community groups. From January 2008 – January 2013, HUD handled 40 fair housing cases for communities in the SNHPC region (19 were found to be no cause). The following table outlines fair housing cases in the region by town and basis (not including cases with a no cause finding).

TABLE 25 – SNHPC REGION FAIR HOUSING CASES, 2008-2013

HUD Cases January 1, 2008 - January 28, 2013											
By Town	Disability	Familial Status	National Origin	Race	Color	Gender	Religion	Marital Status	Age	Sexual Orientation	Total
Auburn											0
Bedford	1										1
Candia											0
Chester											0
Deerfield											0
Derry		1									1
Goffstown											0
Hooksett											0
Londonderry	1										1
Manchester	7		2	2							11
New Boston	1										1
Raymond		6									6
Weare											0
Windham											0
SNHPC Region	10	7	2	2	0	0	0	0	0	0	21

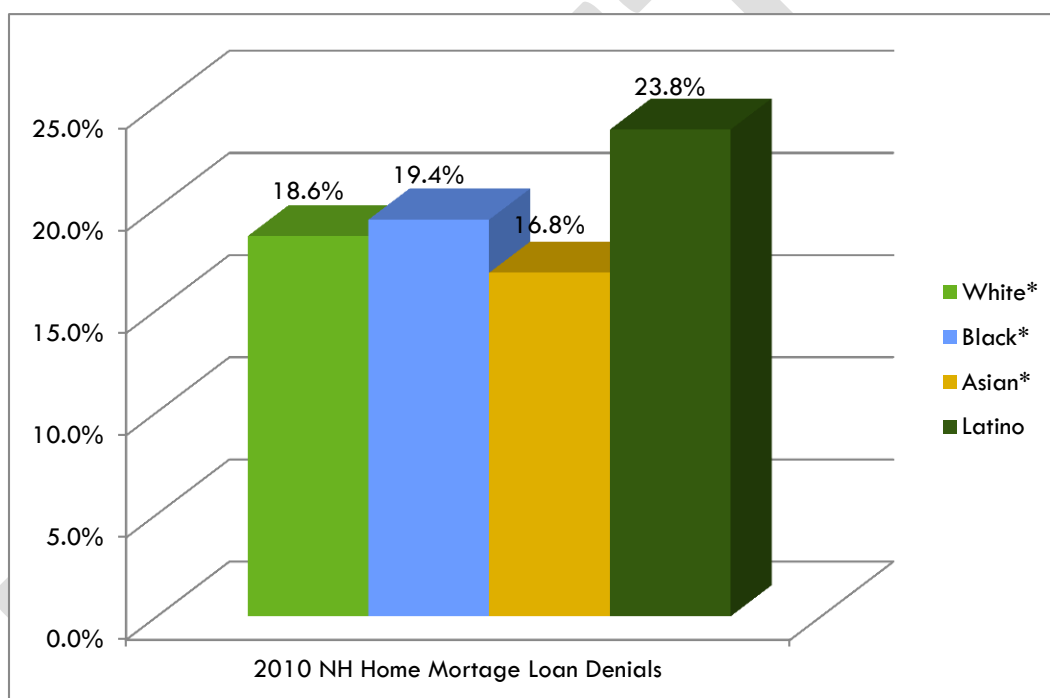
New Hampshire Legal Assistance handles Fair Housing cases for low-income and elderly clients in all regions of New Hampshire. They also offer community education and outreach on Fair Housing issues. NHLA work is funded by a grant from the United States Department of Housing and Urban Development (HUD).

From January 2008 to December 2013 NHLA handled 109 fair housing cases related to discrimination in the SNHPC region.⁶¹ Over half of these were related to the protected class of those with a disability (68 cases). The protected class of national origin and race were both largely represented in this timeframe as well with 16 cases and 12 cases, respectively.

Mortgage Lending practices

The chart below outlines mortgage loan denials by race for the State of New Hampshire for 2010. Latino households had the highest rate of denial, followed by Black households and then White households. Asian households had the smallest rate of denial for home mortgage loans in 2010.

FIGURE 16 - 2010 NEW HAMPSHIRE HOME MORTGAGE LOAN DENIALS

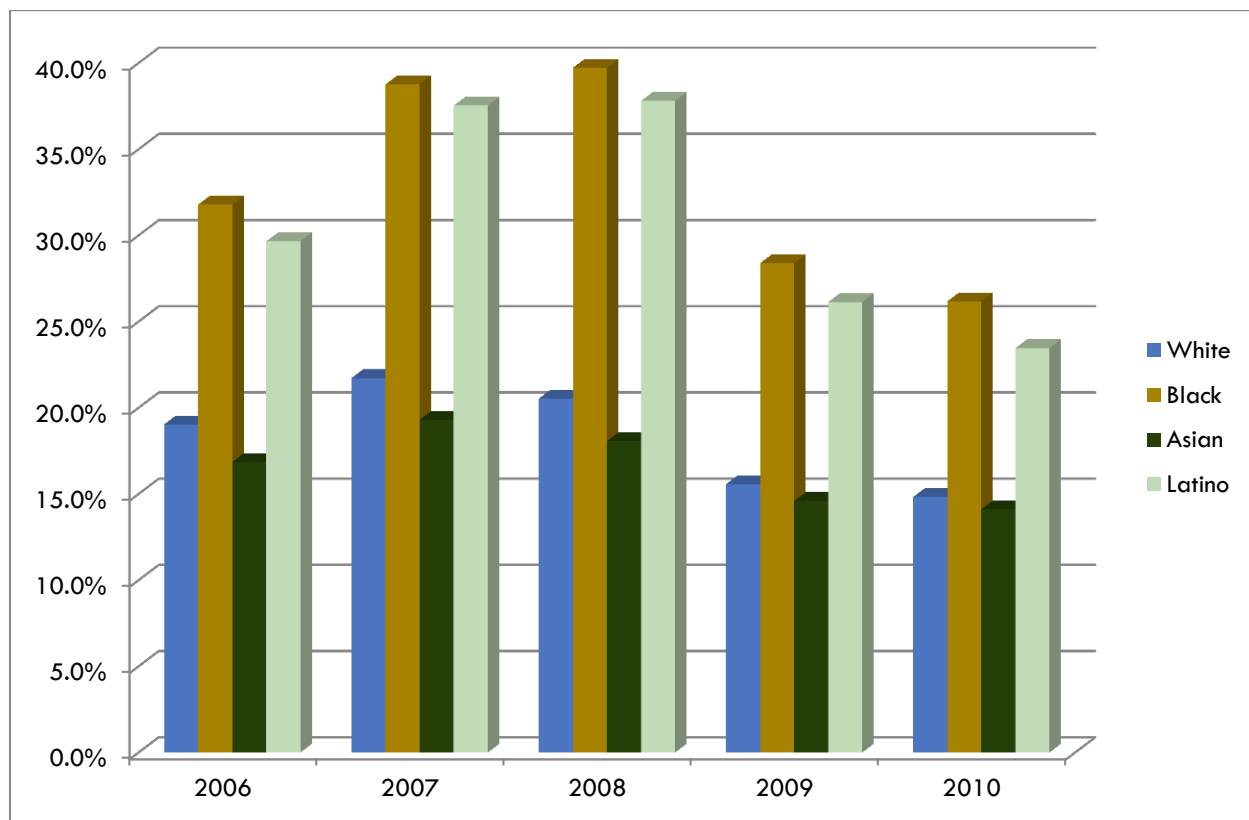


Source: 2010 HMDA. Data compiled by the Federal Reserve Bank of Boston.

*Data refers to Non-Latino white, non-Latino Black and non-Latino Asian

⁶¹ New Hampshire Legal Assistance. Data provided through December 31, 2013. Note: Findings were not included in the data provided by NHLA and therefore could include cases with a “no cause” finding.

FIGURE 17 - NEW ENGLAND HOME MORTGAGE DENIAL RATES BY RACE/ETHNICITY, 2006-2010



Source: 2006-2010 HMDA. Data compiled by the Federal Reserve Bank of Boston.

New Hampshire, along with Connecticut, Massachusetts, Maine, Rhode Island and Vermont are represented in the chart above illustrating total home mortgage denial rates by race/ethnicity for 2006-2010. The data is also shown on **Table 26** (next page) by income and race/ethnicity. It clearly illustrates that the Black and Latino populations have significantly higher denial rates than the White and Asian populations and when looking at the income data, this still holds true no matter what the income bracket is.

TABLE 26 - NEW ENGLAND HOME MORTGAGE DENIAL RATES BY INCOME AND RACE/ETHNICITY, 2006-2010

Income (in thousands)	1 to 30	31 to 50	51 to 70	71 to 90	91 to 120	121 to 150	over 150	Total
2006								
White	34.1%	22.9%	19.4%	17.9%	16.5%	14.6%	14.9%	19.0%
Black	47.4%	35.4%	31.3%	30.7%	29.8%	31.5%	29.6%	31.8%
Asian	37.8%	20.6%	18.7%	16.2%	14.1%	15.6%	14.0%	16.9%
Latino	49.2%	33.0%	29.3%	28.2%	28.1%	28.5%	26.5%	29.7%
2007								
White	36.8%	25.4%	22.6%	21.1%	19.3%	16.4%	16.1%	21.7%
Black	50.5%	39.5%	38.1%	38.5%	38.5%	37.9%	35.6%	38.8%
Asian	41.1%	26.1%	20.9%	19.2%	16.6%	14.4%	13.6%	19.3%
Latino	50.9%	38.5%	36.9%	37.7%	35.6%	35.2%	34.3%	37.5%
2008								
White	39.0%	25.8%	21.9%	20.0%	17.7%	15.4%	13.1%	20.5%
Black	55.2%	43.4%	38.6%	37.8%	38.9%	38.6%	33.3%	39.7%
Asian	48.2%	24.7%	21.5%	17.6%	15.6%	14.4%	10.8%	18.1%
Latino	57.0%	41.1%	37.8%	36.5%	32.9%	33.3%	27.1%	37.8%
2009								
White	35.5%	21.4%	17.0%	15.1%	13.3%	11.9%	11.0%	15.6%
Black	44.0%	32.1%	29.5%	29.7%	28.7%	23.7%	22.2%	28.4%
Asian	43.0%	23.8%	17.9%	14.0%	11.2%	10.6%	10.0%	14.6%
Latino	42.4%	31.2%	27.6%	25.3%	21.9%	18.5%	16.6%	26.1%
2010								
White	38.7%	21.4%	16.5%	14.2%	12.3%	10.4%	10.3%	15%
Black	45.0%	29.7%	26.6%	24.6%	24.3%	20.6%	18.2%	26%
Asian	45.4%	26.9%	18.9%	14.3%	10.9%	9.2%	8.8%	14%
Latino	43.0%	27.9%	23.2%	20.7%	18.1%	17.3%	14.5%	23%

NOTE: Tables include only first-lien loans for owner-occupied homes. The data exclude junior-lien loans, all loans for multi-family properties, and all loans for non-owner-occupied homes. Demographic groups refer to "Non-Latino white," "non-Latino Black," and "non-Latino Asian." Source: 2006-2010 HMDA. Data compiled by the Federal Reserve Bank of Boston.

CONCLUSION

The overarching theme of the input received throughout the Granite State Future process was the Southern New Hampshire region is a convenient and desirable place to live, work and play. There are many characteristics that draw people to our region, including the proximity to the mountains, the coast, the City and to numerous recreational opportunities. While there are many opportunities in the region, there are also a number of challenges surrounding housing choices, opportunity and affordability. Local government, regional organizations and the State can play a large role in assisting the needs of housing in the region. Goals and recommendations to address housing needs in the Southern New Hampshire region are outlined below.

GOALS AND RECOMMENDATIONS

•Goal 1: Encourage development of a variety of affordable housing choices in every community of the region

Recommendation 1-1: Support incentives for investment in reuse and redevelopment of existing structures.

Recommendation 1-2: Encourage communities to allow for cluster housing in their zoning ordinance to provide affordable housing opportunities and to protect the environment.

Recommendation 1-3: Encourage walkable “village neighborhood” development to enhance employment and housing opportunities.

Recommendation 1-4: Encourage more expansive single-family zoning definitions which would allow for flexible multi-generational housing, in-law and accessory apartment living arrangements.

Recommendation 1-5: Assist communities in conducting zoning ordinance reviews and developing recommendations to provide for workforce housing.

Goal 2: Develop and implement a comprehensive public outreach campaign to increase education and training opportunities for fair housing and housing needs in the region

Recommendation 2-1: Promote and host educational workshops and training sessions on housing resources, law and fair housing issues. Specifically work with NHHFA to promote the Housing Awareness public education campaign to promote local acceptance of a variety of housing options.

Recommendation 2-2: Develop a “best practices” resource guide that highlights what other states are doing to encourage/incentivize/require affordable housing, such as 40-B in Massachusetts.

Recommendation 2-3: Clearly distinguish and educate local officials and residents on the differences between manufactured and mobile homes. Manufactured homes are reliably affordable and not mobile.

Recommendation 2-4: Promote “inter-generational communities” and educate its potential benefits, such as seniors being available to volunteer at daycare if residing near a school.

Goal 3: Work to address statewide housing issues that impact the Southern New Hampshire region

Recommendation 3-1: Balance existing HUD entitlement funding between the revitalization of impacted areas (those with housing problems, minority and/or low-income concentrations) and the creation of new affordable housing in non-impacted areas.

Recommendation 3-2: Encourage public transportation services, in all its myriad forms, such as Rideshare.

Goal 4: Monitor statewide, regional and local trends to ensure that housing needs are being met

Recommendation 4-1: Encourage communities to conduct a spatial inventory of where development is occurring, as well as an inventory of affordable housing units.

Recommendation 4-2: Continue to conduct a Regional Housing Needs Assessment to determine where regional cooperation is needed in order to meet housing needs.

Recommendation 4-3: Work with NHHFA to incorporate statewide trends, results and data into regional analysis in order to guide regional and local recommendations and plans.

C

(TRANSPORTATION)

MOVING SOUTHERN NH FORWARD

VOLUME 2:
Transportation



2015-2035

Regional Comprehensive Plan 2015



Southern New Hampshire Planning Commission works to make our region better by facilitating cooperative and long term decision making. We believe a promising future can be achieved through fiscally sound and responsible planning and development decisions that improve the economy, efficiency and health of our region.

June 2014

Regional Comprehensive Plan 2015

for the
Southern NH Planning Commission Region



SNHPC

*Prepared by the
Southern New Hampshire Planning Commission*

DRAFT

June 2014

TABLE OF CONTENTS



TRANSPORTATION	1
Vision & Purpose.....	1
Public Input from SNHPC Outreach.....	1
Written Comment Cards.....	2
Visual Preference Survey.....	3
Regional Visioning Workshops and Forums.....	4
Public Input from UNH Telephone Survey.....	5
Key Issues & Concerns	7
Existing and Future Conditions	9
Red Listed Bridges.....	9
Pavement Conditions.....	11
Transportation Accidents and Fatalities.....	13
Movement of Goods	15
Highway Capacity	17
Public Transit.....	22
Commuting Patterns.....	24
Rail Lines.....	28
Connectivity.....	31
Walkability & Bikability	35
Energy Efficiency & Greenhouse Gas Emissions.....	36
Vehicle Miles Traveled (VMT)	38
Air Quality	40
Affordability.....	41
Financing.....	41
Transportation Improvement Programming	42
Key Strategies & Projects	44
Safety	44
Context Sensitive Solutions.....	45
Healthy Transportation.....	46
Energy Conservation.....	46
Reduce Greenhouse Gas Emissions	47
Complete Streets	48
Pedestrian and Bicycle Facilities.....	50
Public Transportation	56
Maintenance of Roads and Bridges.....	57
Passenger Rail.....	59
Transportation Demand Management.....	59
Smart Growth & Land Use.....	62
Scenic Byways	63
Climate Change Adaptation	65
Alternative Financing	67
Public Outreach.....	68

Outcomes.....	69
Core Goals	69
Recommendations	70
APPENDIX	72
Appendix A: Regional Bicycle Routes (NHDOT).....	73

LIST OF FIGURES

Figure 1: Public Comments on Improving Transportation Choices	2
Figure 2: Transportation Choices: Visual Preference Survey.....	4
Figure 3: Should Policy Makers Invest More in Transportation?: UNH Telephone Survey, 2013	6
Figure 4: Miles of Pavement by Condition in Southern NH	12
Figure 5: Manchester High Accident Intersection (Source: SNHPC, NHDOT data).....	15
Figure 6: NH Freight Shipping Modes (NHDOT, 2011)	16
Figure 7: MTA Ridership by Route, FY 11 - FY 13 (MTA, 2013)	23
Figure 8: Commuters' Transportation.....	24
Figure 9: Population with Access to Multi-Modal Transportation in Southern NH	31
Figure 10: Change in Fuel Consumption in NH 1950-2010 (USDOT).....	36
Figure 11: U.S. Greenhouse Gas Emissions Attributed to Transportation, 2010.....	37
Figure 12: NH TRANSPORTATION CARBON EMISSIONS 1990-2011	38
Figure 13: Decreasing Regional Traffic Volumes	40
Figure 14. Pedestrian crossing on Granite Street in Manchester, NH	48
Figure 15: NH Pavement Condition	58
Figure 16: The Steps of the Congestion Management Process (FHWA)	61
Figure 17 The General John Stark Scenic Byway	63
Figure 18 2007 flooding in Deerfield, NH	65

LIST OF TABLES

Table 1: Public Comments on Improving Transportation Choices	3
Table 2: State Red Listed Bridges by Town ⁴	10
Table 3: Municipal Red Listed Bridges by Town ⁵	11
Table 4: Transportation Fatalities in Southern New Hampshire and the State 2002-2011	13
Table 5: High Accident Intersections in Southern New Hampshire	14
Table 6: Commuting Methods in Southern New Hampshire	26
Table 7: Historic Commuting Methods by Percentage in Southern New Hampshire	27
Table 8: Allowed Train Speed by Class of Rail Line	28
Table 9: NH Park and Ride Lots	32
Table 10: Decreasing Traffic Volumes in Southern NH	39
Table 11: Alternative Financing Methods	67

LIST OF MAPS

Map 1 2010 Roadway Capacity Deficiencies	19
Map 2 2040 No Build Roadway Capacity Deficiencies	20
Map 3 Planned Future Improvements	21
Map 4 Southern NH Rail Lines	30
Map 5 Manchester Transit Authority Routes	33
Map 6 Multi-Modal Transportation Facilities and Routes	34
Map 7 Existing Trail System	54
Map 8 Scenic Byways	64
Map 9 Regional Bicycle Routes	72



TRANSPORTATION

The purpose of the Transportation Chapter is to provide the public and decision-makers with a strategic analysis and evaluation of the region's transportation infrastructure; existing and future transportation conditions; key transportation issues and needs recognized through the public outreach events, activities and surveys; and the key goals and recommendations of the plan, including the background information and data which support this evaluation. This chapter is not meant to serve as a comprehensive transportation plan. Rather it is a strategic integration and evaluation, taking into consideration the sustainability and livability principles and themes as outlined in Volume 1 of the Plan.

VISION & PURPOSE

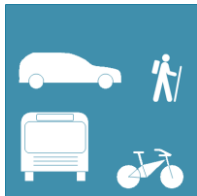
The Transportation Chapter is founded upon the following Value Statement:



Transportation Choices

Expanding and improving upon our local and regional transportation choices for all modes of travel, including bicycling, walking and public transit; choice needs to be a priority to enhance our region.

This Value Statement is also in line with New Hampshire's Livability Principles, which state:



*"Transportation Choices provide a number of options that help people safely and efficiently get where they need to go, whether it is by walking, driving, biking, public transportation, carpooling, or taking a train or plane. Transportation networks should make it easy to get from one place to another, and should also allow the efficient movement of goods to support the economy (commercial freight, rail, and air transport)."*¹

Public input collected via Granite State Future (GSF) public outreach efforts, including regional visioning workshops, comments submitted online, and a telephone survey conducted by the University of New Hampshire, demonstrate widespread public support for expanded transportation choices.

PUBLIC INPUT FROM SNHPC OUTREACH

As captured in SNHPC's Public Outreach Report, the Transportation Choices theme is one of three major themes that emerged from the public input received: everyone values having some choices for transportation and we could be doing a better job of making more choices available to all. Those who live, work and play in Southern New Hampshire would like to see improved transportation infrastructure for all modes of transportation; not only for the automobile, but especially for bicycles, pedestrians and public transit. Transportation should be a choice above all, but for a lot of our communities, options may be

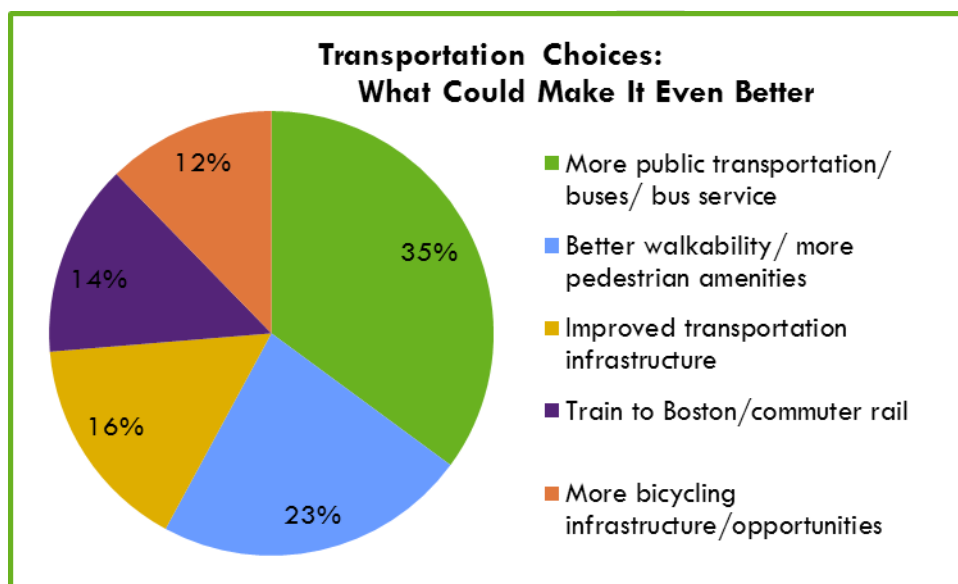
¹ Granite State Future, 2014. History and Principles. <http://www.granitestatefuture.org/about/history-and-overarching-principals/> (last accessed February 12, 2014)

limited by the infrastructure that exists currently and the feasibility of developing creative solutions for expanding those options in our region.

WRITTEN COMMENT CARDS

Among all the written public comment cards, nearly half (45 percent of the written comments collected indicated transportation issues as the main weakness of the region displays the categories of comments with transportation suggestions.

FIGURE 1: PUBLIC COMMENTS ON IMPROVING TRANSPORTATION CHOICES



Public transportation is the most frequently requested Transportation Choices improvement with over one third (35 percent) of comments associated with this general outreach question. Respondents asked for expanded bus service and public transportation for local trips especially; one comment also wanted to see smart public transportation linked with smart phone applications.

Pedestrian improvements were the second most popular improvement suggested (23 percent), and included more sidewalks and general pedestrian amenities. One comment emphasized the importance of sidewalks by noting that some people must walk to get places.

Transportation infrastructure upgrades (16 percent) were proposed to reduce traffic and better connect neighborhoods. Some comments recommended commuter trains to Boston (14 percent).

Other comments requested that bicycles be better included in roadways (12 percent), not just for recreation purposes, but also for commuting purposes. A selection of specific comments listed by comment category is displayed in Table 1.

TABLE 1: PUBLIC COMMENTS ON IMPROVING TRANSPORTATION CHOICES

Categories	Comments
1. More public transportation/ buses/ bus service	Better public transportation, including rail
	More bus service locally
	Smart public transportation such as a small efficient bus routed and scheduled by a smart phone app.
	Longer bus hours. Safer walkways
2. Better walkability/ more pedestrian amenities	More rails to trails and other safe places (sidewalks) to walk the dogs and kids. Connecting the parking lots on South Willow to make multiple visits easier.
	Some people have to walk for transport. I'd like to see more sidewalks.
	Public transportation, more sidewalks
	Better public transportation, more pedestrian amenities to make places more walkable, more economic development and focus on job creation
3. Improved transportation infrastructure	Need to work on infrastructure - traffic is an issue in many Southern NH towns/cities
	Manchester needs to embrace its status as a major New England city, and assert itself as an affordable, urban alternative to Boston, Providence and Portland. It needs better planning--mixed-use development on parking lots and empty lots just outside of downtown, stronger neighborhood centers to anchor areas outside of downtown, and better public transit. Right now, downtown is a great place to visit and there are several wonderful neighborhoods, but they aren't connected well.
4. Train to Boston/ commuter rail	Rail to Boston; More bike paths; First rate schools
	Commuter Rail, more high tech jobs, fiber optic internet ("FIOS")
5. More bicycling opportunities	Better roads for road bicycling in the community
	More bike lanes and bike paths for commuters, not just for recreation.

VISUAL PREFERENCES SURVEY

The results of the Visual Transportation Preferences survey indicate a need for supporting many different transportation options, at percentages suggesting a preference for increasing public transportation, bicycling, and walking to modal shares greater than currently present; see Figure 2.

As shown in Figure 2, participants' selection of images indicated they most preferred to drive (23 percent) or use a train (23 percent), very closely followed by biking (20 percent) or walking (18 percent). Using a bus (11 percent) was preferred by many respondents at the two events held in Manchester (15 percent and 16 percent), while fewer people listed it as their preference at the third event, the Deerfield Fair (5 percent). Some participants also listed rideshares (5 percent) as their preference. Overall, participants in the Visual Preference survey demonstrated preferences for a range of different transportation options, with no single option preferred by even a quarter of participants. The results suggest that residents want a diversity of choices.

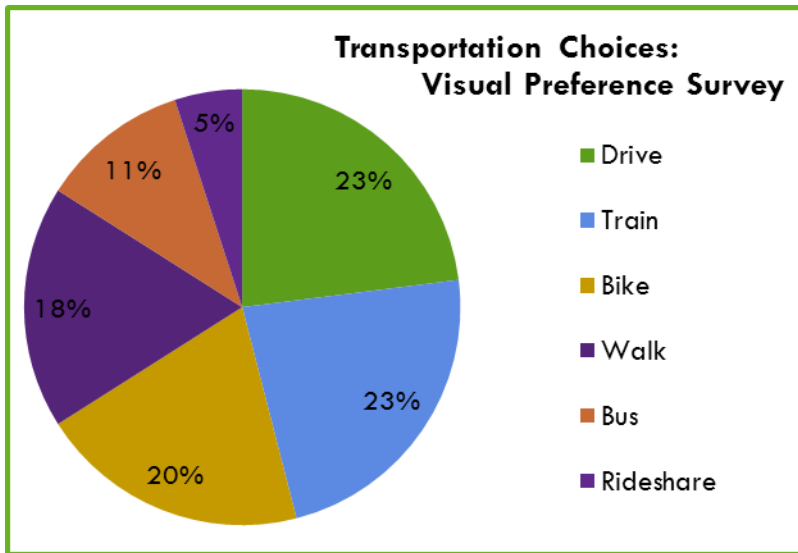


FIGURE 2: TRANSPORTATION CHOICES: VISUAL PREFERENCE SURVEY

REGIONAL VISIONING WORKSHOPS AND FORUMS

Public input collected at the Regional Visioning Workshops also supports transportation choices as a key theme. Transportation was the most discussed topic at the regional workshop held in New Boston. At the Candia regional workshop, transportation was named as a “huge issue” for those without cars and young people. Comments such as this one at the regional workshop in Derry express similar sentiments: “Transportation [is] absolutely critical—we do not do it more—we need more options. [It] needs to be integrated locally.” At all three of these workshops, participants repeatedly stated that while cars are currently the main form of transportation, they want more choices. Investments in transportation infrastructure were considered important for a multitude of reasons: improving the safety of bicyclists and pedestrians, attracting and retaining youth, boosting the economy and tourism, strengthening social connections in their communities, protecting the environment, increasing energy efficiency, and better serving children, seniors, and others who cannot drive.

Transportation Choices was also a reoccurring topic of discussion at other public forums as well. In the Neighborhood Conversations, the SHINE Senior Program members, Raymond Coalition for Youth, Manchester Shared Youth Vision Team, and Greater Manchester Clergy Association named transportation as an area for improvement. Community of Interest discussions with Liberty House members and Hillsborough Advisory Council members also yielded transportation choices as a focus for improvement, as did discussion at the Community of Place forum in Manchester. According to the Communities of Interest focus groups that took place across New Hampshire, transportation was the top issue of importance for demographic groups such as senior citizens; low income populations; minority, immigrant, and refugee populations; disabled populations; and youth.

PUBLIC INPUT FROM UNH TELEPHONE SURVEY

UNH Telephone Survey results provide further insight into residents' transportation preferences:

- With regard to walking and biking, a large majority of residents (89 percent) said they want their community to promote safe places to walk or bicycle when they were asked “What should be actively encouraged in your community?” This suggests broad support for Complete Streets that provide accommodation for not only automobiles, but also for pedestrians and bicyclists.

89 percent
of residents
want their community
to promote safe places
to walk or bike
- A majority of residents (55 percent) also stated that they want policy makers to invest in availability of bike paths. Households earning over \$90,000 are more likely to want investment in the availability of bike paths.
- Fewer residents (32 percent) wanted policy makers to invest more in sidewalks and crosswalk areas. Household earning less than \$20,000, those aged 30 to 39 and those who have lived in New Hampshire for 6-10 years are more likely to want investment in sidewalks and crosswalk areas.
- Nearly three-fourths (73 percent) of residents think policy makers should invest more money in maintaining roads, highways and bridges (with 55 percent willing to pay more in taxes to do so).
- Over half the region's residents want investments in improving the availability of senior and special needs transportation (56 percent).
- About half of residents want investments in expanding bus service between major cities (52 percent).
- Investing in reduced congestion on major roads is desired by nearly half of residents (45 percent).
- Slightly less than half of residents would like policy makers to invest more in traffic safety (44 percent).
- Over a third of residents think that policy makers should invest to improve the availability of public transportation (36 percent). Households earning less than \$40,000 and young people (18 to 29) are more likely to want investment in improving the availability of public transportation.

73 percent
of residents
want policy makers to invest
more money in maintaining
roads, highways, and bridges

Overall, residents were split on whether or not to increase “investments in transportation.” Note that while nearly 90 percent of residents wanted their community to “promote” safe places to walk and bicycle, significantly fewer residents wanted policy makers to “invest” in facilities for the these same initiatives. See Figure 3 for more information from the UNH Telephone Survey on residents' preferences for public investment in transportation.

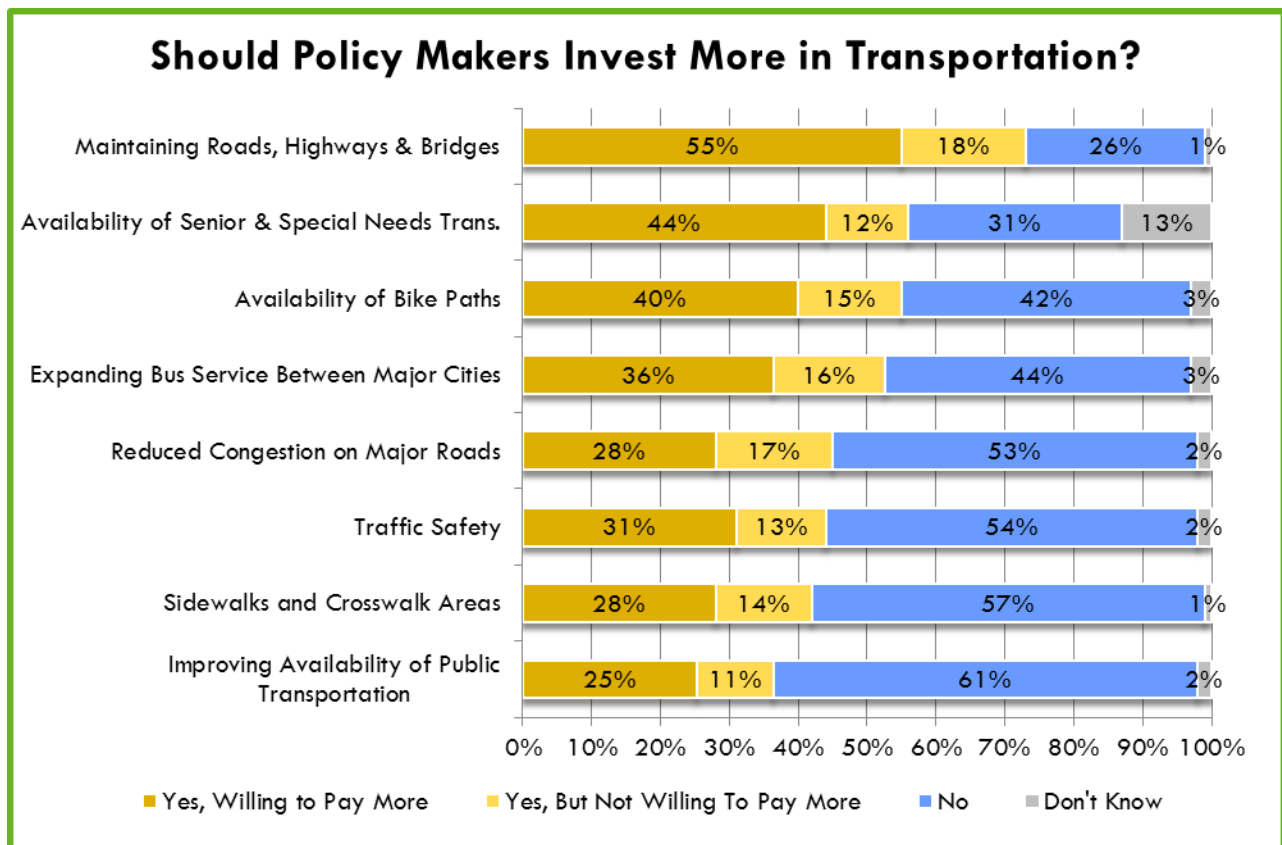


FIGURE 3: SHOULD POLICY MAKERS INVEST MORE IN TRANSPORTATION?: UNH TELEPHONE SURVEY, 2013

KEY ISSUES & CONCERNS

Residents of Southern New Hampshire view transportation as one the two biggest areas for improvement in the region. Throughout the outreach process and the writing of this chapter a number of key issues and concerns came to the forefront of focus, as follows:

- **[Choices]** Residents of the Southern NH region want more choices than are offered by the current transportation infrastructure. Currently, the overwhelming majority of residents drive a single-occupancy motor vehicle to get to work. However, public input indicates that residents want to be able to choose from bus transit, commuter rail, bicycling, and walking as well.
- **[Safety for all users]** Safety is always a goal at the forefront of transportation planning. The SNHPC Region experiences on average 20.5 transportation-related fatalities per year (2002-2011) compared to over 100 fatalities per year statewide. Currently the State has a laudable “Driving Towards Zero” initiative that calls attention to the goal of reducing transportation fatalities. Complete Streets initiatives – initiatives that improve safety for all users: the handicapped, pedestrians, bicyclists, and those riding motorcycles or travelling in cars – are currently not in place but could improve safety, particularly for the most vulnerable users.
- **[Healthy transportation]** Rates of obesity and overweight individuals are increasing in the state; healthy transportation choices that allow physical activity to be incorporated into daily routines are needed. Infrastructure and facilities that support healthy transportation options such as bicycling and walking are important for providing choices that improve health outcomes for the region’s residents.
- **[Affordability]** In the Southern New Hampshire Region, the majority of neighborhoods are not considered affordable in terms of combined transportation and housing costs. Approximately 70 percent of residents do not live in affordable neighborhoods². The majority of affordable neighborhoods in the region are located in Manchester. Additionally, 100 percent of the residents spend more than 15 percent of their income on transportation, which is the maximum percentage considered affordable by the H+T index. This unaffordability is due to the high dependency upon automobile transportation.³
- **[Emissions]** Transportation has large impacts upon the environment and human health. Over a quarter of greenhouse gas (GHG) emissions in the US are attributed to the transportation sector. Average growth of gasoline consumption per decade in NH is 35 percent, suggesting a trend of greater volumes of GHGs. Strategies that reduce vehicle miles travelled (VMT) are key to reducing transportation emissions. Improving transportation alternatives to single-occupancy motor vehicles is the focus of VMT-reduction strategies.
- **[Funding]** Transportation funding priorities on the whole are very automobile-focused, although some funding opportunities exist for alternatives. Critical lack of funding at the state level results in continuing deterioration of existing road/bridge infrastructure, as well as shortage of innovation/new funding for transit and other modes. Economic sustainability for funding the transportation system is challenged by uncertain federal budgets and limited municipal resources as well. The ever-growing network of roads and bridges requires continuous maintenance costs in

² Note: data unavailable for the Town of Windham

³ The Center for Neighborhood Technology. 2013. H+T Affordability Index. Retrieved from <http://htaindex.cnt.org/> (last accessed 13 November 2013)

order to prevent even greater costs of larger-scale replacement. 22 percent of the region's highway pavement is in poor condition and this percentage has been increasing since 2000.

- **[Economic Development]** Transportation plays a central role in economic development. The transportation system needs to not only ensure the mobility of people and goods, but also needs to maximize the accessibility of businesses and contribute to vibrant downtown and commercial areas. Complete Streets projects that improve street facilities for all users have been found to increase foot and bicycle traffic, results in greater sales, attract new businesses, create jobs, increase property values, and input local dollars into the economy.
 - **[Retaining Youth]** An oft-repeated concern heard during public outreach was that youth are leaving the state and region. Many possible reasons for this abound, but limited transportation alternatives and the high cost of commuting by automobile-based transportation may be one factor. Youth need affordable transportation choices, but the current regional transportation system often requires relatively-expensive car ownership to get around. National trends indicate that youth are driving less than in previous generations, and “alternative” modes of transportation, such as bicycling and public transit, are growing in popularity among youth in particular. Bicycle and pedestrian facilities – e.g. bikes lanes and sidewalks - could help increase livability and attract youth.
 - **[Education]** There is a lack of information among lawmakers and public as to the need to diversify modes and increase investment in public transit, both in rural and urban areas. Municipalities in the region are new to “Complete Streets” policies and other alternative transportation planning efforts; an initial knowledge gap needs to be bridged to overcome current challenges. A lack of public knowledge of the connection between transportation infrastructure and regional and state economic development opportunities also shapes policy. Greater education on our transportation challenges could spur more conversation on the region's transportation choices.
 - **Congestion:** The total number of highways (highway sections) currently operating at or near capacity today will increase if no improvements are made by the year 2040. While total number of vehicle miles traveled (VMT) appear to be decreasing 5-6 percent regionally, the total number of daily vehicle trips is expected to continue to increase on average 0.7 percent annually in the region. Providing transportation alternatives and demand management techniques can help reduce vehicle trips in terms of numbers and miles travelled.
 - **[Climate adaptation]** Transportation infrastructure often bears the brunt of weather-related disasters such as severe storms and flooding. With climate change, the likelihood of these disasters has been increasing and will continue to increase, underscoring the need for investment in infrastructure and adaptation, in addition to greater transportation choices.
-

EXISTING AND FUTURE CONDITIONS

Topics addressed in this section are as follows: safety, movement of goods, transportation options and Complete Streets, connectivity, walkability and bikability, energy efficiency and greenhouse gas emissions, parking options/ travel demand management, smart growth and land use, financing, transportation improvement programming, and coordinating local, regional, and state goals.

RED LISTED BRIDGES

**27 Red Listed Bridges:
13 State & 14 Municipal
in Southern New Hampshire**

There are a total of 27 bridges – 13 state-owned and 14 municipal-owned – in the region that are Red Listed. The 13 Red Listed state bridges in the region represent 9.0 percent of the 145 Red Listed state bridges in New Hampshire.^{4,5} A Red List designation indicates that a bridge has one or more major structural elements in poor condition or requires weight limit postings. State-owned Red List bridges are inspected twice per year, and municipally-owned Red List bridges are inspected once a year. Different actions may be taken with regard to red-listed bridges, including replacement or rehabilitation, scheduling for replacement or rehabilitation in the Ten Year Plan, or plans made for the bridge to be addressed by the New Hampshire Department of Transportation (NHDOT) Bridge Maintenance Bureau. Other bridges may need to be added to the Ten Year Plan, or simply be monitored and kept in service.⁶ Addressing red-listed bridges is a NHDOT stated priority for development of the next Ten Year Plan.

The I-93 expansion⁶ and the I-293 Exit 4 project, currently underway, are two projects aimed to reduce the number of red-listed bridges in the region. The I-293 Exit 4 project is part of the NH Bureau of Turnpike's Capital Program to address red list bridges and improve safety and congestion on the Turnpike System. Expanding the Capital Program (which is nearing completion with an 80 percent completion rate in July 2013) could provide additional revenue for improving Red Listed bridges. Some state projects are authorized but not funded, while other bridges are close to becoming red-listed.

Challenges associated with Red Listed bridges include the cost to rehabilitate or replace them, as each bridge can cost millions of dollars. Additionally, a large portion of the bridge inventory is reaching the end of its design life, resulting in the projected addition of further bridges to the Red List.⁶ Despite many bridge projects undertaken, the number of Red Listed bridges in the state has remained roughly constant from 2010 to 2011, ranging from 140 at the lowest (in 2012) to 149 at the highest (in 2011).^{4,6} Thirdly, current preservation activities are aimed to extend the life of a bridge with insufficient investment. Delaying maintenance and trying to address the worst bridges first increases rate of bridge deterioration,

⁴ New Hampshire Department of Transportation. 2013. *NHDOT Red List Summary*. Concord, NH: New Hampshire Department of Transportation. http://www.nh.gov/dot/org/projectdevelopment/bridgedesign/documents/nhdot_redlist2013-04-01.pdf (last accessed July 25 2013).

⁵ New Hampshire Department of Transportation. 2013. *NHDOT Municipal Red List*. Concord, NH: New Hampshire Department of Transportation. http://www.nh.gov/dot/org/projectdevelopment/bridgedesign/documents/nhdot_municipal_redlist2013-04-01.pdf (last accessed 25 July 2013).

⁶ New Hampshire Department of Transportation. 2012. *2012 Annual Report*. Concord, NH: New Hampshire Department of Transportation. <http://www.nh.gov/dot/media/documents/2012AnnualReport.pdf> (last accessed 25 July 2013).

reduces bridge life expectancy, and requires major bridge rehabilitation or replacement at much higher costs.⁶ The same could be said of road maintenance as well.

Because greater numbers of bridges are aging, the NHDOT is “evaluating methods to extend the lives of bridges while reducing future bridge costs by keeping them in good condition.” Current NHDOT strategies for tackling Red Listed bridges include:

- Increase bridge preservation efforts to reduce the rate of deterioration;
- Use better methods and materials to extend the life expectancy on all new bridges; and
- Include bridge preservation/rehabilitation work with roadway work to attain a better economy of scale and reduce the cost of bridge work⁶

These strategies will be needed in order to prevent the number of red listed bridges from increasing and to most efficiently manage the cost of rehabilitation and replacement. See Table 2 and Table 3 below for details on current Red-Listed bridges in the Southern New Hampshire Region.

TABLE 2: STATE RED LISTED BRIDGES BY TOWN⁴

Town	Year Red-Listed	Location	Action	Status
Bedford	2008	NH101 over Pulpit Brook	Replace	Needs to be added to the Ten Year Plan; currently in draft Ten Year Plan
Bedford	2009	NH114 over Brook	Rehab	In the Ten Year Plan
Bedford	1999	US 3 over FEE TPK	Replace	Under Construction
Deerfield	2010	NH107 over Freese's Pond	Replace	Needs to be added to the Ten Year Plan; currently in draft Ten Year Plan
Manchester	2012	I-293, FEE TPK SB over Black Brook	Rehab	In the Ten Year Plan*
Manchester	2012	I-293, FEE TPK NB over Black Brook	Rehab	In the Ten Year Plan*
Manchester	1997	I-293, FEE TPK over N BR Piscataquog River	Rehab	In the Ten Year Plan
Manchester	1999	I-293, FEE TPK over S BR Piscataquog River	Rehab	In the Ten Year Plan
Manchester	1999	I-293, FEE TPK Spur over S BR Piscataquog River	Rehab	In the Ten Year Plan
Manchester	1999	I-293, FEE TPK over Spur D	Rehab	In the Ten Year Plan
Manchester	1999	I-293 Ramp over I-293, FEE TPK	Replace	In the Ten Year Plan
New Boston	2004	NH 13 over S BR Piscataquog River	Rehab	To be addressed by Bridge Maintenance
Raymond	1990	Dudley Road over Lamprey River	Remove	Project cancelled

* Work delayed pending completion of Manchester 16099 planning study.

Source: NHDOT and SNHPC

TABLE 3: MUNICIPAL RED LISTED BRIDGES BY TOWN⁵

Town	Year Built & Rebuilt	Location
Auburn	1850, 1991	Griffin Mill Road over Maple Falls Brook*
Bedford	1928, 1984	Beals Road over Baboosic Brook
Candia	1920	Old Deerfield Road over Brook
Candia	1930	Beane Island Road over Bean Brook
Chester	1932	Hanson Road over Exeter River
Deerfield	1930	Blakes Hill Road over Lamprey River
Londonderry	1930	Stokes Road over Little Cohas Brook
New Boston	2004	Dougherty Lane over Mid Br Piscataquog River
New Boston	1920, 1973	Hilldale Lane over S Br Piscataquog River
Weare	1973	Lull Road over Peacock Brook
Weare	1973	Old Francestown Rd over Peacock Brook
Weare	1940	Peaslee Road over Piscataquog River
Weare	1930, 1996	Burroughs Road over Choate Brook
Windham	1984	Castle Hill Road over Beaver Brook

*Currently closed
Source: NHDOT and SNHPC

PAVEMENT CONDITIONS

22 percent of Pavement in Poor Condition in Southern New Hampshire

Pavement condition measuring, reporting, and monitoring are based upon the Ride Comfort Index and additional pavement condition data. The 5.0-point scale Ride Comfort Index, or RCI, measures the roughness of a road traveled by a motorist. It has been used by NHDOT since 1995. “Good” is the equivalent of a score greater than 3.5 and requires no work, “Fair” is between 3.5 and 2.5 and requires some work, and “Poor” is defined as less than 2.5 and requires major work.^{7,6} The Figure 4 displays the percentage of miles of pavement in the Southern New Hampshire region by condition:

⁷ New Hampshire Department of Transportation. 2011. *Pavement Condition: Collection Year 2010*. Concord, NH: New Hampshire Department of Transportation.
http://www.nh.gov/dot/org/projectdevelopment/planning/typ/documents/c_Pavement_Condition.pdf (last accessed 26 July 2013).

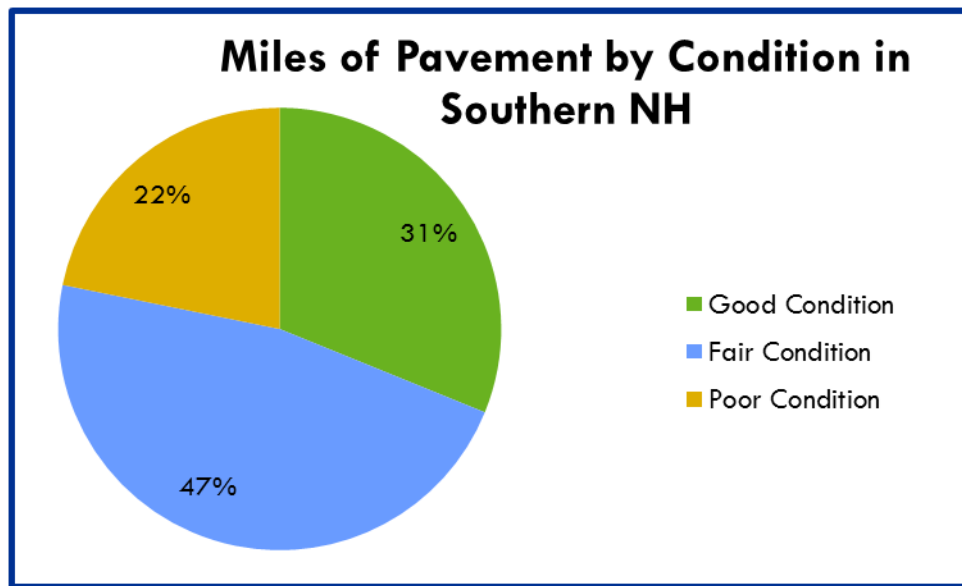


FIGURE 4: MILES OF PAVEMENT BY CONDITION IN SOUTHERN NH

Approximately, 31 percent of the region's pavement is in good condition, 47 percent is in fair condition, and 22 percent is in poor condition. Statewide, since 2000, the percentage of pavement in good or fair condition has been steadily decreasing and the percentage of pavement in poor condition has been steadily increasing, with the minor exception of 2010 due to funding providing by the American Recovery and Reinvestment Act.⁶ With the current funding levels, resurfacing mileage, and unpredictable cost of asphalt cement, NHDOT states that it will not be possible to maintain the good or fair mileage at the current level. Based on the Pavement Management System, funding will need to be increased from \$57M to \$69M per year in order to maintain the current mileage of roadways in good or fair condition. If funding levels are not increased, then the downward trend is projected to continue.^{8,9}

These trends and financing concerns affect the entire State, including the Southern New Hampshire region. NHDOT states a need to develop a permanent sustainable means to hold the existing condition level constant and prevent further deterioration of the network. The safe and efficient movement of people and goods is significantly affected by the condition of New Hampshire's transportation infrastructure. Poorly maintained pavement (and bridges, rail lines, buses, and airport runways) not only creates unsafe conditions for the traveling public, but also increases travel time, decreases capacity, and increases maintenance costs. If additional funding is not found and the roadway network continues to deteriorate, the cost of restoring roadways back to good condition increases exponentially. For example, NHDOT says that while periodic resurfacing of a roadway with a thin hot mix asphalt overlay costs approximately \$40,000 per mile, full depth reclamation and repaving with all new hot mix asphalt costs approximately ten times that - \$400,000 per mile.^{8,9}

⁸ New Hampshire Department of Transportation. 2011. *2011 Annual Report*. Concord, NH: New Hampshire Department of Transportation. <http://www.nh.gov/dot/media/documents/2011-annual-report.pdf> (last accessed 29 July 2013).

⁹ New Hampshire Department of Transportation. 2011. *Performance – 2011: State Highway Pavement in Good or Fair Condition*. Concord, NH: New Hampshire Department of Transportation. http://www.nh.gov/dot/org/commissioner/balanced-scorecard/departments/documents/bs_performance_pavecond.pdf (last accessed 29 July 2013).

TRANSPORTATION ACCIDENTS AND FATALITIES

20.5 Transportation Fatalities/ Year in Southern New Hampshire

There are 20.5 transportation-related fatalities per year in Southern New Hampshire, based on 2002 to 2011 NH DOT data; see Table 4. There are over 100 fatalities annually in the state as a whole. According to NHDOT, the number of fatal accidents in New Hampshire decreased by approximately 23 percent between 2005 and 2010. In

2009 there were 110 highway fatalities, the lowest number since the early sixties. In 2011, an even lower total of 90 fatalities was achieved, although the 2010 number was comparable to pre-2009 numbers.¹⁰ A national data comparison shows New Hampshire is ranked 7th in the lowest number of crashes per capita in the nation in 2010. NHDOT credits the decrease in fatalities in part to engineering enhancements, public education, and increased law enforcement participation in statewide campaigns. Examples of engineered safety improvements include paving roadway shoulders, improving guardrail, installing rumble strips, enhancing delineation, and making intersection safety improvements.¹¹

TABLE 4: TRANSPORTATION FATALITIES IN SOUTHERN NEW HAMPSHIRE AND THE STATE 2002-2011

Year	Southern NH Fatalities	No. Accidents with Fatalities in Southern NH	NH Fatalities ^{12, 10}
2002	11	10	127
2003	25	22	127
2004	24	21	171
2005	35	34	166
2006	21	20	127
2007	21	21	129
2008	18	18	138
2009	21	19	110
2010	14	11	128
2011	15	15	90
Average	20.5	19.1	120.3

Source: NHDOT

High accident locations are also considered with regard to transportation safety. For this purpose, high accident intersections are defined by SNHPC as intersections with 10 or more accidents in four years (between 2008 and 2011). Accidents at or within 200 feet of an intersection were considered to be associated with the intersection. The six locations with the most accidents are as follows. Note that the

¹⁰ <http://vtrans.vermont.gov/sites/aot/files/documents/other/2012TriStatePMReport.pdf> (last accessed October 18, 2013).

¹¹ Driving Towards Zero New Hampshire, 2013. *The Numbers*. NHDOT, AAA, CHaD, City of Manchester, FHWA, NHTSA, NHDOJ, NHDOS, Victims Inc., & BIANH. <http://www.nhdtz.com/resources/detail/19> (last accessed October 18, 2013).

¹² State of New Hampshire (2007). New Hampshire Strategic Highway Safety Plan. http://www.nh.gov/dot/org/projectdevelopment/highwaydesign/documents/shsp_2007.pdf (last accessed October 18, 2013).

number of accidents is in parentheses. **S** indicates that an intersection has been studied, whereas **NS** indicates that it has not been studied.

1. **Manchester:** Amoskeag Rotary/ I-293 Exit 6/ Front St/ Eddy St/ Goffstown Rd/ Amoskeag St (Unknown) **I-293 Exit 6 & 7 Planning Study**
2. **Bedford:** S. River Road/ Kilton Rd (98) **S**
3. **Manchester:** Second St/ Queen City Ave/ Woodbury St (89) **NS**
4. **Manchester:** NH 28 S Willow St/ Weston Rd (80) **NS**
5. **Manchester:** NH 28A Mammoth RD/ Bridge St/Wellington Rd (78) **NS**
6. **Londonderry:** NH 102 Nashua Rd/ Gilcreast (77) **S**

355
High Accident Locations
in Southern NH

Table 5 provides information on the number of high accident locations in each municipality in Southern New Hampshire.

TABLE 5: HIGH ACCIDENT INTERSECTIONS IN SOUTHERN NEW HAMPSHIRE

Municipality	High Accident Intersections	Municipality	High Accident Intersections
Manchester	229	Raymond	5
Derry	29	Candia	2
Londonderry	26	Chester	1
Hooksett	22	Deerfield	1
Bedford	17	Auburn	0
Windham	13	New Boston	0
Goffstown	10	Weare	0

Source: SNHPC

Figure 5 provides information on the high accidents locations in the City of Manchester. Out of the 229 high accident intersections identified by SNHPC, the majority (132) had between 10 and 19 accidents each over four years. 57 intersections had between 20 and 29 accidents, 20 intersections had between 30 and 39, 14 had 40-59, 3 had 60-79 and 3 had 80-100+.

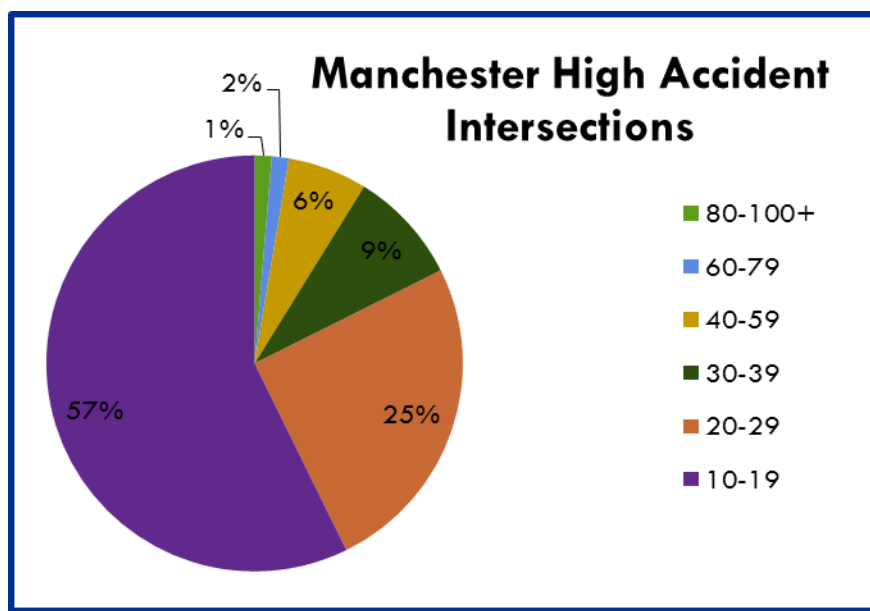


FIGURE 5: MANCHESTER HIGH ACCIDENT INTERSECTION (SOURCE: SNHPC, NHDOT DATA)

MOVEMENT OF GOODS

The movement of goods in the region by trucking, rail, waterways, and air, is a critical part of supporting the economy. The tonnage of freight shipped by all modes is one key statistic used to assess this transportation metric.

68,600,000+ tons of goods annually shipped in the State of New Hampshire

In 2009, NHDOT calculated that 68,677,213 tons of goods were shipped annually in New Hampshire.^{13,14} A breakdown of freight by region is not available at the present time. This measure includes four types of transportation that move freight into, out of, within and through the State of New Hampshire via the intermodal transportation system. The vast majority of goods in New Hampshire are shipped via truck transport (88 percent). Other means of shipping freight, in order from most used to least used include rail (7 percent), waterway (5 percent), and air (~0 percent). See Figure 6 below for a graphic representing modal share.¹³

¹³ New Hampshire Department of Transportation. 2011. *NHDOT Balanced Scorecard 2011: Measuring, Managing and Communicating NHDOT's Transportation Performance*. Concord, NH: New Hampshire Department of Transportation. http://www.nh.gov/dot/org/commissioner/documents/bsc_booklet_webplr.pdf (last accessed 30 July 2013).

¹⁴ New Hampshire Department of Transportation. 2011. *Performance – 2011: Total Freight Shipped Via All Modes*. Concord, NH: New Hampshire Department of Transportation. http://www.nh.gov/dot/org/commissioner/balanced-scorecard/departments/documents/bs_performance_totalcargoshipped.pdf (last accessed 30 July 2013).

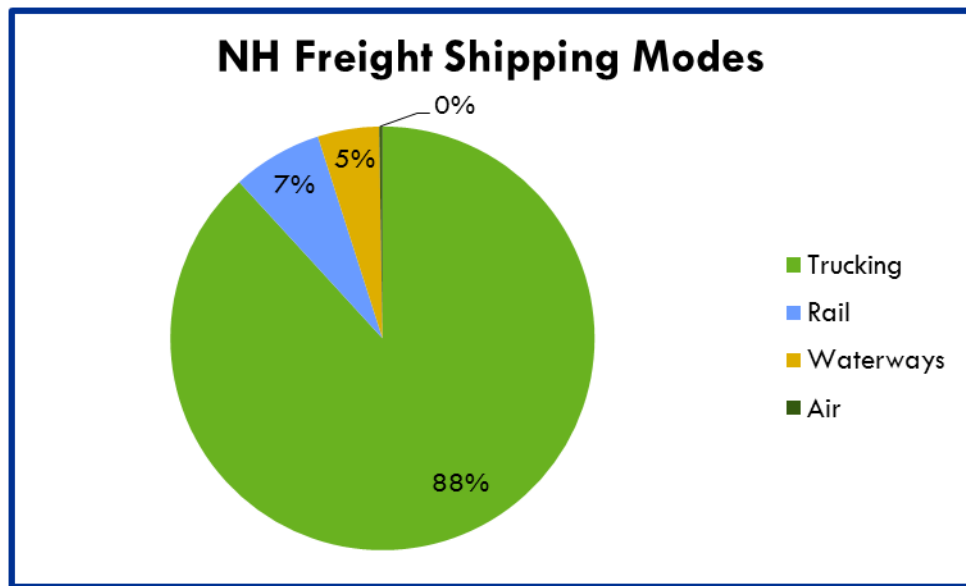


FIGURE 6: NH FREIGHT SHIPPING MODES (NHDOT, 2011)

A study by the OECD and cited by organizations such as the Vermont Agency of Transportation lists rail as the least environmentally damaging method of shipping goods by a number of different metrics. By comparison, freight trucks produce significantly more air pollution than freight rail. Trucks also produce more noise than rail since rail has the benefit of being of an intermittent nature. The average cost of accidents, noise, local pollution, and greenhouse gases per 1,000 tons/km is around four times (400 percent) higher for freight trucks than for freight rail, making rail the preferred shipping mode for multiple factors.¹⁵

A comparison of New Hampshire to other states shows that it uses relatively more trucking and fewer rails for freight than Vermont. Over 17 percent of the roughly 55,000,000 tons of freight is shipped every year in Vermont is shipped by rail.¹⁵ In Maine, about 80 percent of goods are shipped via truck, not including courier services.¹⁶

A variety of factors affect the number of tons of freight shipped. Factors include the demand for goods, the strength of the economy (regionally and nationally), the availability and condition of transportation infrastructure, the health of the freight industry, and competition within the freight industry. NHDOT notes this core metric figure may not be a good current estimation given that the 2009 data was collected and processed before the current recession. The future annual amount of freight shipped may also significantly differ. NHDOT expects freight demand (measured in tons) to double by the year 2025, nationwide. To accommodate this growth and remain competitive with surrounding states, NHDOT emphasizes continued funding of capacity project such as I-93, and rail, port, and airport modernization and expansion.¹³

¹⁵ Vermont Agency of Transportation (2013). Freight services. <http://rail.vermont.gov/freight> (last accessed 18 October 2013).

¹⁶ TRIP (2009). Falling Behind: The Condition and Funding of Maine's Roads, Highways & Bridges. <http://www.mbttaonline.org/LinkClick.aspx?fileticket=Dy3NrJ%2FKliE%3D&tabid=36> (last accessed 18 October 2013).

HIGHWAY CAPACITY

Future conditions for the vehicle-focused roadway network have been modeled by SNHPC. Regionally, total daily vehicle trips are expected to increase from 1,754,509 trips per day in 2005 to 2,367,270 in 2035. This increase is a result of 1) projected socio-economic growth in the 14 SNHPC communities and 2) overall background growth in statewide travel. This increase in generated trips is equivalent to an average increase of 1.00 percent annually. It should be noted that, as economic conditions change over the 30 year planning period, some years will experience accelerated growth in trips while other years will show slower growth. Although predominant travel patterns will remain essentially unchanged throughout the 30 year planning period, the construction of significant projects such as Raymond Wieczorek Drive will modify regional travel patterns and impact traffic on other principal regional routes such as I-293, F.E. Everett Turnpike, US 3, and Brown Avenue. In general, trips to/from Manchester will increase at a slower rate compared with elsewhere in the region because many Manchester TAZs have already or will soon reach their built-out capacity. As a result, additional growth will occur in other less built out portions of the region.

The 2035 average daily traffic volume assignments for 100 selected spot locations of the region's roadways are examined in the Regional Transportation Plan. Projected growth at the 100 selected spot locations varies between 0.39 and 4.35 percent per year; assuming growth between 2005 and 2035 is uniform. On an overall basis, growth in terms of daily link volumes averages out to an annual rate of 1.36 percent.

A commonly used measure of the overall use of a region's highway system is the daily vehicle miles traveled (VMT) statistic. In order to consider the effect of future VMT upon the highway network, a "No-Build" scenario was considered in which no new highway improvement projection are built. The 2035 projections using the No-Build highway network reveal that, overall, regional VMT will total 10,236,483 up from 7,215,142 in the base year. This amount of growth in vehicle miles traveled translates into an average annual increase of 1.17 percent over the 30-year planning horizon.

The SNHPC Long Range Regional Transportation Plan explains that the term "highway capacity" refers to the maximum number of vehicles that can be expected to traverse a section of roadway under certain prevailing traffic, roadway and control conditions. This term, usually expressed in vehicles per hour, refers to a rate of flow and not a total daily volume. Based upon the link capacities that are input into the model, roadway sections that are or will become capacity deficient were identified for a 2010 Base Year and a 2035 No-Build (existing highway network assuming that no projects are completed) scenario.

The results of the 2010 Base Year assignment indicate that sections of highway currently operating at over capacity during peak hour periods include:

- NH 101 (Bedford),
- I-93 and I-293 in Londonderry and Manchester,
- NH 114A in Goffstown,
- NH 102 in Londonderry, and
- US 3/NH 28 in Hooksett.

The results of the future No-Build assignment indicate that by 2035, the sections of highway currently operating at or over capacity during peak hour periods would expand to include:

- NH 101 in Auburn and Bedford,
- NH 102 in Chester and Raymond and
- F.E. Everett Turnpike in Manchester and Bedford

INSERT Map 2 presents the 2040 No-Build Roadway Capacity Deficiencies identified from the Base Year and 2040 No-Build model results. A comparison of the congested roadway corridors between Map 1 and Map 2 reveals the impacts of the incremental growth of traffic under a scenario where no improvements to the regional transportation infrastructure are implemented. Under these conditions, without improvements to expand the capacity of the roadway network, travelers will experience increasing amounts of peak hour traffic congestion resulting in increased travel times, increased fuel consumption and increased vehicle emissions. Additionally, businesses operating commercial vehicles under these conditions will experience reduced productivity through increases in travel times and fuel costs.

Map 3 displays planned transportation improvements, some of which will increase highway capacity. In particular the Interstate 93 and F. E. Everett Turnpike projects are intended to improve North – South highway travel in the region. See map for details.

DRAFT







Map # 3 - 1

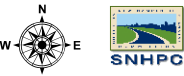
Granite State Future



Transportation 2010 Roadway Capacity Deficiencies

-  2010 Deficient Roads
-  Interstates
-  State and US Routes
-  Town Boundary
-  Rivers
-  Lakes

Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
All SNHPC Communities



The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

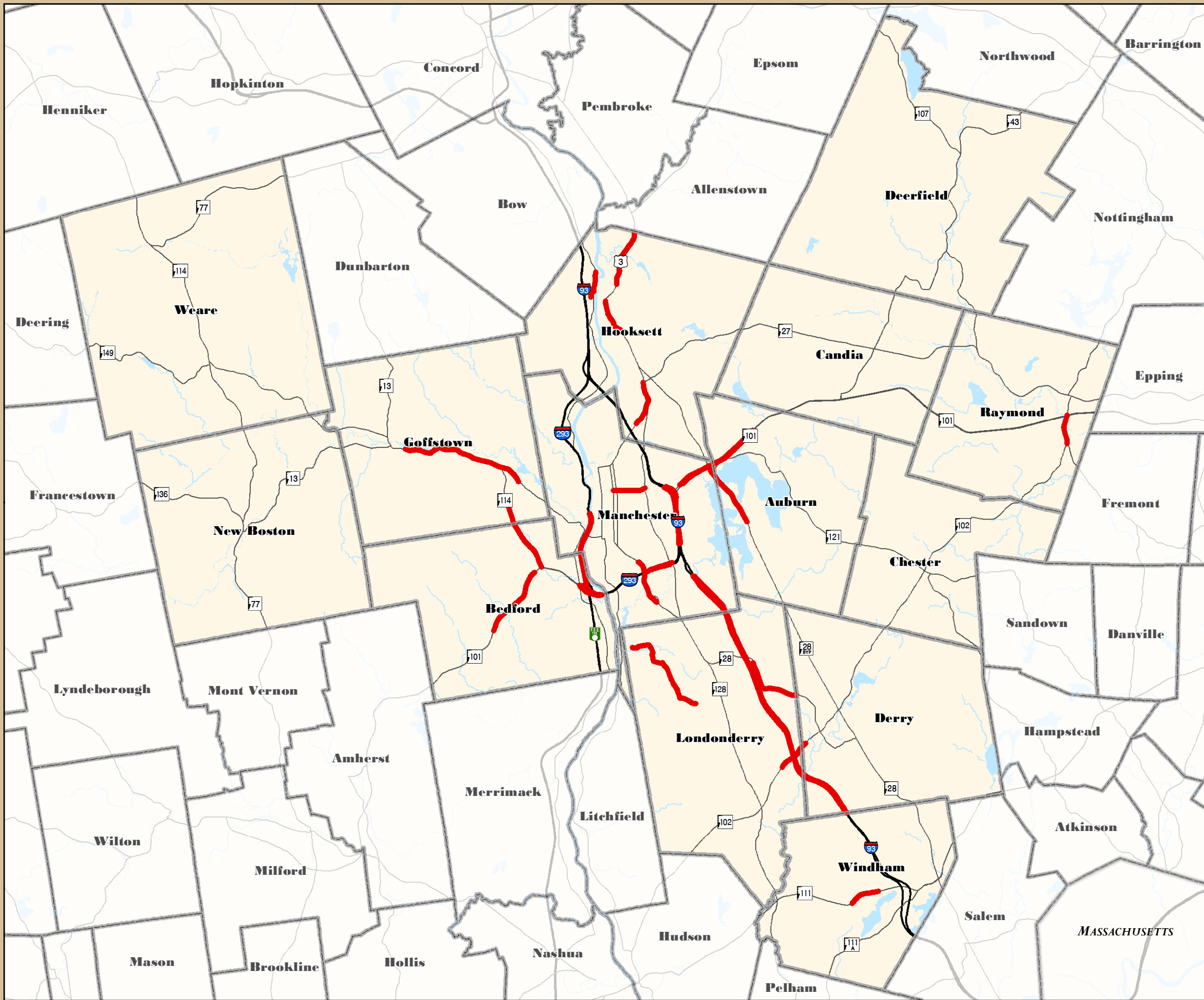
This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2014.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5
Miles



Location
Map



Map # 3 - 2

Granite State Future



Transportation 2040 No Build Roadway Capacity Deficiencies

- 2040 Deficient Roads
- Interstates
- State and US Routes
- Town Boundary
- Rivers
- Lakes

Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
All SNHPC Communities



The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2014.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5
Miles



Granite State Future



Transportation Planned Future Improvements

Additional Projects

- 1) Manchester Transit Authority- Operating and Capital Assistance
- 2) CART- Operating and Capital Assistance
- 3) Portsmouth-Manchester 20222- Bus Service (2016)
- 4) Boston Express - Commuter Bus Service (2015-2019)
- 5) Manchester - Boston Regional Airport - Modernization / Preservation (2015-2024)
- 6) Nashua - Bedford - F.E. Everett Turnpike - ITS Development (2017)

Planned Improvements taken from the NH DOT's recommendation for the Ten Year Transportation Improvement Plan 2015-2024 (DRAFT)

*Text denoted in red represents projects that are still in need of additional funding or anticipate future funding through toll increases

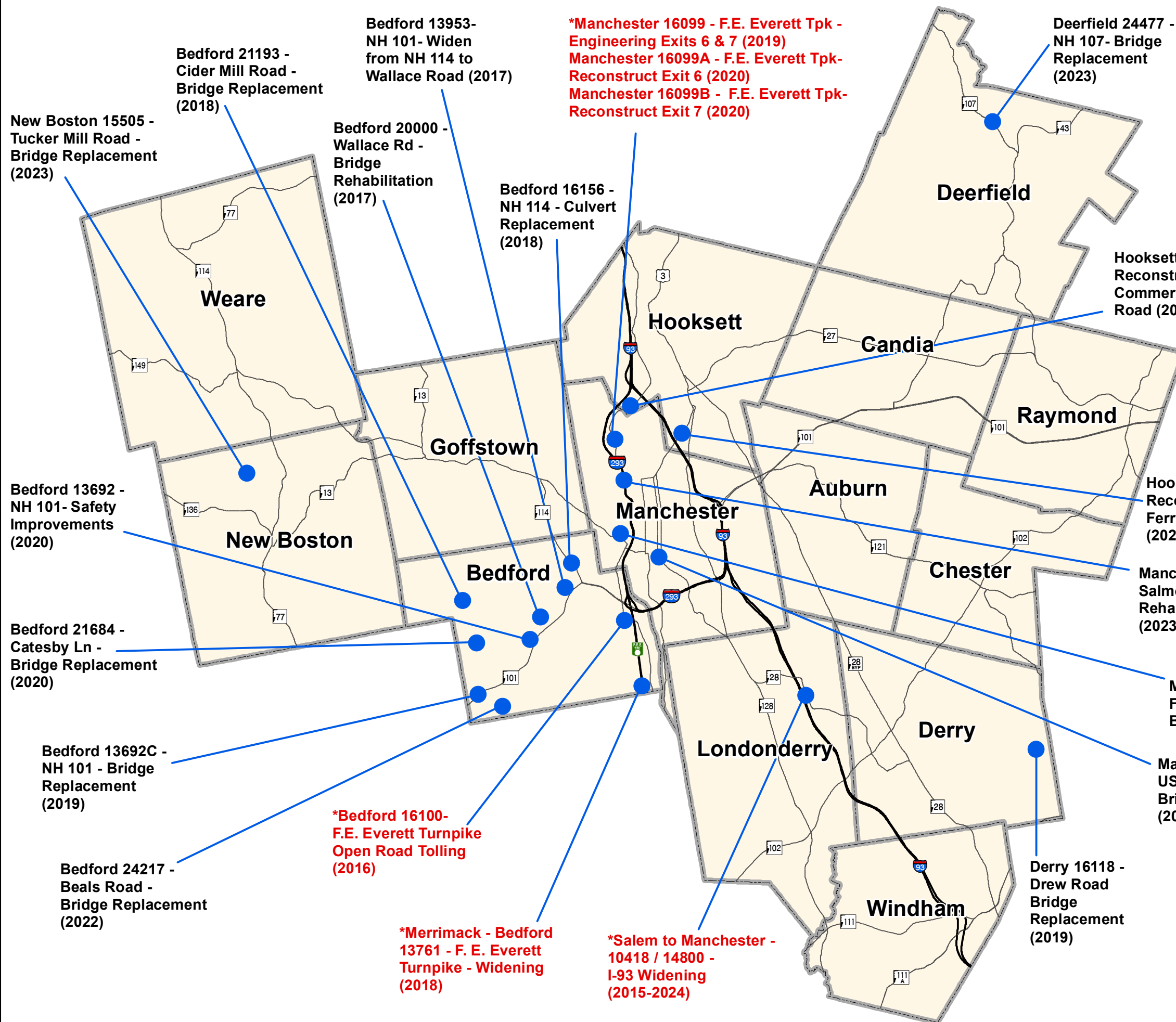
Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
All SNHPC Communities

The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2013.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5 Miles



PUBLIC TRANSIT

3,400,000+ annual ridership
utilizing public transit
in Southern New Hampshire

In 2011, the Southern New Hampshire region had an annual ridership of 3,415,291 utilizing public transit. According to NHDOT, ridership measures one-way trips, i.e., transit vehicle boarding. Transit ridership is a common measure of transit service and is reported to the Federal Transit Administration. For perspective, the population of the Southern New Hampshire region was approximately 275,000 people in 2010. On average each person took 12.4 trips via public transit annually.

The Manchester Transit Authority (MTA) is a major provider of public transportation in the Southern New Hampshire region. As displayed in Figure 7 below, ridership on many MTA routes has increased over the last three fiscal years (July 2010-June 2013). Overall ridership stood at 432,120 for fixed route services in fiscal year 2013. According to the 2013 MTA Short Range Transit Plan, average yearly load factors (the percent of seats that are occupied on any given route, expressed in terms of vehicle capacity) increased on 5 of their 10 routes from FY2010-FY2012. In addition to local routes, MTA initiated express service to Nashua in November 2010 and to Concord in October 2011. These routes have seen significantly increased ridership in the past 2-3 years.

In August 2013, SNHPC, in coordination with CNHRPC, NH DOT, and Steadman Hill Consulting, initiated a Manchester-Concord Transit Feasibility Study, the purpose of which is to determine the potential transit market for services between the two cities and Manchester Airport. The study, when complete, will provide alternatives to address long-term solutions for meeting transportation demands in the corridor. At the time of this writing, alternative potential services were being formulated, with commuter service and direct airport service as possibilities. As part of this study, MTA implemented a pilot program that has considerably increased service between the City of Concord and the Manchester Airport. MTA has implemented this service for an initial one year period while the demand study is being performed. Funding for the new service is provided through the Federal Transit Administration (FTA) with matching funds from State of New Hampshire toll credits.

Most transit systems in the state have seen their ridership increase over time.¹³ Transit ridership is expected to steadily increase through the next couple of years according to NHDOT projections.¹⁷ This increase could be because existing systems are attracting more riders, or because the availability of transit is expanding with longer hours, greater frequency or geographical reach, or a combination of factors. Changes to schedules to make them more convenient, new buses, and other improvements have increased ridership in the City of Manchester.¹³

¹⁷ New Hampshire Department of Transportation. 2011. *NHDOT Balanced Scorecard - Executive Summary 2011*. Concord, NH: New Hampshire Department of Transportation.
http://www.nh.gov/dot/org/commissioner/documents/2011bsc_executivesummarylr.pdf (last accessed 30 July 2013).

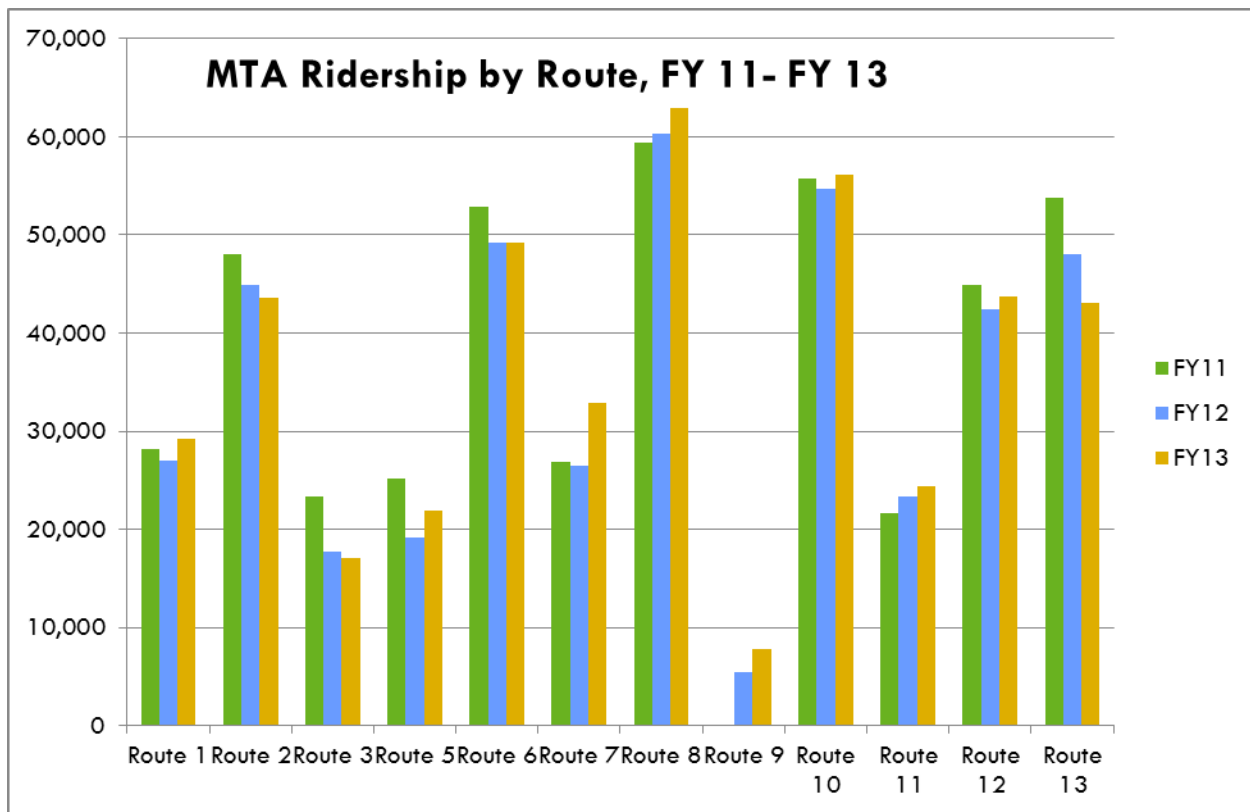


FIGURE 7: MTA RIDERSHIP BY ROUTE, FY 11- FY 13 (MTA, 2013)

One challenge associated with public transit ridership is funding uncertainties. It is difficult to anticipate future funding levels that will be available for transit improvements, which in turn leads to increased ridership. A lack of funding at the state and local levels means the region is unable to utilize all the Federal Transit Administration (FTA) funding available since the local match cannot be found. This results in untapped FTA funding despite the need for funding. Additionally, New Hampshire is more reliant on funding provided by FTA than most states. Without fortuitous, unforeseen funding investments that would enable expanded services, a prudent projection for future ridership is that of modest gains as local systems are able to make incremental improvements. With additional funds, transit could be expanded

**95.8 miles of public transit
in Southern New Hampshire**

and ridership increased by covering currently unserved areas and improving the frequency and convenience of existing services.¹³

SNHPC calculates that public transit serves 95.8 miles in the region. This calculation is based on a best estimate from data available from local transit providers. Local public transit providers in Southern New Hampshire include Cooperative Alliance for Regional Transportation (CART) and Manchester Transit Authority (MTA). CART serves Chester, Derry, Hampstead, Londonderry, and Salem, with limited service only to Plaistow and Windham. (MTA) serves Manchester as well as Bedford, Hooksett, Goffstown, and Londonderry; and includes express service from Manchester to Nashua and Concord. Intercity bus services in the region include Boston Express Bus, providing service on I-93 between Manchester, Londonderry, Salem, and Boston and service on Rt. 3 between Manchester, Nashua, and Boston; Concord Coach Lines

providing service from Northern & Central NH to Boston with stops including Berlin, Littleton, Conway, Meredith, Tilton, Concord, and Manchester; and Peter Pan, providing service between Manchester and Amherst, MA.¹⁸

COMMUTING PATTERNS

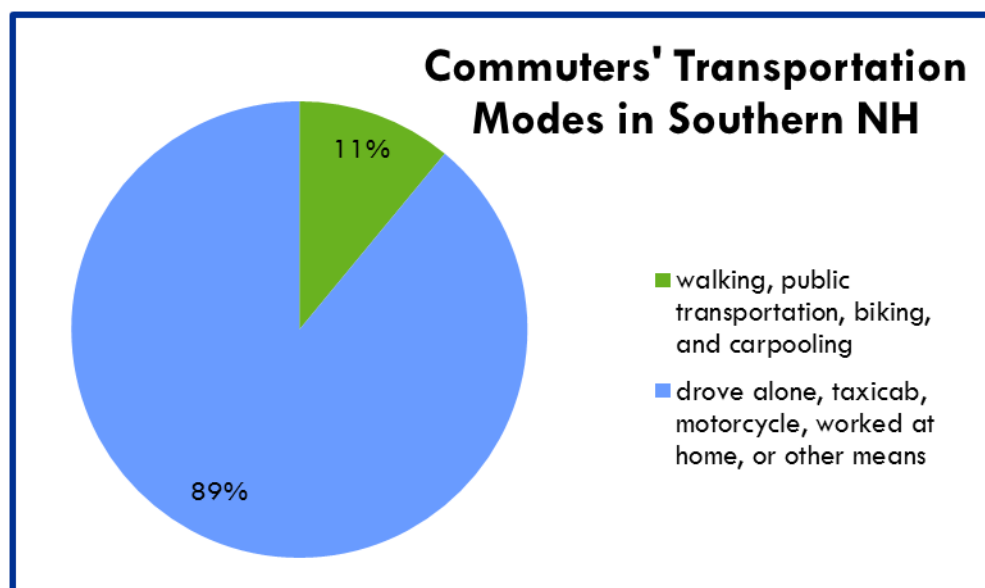


FIGURE 8: COMMUTERS' TRANSPORTATION

The majority of SNHPC residents make daily trips to work by car, and this percentage has increased in the most recent decades. In 2009, 83.5 percent of SNHPC residents drove alone to work. See **Table 6: Commuting Methods in Southern New Hampshire** for full details. According to U.S. Census data, residents of different municipalities had average commute times ranging between Manchester, with 22.8 minutes on average, to Weare, which had the highest average commute time of 36.2 minutes.¹⁹ Driving alone and long commutes are associated with quality of life and environmental impacts. These commuters may have less free time to participate in their communities, spend time with their families, and develop social connections, in addition to daily stress factors. Automobiles are not considered to be "active transportation" since they do not incorporate exercise. Furthermore, automobiles are a significant contributor to air pollution and greenhouse gas emissions.

In addition to the strong commuter preference of single-occupancy vehicles, a large number of residents in the SNHPC region commute daily out of state (in general to Massachusetts) to their place of employment. According to New Hampshire Employment Security, the percent out-of-state commuters ranges from 43.0 percent, 30.6 percent, and 24.0 percent of residents in Windham, Derry, and Londonderry, respectively, towns with easy access to Boston via I-93, to 4.4 percent for the town of Weare. Chester and Raymond also have large populations of out of state commuters, making this issue an important concern for the region with economic development implications as well. Because of its role as the economic heart of the

¹⁸ NH Rideshare. 2011. *Transit Services*. Concord, NH: New Hampshire Department of Transportation. <http://www.nh.gov/dot/programs/rideshare/transit.htm> (last accessed 30 July 2013).

¹⁹ New Hampshire Employment Security. 2013. *Community Profiles*. <http://www.nhes.nh.gov/elmi/products/cp/> (last accessed 28 October 2013).

SNHPC Region, Manchester had the one of lowest rates of out of state commuters (8.1 percent) as well as the highest rate of residents that both live and work within its boundaries (67.2 percent).¹⁹

Based on American Community Survey data, SNHPC calculated that 11 percent of workers 16 years of age and older in the Southern New Hampshire region commute by carpooling (8.1 percent), walking (2.0 percent), public transportation (0.6 percent), or bicycling (0.2 percent). Additionally, 4.8 percent of workers work from home, for a total of 15.8 percent of workers with “green commutes” with reduced

**15.8 percent
of workers have
“green commutes”**

environmental impacts. The majority of commuters in the region choose to use a single occupancy motorized vehicle (83.5 percent). Other modes of transportation for commuting include taxicab (0.1 percent) and motorcycle (0.1 percent).²⁰ Compared to 1990, the percentage of workers commuting by carpooling, walking, public transportation, or bicycling has decreased slightly. Of interest is that more workers in Londonderry utilize public transit than do workers in Manchester, attesting to the use of the Boston Express in addition to the MTA bus services in the region. Refer to Table 6 and Table 7 below for details.

²⁰ American FactFinder. 2010. *American Community Survey: Table B08301 Means of Transportation to Work for Workers 16 and Over*. United States Census Bureau. <http://factfinder2.census.gov> (last accessed 30 July 2013).

TABLE 6: COMMUTING METHODS IN SOUTHERN NEW HAMPSHIRE

		Mode of Travel											
Town	Total Workers 16 and Over	Drive Alone	Percent Drive Alone	Carpool	Percent Carpool	Total Public Transport	Percent Public Transport	Total Walk or Bicycle	Percent Walk or Bicycle	Work from Home	Percent Work from Home	Other*	Percent Other
Auburn	2,848	2,409	84.6	234	8.2	0	0.0	68	2.4	126	4.4	11	0.4
Bedford	9,977	8,646	86.7	457	4.6	71	0.7	67	0.7	616	6.2	120	1.2
Candia	2,224	2,001	90.0	89	4.0	0	0.0	49	2.2	78	3.5	7	0.3
Chester	2,398	1,947	81.2	194	8.1	8	0.3	28	1.2	168	7.0	53	2.2
Deerfield	2,415	1,946	80.6	148	6.1	11	0.5	44	1.8	266	11.0	0	0.0
Derry	18,021	15,586	86.5	1,430	7.9	62	0.3	219	1.2	642	3.6	82	0.5
Goffstown	9,890	7,867	79.5	558	5.6	0	0.0	274	2.8	1099	11.1	92	0.9
Hooksett	7,478	5,976	79.9	618	8.3	23	0.3	351	4.7	375	5.0	135	1.8
Londonderry	13,193	11,128	84.3	868	6.6	159	1.2	197	1.5	825	6.3	16	0.1
Manchester	55,874	46,084	82.5	5,591	10.0	509	0.9	1629	2.9	1,572	2.8	489	0.9
New Boston	2,895	2,345	81.0	225	7.8	0	0.0	84	2.9	241	8.3	0	0.0
Raymond	5,112	4,529	88.6	423	8.3	22	0.4	8	0.2	94	1.8	36	0.7
Weare	5,117	4,360	85.2	410	8.0	0	0.0	71	1.4	250	4.9	26	0.5
Windham	6,612	5,456	82.5	489	7.4	49	0.7	69	1.0	539	8.2	10	0.2
Region	144,054	120,280	83.5	11,734	8.1	914	0.6	3,158	2.2	6,891	4.8	1,077	0.7

*Other = motorcycle, taxicab, and other

Source: ACS 2010

Table 7: Historic Commuting Methods by Percentage in Southern New Hampshire

Municipality	Drove Alone			Carpooled			Public Transportation (including Taxi)			Bicycled or Walked			Other Means*			Mean Travel Time to Work (minutes)	
	1990	2000	2009	1990	2000	2009	1990	2000	2009	1990	2000	2009	1990	2000	2009	1990	2000
Auburn	79.3	87.9	86.3	15.4	6.8	7.8	0.5	0.4	0	1.5	0.3	2.1	0.4	1.3	3.9	25.6	26.7
Bedford	85.5	86	87.2	7.5	5.4	4.2	0.4	0.3	1	1.2	0.5	0.7	0.5	1.5	6.7	21.4	27.2
Candia	79.6	86.5	86	12.1	9.4	6.5	1.1	0.5	0	2.1	0.5	1.4	0.8	0	6.1	25.8	28.3
Chester	79.9	84.2	78.3	10.4	6.8	12	0.6	1.2	0	2.4	0.6	0	1	0	9.6	32.3	32.2
Deerfield	82.6	86.6	82	9.7	7.8	5.8	0.3	0	0	1.4	1	0.5	1	0.3	7.4	33.6	33.9
Derry	83.3	84.9	85.9	12.1	9.7	8	0.6	0.8	0.4	1.3	1.4	1.6	0.5	0.6	4.2	29.6	31.1
Goffstown	78	81.7	78.9	11.5	8.5	7.2	0.1	0.1	0.1	6	5.1	5.5	0.5	1	8.3	22.6	26.1
Hooksett	87.8	82	80.8	6.9	8.8	7.9	0.5	1.6	0.1	1.6	3.6	5.3	0.2	0.4	5.7	20.7	25.7
Londonderry	82.8	86.3	84.9	12.1	7.9	7.7	0.8	1.3	1	1.7	0.7	1.2	0.5	0.6	5.2	28.3	29.7
Manchester	76.9	81	83	14.2	11.9	10.1	1.5	1.4	0.6	4.8	3.1	3.3	0.6	0.4	3	18.8	21.3
New Boston	79.1	82.4	84.4	14.1	10.5	6.3	0	0.5	0	3	1.3	0.3	0.5	0.6	9	29.3	32.7
Raymond	81.2	83.7	85.5	14.4	12.3	10.7	0.6	0.2	0.8	1.3	1.5	0.9	0.5	0.2	1.8	31.2	31.6
Weare	82.4	81.6	83.1	13	11.5	8.4	0	0.4	0	0.4	2.1	2.9	0.6	0.4	5.6	31	35.1
Region	80	83	83.6	12.7	10	7.9	0.9	1	0.3	3.3	2.3	1.9	0.5	0.6	5.9	26.94	29.35
State of NH	78.2	81.8	N/A	12.3	9.8	N/A	0.7	0.7	N/A	4.4	3.1	N/A	0.8	0.6	N/A	21.9	25.3

*Other Means = worked from home, motorcycle, and other. (Note that 2009 data might include “worked from home” while other years may exclude this segment of workers.)

Sources: 1990 U.S. Census, 2000 U.S. Census, ACS 2005-2009

RAIL LINES

~10 miles of Rail Lines
capable of 40 mph speed
in Southern New Hampshire

The New Hampshire Main Line is the only active rail line in the Southern New Hampshire Planning Commission region. The New Hampshire Main Line runs for 39 miles in New Hampshire, roughly half of which are in the Southern New Hampshire region. Owned and operated by Pan Am Railways, the line connects Manchester to Nashua and Concord. There are 11 bridges and 23 grade crossings along the overall line. Pan Am Railways operates from the Massachusetts state line to Bow, delivering unit coal trains and local freight to Nashua, Merrimack, Manchester, and Concord. Map 5 on the following page displays the Main Line and other active rail lines in Southern New Hampshire and the greater area.²¹

The active railroad lines in New Hampshire are classified as to condition according to a system established by the Federal Railroad Administration (FRA). The maintenance of rail lines capable of 40 mph speeds is considered by NHDOT to be one rail-related performance measure. The class of track is a measure that provides an indication of the general condition of railroad track infrastructure. FRA Class 3 track allows operation of freight rail at up to 40 mph and passenger rail at up to 60 mph.²²

The Main Line is maintained to FRA Class 3 from Nashua to Manchester, Class 2 between Manchester and Bow, and Class 1 between Bow and Concord. Table 8 below displays allowed operating speed limits by class; as you can see, only Class 3 rail lines are capable of 40 miles per hour. From Map 5, it appears that roughly 10 miles of the Main Line in the Southern New Hampshire region are Class 3 and capable of 40 mph speed.²²

TABLE 8: ALLOWED TRAIN SPEED BY CLASS OF RAIL LINE

Class	Maximum allowable freight train speed	Maximum allowable passenger train speed
1	10 mph	15 mph
2	25 mph	30 mph
3	40 mph	60 mph

Source: FRA 2012

NHDOT states that track maintained for Class 3 operation would provide satisfactory performance of both freight and passenger service in nearly all cases. The Department suggests establishing goals for the miles of active track at Class 3 would provide an effective measure of overall condition of the railroads in the state, recognizing that track is maintained and repaired by private railroad companies primarily with private capital. In New Hampshire there are currently about 100 miles of track maintained to FRA Class 3, and although it is projected that the mileage of FRA Class 3 track will not change, NHDOT has set a goal

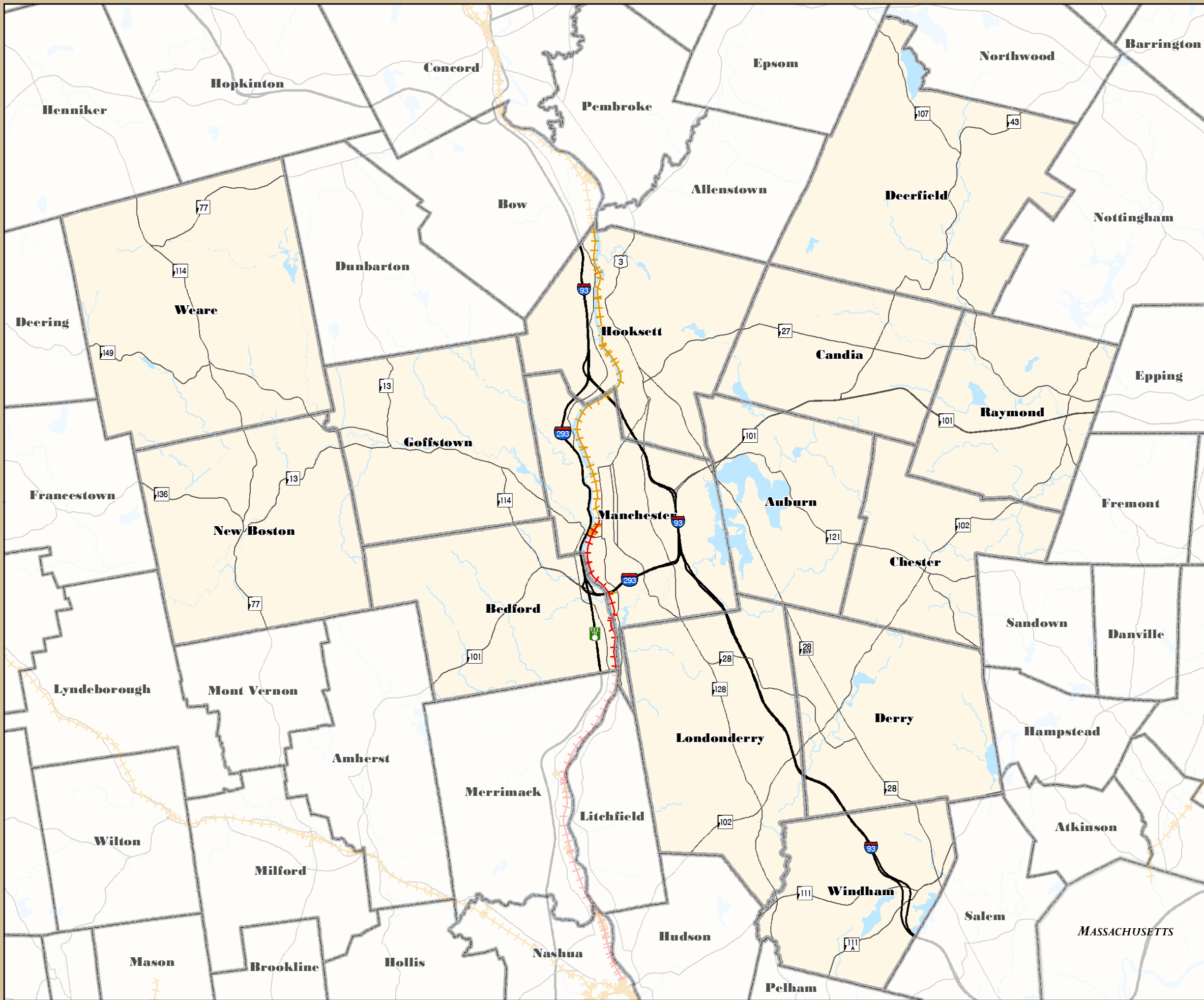
²¹ New Hampshire Department of Transportation. 2012. New Hampshire State Rail Plan. <http://www.nh.gov/dot/org/aerorailtransit/railandtransit/documents/FinalStateRailPlan.pdf> (last accessed September 19, 2013).

²² Federal Railroad Administration. 2012. Track and Rail and Infrastructure Integrity Compliance Manual: Volume II, Chapter 1 Track Safety Standards Classes 1 through 5. www.fra.dot.gov/Elib/Document/3019 (last accessed 04 November 2013).

to increase the mileage by 80 percent - from 100 to approximately 180 miles - by 2016. This goal reflects proposed track upgrades on Pan Am's New Hampshire Main Line and the New Hampshire Northcoast's Conway Branch.²²

The southern half of the State currently receives three quarters of all freight shipped into New Hampshire by rail, based on weight. This figure includes not only the New Hampshire Main Line, but also the Concord to Lincoln Line and the Hillsboro Branch. While the freight received is quite diverse, traffic is dominated by coal for electricity generation. Clay, concrete, glass, and stone also comprise much of the freight moving into this area, based on weight. Other products shipped to this area include farm products, lumber and wood products, food, chemical products, and some nonmetallic minerals. Significantly more freight rail traffic is shipped into this area than is shipped out. The small amount of outbound freight rail traffic is categorized by shippers as miscellaneous freight.²¹

The rail in this region has significant potential for shared passenger and freight use. Two potential passenger rail services are expansion of Massachusetts Bay Transportation Authority (MBTA) commuter rail service from the south or intercity passenger rail service as part of the New Hampshire Capitol Corridor. This corridor is within the Federal Railroad Administration's designated Boston-Montreal high speed rail (HSR) corridor. Infrastructure improvements in the corridor would benefit both passenger and freight interests. The 2013 NH Capitol Corridor Study is currently examining potential transit options.²¹



Granite State Future Transportation Southern NH Rail Lines

- Rail Lines Capable of 40 mph
- Rail Lines
- Interstates
- State and US Routes
- Town Boundary
- Rivers
- Lakes

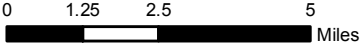
Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
All SNHPC Communities



The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2013.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664



CONNECTIVITY

Connectivity refers to the linkages between modes, options and transportation networks. One key metric of connectivity is the percent of population with access to multi-modal transportation.

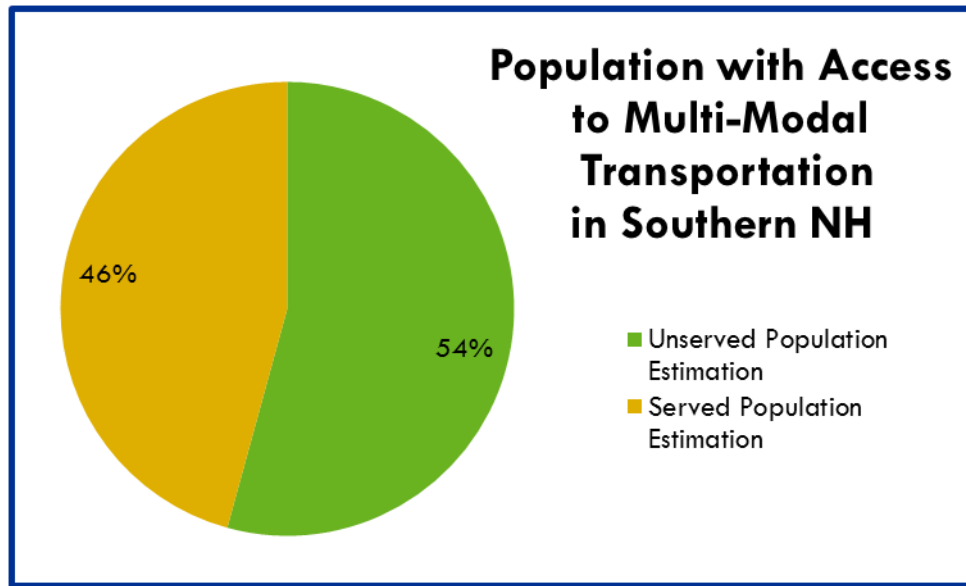


FIGURE 9: POPULATION WITH ACCESS TO MULTI-MODAL TRANSPORTATION IN SOUTHERN NH

Multi-modal transportation refers to the presence of rail and transit options, in addition to the conventional automobile mode. Slightly less than half (46 percent) of Southern New Hampshire residents are served by multi-modal transportation, according to SNHPC calculations. This is because nearly half the SNHPC population resides in Manchester, where public transit options are concentrated. This 46 percent figure compares favorably to the state-wide figure; slightly less than a quarter (24 percent) of New Hampshire residents overall have access to multimodal transportation. Access to multi-modal transportation, is measured here in terms of geographic proximity of multimodal transportation to an individual's home. An individual is said to have access if the facility is within one-quarter of a mile (0.25 miles). NH calls this measure a good beginning indicator, and notes other issues that may also impact the attractiveness of multimodal transportation to riders are not addressed. These other issues include frequency of service; service schedule - how early and late the service operates; proximity of multimodal options to an individual's workplace or other frequent destinations; and rider amenities (e.g. bus or train shelters or enhanced rider information).²³

NHDOT states that growth in access to multimodal transportation will occur with either an increase in population in proximity to existing multimodal terminals or the extension of rail or transit into new areas. They also note other factors, such as frequency and convenience of service, play a key role in growth of ridership along with access.²³ Although increasing these percentages with access is desirable, NHDOT projects that if 2012 budget levels and funding splits, 2012 staffing levels, and 2011-2020 Ten Year Plan (TYP) priorities are not changed, trended performance will likewise yield no change in access to multi-

²³ New Hampshire Department of Transportation. 2011. *Performance – 2011: State Population with Access to Multimodal Transportation*. Concord, NH: New Hampshire Department of Transportation. http://www.nh.gov/dot/org/commissioner/balanced-scorecard/departments/documents/bs_performance_multimodaltrans.pdf (last accessed 31 July 2013).

modal transportation.¹⁷ The TYP now in effect is for FY 2013 – FY 2022 and the version being formulated now is for FY 2015 – FY 2024.

Park and Ride lots are another component of multi-modal transportation. These lots allow commuters to inexpensively and conveniently transfer to public transportation options from automobiles. NHDOT operates Park and Ride lots in the following locations²⁴:

TABLE 9: NH PARK AND RIDE LOTS

Belmont*	Londonderry I-93 Exit 5**
Boscawen	Lyme
Bow	Nashua FEE Tpk Exit 5*
Chesterfield	Nashua FEE Tpk Exit 7
Concord I-93**	Nashua FEE Tpk Exit 8**
Concord I-89	New Hampton
Dover-NH 16**	New London
Dover-Ice Arena*	Northwood*
Epping	Plaistow
Grantham	Portsmouth-NH 33*
Hampstead	Portsmouth Transportation Center**
Hampton	Salem I-93 Exit 2**
Hillsboro	Tilton
Hooksett FEE Tpk Exit 11	Warner
Londonderry I-93 Exit 4**	Windham I-93 Exit 3

*Municipally Owned & Maintained lots

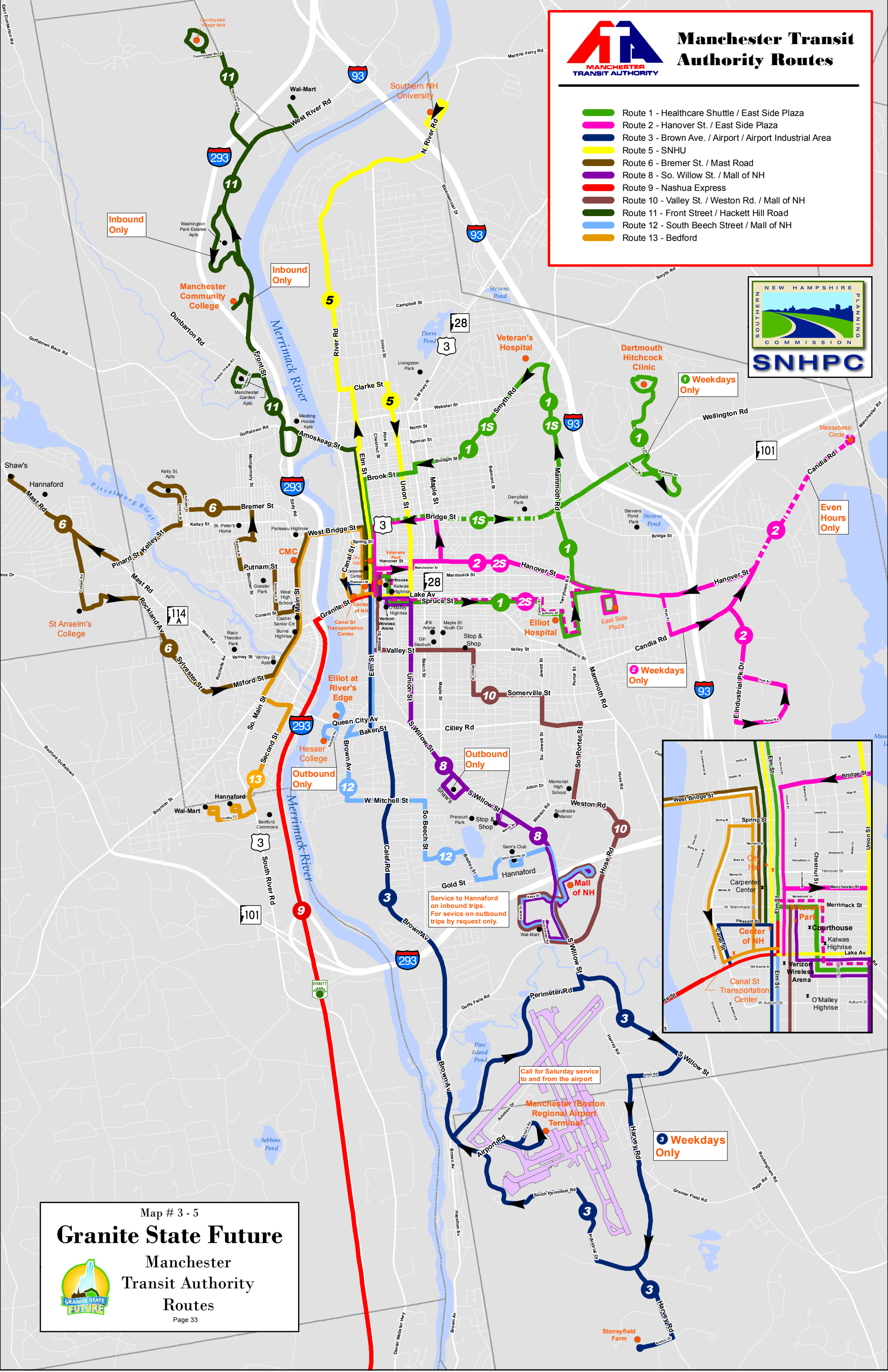
**Location with bus terminal. Terminal operator may charge a fee for the operation of each unscheduled bus departure using the facility, including charter trips. Please contact the facility operator directly with questions about fees.

²⁴ NH Department of Transportation. 2013. NH Rideshare Program: Park & Ride Locations.
<http://www.nh.gov/dot/programs/rideshare/lots/index.htm> (last accessed 29 October 2013)



Manchester Transit Authority Routes

- Route 1 - Healthcare Shuttle / East Side Plaza
- Route 2 - Hanover St. / East Side Plaza
- Route 3 - Brown Ave. / Airport / Airport Industrial Area
- Route 5 - SNHU
- Route 6 - Bremer St. / Mast Road
- Route 8 - So. Willow St. / Mall of NH
- Route 9 - Nashua Express
- Route 10 - Valley St. / Weston Rd. / Mall of NH
- Route 11 - Front Street / Hackett Hill Road
- Route 12 - South Beech Street / Mall of NH
- Route 13 - Bedford



Map # 3 - 5

Granite State Future

Manchester
Transit Authority
Routes

Page 33



Granite State Future



Transportation Multi-Modal Transportation Facilities & Routes

- Existing Regional/Express Bus Service
- Existing Bus Terminal with Park and Ride Lot
- Bus Terminal / Express Bus Stop
- Park and Ride
- Potential Future Passenger Rail Stations
- Potential Future Park and Ride
- Rail Lines Capable of 40 mph
- Interstates
- State and US Routes
- Town Boundary
- Manchester Boston Regional Airport
- Rivers
- Lakes

Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
All SNHPC Communities

The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2013.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5
Miles



WALKABILITY & BIKABILITY

Currently there is little focus in land use development on planning for pedestrian and bicycle travel. Additionally, existing facilities often do not allow for safe and comfortable travel by these modes. According to the NH Department of Health and Human Services, in the state as a whole, many residents report their communities do not have sidewalks or bicycle lanes. Only 24 percent of residents report having paved streets with sidewalks and only four percent report having paved streets with bike lanes.²⁵

On paved New Hampshire streets:

- **24 percent of residents have sidewalks**
- **4 percent of residents have bicycle lanes**

According to the Federal Highway Administration (FHWA), a walkable community is “easy and safe to walk to goods and services (i.e., grocery stores, post offices, health clinics, etc.). Walkable communities encourage pedestrian activity, expand transportation options, and have safe and inviting streets that serve people with different ranges of mobility.”²⁶ Factors in walkability include not only the availability of sidewalks, but also quality of sidewalks – walkability is affected when sidewalks have missing sections, broken pavement, or obstacles such as poles and shrubbery blocking them.^{27,28} Availability and quality of crosswalks are other factors, as are roadway conditions such as road width, traffic volumes and speeds. Land use patterns that influence accessibility, the relative location of common destinations and the quality of connections between them, play a role in walkability. Walkability is also influenced by community support and security and comfort for walking.²⁷ Walkable areas are pedestrian-friendly.

Similarly, bikable communities are bicyclist-friendly. The League of American Bicyclists describes five elements of bicycle-friendly communities as follows:

- Engineering: Creating safe and convenient places to ride and park;
- Education: Giving people of all ages and abilities the skills and confidence to ride;
- Encouragement: Creating a strong bike culture that welcomes and celebrates bicycling;
- Enforcement: Ensuring safe roads for all users;
- Evaluation & Planning: Planning for bicycling as a safe and viable transportation option²⁹

Bicycle infrastructure and facilities such as bicycle lanes, shared-use trails, bicycle parking, and bicycle-friendly policies are part of bicycle communities. Comprehensive bicycle plans and dedicated funding also

²⁵ NH Obesity Prevention Program, 2011. *Municipal Survey Report: Obesity Prevention in New Hampshire Communities*. NH Department of Health and Human Services, Division of Public Health Services <http://www.dhhs.nh.gov/dphs/nhp/documents/munisurveyreport.pdf> (last accessed September 20, 2013).

²⁶ Federal Highway Administration, 2013. A Resident's Guide for Creating Safe and Walkable Communities. U.S. Department of Transportation. http://safety.fhwa.dot.gov/ped_bike/ped_cmnty/ped_walkguide/about.cfm (last accessed January 13, 2014).

²⁷ Victoria Transport Policy Institute, 2013. Walkability Improvements: Strategies to Make Walking Convenient, Safe and Pleasant. *TDM Encyclopedia*. <http://www.vtpi.org/tdm/tdm92.htm> (last accessed January 13, 2014)

²⁸ U.S. Department of Transportation, U.S. Environmental Protection Agency, National Center for Safe Routes to School, Pedestrian and Bicycle Information Center, n.d. Walkability Checklist. <http://katana.hsrc.unc.edu/cms/downloads/walkabilitychecklist.pdf> (last accessed January 13, 2014)

²⁹ The League of American Bicyclists, 2013. The Essential Elements of a Bicycle Friendly America. <http://www.bikeleague.org/content/5-es> (last accessed January 13, 2014)

play an important role.²⁹ At the time of writing, infrastructure and facilities are extremely limited in the region, no comprehensive bicycle plans are in place, and dedicated funding for bicycles has not yet been utilized.

ENERGY EFFICIENCY & GREENHOUSE GAS EMISSIONS

Energy efficiency and greenhouse gas emissions in transportation are linked to factors such as energy use, traffic flow, and the transport of goods. Key data include carbon dioxide (CO₂) emissions, number of alternative fuel-powered automobiles, types of automobile fuels available, municipalities, transit organizations and others utilizing alternative fuels, cost of fuels, gasoline and diesel fuel consumption, and per person energy expenditure.

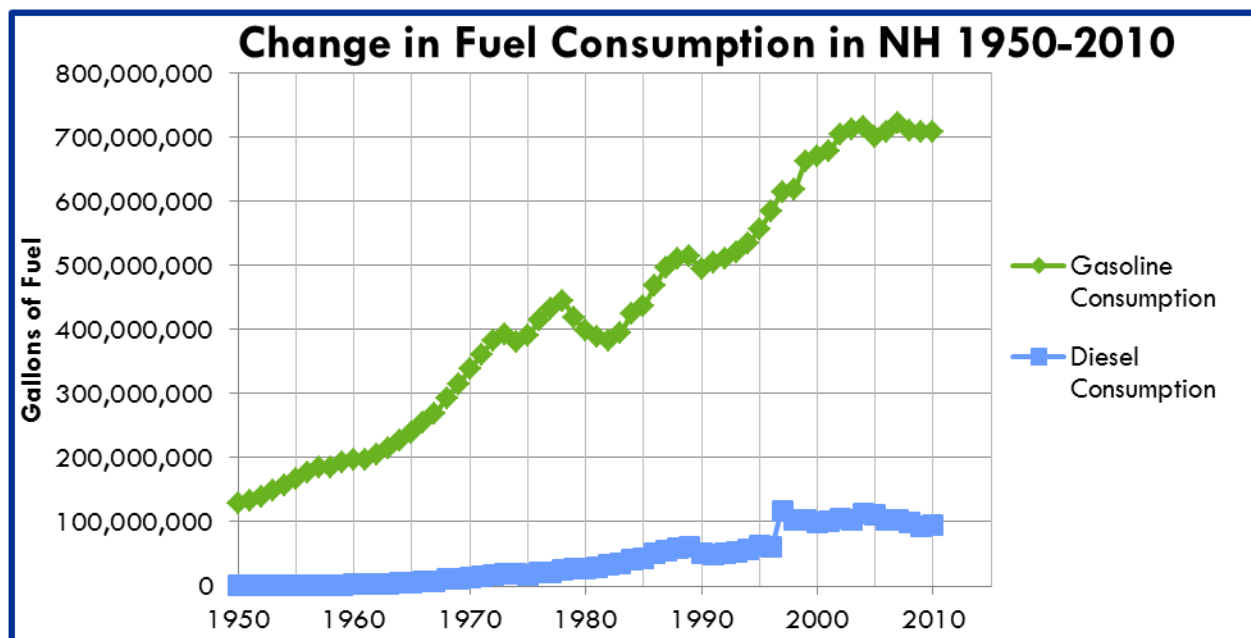


FIGURE 10: CHANGE IN FUEL CONSUMPTION IN NH 1950-2010 (USDOT)

Figure 10 shows that fuel consumption in New Hampshire has increased over 500 percent between 1950 and 2010. For comparison, New Hampshire's population has increased less than 150 percent in that same period.³⁰ Looking over the span of six decades, gasoline consumption has consistently climbed the chart from decade to decade; the average growth in gasoline consumption per decade is 35 percent. Gasoline consumption has grown as much as 73 percent in a single decade (the 1960s), although the most recent decade (the 2000s) experienced a more moderate growth of 5.8 percent. Diesel consumption, though initially expanding rapidly from 1950 levels, has remained relatively constant since the late 1990s, actually declining by 5.3 percent in the most recent decade. As of 2010, the State of New Hampshire consumes over 800,000,000 gallons of fuel annually, 88 percent of which is gasoline.³¹

³⁰ United States Census Bureau. 2013. *Population in the U.S.* Washington, D.C.: United States Census Bureau. <http://www.google.com/publicdata/explore?ds=kf7tgg1uo9ude> (last accessed 31 July 2013).

³¹ Office of Highway Policy Information. 2012. *U.S. Highway Statistics*. Washington, D.C.: Federal Highway Administration. <http://www.google.com/publicdata/explore?ds=gb66jodhlsaab> (last accessed 31 July 2013).

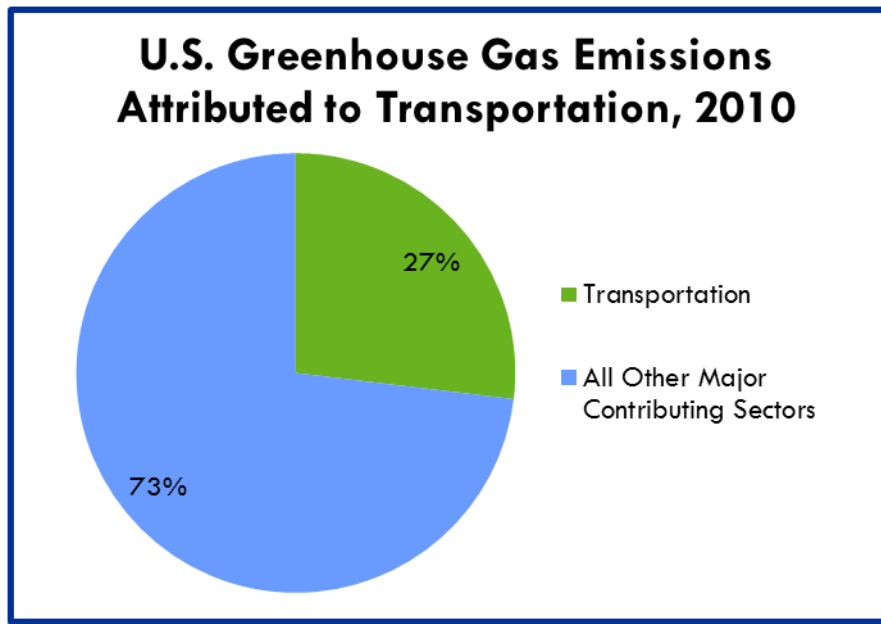


FIGURE 11: U.S. GREENHOUSE GAS EMISSIONS ATTRIBUTED TO TRANSPORTATION, 2010

Figure 11 indicates that 27 percent of greenhouse gas emissions emitted by economic sectors are attributed to transportation. This national statistic for the year 2010 was calculated by the U.S. Environmental Protection Agency (EPA). This 27 percent of greenhouse gas (GHG) emissions represents 1,834 teragrams or 1,000,000 metric tons of GHGs.³² GHGs, such as carbon dioxide, are of significance since they directly cause global warming, or climate change. The impacts of climate change are discussed further in the Climate Change Impacts Assessment Chapter.

The transportation sector is a major contributor to climate change. EPA names transportation as the second of five major fuel consuming sectors contributing to carbon dioxide (CO₂) emissions from fossil fuel combustion; in order: electricity generation, transportation, industrial, residential, and commercial. CO₂ from fossil fuel combustion is the largest source of U.S. greenhouse gas emissions, and accounts for approximately 78 percent of emissions (weighted by global warming potential) since 1990. Emissions of CO₂ from fossil fuel combustion increased at an average annual rate of 0.7 percent from 1990 to 2010. The U.S. Environmental Protection Agency names growth in emissions from electricity generation and transportation activities as the second of two fundamental factors influencing this trend (the first factor is a generally growing domestic economy). Between 1990 and 2010, U.S. CO₂ emissions from fossil fuel combustion increased a total of 13.7 percent. From 2009 to 2010, these emissions increased by 3.5 percent.³²

³² United States Environmental Protection Agency. 2012. *Inventory Of U.S. Greenhouse Gas Emissions And Sinks: 1990 – 2010*. Washington, D.C.: U.S. Environmental Protection Agency.
<http://www.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2012-Main-Text.pdf> (last accessed 31 July 2013).

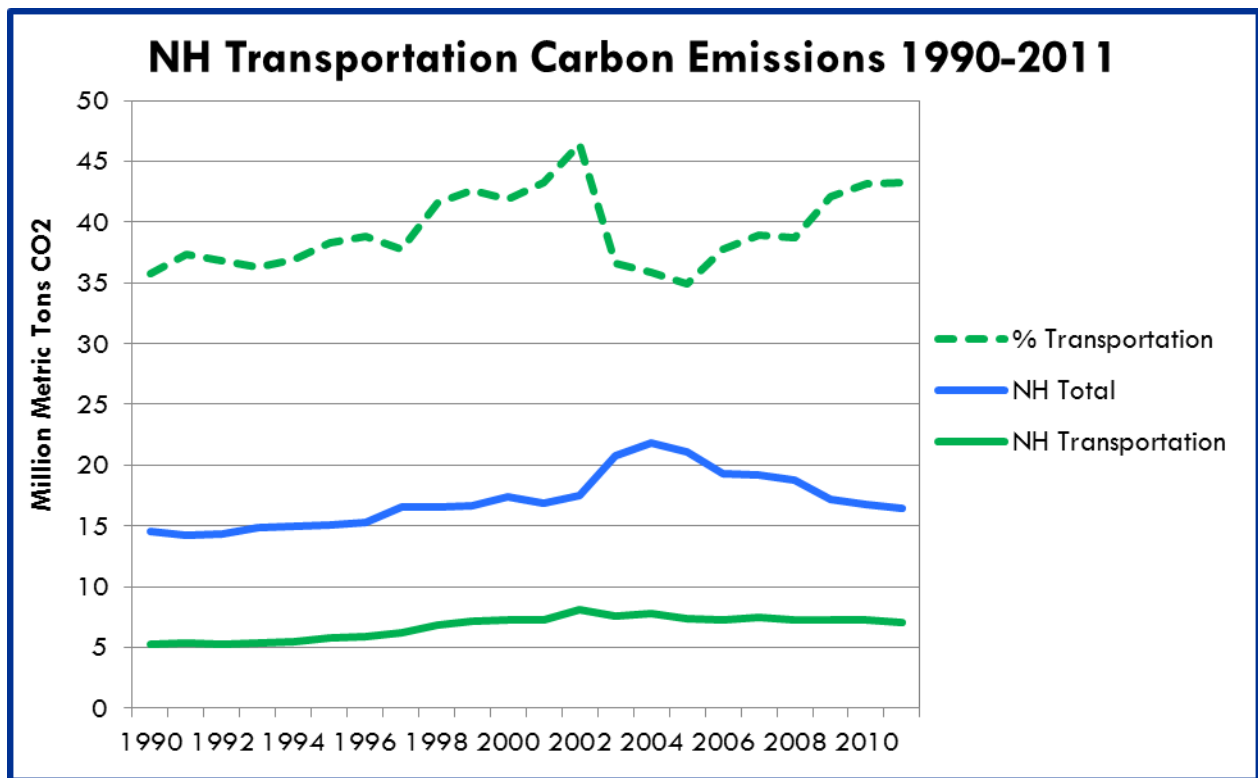


FIGURE 12: NH TRANSPORTATION CARBON EMISSIONS 1990-2011

Source: U.S. Environmental Protection Agency³³

As Figure 12, NH Transportation Carbon Emissions 1990-2011 shows, the transportation sector in New Hampshire makes up an even greater share of state carbon emissions than the sector does at the national level. Between 1990 and 2011 transportation was responsible for 39 percent of New Hampshire carbon emissions on average. Most recently in 2011, transportation emissions accounted for a notable 43 percent of emissions. The data suggests that reducing carbon emissions from transportation will be important to climate change mitigation strategies in the state.

VEHICLE MILES TRAVELED (VMT)

Recent traffic data in the SNHPC Region suggests a dramatic slowing in total traffic growth on roads other than interstates and freeways. Traffic counts over the last ten years have remained virtually flat, decreasing by roughly 6 percent. Since our traffic count program has a three-year cycle, traffic count locations repeat every three years. We took the years with the same count locations and compared total traffic volumes. The numbers below represent the sum of the locations of the volume of traffic to pass through each location in one day. These counts do not include sections on interstates and freeways whose counts were conducted by NHDOT. From Table 10, a conclusion could be drawn that total traffic volumes are decreasing on local roads. See Figure 13 for this traffic volume data displayed in graph form. The trend of decreasing overall traffic volumes does not equate to decreasing volumes of every individual

³³ U.S. Environmental Protection Agency, 2011. CO₂ Emissions from Fossil Fuel Combustion. <http://www.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2012-Main-Text.pdf> (last accessed 31 July 2013).

roads. Increasing traffic volumes were observed for 11 roadway segments, including parts of Interstate 93, Interstate 293, and U.S. Route 3. Traffic volumes on the following road segments increased:

- I-93 between exit 4 and exit 5 in Londonderry
- I-93 between exit 3 and exit 2 in Windham
- I-293/NH 101 between I-93 and exit 2 in Manchester
- I-293 between exit 4 and exit 3 in Manchester and Bedford
- US 3/NH 28 between Compbell and NH 28A in Manchester and Hooksett
- NH 3A between Greenview Drive and Technology Drive in Manchester and Hooksett
- US 3/NH 28 at Hooksett/Allenstown town line
- NH 3A between Hackett Hill Road and S. Main Road
- NH 28 Bypass in Derry
- NH 27 (Raymond Road) between NH 43 and Blevens Drive in Candia
- NH 43 at Candia/Deerfield town line

Thus, even though overall traffic volumes in the SNHPC region are decreasing on roads whose counts are conducted by the planning commission, congestion remains an issue on the interstates and highways with the highest traffic volumes.

TABLE 10: DECREASING TRAFFIC VOLUMES IN SOUTHERN NH

Cycle A: 393 locations:				
2004	2007	2010	6%	decrease in traffic volume
2,443,950	2,382,290	2,296,820		
Cycle B: 413 locations:				
2005	2008	2011	5%	decrease in traffic volume
2,328,900	2,233,570	2,203,640		
Cycle C: 436 locations:				
2006	2009	2012	6%	decrease in traffic volume
2,330,130	2,217,610	2,178,830		

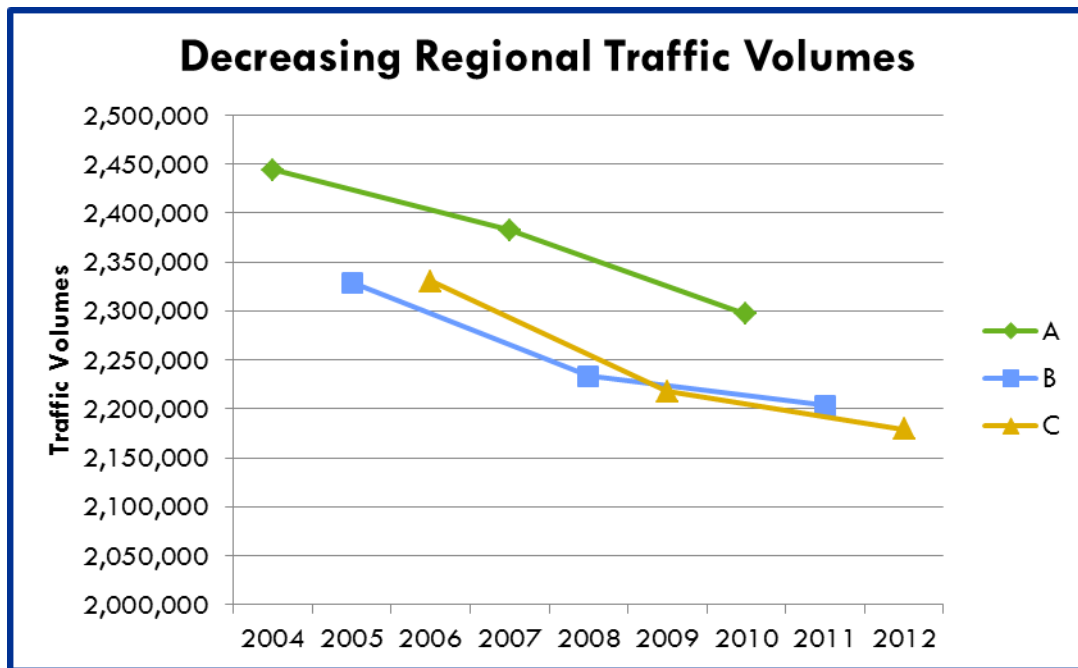


FIGURE 13: DECREASING REGIONAL TRAFFIC VOLUMES

AIR QUALITY

In terms of emissions trends, New Hampshire has “already begun to make real progress” in many of the areas targeted by the recommendations in the NH Climate Action Plan (2009), but it is unclear how successful efforts have been in the most recent couple of years. Between 2005 and 2009, 67 percent of indicators showed positive trends. In this time period the New Hampshire economy experienced a decrease in overall energy demand, even as the NH economy as a whole grew. Renewable electricity generation also expanded. Primary energy consumption decreased 14 percent, and associated GHGs decreased 21 percent between 2004 and 2009. Per capita emissions in NH decreased from 2005-2009 as well. However, the limited data available for indicators in 2010 and 2011 suggest it will be challenging to maintain positive trends. For the transportation sector, the amount of energy consumed and GHG emissions remained relatively flat from 2005 to 2009, as did public transit ridership. However, VMT and per-capita VMT importantly did decrease, perhaps indicative of higher fuel prices or smart growth land use planning. Total land conserved increased as well.³⁴

The regional air quality analysis for the Southern NH Region focuses on Volatile Organic Compounds (VOC), Nitrogen Oxides (NOx) and Carbon Monoxide (CO). VOC and NOx are important precursors to the production of the GHG ozone. Air quality in the SNHPC region is improving. The previous Boston-Manchester-Portsmouth (SE) NH 8-hour Ozone Non-Attainment area designated April 2004, which included the entire SNHPC region except for three towns in attainment, was designated as “unclassifiable/attainment” in July 2013. This finding of “unclassifiable/ attainment” also applied to much of the southern portion of New Hampshire. The City of Manchester was also previously designated non-attainment for carbon monoxide (CO) and is required to demonstrate conformity to a 20-year

³⁴ Wake, C., Skoglund, C., Pisa, R., Doll, S., 2012. New Hampshire’s Energy, Environmental, and Economic Development Benchmark Report. *New Hampshire Energy and Climate Collaborative*. http://nhcollaborative.org/media/2012_NH_EEE_BenchmarkReport_Full.pdf (last accessed March 28, 2014)

maintenance plan to ensure it continues to achieve compliance. CO has noteworthy indirect effects upon climate change.

AFFORDABILITY

According to the Housing + Transportation affordability index, neighborhoods that are considered to be “location efficient”—compact neighborhoods with walkable streets, access to transit, and a variety of amenities—have lower transportation costs than inefficient ones. Contrastingly, location inefficient places are auto-dependent, and people who live there have high transportation costs and are more susceptible to fluctuations in gas prices. A neighborhood is conventionally deemed affordable if no more than 30 percent of income is spent on housing. The H+T index also considers the cost of transportation and defines a neighborhood as affordable if no more than 45 percent of household income is spent on housing and transportation combined.

In the Southern New Hampshire Region, the majority of neighborhoods are not considered affordable. Approximately 68 percent of residents do not live in affordable neighborhoods and 52 percent of neighborhoods were not affordable.³⁵ The majority of affordable neighborhoods that are available are located in Manchester. Additionally, 100 percent of the residents spend more than 15 percent of income on transportation, the H+T index’s suggested affordable amount.³⁶ For comparison, in the Nashua Planning Commission Region 80 percent of residents do not live in affordable neighborhoods and 76 percent of neighborhoods were not affordable; in the Rockingham Planning Commission Region these numbers were 79 percent and 74 percent respectively. Nationally, 72 percent of U.S. neighborhoods are not considered affordable to the typical household in terms of combining housing and transportation costs.³⁷

FINANCING

On July 6, 2012, the President signed into law MAP-21, the Moving Ahead for Progress in the 21st Century Act. MAP-21 provides over \$105 billion in funding for surface transportation programs for fiscal years 2013 and 2014. It provides needed funds and transforms the policy and programmatic framework for investments to guide the growth and development of the country’s vital transportation infrastructure. MAP-21 creates a streamlined, performance-based, and is a multimodal program to address the many transportation challenges including improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery.

Fiscal constraint requirements have remained a key component for transportation plan and program development in MAP-21. Fiscal constraint requires that revenues in transportation planning and programming are identified and “are reasonably expected to be available” to implement the metropolitan long range transportation plan and the TIP while providing for the operation and maintenance of the existing highway and transit systems. Metropolitan planning statutes state that the long-range transportation plan and TIP must include a financial plan that “indicates resources from public and private sources that are reasonably expected to be available to carry out the program” [23 U.S.C 134(g)(2)(B) and 134(h)(2)(B)(ii)]. Additionally, revenues must be “available and committed” for the first

³⁵ Note: data unavailable for the Town of Windham

³⁶ The Center for Neighborhood Technology. 2013. H+T Affordability Index. Retrieved from <http://htaindex.cnt.org/> (last accessed 13 November 2013)

³⁷ The Center for Neighborhood Technology. 2013. About the Index. Retrieved from <http://htaindex.cnt.org/about.php> (last accessed 06 January 2014)

two years of a TIP in air quality non-attainment and maintenance areas [23 CFR 450.324(e) and 23 CFR 450.216(a)(5)].

Federal transportation legislation has placed emphasis on intermodal transportation. The previous legislation, SAFETEA-LU, required that “the plans and programs for each metropolitan area[s] shall provide for the development and integrated management and operation of transportation systems and facilities (including pedestrian walkways and bicycle transportation facilities) that will function as an intermodal transportation system...” This emphasis on the development of an integrated and intermodal system includes consideration of the importance of pedestrian and bicycle facilities in this system. In the past, legislation emphasized that the use of all possible forms of transportation should be encouraged to:

- Efficiently use and reduce the impact of vehicular transportation on our limited fuel supplies and land resources;
- Reduce the negative impacts of hydrocarbon combustion (fossil fuel) on air quality; and,
- Reduce traffic congestion at major intersections and in densely populated areas.

Secondary benefits resulting from increasing levels of bicycle and pedestrian transportation include improved public and environmental health, safer streets, more vibrant downtown areas and increased economic activity and property values.

The current federal transportation legislation, MAP-21, is a multimodal program to address many transportation challenges including many that pertain to walking and biking.

Among the eight planning factors carried forward in MAP-21 are four that support improved accommodations for bicycles, pedestrians, and public transportation:

- Increase the safety of the transportation system for motorized and non-motorized users;
- Increase the security of the transportation system for motorized and non-motorized users;
- Increase accessibility and mobility of people and freight;
- Protect and enhance the environment, promote energy conservation, and improve quality of life, and promote consistency between transportation improvements

TRANSPORTATION IMPROVEMENT PROGRAMMING

The Transportation Improvement Program (TIP) is a vital link between plan development and project implementation where plans are converted into specific improvement projects and then programmed for implementation on the basis of priority and fiscal constraint. The FY 2013 – FY 2016 TIP is a staged multi-year program of regional transportation improvement projects for the SNHPC Metropolitan Planning Organization (MPO) area. Based on guidelines contained in Moving Ahead for Progress in the 21st Century (MAP-21), the TIP is updated at least once every four years. The TIP is updated by the MPO in accordance with joint federal metropolitan planning regulations, 23 CFR 450, issued by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), U.S. Department of Transportation. Metropolitan planning factors carried forward in MAP-21 are included in this document as Appendix B. Additionally, the SNHPC MPO is required to certify that its transportation planning process is in conformance with applicable legislation.

In New Hampshire, the TIP is generally updated every two years by the MPO, concurrent with the NH Department of Transportation (NHDOT) State Transportation Improvement Program (STIP). The first two TIP years include those projects that have been selected for funding as agreed upon by the NHDOT and the MPO. The projects included in the TIP are included in the air quality determination. Those fiscally constrained projects included in the third year of the TIP subsequently become the first year projects

following the biannual TIP update. All transportation projects utilizing Federal transportation funds in the SNHPC MPO region must be included in a conforming approved TIP in order to be incorporated into the STIP and proceed to implementation. Other requirements pertaining to the development and maintenance of the TIP include:

- The TIP must contain all transportation projects including all capital and non-capital projects within the MPO area to be funded through Title 23 or the Federal Transit Act, projects consistent with the recommendations of the long-term RTP and all regionally significant projects regardless of whether FHWA/FTA approval is required;
- The TIP must include a financial plan demonstrating that it is financially constrained by year and must include project-specific costs by funding source and category. Funding for the first two years must be available and committed and funding for the third and fourth years should be reasonably approved;
- The TIP must be established through the use of effective early and continuing public involvement;
- If adopted by the MPO and approved by the Governor, the TIP must be included in the STIP without modification.
- The TIP serves as the short-range project-specific component of the long-range plan for the region, which is called the Regional Transportation Plan for the Southern New Hampshire Planning Commission (RTP). The RTP, which addresses all forms of transportation used in the 14 municipalities of the region and for each mode, is intended to serve as a guide for funding of transportation projects. Prioritization of the Plan recommendations results from a screening process to assure that impacts associated with health, safety, welfare and the environment are properly weighed in the public interest.

KEY STRATEGIES & PROJECTS

Key transportation strategies include healthy transportation, energy conservation, and reducing greenhouse gas emissions. With a focus on key opportunities and short term and long term solutions, the following key projects have been identified as well.

SAFETY

Safety has been continued as a stand-alone planning factor in MAP-21. For many years, SNHPC, which has maintained its own core strategies designed to increase safety, also collaborates on numerous projects with its member communities to address safety issues. Many projects and programs included in the Regional Transportation Plan sustain and improve the safety of the transportation system. Transportation projects involving the development of alternative modes of transportation such as walking and bicycling improve the safety of the transportation system by diverting trips to alternative modes. Major planned/proposed improvement projects such as the widening of the NH 101 corridor in Bedford and the re-design of the I-293 Exit 6/7 area in Manchester and Hooksett are also essential to the maintenance of a safe roadway network.

At the state level, NHDOT has instituted a program entitled “Driving Toward Zero” in an attempt to reduce considerably the number of traffic-related deaths in NH. Eliminating deaths on New Hampshire roadways is an important vision and the driving force behind the work of the New Hampshire Driving Toward Zero Deaths (NHDTZD) Coalition. It is also an important vision for all who travel on New Hampshire's roadways- by car, motorcycle, truck, bicycle, or even on foot-day and night under all types of weather conditions.

The NHDTZD's mission is to create a safety culture where even one roadway fatality is one too many. Zero fatalities is the only acceptable number and of course, the only number we can ALL LIVE with.

The New Hampshire Driving Toward Zero Deaths Program aligns with the Toward Zero Deaths: A National Strategy on Highway Safety program that began in 2009 as a data-driven effort focusing on identifying and creating opportunities for changing American culture as it relates to highway safety.³⁸

SNHPC is also currently active in assisting member communities in obtaining Highway Safety Improvement Program (HSIP) funding for hazardous roadway and intersection improvements in the region. The HSIP program was established to provide funding for modest safety improvements that achieve significant reductions in traffic fatalities and serious injury crashes. The HSIP funding process is dependent on data, as locations for improvements are identified through crash information demonstrating that there is a safety problem. NHDOT has been utilizing these funds to address highway safety issues around the State and SNHPC has already been successful in assisting two member communities to obtain funding for improvements through this program. HSIP provides the following strategic goals for safety on New Hampshire roads:

- Reduce the number of traffic fatalities and serious injuries;
- Reduce the number and severity of crashes;
- Decrease the potential for incapacitating and fatal injuries; and
- Maximize the benefit of the limited resources: time and money.

The Road Safety Audit (RSA) represents another proactive approach to improving transportation safety. An RSA is an examination of a future or existing roadway to report on safety issues. The RSA represents a

³⁸ New Hampshire Department of Transportation, 2013. Driving Toward Zero: About Us. <http://www.nhdtz.com/about> (last accessed 25 September 2013).

strategy to improve safety and communicate to the public how local, regional and State stakeholders can proactively work toward crash reduction at hazardous locations. The RSA can be performed during the planning, preliminary design and final design stages of a planned facility as well as on existing roads. The RSA concept has proven to be highly effective in identifying and reducing the roadway crash potential. NHDOT is currently participating in RSAs for hazardous locations in the region and SNHPC is currently assisting in these efforts by coordinating and participating in RSA training for stakeholders. SNHPC has also participated in RSA exercises at three locations in the region.

As part of the SNHPC Unified Planning Work Program (UPWP), the SNHPC staff have been conducting a High Accident Location Study on a yearly basis. A high accident location study is conducted based on comprehensive crash data analyses and field visits to identify possible accident causes and countermeasures to effectively mitigate the safety issues. In addition to the UPWP fund, the State Planning and Research (SPR) fund has been used in these studies as well. The findings of a study form the basis for designing safety improvements to be implemented through HSIP funding. The SNHPC has completed 13 high accident intersection studies in the region.

CONTEXT SENSITIVE SOLUTIONS

Context Sensitive Solutions are a sustainable planning approach currently utilized in regional planning. SNHPC staff have participated in Context Sensitive Solutions (CSS) training and are actively involved in efforts to encourage principals of CSS and Context Sensitive Design in transportation planning and design processes. CSS is a collaborative, interdisciplinary approach stressing transportation design that fits physical setting and preserves scenic, aesthetic, historic and environmental resources while maintaining safety and mobility. Benefits of CSS design include more cost-effective roadway design that better accommodates community objectives including multi-modal transportation, efficient land use, preservation of cultural and environmental resources, increased safety, and more livable communities.

HEALTHY TRANSPORTATION

Transportation plays an important role in health. Sources ranging from the Center for Disease Control to HEAL (Healthy Eating Active Living) Strategies to the State Plan to Address Health Disparities and Promote Health Equity in NH emphasize the importance of transportation in health. The following strategies are recommended for supporting health objectives:

- Improve infrastructure to support walking, bicycling and other modes of active transportation³⁹
- Adopt zoning policies for mixed-use, compact and transit oriented development³⁹
- Improve transportation to health care facilities, employment centers, and food⁴⁰
- Expand transportation options and improve use of existing options to connect individuals to transportation needed for health visits, including chronic care treatment⁴¹

New Hampshire is among the states with the highest percentage of overweight adults, a fact that highlights the importance these strategies. In 2012, 27.3 percent of New Hampshire adults were obese.⁴² NH adolescents are also among the least physically active teens in the nation. Improving infrastructure to support walking and bicycling, and adopting zoning policies for development that supports these transportation modes, could make a difference by creating opportunity for physical activity. Resources for communities include the Livable Walkable Community Toolkit, the Safe Routes to School (SRTS) program, and the Bike-Walk Alliance of NH.⁴⁰

ENERGY CONSERVATION

Energy conservation in the transportation section is currently being promoted through SNHPC's participation in the CMAQ and Transportation Alternatives (formerly the Transportation Enhancement (TE) grant programs. Many of the projects eligible for funding under the CMAQ program such as improvements to public transit, bicycle and pedestrian facilities and programs, travel demand management projects and establishments of Transportation Management Associations can also make significant contributions to reductions in energy use. The Transportation Enhancement (TE) program supported community-based projects that expand travel choices and enhance the transportation experience by improving the cultural, historic, aesthetic and environmental aspects of our transportation infrastructure. Eligible projects, which included creation of bicycle and pedestrian facilities, conversion of abandoned railway corridors to trail facilities and streetscape improvements, can also be instrumental in energy savings. The Transportation Alternatives (TA) also supports these activities, although there are differences from the former TE program.⁴³

SNHPC also assisted member communities in preparing master plan energy chapters. Transportation-related recommendations from these chapters include incorporating "Complete Streets" principles into

³⁹ HEAL NH, 2013. *Recommended Strategies for Cities and Towns*. <http://www.healnh.org/2011-11-08-16-46-50/cities-towns.html> (last accessed September 20, 2013)

⁴⁰ HEAL NH, 2008. *HEAL Action Plan for New Hampshire 2008*. <http://www.healnh.org/about-heal/heal-action-plan/69-heal-action-plan.html> (last accessed September 20, 2013)

⁴¹ The State Plan Advisory Work Group, 2011. *State Plan to Address Health Disparities and Promote Health Equity in NH*. New Hampshire Health and Equity Partnership. <http://www.dhhs.nh.gov/omh/documents/disparities.pdf> (last accessed September 20, 2013)

⁴² Centers for Disease Control and Prevention, 2013. Overweight and obesity. <http://www.cdc.gov/obesity/data/adult.html> (last accessed January 8, 2014)

⁴³ Federal Highway Administration (FHWA), 2013. Transportation Alternatives Program (TAP) Guidance. U.S. Department of Transportation. <http://www.fhwa.dot.gov/map21/guidance/guidetap.cfm> (last accessed January 17, 2014)

roadway design, encouraging compact and mixed-use developments in village centers and development of facilities for cyclists and pedestrians.

REDUCE GREENHOUSE GAS EMISSIONS

This strategy, reducing greenhouse gas emissions, overlaps somewhat, but not entirely, with the energy conservation strategy. SNHPC supported the State and New Hampshire Department of Environmental Services to address the impacts of climate change through the development of implementation strategies for the New Hampshire Climate Action Plan. The Plan, originally created through an Executive Order in 2007, established quantified greenhouse reduction goals and recommended specific actions to achieve these goals.

The New Hampshire Climate Action Plan was created through a Climate Change Policy Task Force consisting of over 100 participants who engaged the public through a process that included official listening sessions and additional opportunities for public comment. The results of the process were recommended goals to reduce greenhouse gas emissions 1) 20 percent below 1990 levels by 2025 and 2) 80 percent below 1990 levels by 2050. Strategies developed to achieve the goals include those in the transportation sector with a focus on fuels, transportation demand (vehicle-miles traveled) and vehicles. The Climate Action Plan includes some 67 recommended actions for addressing the state's energy needs while also strengthening the economy and reducing the threats of climate change.

Since the release of the New Hampshire Climate Action Plan, progress on the implementation of the Plan is being monitored by the NH Energy and Climate Collaborative, which released the NH Climate Action Plan Annual Progress Review in June 2010 and a subsequent Benchmark Report in the summer of 2012. The Collaborative consists of a group of 21 leaders from the business, non-profit and public sectors, who volunteered to track, report, facilitate and communicate progress towards implementation of the recommended actions outlined in the NH Climate Action Plan.

The New Hampshire Climate Action Plan⁴⁴ recommends a number of transportation-focused strategies for reducing greenhouse gas emissions. Key strategies include:

- Encourage appropriate land use patterns that reduce vehicle-miles traveled
- Reduce vehicle-miles traveled through an integrated multi-modal transportation system
- Support reducing vehicle emissions through state actions
- Support regional and national actions to reduce greenhouse gas emissions from fuel
- Include climate change adaptation and mitigation in programs and planning

Encouraging appropriate land use patterns that reduce vehicle-miles traveled is an important aspect of reducing greenhouse gas emissions (GHGs) from transportation. Appropriate land use patterns could be encouraged by developing model zoning to support bus/rail transit; developing model zoning for higher-density, mixed-use development; streamlining approvals for low-greenhouse-gas development projects; assessing greenhouse gas emission impact fees; and continuing/expanding funding, education, and technical assistance to municipalities. Some of these actions may be more appropriate at the regional or state level than the municipal level.

⁴⁴ New Hampshire Climate Change Policy Task Force, 2009. *The New Hampshire Climate Action Plan: A Plan for New Hampshire's Energy, Environmental and Economic Development Future*. NH Department of Environmental Services. http://des.nh.gov/organization/divisions/air/tsb/tps/climate/action_plan/documents/nhcap_final.pdf (last accessed September 20, 2013).

Reducing vehicle-miles traveled through an integrated multi-modal transportation system involves promoting public transit and facilities for bicycle and pedestrian infrastructure. Recommended actions encompass improving existing local/intra-regional transit (bus) service, expanding local/intra-regional transit (bus) service, improving existing inter-city bus service, expanding and improving bicycle and pedestrian infrastructure, maintaining and expanding passenger rail service, maintaining and expanding freight rail service, implementing a stable funding stream to support public transportation, and expanding park-and-ride infrastructure. Some of these actions may be more appropriate at the regional or state level than the municipal level.

Various actions to reduce vehicle emissions undertaken at the state level should be supported as well. Such state actions include adopting California Low Emission Vehicle (CALEV) standards, creating a point-of-sale financial incentive for high-efficiency vehicles, installing retrofits to address black carbon emissions, implementing commuter trip reduction initiative, increasing highway automobile efficiency, and addressing vehicle idling, and improving traffic flow.

Supporting regional and national actions to reduce greenhouse gas emissions from fuel includes support for standards such as stricter corporate average fuel economy standards and fuel economy standards for heavy-duty vehicles. Support for adoption of a low-carbon fuel standard and for promotion of alternative fuel and advanced technology vehicles and supporting infrastructure is recommended as well.

More generally, the NH Climate Adaptation Plan recommends including climate change mitigation (and adaptation) throughout programs and planning, which includes not only transportation programs and planning but other areas as well.

COMPLETE STREETS



FIGURE 14. PEDESTRIAN CROSSING ON GRANITE STREET IN MANCHESTER, NH

Complete Streets is an important component of transportation options. Complete Streets enable safe, convenient, and comfortable transportation for all users, including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities. Complete Streets with pedestrian, bicycle, and automobile improvements offer many more transportation choices and directly benefit public health, the environment, and the local economy.

Complete Streets work to reduce accidents and fatalities, aid older folks driving and walking, help seniors stay active in their communities and provide opportunities for physical activity, important in the fight against obesity. People with disabilities (nearly 20 percent of Americans) also directly benefit. Many communities with Complete Streets also experience new business growth and job creation, and increased sales tax revenues.

The NH Department of Transportation says in the Statewide Bicycle and Pedestrian Plan that “The economic benefits of bicycle paths in terms of stimulating economic development and bringing revenue to a community or region should not be

overlooked.”⁴⁵ Pedestrians likewise generate significant economic activity through shopping, dining, and accessing personal and professional services.⁴⁶ In Burlington, VT, the Burlington Bike Path serves as a key resource not only for recreation and commuting, but also as an economic generator. The Bike Path is part of Burlington’s network of on-street paths and is the spine of the regional bicycle corridor. A study found that 30 percent of all bike path users come from beyond the city and spend \$4,500,000 locally each year.⁴⁷

The National Complete Streets Coalition has found that local businesses see many benefits in improving access by pedestrians and bicyclists. For example, when a bike lane was added along Valencia Street in San Francisco’s Mission district, nearby businesses saw sales increase by 60 percent. The merchants attributed the increased sales to increased pedestrian and bicycle activity. Similarly, a study in Toronto showed nearly 75 percent of merchants along Bloor Street expected that better bicycle and pedestrian facilities would improve business. In Washington, D.C., design improvements for a three-quarter mile corridor in Barracks Row helped attract 44 new businesses and 200 new jobs, with increases in sales and foot traffic.⁴⁸

In New Hampshire, the City of Keene has passed a Complete Streets Resolution in 2011 resolving “that in order to develop and maintain a safe, efficient, balanced and environmentally sound transportation system for people of all ages and abilities, transportation and development projects shall incorporate a Complete Streets philosophy that expands transportation choices....”⁴⁹ The City of Concord’s proposed Downtown Improvement Project also embraces Complete Streets, and the project proposes to convert the existing four-lane Concord Main Street to a two-lane Complete Street design configuration “promoting multi-modal use and offering more transportation choices, all while improving livability, safety and providing a reliable transportation network.” Property values are conservatively anticipated to increase eight percent with the completion of the Complete Streets project.⁵⁰

Creating complete streets means transportation agencies must change their approach to community roads. By adopting a Complete Streets policy, communities direct their transportation planners and engineers to routinely design and operate the entire right of way to enable safe access for all users, regardless of age, ability, or mode of transportation. This means every transportation project will make the street network better and safer for drivers, transit users, pedestrians, and bicyclists – making your town a better place to live.

There is no singular design prescription for Complete Streets; each street is unique and responds to its community context. Roadways that are planned and designed using a Complete Streets approach may include: sidewalks, bike lanes (or wide paved shoulders), special bus lanes, comfortable and accessible

⁴⁵ New Hampshire Department of Transportation. 2000. New Hampshire Statewide Bicycle and Pedestrian Plan. <http://www.nh.gov/dot/programs/bikeped/documents/BikePedPlan.pdf> (last accessed 29 August 2013)

⁴⁶ Vermont Department of Health (2012). Complete Streets: a Guide for Vermont Communities. Retrieved from <http://www.ccrpcvt.org/completestreets/CompleteStreetsforVTcommunities2012.pdf> (last accessed 29 August 2013)

⁴⁷ Burlington Vermont Department of Parks and Recreation. 2013. Burlington Bike Path. City of Burlington, VT. Retrieved from <http://www.enjoyburlington.com/parks/bikepath1.cfm>

⁴⁸ National Complete Streets Coalition. 2010. Economic Development. Smart Growth America. Retrieved from <http://www.smartgrowthamerica.org/complete-streets/complete-streets-fundamentals/factsheets/economic-revitalization> (last accessed 29 August 2013)

⁴⁹ City of Keene, NH. 2011. Keene City Council August 18, 2011. Retrieved from http://keene.granicus.com/MediaPlayer.php?view_id=2&clip_id=265 (last accessed 29 August 2013)

⁵⁰ City of Concord, NH. 2013. Expected Property Value Benefit: Analysis and Estimation. Concord Downtown Complete Streets Improvement Project. Retrieved from <http://www.concordnh.gov/DocumentCenter/View/1790> (last accessed 29 August 2013)

public transportation stops, frequent and safe crossing opportunities, median islands, accessible pedestrian signals, curb extensions, narrower travel lanes, roundabouts, and more.⁵¹

Complete Streets policies are relatively new in New Hampshire. No policies have been adopted in the Southern New Hampshire region thus far. A list of municipal Complete Streets policies or projects in the state includes:

- Keene – Complete Streets resolution and inclusion in 2010 Comprehensive Master Plan⁵²
- Portsmouth – Complete Streets policy⁵³
- Concord – Comprehensive Transportation Policy,⁵⁴ Complete Streets Downtown Improvement Project⁵⁵, Rt. 3/ Fisherville Rd project⁵⁶

SUNCOOK VILLAGE – BROADWAY STREET PROJECT PEDESTRIAN AND BICYCLE FACILITIES

Current land use patterns in the region often do not support development of facilities and planning for pedestrian and bicycle travel. Additionally, existing facilities often do not allow for safe and comfortable travel by these modes. The extent to which planning for pedestrian and bicycle facilities can practically occur at the local level often varies greatly. As a result, project level actions can be taken to change practices, policies and regulations pertaining to pedestrian and bicycle facilities in the following areas:

- Land use, by making development more compact and reducing distances between origin and destination points;
- Engineering practice, by supplying adequate facilities and seriously considering bicycle and pedestrian needs at every stage of the planning and development process;
- Education concerning automobile, pedestrian, and bicycle safety;
- Encouragement, by building community support and awareness, and by assisting private and public sector businesses to increase employee levels of biking and walking; and
- Enforcement, by more strictly implementing existing laws to strengthen the education element.

⁵¹ Smart Growth America. 2013. Welcome to the National Complete Streets Coalition <http://www.smartgrowthamerica.org/complete-streets> (last accessed 28 October 2013)

⁵² City of Keene, NH. 2011. Complete Streets. 2010 Comprehensive Master Plan. <http://www.ci.keene.nh.us/departments/planning/keene-cmp-2010/plan/transportation/complete-streets> (last accessed 28 October 2013)

⁵³ City of Portsmouth, NH. 2013. Complete Streets Policy. <http://planportsmouth.com/bike-pedestrian.html> (last accessed 28 October 2013)

⁵⁴ Smart Growth America. 2013. Complete Streets Policy Adoption. <http://www.smartgrowthamerica.org/documents/cs/policy/cs-chart-allpolicies.pdf> (last accessed 28 October 2013)

⁵⁵ City of Concord, NH. 2013. Concord Downtown Complete Streets Improvement Project. <http://concordmainstreetproject.com/> (last accessed 28 October 2013)

⁵⁶ Central New Hampshire Regional Planning Commission. 2012. Complete Streets Policy. <http://www.cnhrpc.org/transportation/complete-streets-policy.html> (last accessed 28 October 2013)

Promotion of bicycle and pedestrian transportation also involves providing incentives and reducing disincentives at the project level through improvements such as:

- Signage
- Support facilities
- Traffic calming
- Implementation of principles and guidelines for shared use path design,
- Implementation of principles and guidelines for pedestrian planning and design
- Implementation of principles and guidelines for bicycle planning and design

A suggested planning process for designing and implementing pedestrian and bicycle improvements in communities could include the following benchmark steps:

- Building community support
- Identify issues and problems
- Set goals and objectives
- Establish an action plan
- Enact an implementation plan

The establishment of a regional system of bicycle and pedestrian facilities has the potential to link communities and form a network of alternative transportation corridors. This system could connect to locally developed systems and link with sidewalks, shared-use paths, and local streets. The system of bicycle and pedestrian facilities in the region is currently growing through the efforts of stakeholder groups such as the RTCC and in the spring of 2010, Transportation Enhancement grants were awarded to trail projects in Goffstown, Manchester and Derry. SNHPC's trails in Map 8 can be viewed below. It displays the principal existing and planned system of bicycle and pedestrian facilities in the region. Further development of this infrastructure would be instrumental in the development of a transportation system where alternative modes become essential ingredients and significantly contribute to regional mobility and accessibility. Walking and biking also are a strategy in energy conservation efforts, as discussed in the prior energy conservation section.

In 2008, SNHPC and its member communities assisted the NHDOT in an update to the State Bicycle Maps. The completion of the project created a user-friendly bicycle map that includes transit and passenger rail information providing opportunities to increase the use of alternative transportation modes. The maps note that cyclists will find heavy traffic around the Manchester vicinity. Bicycle services can be found along surface highway corridors connecting Salem to Concord and Nashua to Manchester. A highlight of the Merrimack Valley is the Manchester and Lawrence Railroad corridor, where a paved rail trail currently connects Derry and Windham. See Appendix A: Regional Merrimack Valley Bicycle Routes (NHDOT).⁵⁷

With the assistance of an advisory committee comprised of representatives of various City Departments, the SNHPC completed a Downtown Manchester Pedestrian Study in 2008. The study recommendations included those involving prioritizing infrastructure improvements, developing policy related to development of procedures for determining vehicular and pedestrian rights-of-way, maintaining pedestrian crosswalks, incorporating pedestrian planning into the City's signage package, improving connectivity between pedestrian corridors and expanding pedestrian improvements to other portions of the study area.

⁵⁷ NH Department of Transportation, 2013. *Merrimack Valley Region Bicycle Routes*. New Hampshire Regional Bicycle Maps. <http://www.nh.gov/dot/programs/bikeped/maps/mv.htm> (last accessed September 30, 2013).

The Safe Routes to School (SRTS) program is another existing pedestrian initiative. SRTS is designed to 1) teach children, parents and faculty about the benefits of walking to school, 2) increase the number of children who walk to school, 3) reduce traffic congestion in and around schools and 4) increase pedestrian and vehicular safety. SRTS programs are developed through a combination of educational measures, programs, and physical improvements to the transportation infrastructure. Benefits identified through a SRTS program include improved health and physical development in children, decreased conflicts between children and motor vehicles, reduced traffic congestion and air pollution, increased independence and improved social interaction skills for children. SRTS programs involve cooperation between the school community, local residents, municipal authorities and law enforcement. SNHPC has participated in various SRTS projects for member communities and in its capacity as a member of the State SRTS Advisory Council. SNHPC Safe Routes to School projects include:

- The Hallsville E.S. SRTS Demonstration Project was geared toward encouraging and enabling children to walk to school through strategies and physical improvements near the school. The project included identification and documentation of student and parent attitudes toward walking to and from school, completion of a Parking Occupancy Study for the area in the vicinity of the school and Development of a Traffic/Parking Mitigation Plan that has increased vehicular and pedestrian safety in the vicinity of the school.
- The SRTS Site Evaluation for Henry Wilson E.S. in Manchester involved completing a Site Evaluation under contract to the Manchester Health Department that focused on the area around the school and made recommendations to increase vehicular and pedestrian safety within the catchment area of the school. The completion of the Site Evaluation and subsequent Travel Plan enabled the school to obtain Federal funding to implement infrastructure improvements designed to improve safety and increase the number of children who walk to school.
- SNHPC also conducted a similar SRTS Travel Plan Site Evaluation for Weston E.S. in Manchester under contract to the Manchester Health Department.

SNHPC is currently participating, along with NHDOT, RPC and local trail stakeholder groups in the Regional Trails Coordinating Council (RTCC). The Council, formed in 2010, is designed to build upon the past work of the Manchester Regional Trails Alliance that also included Goffstown, Bedford, Londonderry, Auburn, Derry and Hooksett. The primary goal of the RTCC is to assist member organizations in the development and implementation of a comprehensive trail plan. The RTCC strives to connect existing and planned trail networks in the region by providing a forum for cooperation and collaboration among trail organizations. It also serves as an information clearinghouse for regional trails stakeholders. The goals of the RTCC include, but are not limited to the following:

- Assist in the development of individual trails to form a continuous network in the southern and central regional regions of the State of NH;
- Develop maps of the region's trail network, including completed as well as planned and missing segments, and their conditions;
- Identify and assist in obtaining available public funding (state, federal, etc.) for trail use;
- Identify and assist organizations in obtaining available funding;
- Identify and prioritize trail segment development tasks;
- Provide forums and events to educate the public as to the importance of non-motorized multiuse trails in the health and quality of life of the regions;
- Combine and augment the passion of volunteer groups and the power of regional planning commissions to achieve common missions and values to accomplish common goals while, as necessary, overlapping jurisdictional boundaries.

Recognizing the value of trail projects to municipalities, the RTCC will be responsible for developing and implementing a comprehensive plan to complete north/south and east/west corridors. Currently, there are portions of regional trail systems in various stages of completion. To facilitate completion of these facilities, the RTCC would be responsible for identifying and pursuing sources of funding, developing fundraising programs, bike tours, grant writing, and prioritizing trail sections to be completed. It is hoped that a prioritized program of projects with a funding plan can be developed for completing these north/south and east/west trail corridors. One multi-use trail that the RTCC is focused on developing is the paved trail connecting Derry and Windham.

The RTCC is another resource for trail maps. See the Appendix B Regional Trails Coordinating Council map for trails extending from the Southern New Hampshire region.

Based on a review of projects summarized in this section, the SNHPC has been shown to be committed to helping achieve our residents' vision for expanded transportation choices by facilitating and encouraging bicycling and walking as convenient, safe, and practical forms of transportation throughout the region. This work is generally supported by objectives emphasizing the regional network, safety, appropriate design, education and promotion, planning and maintenance, including:

- Establishing a continuous and coordinated regional bikeway and pedestrian walkway system, ensuing that this regional system is well linked with local municipal systems and adjacent systems in adjacent towns and regions;
- Making biking and walking safer;
- Creating a traveling environment that provides an inviting, viable alternative to motorized travel;
- Promoting public awareness and acceptance of bicycling and walking as attractive, viable transportation and recreation modes;
- Participating in and promoting SRTS activities in the SNHPC region; and
- Fully and meaningfully integrating bicycling and pedestrian needs into the land use planning, transportation planning, highway design, and highway maintenance processes.

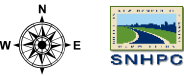
Granite State Future Transportation Existing Regional Trail System



- Paved
- Unpaved
- Interstates
- State and US Routes
- Town Boundary
- Existing Open Space
- Rivers
- Lakes



Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
All SNHPC Communities



The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2013.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664



Multi-modal transportation which includes consideration of the importance of pedestrian and bicycle facilities in this system is needed to expand transportation choices. Encouraging efficient use of the transportation infrastructure through the development of a multi-modal system focused on modes such as walking and cycling will result in 1) reducing the impact of vehicular transportation on our limited fuel supplies and land resources; 2) reducing the negative impacts of hydrocarbon combustion (fossil fuel) on air quality; and 3) reducing traffic congestion at major intersections and in densely populated areas. These priorities suggest the need for increasing use of bikeway and pedestrian facilities to not only expand capacity and improve travel efficiency, but also to provide other benefits such as improved health, safer streets, more vibrant downtown areas and increased economic activity and property values. Many of these benefits can be realized through focus on Pedestrian-Oriented Development and a “Complete Streets” approach to roadway network design at the local level. Developments and improvements emphasizing alternative modes of transportation will provide the infrastructure required for individuals to utilize increased transportation options.

In addition to specific completed projects such as assisting the NHDOT in an update of State Bicycle Maps, completion of the Manchester Downtown Pedestrian Study, and Safe Routes to School Travel Plans for Wilson and Weston Elementary Schools, SNHPC is also involved in numerous other activities promoting and advancing biking and walking as alternative modes of transportation in the region. The update of the Livable, Walkable Community (LWC) Toolkit was developed as a resource to 1) improve the livability of New Hampshire communities and 2) increase rates of physical activity among residents throughout the state. The Toolkit is a resource to bring together citizens and stakeholder groups to develop local action plans for becoming more livable, walkable communities. The updated Toolkit will serve as an educational and community planning resource to inform and educate communities, planning professionals and policy makers on how they can reshape the built environment to encourage and implement safe places for walking and biking.

SNHPC is currently participating, along with NHDOT, RPC and local trail stakeholder groups in the Regional Trails Coordinating Council (RTCC). The RTCC was designed to build upon the past work of the Manchester Regional Trails Alliance to assist member organizations in the development and implementation of a comprehensive trail plan. The RTCC strives to facilitate biking and walking through the connection of existing and planned trail networks in the region by providing a forum for cooperation and collaboration among trail organizations. It also serves as an information clearinghouse for regional trails stakeholders. The RTCC is currently developing and implementing a comprehensive plan to complete regional north/south and east/west corridors by identifying and pursuing sources of funding, fundraising and prioritizing trail sections.

SNHPC will also continue to promote the development of pedestrian and bicycle facilities through its participation in the Transportation Alternatives (TA) (formerly Transportation Enhancement (TE)) and Congestion Mitigation and Air Quality Improvement Program (CMAQ) programs. The CMAQ program provides assistance for air quality improvement and congestion mitigation projects. Projects eligible for CMAQ funding include construction of bicycle and pedestrian facilities that are not exclusively recreational and establishing and funding State bicycle/pedestrian coordinator positions for promotion and facilitation of non-motorized transportation modes. The TA program is designed to fund activities such as construction, planning, and design of facilities for pedestrians and bicycles, and conversion of abandoned railway corridors into trails for pedestrians, bicyclists, and other non-motorized transportation users.⁴³ In an effort to develop a multi-modal transportation network that emphasizes cycling and walking, SNHPC will continue to facilitate and encourage these modes as convenient, safe, and practical forms of transportation. Goals related to this effort include establishing continuous and coordinated regional bikeway and pedestrian walkway systems and linking this system with others in adjacent towns and regions. Previous sections of this plan emphasized project level actions required facilitate this goal such as promoting more compact development to reduce distances between origin and destination points, actively considering bicycle and

pedestrian needs at every stage of the planning and development process and building community support and awareness of biking and walking.

PUBLIC TRANSPORTATION

Increasing accessibility and mobility of people and freight is essential to sustain the economy of the region. The ability of people and goods to move throughout the region has a direct impact on quality of life for residents and employees in the area. Increased accessibility and mobility in turn depend on the development and maintenance of an efficient transportation system that utilizes various modes. SNHPC currently participates in the planning process for existing transit services in the region, such as those offered by Manchester Transit Authority (MTA) and Cooperative Alliance for Regional Transportation (CART). SNHPC staff has also been involved in plans and agreements to develop new transit services such as the fixed-route CART Salem Shuttle, which is now in service.

Plans to expand passenger rail service in the region and proposals to develop multimodal transportation hubs at locations such as downtown Manchester and Manchester-Boston Regional Airport (MBRA) have the potential to improve accessibility and mobility for individuals and freight and facilitate access to goods and services. SNHPC continues to contribute to the efforts of the NH Rail Transit Authority (NHRTA) in developing commuter and passenger rail and related public rail transportation services. NHRTA is pursuing the implementation of passenger rail service on the NH Main Line Capitol Corridor as the first phase of a Boston to Montreal rail service. Currently, the project is being studied by URS Corporation, with the approval of the NH Executive Council, to determine its benefits and economic feasibility.

A study designed to determine the demand for regularly scheduled bus service between the Portsmouth Transportation Center and MBRA was completed by SNHPC and Rockingham Planning Commission in February 2009. After using this study as a guide to implementing the service, in April 2010 the NHDOT applied for Congestion Mitigation and Air Quality Improvement Program (CMAQ) start-up funding for the service. NHDOT Bureau of Rail and Transit was subsequently awarded a \$2,500,000 CMAQ grant to implement regularly scheduled bus services between the MBRA, downtown Manchester and the Portsmouth Transportation Center. The start of service occurred in autumn of 2013.

Many of the Commission's current transit activities deal with continuing support and assistance for existing transit services and other initiatives, such as the pursuit of an expansion of passenger rail services into southern New Hampshire, that involve new services. One element all existing transit services and proposals for future services have in common is the need for funding for operations and capital replacement. Because of competing economic priorities at the local level, communities in the region are challenged to provide local matching funds sufficient to sustain transit at current operating levels. Providing funding to expand transit services above their current levels will be even more challenging. The Financial Plan of the latest Regional Transportation Plan identifies revenues from various Federal, State and local sources available for funding transit projects. However, the funding projections it identifies are assumed to be sufficient only for maintaining the current service levels and replacement of capital; additional funding will be required for growth and expansion of transit in the region. It appears evident that in order to expand transit in the SNHPC region, sources of dedicated transit revenue must be identified.

MAINTENANCE OF ROADS AND BRIDGES

Maintenance is a cornerstone of state and regional goals. NHDOT's 2012 Annual Report emphasizes that the condition of New Hampshire's transportation infrastructure greatly affects the State's ability to provide for the safe and efficient movement of people and goods: "poorly maintained pavement, bridges, rail lines, buses, and airport runways increase travel time, decrease their capacity, create unsafe conditions for the traveling public, and increase maintenance costs." ⁶ The Regional Transportation Plan similarly accentuates the importance of maintenance, noting that the region's continuing dependence on roadways for commerce and movement of goods suggests maintenance and preservation of the highway network will become increasingly important.

Data presented earlier in the chapter emphasize the importance that truck transportation currently plays in the movement of goods within the region. The data show that truck and highway transportation play a vital role in developing and sustaining the region's economy and therefore are essential for maintaining the quality of life for residents and businesses. At the present time, because commercial trucking services based on regional roadways will continue to be essential to sustain the region's economy, maintenance and preservation of the highway network is a key issue. It is also important to note the region's continuing dependence on roadways for freight transportation may require strategies to address air quality concerns and greenhouse gas emissions associated with transporting goods. In the longer term, increased accessibility and mobility for the movement of goods will depend on the development and maintenance of an efficient transportation system that utilizes other modes.

Existing conditions data relevant to maintenance goals includes pavement condition, Red Listed bridges, and rail lines capable of 40 mph speed. With regard to bridges, it notes that delaying maintenance and trying to address the worst bridges first increases rate of bridge deterioration, reduces bridge life expectancy, and requires major bridge rehabilitation or replacement at much higher costs. ⁶

With regard to pavement condition, NHDOT data for 1996 through 2012 show that the mileage of roadways in good or fair condition reached an all-time high of 3,064 miles in 2000, and is projected to continue declining steadily through 2018, the furthest year for which projections were made; see Figure 15 below. The goal of NHDOT is to hold the current amount of mileage in good or fair condition in 2012 steady through 2018, resulting in over 200 more maintained miles by that time. On State roads, it is the goal of NHDOT's roadway maintenance strategy to focus resurfacing activities on higher volume roadways thus keeping them from deteriorating to poor condition. ⁶

Funding is at the heart of maintenance needs. NHDOT's anticipated cost to repair/replace all current Red Listed bridges is \$715M or \$71.5M per year over the next 10 years. There currently is a \$15M annual shortfall of available funding to address these needs. If this trending is not addressed, bridge conditions will worsen exponentially in the future.¹³

New Hampshire Pavement Condition

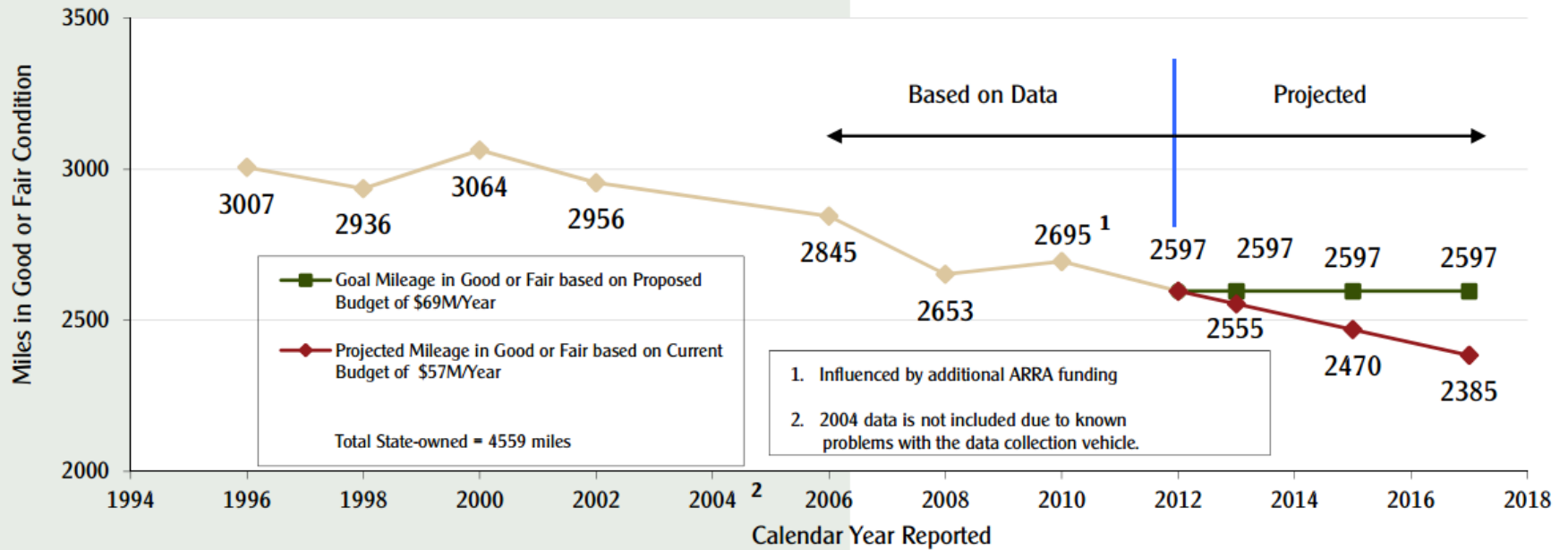


FIGURE 15: NH PAVEMENT CONDITION

Source: NHDOT 2012

PASSENGER RAIL

In March of 2013, the NH Department of Transportation, working in concert with its counterparts in Massachusetts, started the NH Capitol Corridor Study, a 21-month project supported by both the Federal Railroad Administration (FRA) and Federal Transit Administration (FTA).

The project will include a study of potential rail and bus transit investments in the NH Capitol corridor, which connects the major population centers of New Hampshire to metropolitan Boston, and the development of a service development plan and related documents for intercity passenger rail between Boston, MA and Concord, NH. This study will be taking a multimodal, systems-wide approach in the development of the alternatives that will be considered. The NH Capitol Corridor extends 73 miles between Boston and Concord. Rail facilities within the corridor include existing Massachusetts Bay Transportation Authority (MBTA) commuter rail service between Boston and Lowell, MA and Pan Am Railways, Inc. freight service between Lowell, MA and Concord, NH. In addition to the existing rail infrastructure, highway corridors under consideration for commuter service investment include the US Route 3/Everett Turnpike corridor and the I-93 corridor in Massachusetts and New Hampshire. Both of these highway corridors are served by commuter and intercity bus service.

Implementing the findings of NH Capitol Corridor Study will improve public transit options in the region, whether by passenger rail or by bus.

TRANSPORTATION DEMAND MANAGEMENT

SNHPC promotes Transportation Demand Management (TDM) to reduce the number of single-occupancy vehicle trips. Organized TDM programs can include benefits such as vanpools, bicycling and walking programs, incentive programs, parking management, alternative work hours, and compressed workweeks. Rather than depending on Interstate widening programs to solve all our commute problems, TDM strives to reduce the number of vehicles on the road. By using the existing transportation infrastructure more efficiently, the impact of the expected population growth on transportation can be mitigated. While office employers can coordinate TDM benefits for their employees, Transportation Management Associations can coordinate TDM commuter benefits on a regional scale, making TMAs a valuable and sustainable transportation administration tool for the region.

In 2005, SNHPC completed a report called Smart Choices, Smart Trips: An Employer's Guide to Implementing Effective Transportation Demand Management Programs in Southern New Hampshire. In summary, the keys to a successful TDM program are communication, planning, and commitment. Employers must communicate effectively with their employees at every stage of the process to determine the needs and attitudes of employees as well as to inform them about options and office policies. Good research and planning can prevent disorganization and allow companies to implement new components of the TDM programs as resources become available. Finally, a company that is committed to changing the commuting habits of its workforce will follow through with their TDM program until their goals are met, demonstrating the importance of alternative transportation to the employees as well as the greater community.

A substantial proportion of traffic in the region is created by commuters who live far distances from where they work. Transit Oriented Development, in which towns build mixed-use, pedestrian-friendly developments around transportation centers (such as transit stations or Park and Ride facilities) can be promoted as a sustainable response to this issue. These higher-density complexes allow residents to live in close proximity to retail services and have easy access to their workplaces. They serve the towns by easing infrastructure costs and reducing traffic congestion. Park and Ride lots and facilities are other tools that can be used to pursue similar ends. Cheaper and easier to implement than Transit Oriented Developments,

Park and Ride facilities placed at major crossroads can promote car-pooling and reduce congestion and carbon emissions. Park and Ride can be viewed as a low hanging fruit when pursuing larger sustainable transportation measures as it can be a small but important first step toward that goal. The New Hampshire DOT maintains a list of all Park and Ride facilities in the state, offers a commuter matching service, and provides other Park and Ride information through its Rideshare program- see the Existing and Future Conditions section of this chapter for locations in Southern New Hampshire.⁵⁸

Other measures for consideration that promote a more sustainable transportation network moving into the future include:

- The continued pursuit and promotion of bicycle and pedestrian planning;
- Increased public transit options, including the possible creation of a regional transit authority;
- Increased park-and-ride facilities near interstate entrance ramps and other major roadway junctions to encourage more carpooling and vanpooling;
- Commuter rail to Boston and other passenger rail services;
- Park and ride facilities near major highway access points;
- Intelligent Transportation Systems (ITS) that utilize advanced communication and information technology to increase driver safety, improve transportation times, reduce fuel consumption, make freight delivery more efficient and generally improve upon the current transportation system;
- Provide alternative fuel infrastructure as the technology becomes widely available. Examples of this would include pumps for alternative fuels at filling stations and recharging stations for electric cars;
- Additional smart growth land use techniques similar to TOD that promote compact development and less auto-dependence, including Planned Unit Developments (PUD), Traditional Neighborhood Design (TND) developments, Village Plan Alternatives (VPA) and Conservation Subdivisions.

SNHPC is also collaborating with other State MPOs to address congestion in the urbanized portion of New Hampshire. Federal transportation law requires that MPOs serving the same Transportation Management Area (urbanized area with a population over 200,000, as defined by the Bureau of Census) must address congestion management via a Congestion Management Process (CMP). Because portions of the Rockingham Planning Commission (RPC), Nashua Regional Planning Commission (NRPC) and SNHPC are included in the census Boston Urbanized Area, these organizations completed development of CMPs in 2010.

A CMP is defined as a set of actions linked to the planning and environmental review processes that provide for effective management and operation of a transportation system. It is based on agreed-to travel demand reduction and operational management strategies and additional measures designed to increase capacity. The CMP, which can be integrated into the Regional Transportation Plan, is used to identify congested locations, determine the causes of congestion, develop alternative strategies to mitigate congestion, evaluate the potential of different strategies and track and evaluate the impact of previously implemented congestion management strategies.

The ultimate goal of the SNHPC CMP involves the development of a series of goals pertaining to managing or minimizing the impacts of congestion in the region. SNHPC is currently collaborating with RPC and NRPC on development of the annual CMP programs to initiate the process of managing congestion in regional corridors. Eventually, each MPO will individually implement its own strategies to address congestion issues. The final step in the development of the CMP will involve the evaluation and monitoring of the implemented strategies.

⁵⁸ NH Rideshare (2013). NH Rideshare – Your Source for Transportation Alternatives. NHDOT. <http://www.nh.gov/dot/nhrideshare/index.htm> (last accessed 04 November 2013)

Non-governmental initiatives to encourage alternative transportation also play a role in the region. In 2011, the first Statewide Commute Green Challenge saw 678 commuters saving 64,731 miles in a one-week competition. The coalition behind the challenge, Commute Green New Hampshire, also worked together to build a website, Trip Logger tool, coordinate marketing materials, and secure funding in addition to conducting the Statewide Challenge. In 2012, more than 500 individuals and 100 teams logged their green trips on the website (CommuteGreenNH.org) from May to December 2012. During that time, participants logged 223,589 miles, avoided 10,801 vehicle trips, reduced CO₂ emissions by 219,117 pounds, and saved \$128,116 in vehicle operating costs.

CGNH has initiated ongoing conversations with a number of different organizations. It is working with vRide, a ride sharing company, to develop vanpools along I-93 corridor. Concurrently, Central New Hampshire Regional Planning Commission (CNHRPC) staff is working with NH Department of Administrative Services to develop a pre-tax transit benefit program for state employees. CGNH is also in ongoing conversations with MassRides, Massachusetts Transportation Management Associations and their advisory council on how to coordinate connectivity of ridematching technology, marketing materials, events, etc. These organizations have been invited to participate in the strategic planning process. Likewise, CGNH is working with Vermont Agency of Transportation and GoMaine on ridematching technology evaluation and connectivity and how to develop an effective customer service call center as well as using coordinated marketing materials. These agencies have been invited to participate in the strategic planning process.



FIGURE 16: THE STEPS OF THE CONGESTION MANAGEMENT PROCESS (FHWA)

SMART GROWTH & LAND USE

Smart Growth and Land Use themes focus on alternative transportation modes; relieving congested roads; decreasing water and air pollution; and promoting energy efficiency; infill and compact development; mixed use; and transit-oriented development. Smart growth land use techniques include Planned Unit Developments (PUD), Traditional Neighborhood Design (TND) developments, Village Plan Alternatives (VPA) and Conservation Subdivisions.

A set of ten basic principles have been developed by the Smart Growth Network. The principles stem from the experiences of communities around the nation that have used smart growth approaches to create and maintain great neighborhoods. They are:

1. Mix land uses
2. Take advantage of compact building design
3. Create a range of housing opportunities and choices
4. Create walkable neighborhoods
5. Foster distinctive, attractive communities with a strong sense of place
6. Preserve open space, farmland, natural beauty, and critical environmental areas
7. Strengthen and direct development towards existing communities
8. Provide a variety of transportation choices
9. Make development decisions predictable, fair, and cost effective
10. Encourage community and stakeholder collaboration in development decisions⁵⁹

Transportation overlaps with land use, housing, community development, and other focus areas in smart growth. Creating walkability and providing a variety of transportation options are at the heart of smart growth in transportation planning.

⁵⁹ Environmental Protection Agency, 2013. About Smart Growth. http://www.epa.gov/dced/about_sg.htm (last accessed January 24, 2014)

Who Said “Live Free or Die”?

**General John Stark,
a New Hampshire
hero said it, and we
celebrate it!**



Tour the General John Stark Scenic
Byway and see why we call NH home.
The Byway towns of Dunbarton,
Goffstown, New Boston, and Weare
welcome you!

**FIGURE 17 THE GENERAL JOHN STARK
SCENIC BYWAY**

includes the towns of Auburn, Chester, Derry, Hampstead, and Atkinson, and its nomination was submitted to NH DOT in August 2012. The Upper Lamprey Scenic Byway encompasses the towns of Northwood, Deerfield, and Candia. SNHPC submitted this byway's nomination on behalf of the ad hoc byway committee in January 2013. These byways' ad hoc committees remain very active in their compilation of Corridor Management Plans, which will be essential in securing federal byway funding, should it become available in the coming years.

Through the efforts of the SNHPC, the Towns of Goffstown, New Boston and Weare and the Town of Dunbarton in the Central New Hampshire Regional Planning Commission region, the General John Stark Scenic Byway was designated a New Hampshire State Scenic and Cultural Byway on June 5, 2008, by the State Scenic and Cultural Byways Council and NHDOT. The Byway showcases many cultural and historical features of regional, State and National significance. To facilitate ongoing management of the Byway, a series of goals and strategies as well as a corridor management plan have been identified and developed by the General John Stark Byway Council.

Economic development is also an important strategy of the General John Stark Scenic Byway supporting the goals and objectives of the Regional Transportation Plan. Specifically, the Byway seeks to expand local economic development by; 1) expanding existing local businesses, including local artists, agriculture, and tourist related businesses; 2) encouraging businesses and communities to market the Byway in their advertising; and 3) promoting new tourist related businesses. The Council has designed a number of strategies to implement these goals including working with member communities to encourage incorporating the Byway into their economic development strategy. Support for small businesses applying for Tourist Oriented Directional Signs to help attract visitors to their business will also be provided and the Council will also work with business owners to participate in the Byway planning process.

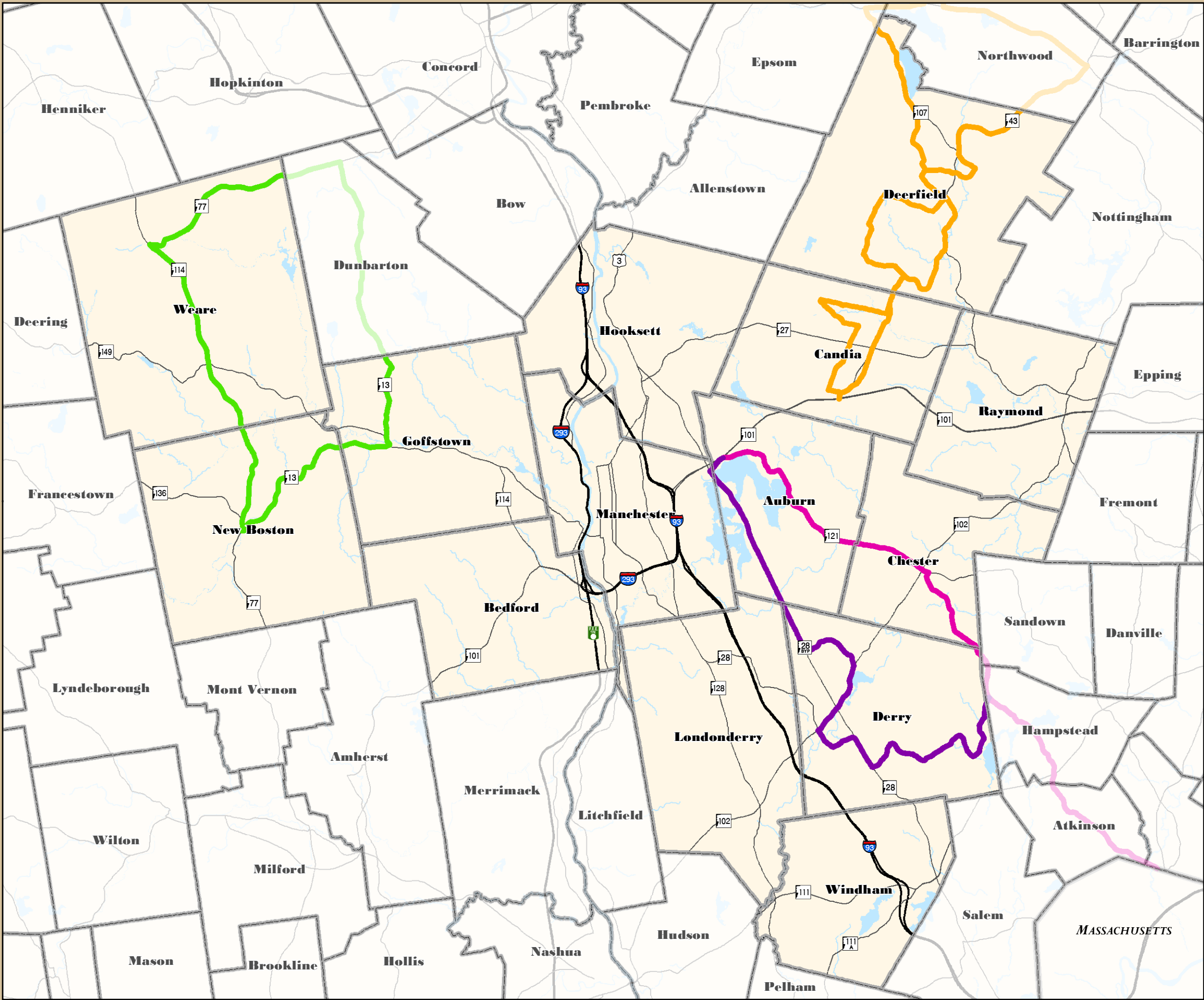
Two other scenic byways recently won approval from the State Scenic Byway Council in May 2014: the Upper Lamprey Scenic Byway and the Robert Frost/ Old Stage Coach Scenic Byway. The Robert Frost/Old Stage Coach Scenic Byway

Granite State Future Transportation Existing Scenic Byways



Existing Scenic Byways in Southern NH

- General John Stark Scenic Byway
- Robert Frost Scenic Byway
- Stage Coach Scenic Byway
- Lamprey Scenic Byway
- Interstates
- State and US Routes
- Town Boundary
- Rivers
- Lakes



Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
All SNHPC Communities

The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2013.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5
Miles



CLIMATE CHANGE ADAPTATION

The NH Climate Adaptation Plan recommends including climate change adaptation throughout programs and planning. Various types of infrastructure, such as the transportation network, are at increased risk of damage and disruption due to climate change.

SNHPC is currently conducting culvert assessments and emergency planning which has revealed infrastructure that is vulnerable to extreme weather events. Major flood events have caused significant damage to roads, bridges and culverts in our communities. The Towns of Goffstown and Raymond in particular have experienced many flooding issues in the past five years that have inflicted considerable damage to local roads, bridges and property. Towns such as Deerfield and Chester had



FIGURE 18 2007 FLOODING IN DEERFIELD, NH

all of their major evacuation routes closed off due to flooding in recent big storms - see Figure 18.

Mobility of residents and emergency responders, particularly in rural towns which do not have many roads, is a worry; the biggest concern above all is safety. Safety is a clear issue in towns such as Goffstown where over 300 homes are in low-lying areas prone to flooding. SNHPC is studying the Piscataquog River quite extensively right now by developing a hydrology model to determine the vulnerability of local road and stream crossings. In addition, SNHPC plans to team up with the USGS Pembroke, NH office to conduct a flood inundation and early warning study. SNHPC is also currently in the process of assisting our communities in updating their Hazard Mitigation Plans.

FHWA and FTA have issued guidance to MPOs on natural hazard mitigation involving the protection of transportation infrastructure from the impacts of climate change. As MPOs incorporate security and natural hazard planning into their processes, they are working in an environment of “All-Hazards Planning” as defined by the Department of Homeland Security (DHS) in its regulations for planning for and responding to threats to the public and the nation’s infrastructure. DHS uses the term all-hazards to describe an incident, “natural or man-made, that warrants action to protect life, property, environment, and public health or safety, and to minimize disruptions of government, social, or economic activities.”

SNHPC presented an all-hazards planning approach to security in early 2010 to its Technical Advisory Committee which includes representatives from the NHDOT and FHWA. Subsequent discussion focused on the security-related projects currently being undertaken at the regional level as well as on additional ways that SNHPC may be able to use its resources to contribute further to security planning work in the region. The following list of activities was identified:

- Transportation modeling to support and coordinate local evacuation plans.
- Mapping local and regional evacuation routes in relation to transportation infrastructure and natural hazards.
- Identifying the transportation needs of transportation-dependent populations in the region.
- Utilizing the Public Participation Plan for the SNHPC Region to disseminate information about regional evacuation plans to the public.

Recent events including a severe ice storm in December 2008 and a significant windstorm in February 2010 highlighted the need for community preparedness in the SNHPC region. As a result, SNHPC in

association with the City of Manchester and a Community Preparedness Committee consisting of representatives from emergency management, police, fire and local government from each town in the region, prepared a Southern New Hampshire Community Preparedness Plan in 2010. The Plan, which was created to develop a regional framework to enable planning for increasing levels of community preparedness, provides an overview of emergency services in the Southern New Hampshire region including contact information for emergency management personnel in each community. Mitigation strategies and actions including evacuation procedures are outlined and the Plan also identifies community readiness stages for each community and strategies for implementation. The plan outlines an outreach process developed and implemented in the Southern New Hampshire region.

This Southern New Hampshire Community Preparedness Plan is intended to be a model for other regions in the State for developing their own community preparedness programs and for increasing levels of community preparedness throughout the State of New Hampshire. By addressing the need for community preparedness and planning on a regional level, communities will all benefit from increased coordination and efficiency of resources.

In addition to the Southern New Hampshire Community Preparedness Plan, SNHPC has also collaborated with its member communities in the development of local Hazard Mitigation Plans. Hazard mitigation is defined as "activities designed to alleviate the effects of a major disaster or emergency or long-term activities to minimize the potentially adverse effects of future disaster in affected areas". This includes structural interventions such as flood control devices and nonstructural measures such as avoiding construction in flood-prone areas. Mitigation includes not only avoiding the development of vulnerable sections of the community but also making existing development in hazard-prone areas safer.

FEMA has mandated that all communities within the State of New Hampshire establish local hazard mitigation plans as a means to reduce future losses from natural or man-made hazard events before they occur. The New Hampshire Division of Homeland Security and Emergency Management provided funding to SNHPC to create local Hazard Mitigation Plans for its communities. The SNHPC originally began preparing local Hazard Mitigation Plans for its member communities in 2001 and updates to the Plans were initiated in 2008. The mitigation plans include critical facilities at risk including medical facilities, public utilities and schools and also consider primary and alternate evacuation routes in each community.

Increasing the security of the transportation system in the region through the success of the programs discussed in this section depends heavily on public knowledge and acceptance of them. Much of the information about these projects is available to the public through the internet. Because of the importance of the internet and access to it in delivering information to the public, the University of New Hampshire, nine regional planning commissions and the NH Department of Resources and Economic Development/Division of Economic Development are currently collaborating on the State of New Hampshire Broadband Data and Development Grant Program Project.

SNHPC's newest climate change adaptation effort is the Piscataquog Watershed Stream Crossing Vulnerability Assessment (anticipated completion December 2013), which will inform adaptation to more frequent extreme precipitation events. SNHPC has selected a contractor to build an Excel and GIS-based hydrologic/ hydraulic capacity model formulated on the NRCS TR-55 runoff model, and to apply this model to all of the watershed's stream crossings (e.g. drainage pipes, culverts, arches and bridges). The project involves assessing the design, condition and vulnerability of each stream crossing and recommending the necessary sizing of these structures for replacement or restoration priority so they will not wash out during severe storms and flooding events.

One key issue in ensuring that transportation infrastructure can withstand climate change is strengthened design guidelines. Adapting to climate change by building and rebuilding stronger ensures that structures won't waste taxpayer dollars by getting wiped out a couple of years down the road in the next big storm.

However, engineers do not necessarily factor in climate change when they design transportation infrastructure. Designs are often based upon out-of-date Technical Paper 40 (TP40) precipitation data on the 100-year flood of the past. Organizations such as the Northeast Regional Climate Center at Cornell University⁶⁰ have updated the data to reflect climate change-caused precipitation changes that have occurred through recent years. Adopting these new data and incorporating them in design guidelines will ensure longer lasting infrastructure. Additionally, there is a need to not only look back on climate change that has already occurred, but to also look ahead and anticipate further future changes.

ALTERNATIVE FINANCING

As discussing in the Existing and Future Conditions section, there is a need for alternative financing in order to fulfill stated transportation goals. Table 11, below, presents a list of options for funding transportation improvements.

TABLE 11: ALTERNATIVE FINANCING METHODS

Alternative	Description	Drawbacks/Benefits
Public-Private Partnerships (PPPs or P3s)	FHWA encourages the consideration of public-private partnerships: “Early involvement of the private sector can bring creativity, efficiency, and capital to address complex transportation problems facing State and local governments.” ⁶¹	New Hampshire has not enacted statutes enabling use of PPPs at this time. ⁶²
Tax increment financing	Property values are assessed for the base year. Any taxes from an increase in property values or new property are dedicated to improvements in those areas, such as roads, transit, parking, pedestrian, and traffic signals.	Most districts use bonds initially and then use taxes to repay bonds. Immediate tax benefits from new developments delayed for several years until bonds are paid off.
Assessments	A fee on properties within a district to pay for specific improvements within the district. Can be one-time or recurring, used to retire bonds or fund maintenance costs.	Works well only with cooperation from local businesses paying the fees. Are not considered taxes and cannot be deducted from federal taxable income.
Transit Assessment District	This is similar to assessment, but rates vary according to proximity from transportation improvements. Can be divided into graduated assessment benefit zones.	Subject to voter approval. Can be done completely at a local level.
Fees	As opposed to taxes, these are levied only on those parties causing a significant impact on transportation infrastructure. May be assessed based on square ft of development, units constructed, or peak hour vehicle trips generated.	Can be challenged by the private sector. Levied at the time that the building permit is issued—assuring concurrent construction of roads. Money only funds new improvements—new and old residents must equally share maintenance costs of old roads.

⁶⁰ DeGaetano, A. and Zarrow, D., n.d. Extreme Precipitation in New York & New England. *Northeast Regional Climate Center, Cornell University*.

http://precip.eas.cornell.edu/docs/xprecip_techdoc.pdf (last accessed January 17, 2014)

⁶¹ Federal Highway Administration, 2013. Public-Private Partnerships. U.S. Department of Transportation.

<http://www.fhwa.dot.gov/ipd/p3/index.htm> (last accessed January 21, 2014)

⁶² Federal Highway Administration, 2013. State P3 Legislation. U.S. Department of Transportation.

http://www.fhwa.dot.gov/ipd/p3/state_legislation/index.htm (last accessed January 21, 2014)

Negotiated Investments	Private sector contributes or fully funds public sector transportation improvements, either in exchange for zoning changes and building permits or for projects that benefit the private company.	Can be used on the local level as a negotiation technique for developers who need zoning changes.
Private donations or initiatives	A private developer finances all or part of a transportation project that benefits him/her but is a low public priority.	Raises the question of the degree to which private interests can influence public priorities.
Use of property rights	The city or state sells or leases property rights above, below, or adjacent to highways, routes, or other transportation facilities.	Requires intensive negotiations and involvement and is a lengthy process.
Contracted transit services	When private interests dictate a public-access transit system, private funds are invested in fully financing or contracting out services for public use.	In cases with little public involvement, transit can become effective and efficient for the intended users. However, construction is totally dictated by private interests.
Tolls	Tolls are collected for use on roads.	Toll roads are constructed more quickly.
Tax on gasoline	Taxes are levied on gasoline and used towards transportation projects.	Can be passed at a local or county level. Must receive public support. Gas prices already expensive.
Tax on Vehicle Miles Travelled (VMT)	Taxes take the form of a distance-based user fee. Oregon has passed legislation enabling 5,000 volunteers to be charged \$0.015/mile in 2015 (in lieu of the gas tax in place).	Political acceptance is still growing on the national level.
Beer tax	Taxes collected on beer in Birmingham, AL raised \$2 million for transportation	
Lottery	Portions of lottery proceeds go toward transit and transportation costs.	Currently, NH lottery revenues go towards operating expenses, prizes, and education. Requires legislative approval.

PUBLIC OUTREACH

One of the initial steps in developing a fully integrated and connected transportation network is to ensure as much information as possible on an area's transportation plans, programs and projects is readily available to stakeholders and the public. This information must be accessible to a wide variety of individuals, groups, and organizations affected by and/or interested in these issues. Establishment of effective early and continuing public involvement in the planning process before key decisions are made, and while there is ample opportunity to affect decisions, is essential to the development of a planning process emphasizing a fully integrated and connected transportation network.

In order to develop a fully integrated and connected transportation network, SNHPC is committed to promoting opportunities for informed public input to be used in the decision making process by providing timely access to needed information and reasonable opportunities for interested parties to comment. In an effort to facilitate the development of an integrated and connected transportation network in this region, the SNHPC is responsible for numerous plans designed to fully inform the public about transportation plans, programs and projects.

The Public Involvement Process for the SNHPC Region was designed to satisfy specific purposes and objectives pertaining to public involvement, incorporate current practices, and technological innovations to satisfy the requirements of Federal transportation legislation. Current transportation legislation includes

increased emphasis on public participation emphasis including a need for extensive stakeholder participation above and beyond “public involvement”. Developed in the spirit of improving citizen participation and providing multiple opportunities for public officials, special interest group, and citizen input, the Public Involvement Process for the SNHPC Region represents the current practices of the Commission for engaging the public in the planning process. The Process is included as Appendix B of the Regional Transportation Plan.

Information available on the SNHPC website makes use of reproductions of plans, maps, graphics and other visualization techniques designed to more effectively communicate information to the public. SNHPC also directly distributes the latest news and information from the Commission through the monthly “Media Blast” and quarterly newsletters. It is hoped that the ability of SNHPC to effectively communicate information to the public will be further enhanced through the development of new links between the Commission’s transportation database and its GIS capabilities. Staff is currently focusing on 1) linking traffic count data from the annual regional traffic counting program to the network of the SNHPC travel demand model, 2) linking the traffic count database with the GIS database and 3) linking various transportation features, such as traffic flows, accident history, level of service, level of congestion, transportation hubs, transit routes and major activity centers with regional maps in GIS format. It is hoped the information developed through these enhanced features will be made available to the public. Interactive maps displaying traffic counts at different locations throughout the region are now available on the SNHPC website.

The SNHPC regularly participates in public forums and community surveys to more effectively gauge local attitudes. An extensive outreach effort was undertaken for this effort to update the Regional Comprehensive Plan, some of the results of which can be viewed at the beginning of this chapter. The full input collected from the regional workshops, neighborhood conversations, events, surveys, and comment cards can be found in SNHPC’s Public Outreach Report on the Granite State Future project. On behalf of the Region 8 Regional Coordination Council, SNHPC also participated in the administration of Community Transportation provider and consumer surveys that were administered to clients of social service agency based clients in the region. SNHPC also facilitates access to information on transportation planning plans, programs and projects through additional activities such as the Planners Roundtable series which have been held on a continuing basis since 2005. Topics discussed at Planners Roundtable meetings have included the planned Woodmont Commons development in Londonderry, the Capitol Corridor passenger rail project and the Route 3 Mixed Use Overlay District in Bedford.

OUTCOMES

The core goals and recommendations help to define the region’s transportation agenda and identify and prioritize projects that can best meet transportation needs as discussed in Key Issues and Concerns. They were developed based on the principles of the Key Projects and Strategies.

CORE GOALS

The transportation core goals, listed below, are as follows:

- 1. Safer transportation for all users**
- 2. Less trips by single occupancy-vehicles**
- 3. Increased availability of pedestrian and bicycle facilities**
- 4. Increased availability of public transportation**
- 5. Development of passenger/ freight rail**
- 6. Smart growth land use policies**

7. **Climate change adaptation in transportation**
8. **Increased education on transportation issues and alternatives**
9. **Sustainable funding for transportation infrastructure**

RECOMMENDATIONS

The recommendations listed below are strategic initiatives intended to demonstrate a commitment to and implementation of the aforementioned core goals and to bring about enhanced transportation infrastructure for the region. Many of the recommended initiatives are important catalytic projects that will have significant benefits, not only for the SNHPC region, but statewide. Some of these initiatives are also listed in others chapters of *Moving Southern New Hampshire Forward*. These strategic initiatives are ranked in order of priority and include:

- **Analyze Complete Streets Challenges** - Conduct a comprehensive analysis of state and local policies and practices preventing Complete Streets or causing difficulties for municipalities interested in implementing Complete Streets, and suggest recommendations. For example, state guidelines may not currently encourage bicycle use of shoulders and legal responsibilities concerning snow and ice removal may be a difficulty in sidewalk implementation.
- **Offer Complete Streets Training and Educational Opportunities** – Provide information and ongoing support to municipal planners, engineers, and other transportation professionals, community leaders, and the general public to develop understanding of “the Complete Streets approach, the new processes and partnerships it requires, and the potential new outcomes from the transportation system,” as identified by Smart Growth America.⁶³
- **Change Procedure and Process in Transportation Decision-Making** – In order to smoothly ameliorate the identified challenges to Complete Streets implementation, revise, update, and adopt documents, plans, and processes. Maintenance and operation procedures need to be updated to look beyond automobile movement, as does criteria for selection of transportation projects. Likewise, design guidance and criteria for measuring infrastructure performance need to account for all users of the transportation system.⁶³
- **Develop Additional Funding Sources** – Funding is critical to implementing the infrastructure projects that are needed in the region. Financing measures to consider include Public-Private Partnerships (PPPs), impact fees & TIFDS, private investment, bonding, and local taxes.
- **Develop a Regional Bicycle and Pedestrian Plan** – “Bicycle-friendly communities have one thing in common: they place a high priority on short- and long-term planning methods and policy-making that incorporate and support non-motorized transportation.”⁶⁴ A Plan helps to ensure that appropriate facilities for bicyclists are provided throughout the built environment in the region.^{65, 66}
- **Implement Transportation Demand Management** - Evaluate strategies such as ordinances and programs encouraging carpooling, staggered work hours; work at home options, and

⁶³ Smart Growth America (2010). Implementation. *National Complete Streets Coalition*. Retrieved from <http://www.smartgrowthamerica.org/complete-streets/implementation> (last accessed 6 January 2014)

⁶⁴ Pedestrian and Bicycle Information Center (2013). Develop Plans and Policies. <http://www.bicyclinginfo.org/develop/> (last accessed 6 January 2014)

⁶⁵ Pedestrian and Bicycle Information Center (2013). Levels of Bicycle Planning. Retrieved from <http://www.bicyclinginfo.org/develop/levels.cfm> (last accessed 6 January 2014)

⁶⁶ League of America Bicyclist (2013). The Essential Elements of a Bicycle Friendly America. <http://www.bikeleague.org/content/5-es> (last accessed 8 January 2014)

park and ride lots that can reduce the number of single-occupancy vehicle trips, causing congestion on the region's primary roads and highways and which have positive impacts on energy and air quality. Trip reduction ordinances can be a successful tool for managing congestion and involving the private sector in traffic management efforts.⁶⁷

- **Become a Bicycle-Friendly Community** – Work with the League of American Bicyclists to achieve designation as a Bicycle-Friendly Community in each municipality across the region.⁶⁸
- **Utilize Smart Growth Principles in Land Use Management and Urban Design** - Adopt land use policies that allow for transportation efficient development and opportunities for short pedestrian and bicycle trips, as well as other alternative transportation options.⁶⁹
- **Update Design Guidelines to Reflect Current and Future Climate Change** - When designing transportation infrastructure, engineers consult data on extreme precipitation and flooding events (e.g. the 100-year flood). Due to climate change, this data has become out-of date, and it is recommended that engineers accurate data reflecting present change and weighing future change.
- **Conduct a Feasibility Study in Establishing a Regional Public Transit System/Authority** – In order to bring about systematic public transit services to outlying communities and other rural areas within the region, a regional transit authority will be needed. This study would explore these options and evaluate the region's overall transit needs as a NH DOT-TIP funded project.
- **Expand I-93 Commuter Bus Service Throughout the Region** – This initiative would involve implementing and expanding intercity and commuter bus service within the region and the Manchester Boston Regional Airport through the NH DOT I-93 Commuter Bus Service Project.
- **NH Capitol Corridor Passenger Rail** – Restoring passenger rail service through the NH Capitol Corridor Passenger Rail Project linking Concord, Manchester, the airport and Nashua with Boston is recognized as an important economic development initiative for the SNHPC region.

⁶⁷ U.S. Environmental Protection Agency, n.d. Trip Reduction Ordinances.

http://www.epa.gov/otaq/stateresources/policy/transp/tcms/trip_reduction.pdf (last accessed 8 January 2014)

⁶⁸ League of America Bicyclist (2013). Becoming A Bicycle Friendly Community.

<http://www.bikeleague.org/content/communities> (last accessed 8 January 2014)

⁶⁹ City of Seattle, Washington, 2008. Best Practices: Land Use Management and Urban Design. *Seattle Urban Mobility Plan*.

<http://www.seattle.gov/transportation/docs/ump/07%20SEATTLE%20Best%20Practices%20in%20Transportation%20Demand%20Management.pdf> (last accessed 8 January 2014)

APPENDIX

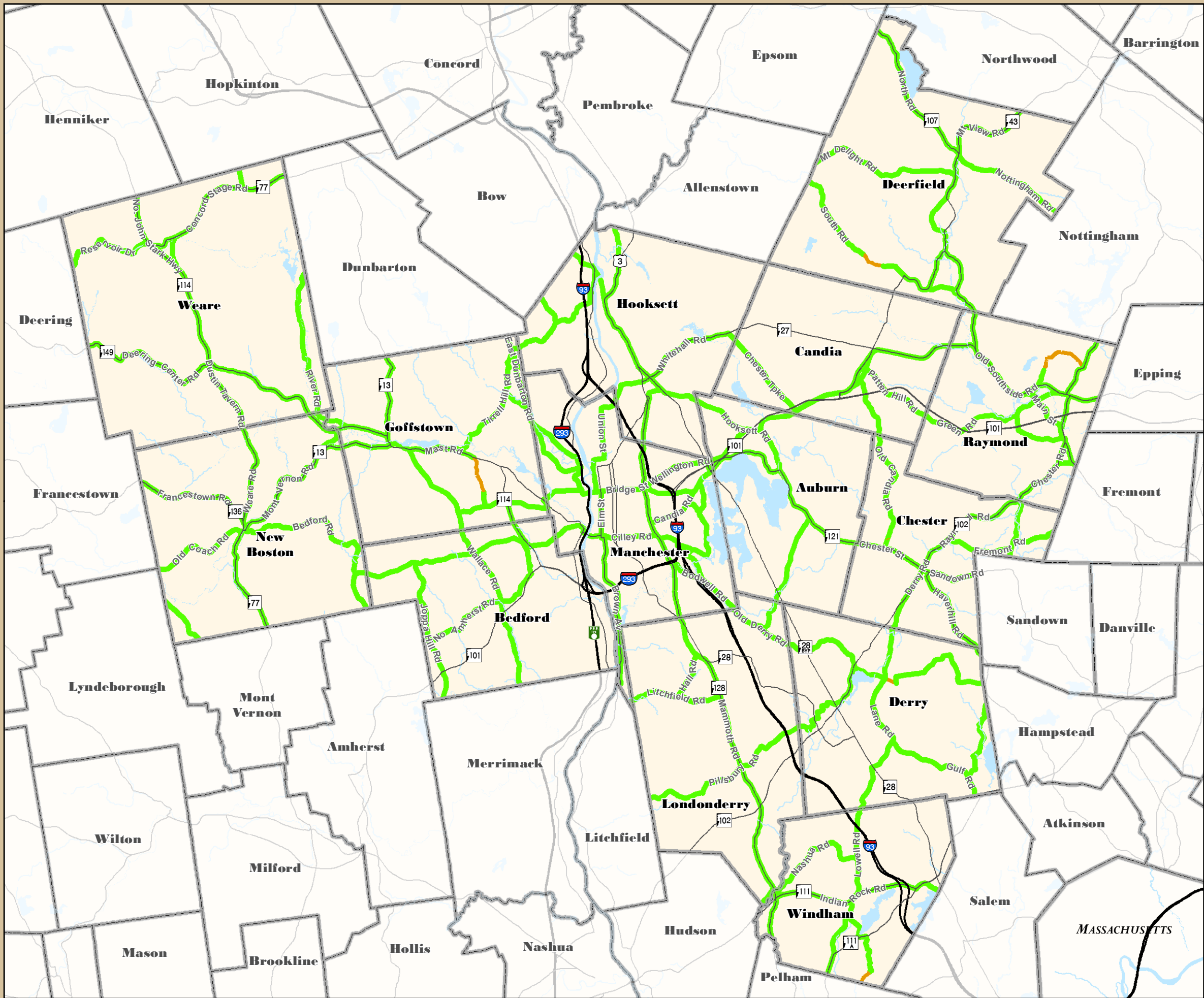
Granite State Future



Transportation Regional Bicycle Routes (NHDOT)

Regional Bicycle Routes

- Paved Roads
- Unpaved Roads
- Interstates
- State and US Routes
- Town Boundary
- Rivers
- Lakes



Data Sources:
Granit Digital Data (1:24,000)
NH Department of Transportation
All SNHPC Communities

The individual municipalities represented on this map and the SNHPC make no representations or guarantees to the accuracy of the features and designations of this map.

This map is prepared for planning purposes only and is not to be used for legal boundary determinations or for regulatory purposes.

Map Produced by GIS Service SNHPC 2013.
Contact: SNHPC, gis@snhpc.org or (603) 669-4664

0 1.25 2.5 5
Miles

