



CHAPTER 1: Regional Story

INTRODUCTION

For any plan it is first important to have an understanding of the region. The demographic trends and patterns of development, as well as the extensive public input, build the profile of what we experience today. This Chapter highlights major themes in the region that are supported by key data from other chapters as well as from input through public outreach. By analyzing the data in combination with the extensive public outreach, the region's story emerges and sets the framework for identifying the challenges that need to be addressed. There are two main parts to telling the story: where we are today and where we want to be. The Vision Chapter provides the direction to lead us there. Before we look forward, however, we first need to have an understanding of the present, including the trends in the region and what we heard from the public outreach efforts. For a further review of existing trends and conditions for the region, please refer to Appendix A, Existing Conditions, and the individual chapter topics.

THE STORY TODAY:

The region includes the state capital and a wide range of communities with a mix of rural and urban development. There is a high quality of life in the region that is valued for its strong sense of community and access to natural resources and open space. A key trend, but not isolated to the region, is the aging population combined with a slowing of overall growth. With this trend expected to continue, there is concern that it will lead to a potential loss of human capital and the skilled labor force necessary to fuel economic growth. Maintaining a productive economy, with good jobs and competitive salaries, is essential for supporting the high quality of life that residents enjoy. In an economy where businesses can locate just about anywhere, the attraction of key amenities such as a sense of place and stewardship of natural resources become more important to the region's competitive advantage. Many of the values that residents rank highly are related to the natural resources, rural quality, and small-town character of the overall region. These qualities are linked to the overall demographics of the region and the current landscape patterns. Transportation and maintaining access to amenities and services is a continuing concern, as is the availability of adequate housing types and locations. These considerations are especially significant when considering the changing demographics in the region. There is a strong connection with a high quality of life being defined by educational opportunities, services, recreational and cultural opportunities and a healthy environment. How the demographic trends anticipated in the future will impact these values is a common concern expressed during the public outreach.

A FAMILIAR PATTERN:

The profile of the Central NH Region historically follows the pattern of much of the northeast and also reflects some of the trends of the nation as well.

Aging Population

While an aging population is certainly a national trend, the northeast and New Hampshire in particular are aging more quickly. The median age in New Hampshire was 41.1 in 2010, the 4th highest median age in the country; the Central NH Region reflects the statewide median age with Bradford, Canterbury, Hopkinton and Sutton sharing the highest median age range of 45-50 years (Figure 1). The data clearly shows that the trend of an aging population is continuing in New Hampshire and the region. From 2000 to 2010 the change in the percent of regional population by age illustrates this demographic trend (Figure 2). While much of the demographic change is fueled by historic fertility patterns, and not completely by out-migration of young adults, the make-up of the population in New Hampshire is changing and poses implications for the region (*Ken Johnson, New Hampshire Demographic Trends in Twenty-First Century, 2012*). With the Baby Boom generation aging and the population of younger adults (with the exception of the 18 to 24 year cohort) decreasing by several thousand, there is a dramatic shift in the makeup of the population. The shift towards an older population with fewer younger adults in the region has many potential impacts, including a decrease in the available workforce for early to mid-career positions, fewer children attending schools, and the fewer younger adults available to positions on many of the volunteer departments in town including emergency response.

Migration certainly influences the changing demographics, but the primary driver behind the aging population is the pattern of aging in place by those currently residing in the state. This trend will continue in the region as the Baby Boom generation ages. While it is certainly true that some older New Hampshire residents leave the state for retirement in the Sunbelt states, there is a trend of the state gaining older migrants as New Hampshire is an attractive state to retire to and many demographers anticipate that this will likely continue. “The combined effect of this aging in place and senior migration is a likely doubling of the population aged 65 to 74 in the next twenty years.” (*Ken Johnson, New Hampshire Demographic Trends in Twenty-First Century, 2012. Pg. 13*)

WHAT WE HEARD:

Horseshoe Pond Place and Senior Resource Center

The renovated Page Belting Building at Horseshoe Pond Place in Concord illustrates creative re-use, desirable senior housing, downtown proximity and accessibility to nearby amenities. The public Senior Resource Center at Horseshoe Pond Place (HSPP) is a senior residence as well as a full-service senior center that serves Concord area older adults. The immediate area includes offices, hotel and conference center, and a walk-in urgent care Concord Hospital facility. The adjacent farmed fields and Horseshoe Pond offers scenic views. Even though Horseshoe Pond Place is adjacent to downtown Concord, there is no convenient and safe pedestrian route directly connecting downtown and the Senior Center. A few residents brave the walk, but the pedestrian connections between HSPP and downtown destinations could be much stronger and safer, allowing for more exercise, reduced vehicle miles traveled, and increased accessibility for those living there and people going to the senior center.

How we plan for an increasingly older population with less mobility is a challenge that many of the communities and the region will need to address. Current programs like the Volunteer Driver Program help extend transportation options to those who need it. More long term and short term strategies need to be developed including more walkable communities, housing choices in locations connected to reliable, safe transportation options, accessible recreation opportunities, and places to connect with others. The needs and choices of an aging population are also redefining how communities need to plan for housing options that are attractive and in demand in the market.

Figure 1.1: Median Age

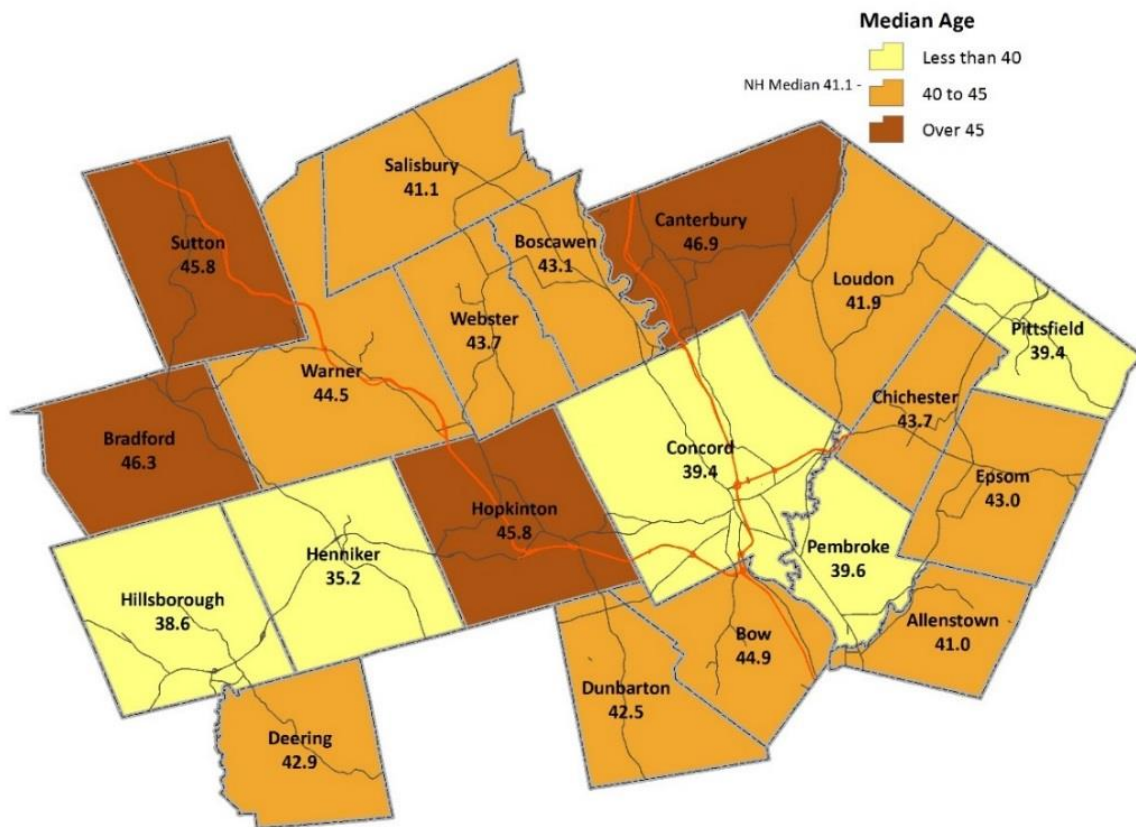
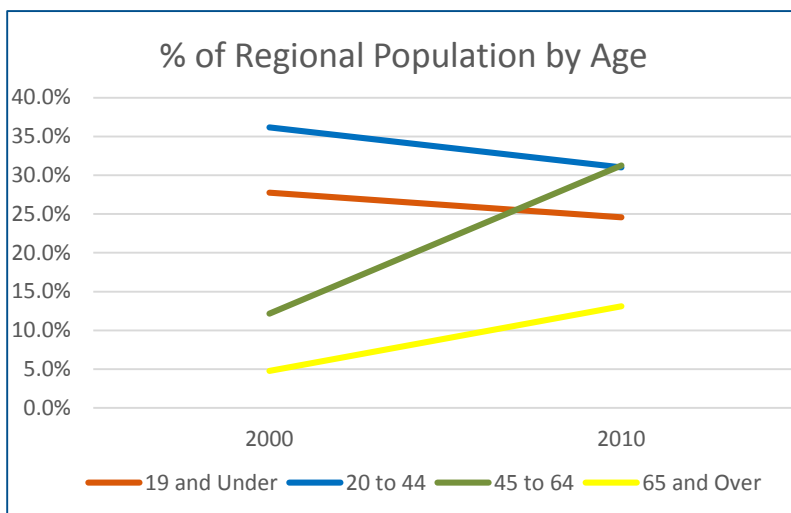


Figure 1.2: Regional Population by Age

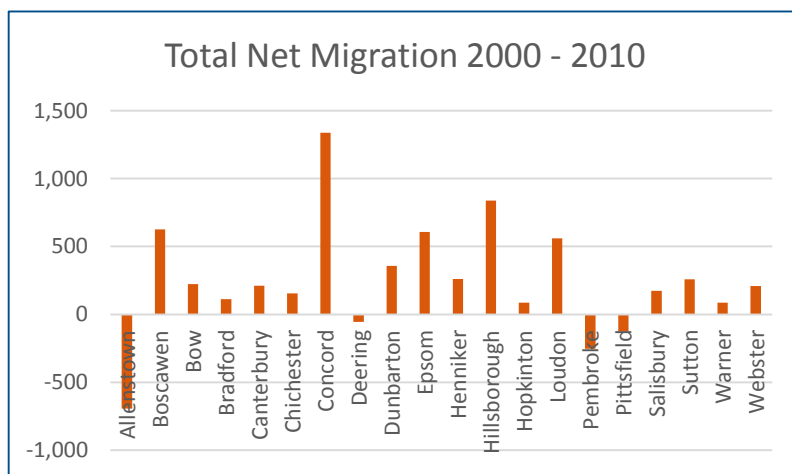


Source: U.S. Census 2000 and 2010

Changes in the Workforce

Migration of new residents from other states to New Hampshire has slowed considerably compared to the years of high in-migration. Over the most recent ten year period, 2000 to 2010, 4,970 new residents moved into the region, contributing to a total increase in population of 7,689 from 2000 to 2010 (Figure 3). This increase is modest compared to the growth from 1990 to 2000, with an increase of 11,306 in total population (US Census Bureau, NHNetwork). Much of the state's historic population gains through migration have come from Massachusetts, which has added to the attainment level of education in the workforce. New Hampshire has historically had a very high education level and may be affected in the future by the slowing of in-migration from Massachusetts.

Figure 1.3: Total Net Migration 2000 – 2010



Sources: U.S. Census 2000 and 2010, NH Vital Records

WHAT WE HEARD:

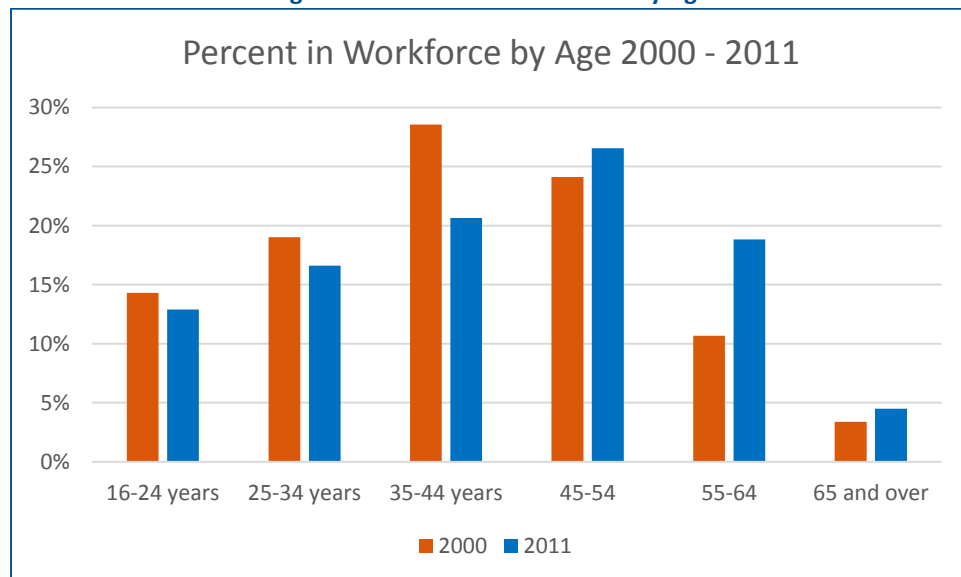
Kearsarge Area Chamber of Commerce

A Familiar Storyline: Young people are leaving the region's small towns for opportunities in education and jobs elsewhere and out of state. How does an area of rural small towns retain and attract residents of all ages? The high cost of college education in New Hampshire is perceived to contribute to this trend of student out-migration. New Hampshire college graduates have the second highest debt load in the country on average owing close to \$33,000 (Delaware is ranked first www.projectonstudentdebt.org). To provide more options there is interest expressed in connecting high school students with local businesses in the area for on the job training and professional experience. Programs such as New Hampshire Technical Institute (NHTI) to provide training for local business needs as well as Granite State College online courses can provide opportunities for students to learn skills relevant to the area's business needs. The quality of life in the region and in New Hampshire is a draw for many and communities are hoping that young people will move to the area. A familiar challenge: They will need job prospects, opportunity, and the broadband connection to stay connected in their careers.

Migration is a driving factor in the demographic changes occurring in the United States, New Hampshire, and the region. There are life-cycle age-specific migration patterns evident nationally that are identified by demographers (Johnson, Winkler, Rogers, Carsey Institute UNH, 2013). Nationally, young adults (age 25 to 29) are moving to large metropolitan cores in migration that often reflects the completion of education or training and the transition to full time, career-oriented employment. Family age population (adults age 30 to 49), often with dependent children, migrate towards suburban areas and to rural areas with scenic and recreational amenities that have histories of sustained migration gains. For these adults and families to move to such areas, including the Central NH Region, there needs to be economic and employment opportunities in addition to the quality of life. Improving the broadband and telecommunications infrastructure is key to connecting the region to economic opportunities in the global economy.

The aging population trend creates changes in the workforce population. Currently, New Hampshire and the region have a high proportion of experienced workers at the peak of their earning potential with considerable social, economic, and intellectual capital. However looking to the future, the aging of the population presents challenges and changes in the workforce. As the population ages, there are a higher proportion of workers who are getting closer to retirement. There is also an increase in workers who are age 65 and older in the workforce (Figure 4). The population and in-migration trends indicate that as many workers near retirement there may be a shortfall in the workforce to fill those positions. The region may see many of these positions go unfilled as government and businesses choose not to fill positions due to tightening of budgets or lack of qualified workers. With a higher proportion of the population nearing retirement in the near future there is an opportunity to look at ways to continue to engage this highly experienced population in community, business, and stewardship of natural resources that contribute to the high quality of life enjoyed in the region.

Figure 1.4: Percent in Workforce by Age



Sources: CNHRPC Estimate Using Region's share of County Workforce. US Census ACS 2009-2011

The demographic trends under way in the region present both challenges and opportunities. There are opportunities as a result of the changing demographics as the region positions itself to attract young professionals. Attracting a younger population will contribute to the well-being of the region by providing human capital that enhances the workforce and contribute to the social, intellectual, and economic life. Economic development today requires more of a placed (i.e. community centered) based approach while highlighting a skilled workforce, as quality of life becomes as prominent of a draw as highway access once was. Clarification of local government processes and improved broadband infrastructure are also important factors in economic development. Many young adults in their twenties and thirties are looking for opportunities to spend less time commuting in a car and are buying smaller houses later in life compared to their predecessors. Many of these trends are not unique patterns to the region, but in light of the changing demographics and workforce, it is important the region's communities and businesses to come together to look at this issue.

Increasing Diversity and Social Community

The region, while still mostly white, has seen an increase in racial and ethnic diversity over the past decade, a national and statewide trend that is expected to continue. Nationally, minority births exceeded non-Hispanic white births for the first time in US history in 2011 (US Census estimates). In the region, this increase in diversity is particularly noticeable in the youth population and the increasing refugee population in Concord (Figure 5). This change may point to potential changing needs in public policy for school programs, health care and community services to be responsive to cultural needs. Safe, accessible youth recreation opportunities close to home, such as parks and sports fields, as well as a more walkable neighborhoods are important to consider.

The sense of community is considered one of the highest valued qualities of the region. As new populations move into the area or children grow up in the community, there may be a need for more opportunities for social interaction across different segments of the population to build trust and community cohesiveness. The World Refugee Celebration Day in Concord, celebrated over the summer as a festival of music, food, and culture, is one such opportunity. With increasing diversity also comes opportunity for the wider community to participate in more diverse cultural experiences such as new restaurants, festivals, and broader exposure awareness to diverse cultures in schools for students. Building on the cultural amenities in a place-based approach is one aspect to attracting young workers to the region who may be looking for 'what to do' after work.

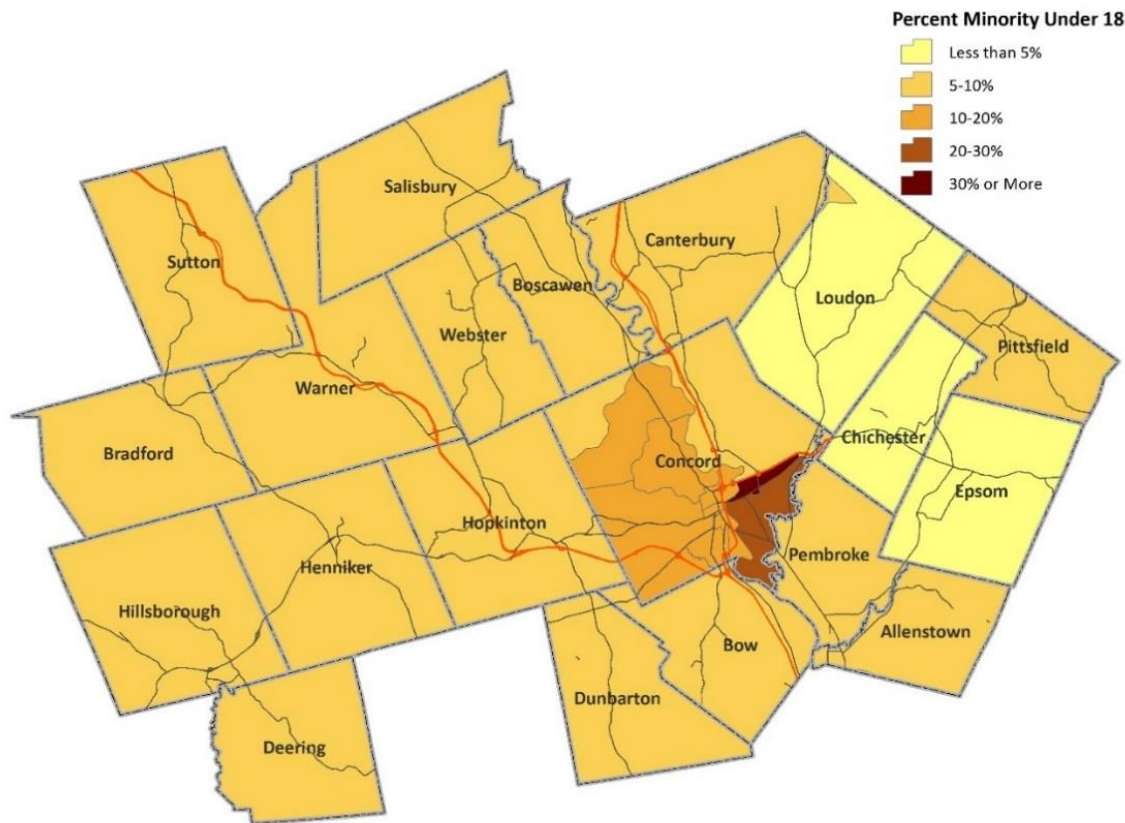
WHAT WE HEARD:

Lutheran Social Services

English for Speakers of Other Languages Class

New residents to the region arrive from many different places, for many different reasons. Refugees resettling in the region contribute to the number of new residents. From the Federal Fiscal Year 2010 to 2012, 154 school aged children were resettled in Concord as refugees from other countries. Refugees from Bhutan are a growing tight-knit community in the Concord and Manchester areas after being resettled in New Hampshire. The increased diversity adds to the community with a richness of heritage and culture, including the active non-profit organization the Bhutanese Community of New Hampshire. Many English language learners spoke similarly as others around the region about the appreciation of parks and recreation, especially opportunities for children. There are challenges facing this community that are often very difficult. The need for jobs, specifically farming as well as small home based jobs, like tailoring, as well as affordable housing within the vicinity of stores, jobs, and public transportation was expressed.

Figure 1.5: Percent Minority under 18 Years

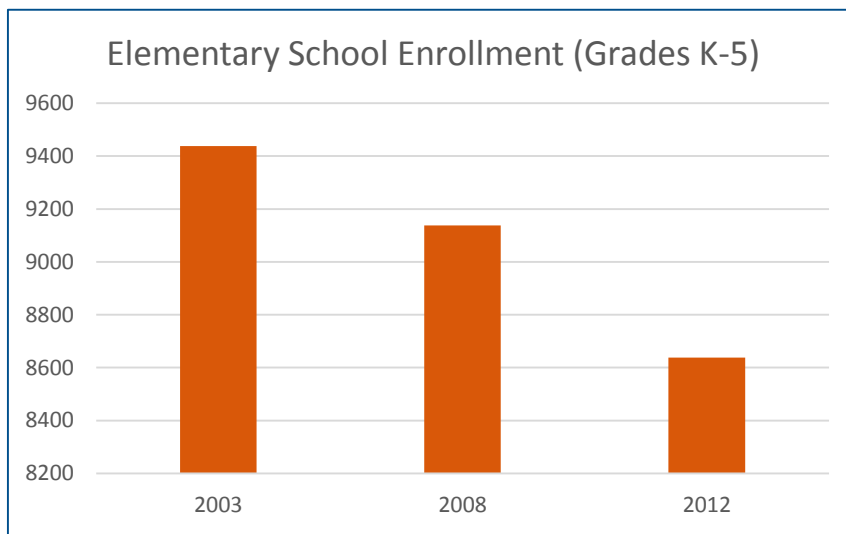


Declining School Enrollment

Population trends in the public schools show fewer school aged children in the region. Overall the kindergarten to grade five enrollment in the region has declined from 2003 to 2012 with a wide range in decreases throughout the region. Local elementary schools have school enrollments that have dropped between four percent to up to 30% from 2003 to 2012. While the decrease in enrollment numbers in public schools is evident, there also may be a shift to charter or private schools contributing to the trend in the area. Opening in 2007 with 51 students, the Strong Foundations Charter School in Pembroke increased enrollment to 172 students in 2012. The catchment area for the school goes beyond the region, but may be a contributor in the trend of decreased public school population. What this means for the community vitality in smaller communities with small elementary schools is an upcoming challenge to be considered. While school populations have decreased, there is a concern about addressing the wide range of per pupil expenditures across the region's communities to create a more equitable public school experience and outcomes. There are opportunities to create engaging, meaningful K-12 civics education and engagement curricula to increase the knowledge and skills of high

school graduates with respect to their roles as active citizens and community leaders. This is especially important in New Hampshire where small communities rely on volunteers and sense of civic duty.

Figure 1.6: Elementary School Enrollment



Source: *NH Department of Education*

Stewardship

The conservation lands, scenic character, and access to recreation opportunities are essential to the quality of life in the region. The sense of stewardship is very strong around the region from local conservation commissions, land trusts, to snowmobile associations. The population trends will affect needs in the type of recreation and the access to recreation areas, scenic view points, and trail. Recreation opportunities closer to home and a range of transportation options to get there are needed as residents age in place. Hoping to attract businesses and new population to the region, the value of natural resources and recreation opportunities are seen as valued assets to many communities in the region. Investing in the region's natural resources, scenic quality, and recreation opportunities is part of the economic equation.

Investment is already occurring throughout the region as residents clearly value the quality of the open space and access to recreational opportunities. Volunteer stewards of the land work to protect and maintain the quality of natural resources and open space. As the population ages there will be a need for a continued sense of stewardship passed along to younger generations in addition to the active older population to sustain the quality and improvement for access to recreation opportunities on open space conservation land. While conserving undeveloped land is the first step towards protecting open space, it is maintaining the easements, clearing trails, and being stewards of the land that takes much of the effort.

WHAT WE HEARD:

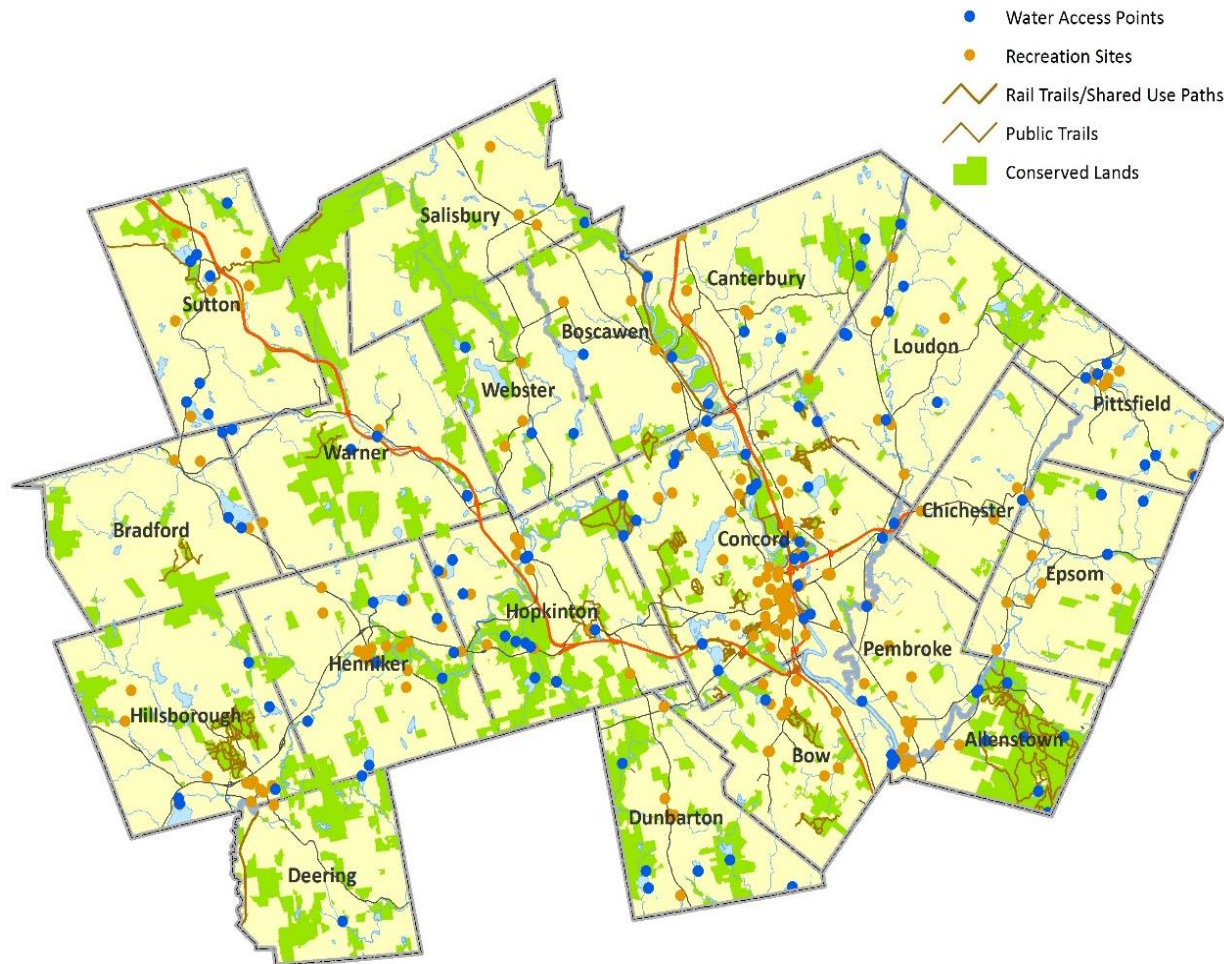
Salisbury Elementary School 5th Grade Class

Similar to other elementary schools in the region, Salisbury Elementary School has seen a decline in school enrollment over the past decade due to overarching demographic shifts experienced in the community, the region and New Hampshire. One of the smaller, rural schools in the region, enrollment in the 2012 – 2013 school year was 82 students. A member of the regional Merrimack Valley School District, the principal position is shared across Salisbury Elementary and Webster Elementary schools. There is concern about the vitality of rural communities that continue to face declining school enrollment. When asked what they thought about their community, the 5th graders shared an appreciation for open spaces, a desire for recreation opportunities and places to play, and requested a Gamestop store in town. What do you like best about your town?

"The woods, the town is small, you know everyone and the houses aren't close together." – Salisbury 5th grader

There are many recreation sites on open space, wooded trails, and water access points throughout the region. As one of the highest valued aspects of living in the region, these opportunities for recreation will need to continue to be maintained. Tied very closely to stewardship is volunteerism in the communities in the region, small communities are dependent on volunteers for many town positions in addition to depending on local conservation commissions and recreation departments to maintain conservation lands. To maintain the quality of recreation and natural resources, in addition to the quality of life, volunteer stewardship plays a large role in the success of the region

Figure 1.7: Open Space Recreation Access Sites

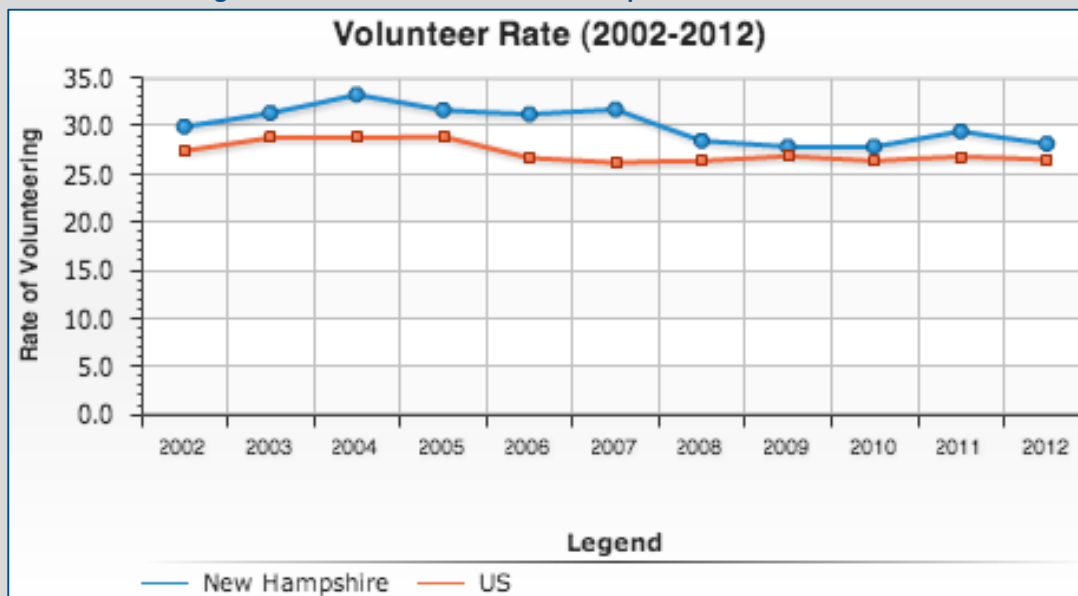


The Challenge of Volunteerism

New Hampshire communities have a long tradition of reliance on volunteerism to fulfill many local and regional functions. Municipal governments are dependent on volunteer boards and committees to conduct such activities as land use planning, land use reviews and decisions, conservation/open space planning and trail development as well as social/community services. Local control and decision making is at the root of many New Hampshire communities, including those in the region. A continuing concern for many volunteer boards is the noticeable decline in the number of people who are coming forward to volunteer for boards and committees. It is difficult to overlook the age of our current roster of volunteers and the absence of a younger pool of participants. Particularly in the smaller, rural communities in the region, volunteerism is critically important to the success and the health of the community.

There are some quantitative sources of data on volunteer rates but unfortunately, not at the municipal level. For example, according to the Bureau of Labor Statistics, the national volunteer rate in 2013 was the lowest it has been since the data was first collected in 2002 and now sits at 25.4%. Women continue to volunteer at a slightly higher rate (22.2% and 28.4%, respectively) across all age groups, educational levels, income, etc. There is some data available for New Hampshire from the Corporation for National and Community Service that indicates that in 2012, 28.4% of residents volunteered, ranking New Hampshire 23 among the 50 states (<http://www.volunteeringinamerica.gov/nh>). The figure below shows the volunteer rate from 2002-2012 for both the US and New Hampshire.

Figure 1.8: Volunteer Rate in New Hampshire and US 2002-2012



Why an individual decides to volunteer is instrumental in understanding how to approach recruitment of a broader base of volunteers in our communities - specifically, it is critical that we figure out what will attract a younger demographic to participate in more of our local and regional boards and committees. Reliable data on **why** people volunteer is not readily available but one can easily assume that it can be for reasons such as a strong commitment to civic engagement/giving back to the community or a personal commitment or interest in a particular

service or local project. Historically, the social contact/connection from volunteering was a common motivator, but it may be less prevalent today now that there are more avenues available for interaction through various social technologies.

Why people do not volunteer can be typically attributed to work commitments such as long commutes that result in little free time, being overcommitted with school/family activities for children or caregiving to elderly parents or just a reluctance to get involved. It is often observed that the same people are involved with many volunteer efforts in communities.

As stated earlier, New Hampshire and our communities rely on volunteers to staff many of the land use boards and other service organizations, each contributing to the success and to the health of our communities. How the region responds to the reality of an aging population, a declining pool of a younger population ready to take over, and the overall drop in the volunteering rate is going to be critical to maintaining the integrity and sense of community so valued by our communities.

Quality Of Life

The Central NH Region is valued for its small town feeling and there is a strong appreciation of the family-oriented environment. Community connections are highly valued and often described as either a tight-knit community, close community, or a small community. There is enjoyment of small villages or town centers, libraries, schools, and recreation centers and fields as they are important assets in the community that contribute to the quality of life and provide an opportunity for residents to interact with each other. Outreach identified an interest in more community oriented facilities such as community centers, and indoor recreation opportunities for youth as well as older adults. All local master plans mention the goal of protecting and maintaining community character, whether described as rural by 18 of the region's municipalities, or vital for Pittsfield, and essential for Concord.

There is emphasis from the local master plans, to comment cards, to outreach with small groups, that there is an appreciation for the quality of life in the region. The concerns about economic development, housing, transportation are often seen as maintaining the current conditions with specific improvements such as more bike lanes, ridesharing, small downtown development, and housing options, rather than a shift away from the current condition. There are current trends such as aging population, changing workforce, and volunteerism that are

WHAT WE HEARD: Riverbend Community Health Program

Transportation and housing are different sides of the same coin for many. Desired housing and location is influenced by public transportation options and safe walking routes to access stores, jobs, and appointments. Access to services is an ongoing need and is determined by housing location and transportation options. Concord Area Transit service does not run on the weekends and some are homebound by this. There is a reported increased demand for affordable housing with the influx of refugees in the area over recent years and some have experienced fewer housing options available. Despite the many challenges, many participants enjoy the scenic quality of the region and the quality of life in the area.

strong impacts that need to be addressed by planning for the future that allows the quality of life in the Central NH Region to continue.

The Challenge of Finding a Place to Call Home

The need for housing is driven both by increases in population, albeit slow, and the decline in household size over the last couple of decades. The aging population also affects demands in the housing market. While the region's population continues to grow slowly, average household size continues to decrease. This is a trend that is seen throughout the state and will drive the future need for housing. While smaller household size seems to suggest smaller housing units in the future, current building trends point to continued construction of larger homes than those built in the past.

Community vitality requires a mix of available housing options. Many different housing needs, including cost, were expressed during public outreach sessions. Although the median rental cost in the region (\$970) is less than the state median (\$1,005), rental costs have not come down as housing values have, putting a burden on renters in a slow economy. There are geographic areas in the region where rental costs exceed 50% of the income of renters. Concord provides the majority of the rental and affordable rental units for the region, but there is demand for affordable rental units in communities in the greater Concord area as well as in some of the more rural communities. There is also an increase in the demand for the limited supply of rental housing available with the addition of refugees resettled in the Concord area over the past decade.

As the population ages, there is an expressed need for smaller housing as people age in place and downsize. There are areas in the region where there is a significant concentration of population over the age of 75 years. There are current and future needs in housing, transportation, and accessibility that come with an older community, especially where there is a concentration. Looking at future need there is a concern about the high cost of housing, and taxes, in the more suburban communities as the older population moves onto fixed incomes. While there are housing concerns in terms of size of housing, supply, cost, and location, the majority of the region values the single family home on one lot, a similar pattern to what is currently available. Downtown apartments were also of interest, especially to those in the immediate Concord area, because of the available transportation options and proximity to amenities. This housing choice is not perceived to be as readily available despite the increasing demand. Housing affordability is more difficult to find in the owner-occupied market where 11% of the owner occupied units are affordable, while more than half (54%) of the renter-occupied housing units are affordable. During outreach, there was expressed demand for more affordable units near transit options.

The impact of long term, reduced energy costs through energy efficiency improvements and renewables will continue to be an attractive incentive as we look to the future. While the housing market has slowed over the last few years the growth of the green home industry continues to increase. Creating energy efficiency improvements on existing and new structures has benefits for homeowners with energy costs unpredictable in the future.

Getting Around the Region - Are We Meeting the Need?

Land use patterns, an aging population and the facilitation of viable economic development are all key factors to consider for the region and how best to plan for the maintenance and future upgrades of the

transportation network. Transportation choices provide a number of options to allow people in both rural and more densely settled areas to 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. Historically, Vehicle Miles Traveled (VMT) have followed an increasing trajectory, but nationally the levels have declined and plateaued since about 2008. This may be indicative of changing preferences, especially in the younger demographic, towards more compact living with shorter commute times, less reliance on the single occupancy vehicle (SOV), and owning fewer cars. While the region may not be experiencing this trend in force, maintaining a safe and efficient transportation system serving the rural, suburban, and more urban settings is essential. A major concern across the region is the deterioration of the region's physical transportation infrastructure.

Deterioration of pavement condition and bridges is a trend that has continued to impact the region. Thirty percent of the region's highway pavement condition is in poor condition (see Figure 1.9). This trend has been increasing statewide since 2000. Fourteen (5.9%) of NHDOT owned bridges and 37 (22%) of municipal owned bridges are Red Listed, a designation that indicates that a bridge has major structural elements in poor condition or limitations for use. At the state level, the current available funding makes it difficult to maintain the road infrastructure with resurfacing mileage and the increasing cost of asphalt cement. In the region the continued trend of deteriorating infrastructure is expected to continue if funding is not addressed.

The majority of residents make daily trips to work and appointments by car. The dependence on single occupancy vehicle characterizes the transportation pattern in the region. Eighty percent of the region's residents drive alone to work with a mean travel time of 22.1 minutes (See Figure 8) (ACS 2007-2011). With an aging population, this dependence on individual vehicles can be isolating to those who can no longer drive or do not have access to a vehicle, especially in the rural areas of the region. The recently established Volunteer Driver Program provides flexible transportation options to those who need a ride to appointments driven by volunteer drivers who receive a small reimbursement. The program is growing in demand and capacity and similar to other programs in the region, relies on the willingness of community members to participate as volunteer drivers. More short term and long term solutions to address transportation concerns include; walkable communities, bicycle lanes, rail trails, park and ride lots, and land use patterns that are scalable to the region to address the transportation access needs of all residents.

Over the most recent decades, drivers have driven longer travel distances and increased congestion caused as more vehicles are added to the roadways. Vehicle miles traveled in New Hampshire increased by 29% from 1990 to 2011,

WHAT WE HEARD:

Hillsborough Outreach Session

Mobility for an increasing aging population factors into transportation needs, access to nearby activities and recreation, and community connections. For some, getting from rural communities into Concord or Manchester for appointments is difficult and moving closer to downtown centers is not an option because of the higher cost of housing. The Volunteer Driver Program is working to address transportation needs by assisting residents with getting to and from appointments. Other transportation efforts, such as Safe Routes to School, and other pedestrian connections are important to many communities for connecting residents with active transportation and recreation opportunities for all ages.

jumping from 9.8 billion vehicle miles traveled (VMT) in 1990 to 12.7 billion VMT in 2011. While there is some indication of the rate of increase of VMT slowing, vehicles continue to be added to the roadways contributing to air pollution and greenhouse gas emissions. Twenty seven percent of greenhouse gas emissions in the country are attributed to the transportation sector.

A long term, sustainable transportation funding source for transportation infrastructure in the region is essential. Along with investment in traditional transportation infrastructure, investments in alternative travel modes, more flexible land use, and better coordination between transportation and utility providers will be essential in the region moving forward. Nationally, New Hampshire ranks 42 in state funding to public transportation while towns and cities have difficulty in raising the money required to match federal funds for transportation infrastructure.

Commute Green New Hampshire

CNHRPC is working with a number of other regional planning commissions and transit agencies throughout the state to encourage transportation demand management (TDM) strategies such as ridesharing, the provision of new park and ride facilities, and employer-based programs that promote alternative transportation. For more information on CGNH, see commutegreennh.org.



Source: Londonderry.net

Figure 1.9: Pavement Condition

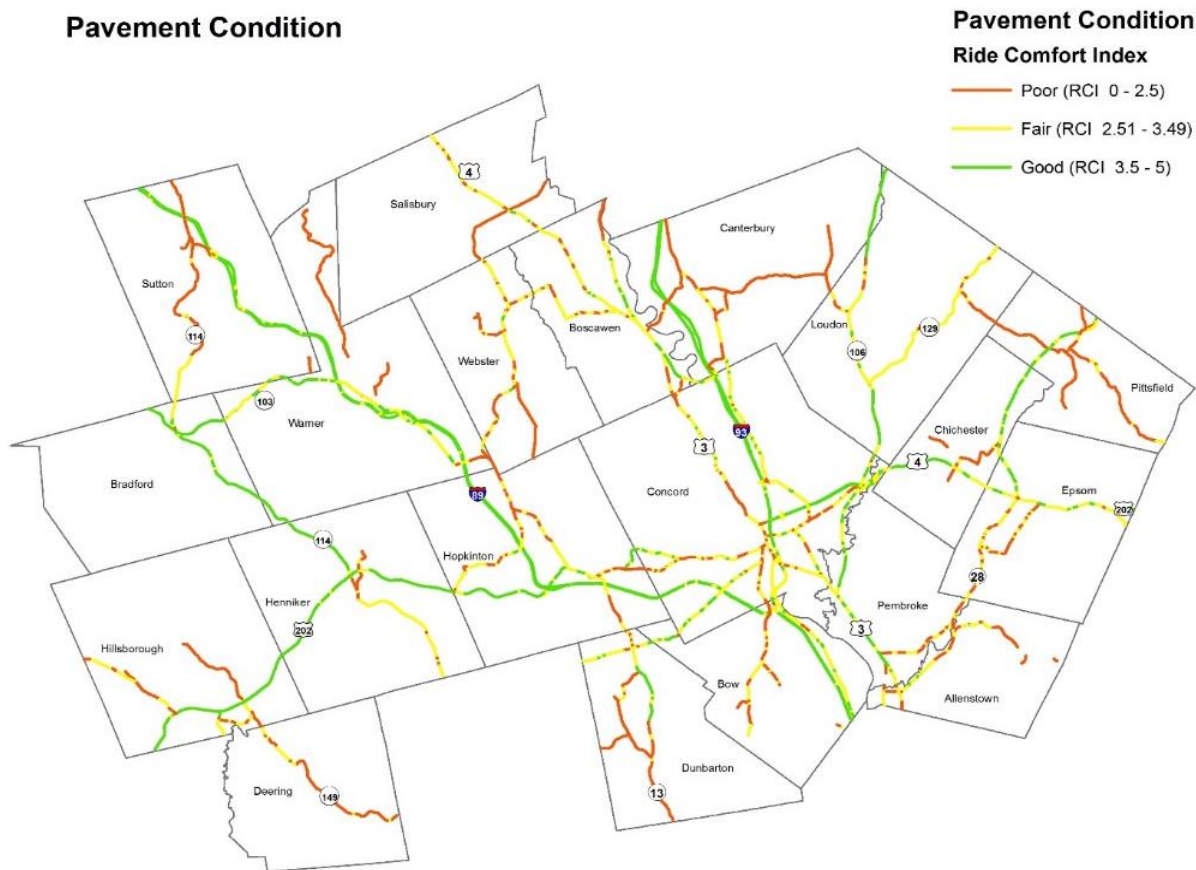
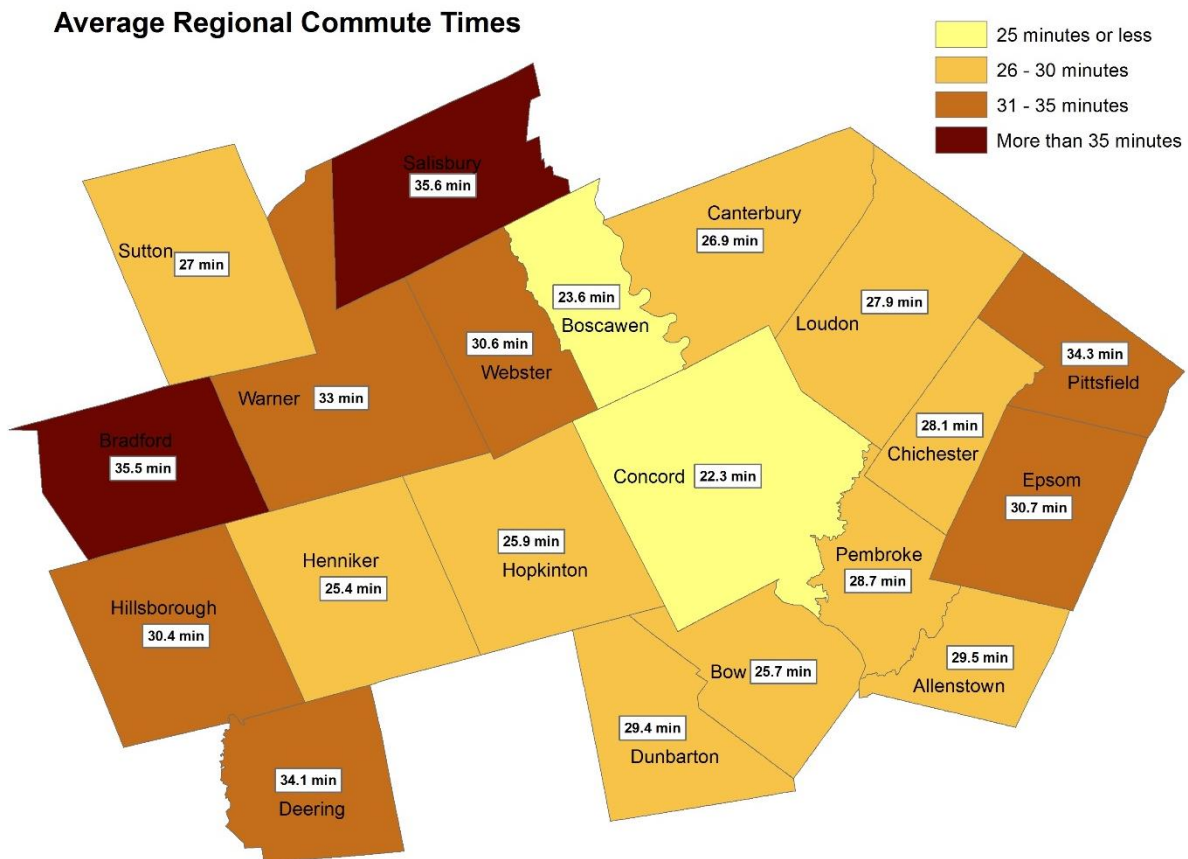


Figure 1.10: Average Commute Times



Increasing Weather Hazards – Building Resiliency

The region has experienced the effects of increasing instances of extreme and unpredictable weather events. Over the last nine year disaster period, 2005 to 2013, eleven presidentially-declared major disasters in Hillsborough and Merrimack Counties struck the Central NH Region as indicated in Table 1.1. Flooding, high winds, hurricanes, snow and ice storms, and even an tornado caused damage by washing out roads, damaging roofs, breaking trees and blocking roadways, disrupting utility infrastructure, and flooding basements. Repairing the damages and cleaning up the debris costs communities and individuals large amounts of money for emergency response and recovery. Prior to the 2005 Columbus Day flood, the last declared disaster in the region was the December 1998 Ice Storm. Between 1973 and this 1998 storm, only nine (9) major disasters were declared over a 25 year period for the Central NH Region. Overall, 20 major disasters within the previous 41 years were declared, 11 of which were within the last nine-year disaster period. The frequency of weather hazard occurrence has doubled since 1970.

Table 1.1: Major Disaster Declarations

| Central NH Region Major Disaster Declarations, 2005 to 2013 Hillsborough and Merrimack Counties | | | | |
|--|-------------|---|--------------------|------------------------|
| FEMA Disaster Type | FEMA Number | Local Disaster Name | Incident Period | Includes County M / H* |
| DR | 4105 | 2013 Severe Winter Storm and Snowstorm | Feb 8-10, 2013 | H/M |
| DR | 4049 | 2011 Halloween Snow Storm | Oct 29-30, 2011 | H |
| DR | 4026 | 2011 Tropical Storm Irene | Aug 26-Sep 6, 2011 | M |
| DR | 1913 | 2010 Severe Storms and Flooding | Mar 14-31, 2010 | H/M |
| DR | 1892 | 2010 Severe Wind and Winter Storm | Feb 23-Mar 3, 2010 | H/M |
| DR | 1812 | 2008 December Ice Storm | Dec 11-23, 2008 | H/M |
| DR | 1799 | 2008 Fall Flood | Sep 6-7, 2008 | H/M |
| DR | 1782 | 2008 July Tornado | Jul 24, 2008 | H/M |
| DR | 1695 | 2007 April Flood | Apr 15-23, 2007 | H/M |
| DR | 1643 | 2006 Mother's Day Flood | May 12-23, 2006 | H/M |
| DR | 1610 | 2005 Columbus Day Flood | Oct 7-18, 2005 | H/M |

Source: <http://www.fema.gov/disasters>

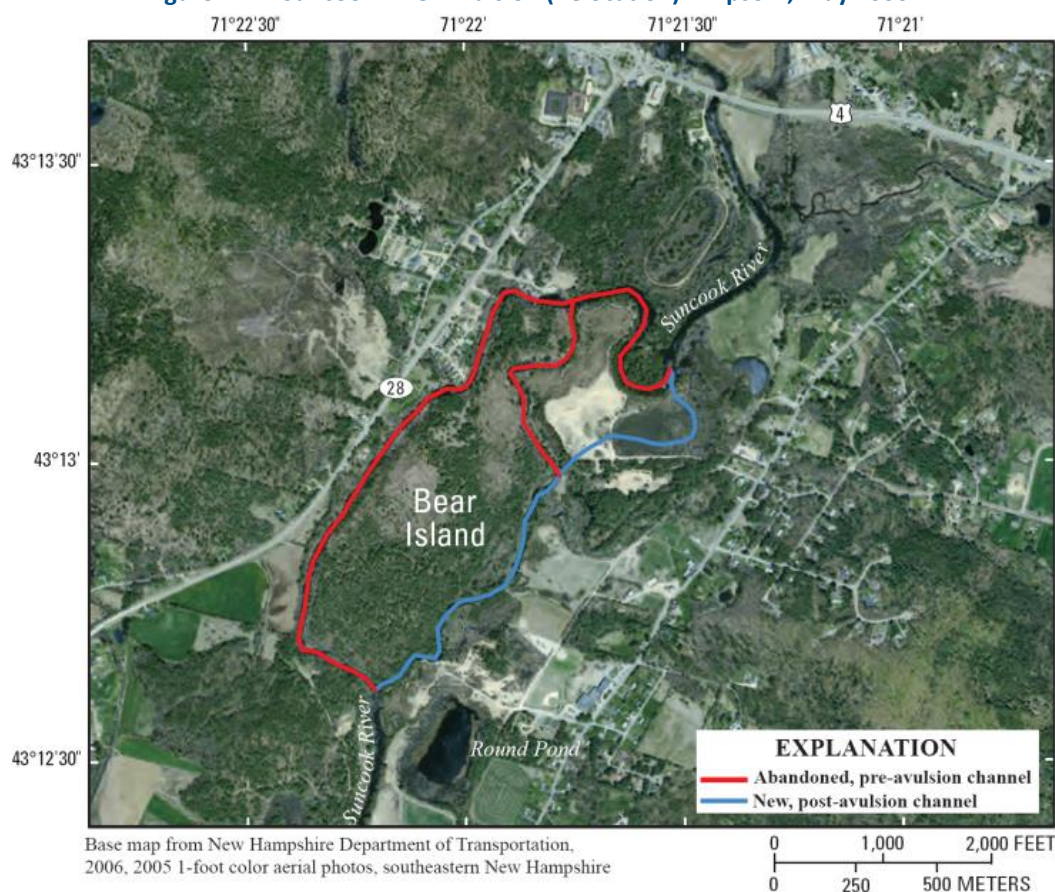
** Disasters typically include more than just Merrimack or Hillsborough County in NH*

(M) Merrimack County comprises **18** communities in the CNHRPC Region

(H) Hillsborough County comprises **2** communities in the CNHRPC Region

In May 2006, the region experienced its most devastating natural disaster in recent memory. Wide-spread flooding occurred in every community within the region and impacted seven of the ten New Hampshire counties. The US Geological Survey recorded peak discharges equaling or exceeding 100-year floods at 14 stream gages in New Hampshire, including three in the region at the Contoocook River in Davisville village (Warner) and at two along the Soucook River in Concord. This flooding event overflowed roads, damaged bridges, destroyed drainage and culvert systems, stranded people within their homes, thwarted business, and overwhelmed stormwater collection systems. Within floodplains areas, homes and their contents were damaged by floodwaters. A breach in the riverbank of the Suncook River in Epsom caused an avulsion, or the abandonment of a river channel and the formation of a new channel, as displayed in Figure 1.11. This was an event of lasting significance to the communities through which the Suncook River flows. Extensive waterfront home and property damage occurred, lot lines were shifted as banks fell into the river, an island was no longer surrounded by water, and silt and sand sedimentation of the Suncook and Merrimack Rivers continues to present day.

Figure 1.11: Suncook River Avulsion (Relocation) in Epsom, May 2006



Source: *USGS Flood Study of the Suncook River 2009*

The 2006 flood, in combination with the 2005 Columbus Day flood six months prior and the subsequent April 2007 flood one year later, raised the awareness of the region to the importance of the effects of severe weather on municipalities and residents within the Central NH Region. Hazard Mitigation Plans, already developed for most of the region's communities by the time of the 2007 flood, continued to identify projects for reducing the impact of weather hazards such as severe rain, wind, snow, fire, drought and other types of hazard events on property, people, and infrastructure. Emergency preparedness rose in importance as smaller communities struggled with the lack of resources needed to adequately get their municipalities ready for the next big disaster.

The Central NH Region weather is comprised of daily changes in local weather indicators such as temperature, precipitation, humidity, and wind. The extreme weather events the region has experienced will continue in the future and are caused by a changing climate, which is the long-term average of the weather indicators over larger areas. The University of New Hampshire and partners researched the weather patterns and climate change in Southern New Hampshire, which includes the Central NH Region (*Climate Change in Southern New Hampshire: Past, Present, and Future, by Climate Solutions New England 2014*). Some long-term trend findings from the assessment are:

- Days above 90 degrees have increased
- Days below 32 degrees have decreased

- Amount of precipitation has increased
- Snow-covered days have decreased
- Days of the growing season have increased
- Wettest day of the year's inches of water have increased
- Since 1970, lake ice-out dates are one week earlier than they were in 1895

These shifting weather patterns the Central NH Region communities are experiencing will require further planning to reduce the impact of the major disaster events. Municipal budgets are tight, particularly in tough economic times, but a few actions can be undertaken to help proactively plan for expected forthcoming weather hazards as a result of southern New Hampshire's changing climate. Investments in infrastructure through the use of capital improvements programs and capital reserve funds are a necessary first step to help ensure municipal infrastructure, including transportation, water and sewer, gas, electrical power, and municipal building and response capability, remains as intact as possible to ensure appropriate response to the weather hazard events.

THE FUTURE STORY:

There are many opportunities to address the trends and emerging issues that are shaping our present environment. These trends have certainly influenced CNHRPC's vision and its approach to developing the guiding principles and implementation strategies. While we fully enjoy the many positive qualities of the region now, it is important to plan ahead to not only ensure that these qualities are maintained but to take advantage of the opportunity to respond proactively to any emerging trends that could impact the future.

The public outreach response and the goal/vision statements from the region's master plans all point to the theme that there is a strong connection to the region as it is, but there are opportunities to strengthen what is working and what needs to be addressed.

There are four main themes that tell the story of the direction where the region can go. These themes are the foundation for the vision statement and are used to frame the guiding principles and implementation initiatives discussed in the Vision and Implementation Chapters.

1. CONNECT

The importance of connections as the region moves forward is a valued asset that needs to be a central focus of the vision and implementation strategies. Connection was a dominant topic throughout the public outreach process and the data collected for this Plan. A region where people have more choices on how they connect to the places where they live, work and recreate is highly desirable. The term is used in its broadest sense here as it addresses connections for the transportation system, schools, recreation access and broadband and will be further refined in the Vision Chapter. Some of the ways this plan will examine connections is through:

- Facilitating a transportation infrastructure that supports vitality of communities and the economy;
- Supporting training programs that develop workplace readiness skills;

- Bringing residents to the outdoors closer to home; and
- Promoting an expanded and faster broadband and telecommunications infrastructure.

2. INVEST

There is a challenge to be met regarding the lack of a regional identity and how to develop economically in ways that are strategic and focused on what already works in this region. Certainly the quality of life is an asset that can attract and retain workers, employers and visitors. Capitalizing on this asset and investing in what is currently valued is an important strategy as businesses want to operate in an area that has a readily available, talented workforce.

As we focus on the trends of today, it is important to look forward to fostering a climate that is attractive to investment and opportunity. There are many ways to market the region that will be explored in later chapters, including:

- “Growing our own” by focusing on retention, expansion and fostering a climate of investment and economic opportunity in the region;
- Encouraging economic development that is a “good fit” for the region and fosters a prosperous quality of life that provides opportunity and supports the needs of the region; and
- Promoting and developing new and existing businesses.

3. PARTNER

There is a strong history of successful partnerships in the region and this trend needs to be continued and improved in the future. Some strategies to bring this theme forward that will be further refined in the Vision and Implementation Chapters include:

- Addressing regional issues such as watershed management and economic development with a collaborative response from the region’s communities;
- Actively coordinating regional efforts such as broadband, transportation and natural resource protection;
- Cooperating locally and regionally to improve energy efficiency;
- Fostering collaboration on response to hazardous events, including weather disasters; and
- Creating a culture of collaboration that encourages innovation and sharing of resources

4. SUSTAIN

The theme of sustainability has its roots in the public outreach and comments received throughout the planning process. How we maintain the current status quo in light of an aging population will need to be addressed. The region is already a special space for residents and highly valued for its quality of life. How we sustain and enhance what residents value about the region and its communities is a challenge that must be met. Some key opportunities that will be further refined in future chapters include:

- Maintaining access to a local food supply in the region;
- Encouraging/maintaining a strong volunteer base in our communities;

- Reducing energy consumption in order to sustain a healthy environment;
- Preserving our natural and built environment;
- Being strategic and efficient in fiscal expenditures; and
- Steward natural resources so that future generations are able to enjoy the same amenities we experience today.

MOVING THE PLAN FORWARD:

The Central NH Region is going through several demographic changes that will be felt in the housing market, the economy, health care and the workforce, to name a few areas. Telling the Regional Story is one way to call out these changes and trends and to look for ways to proactively address any identified concerns or issues and how they measure against what is valued by the residents in the region. The following Chapters use the Regional Story either as a taking off point for building the vision and guiding principles or as the foundation for creating a “deeper” profile of the region in the areas of economic development, transportation, housing, natural resources, energy efficiency, and weather hazards.