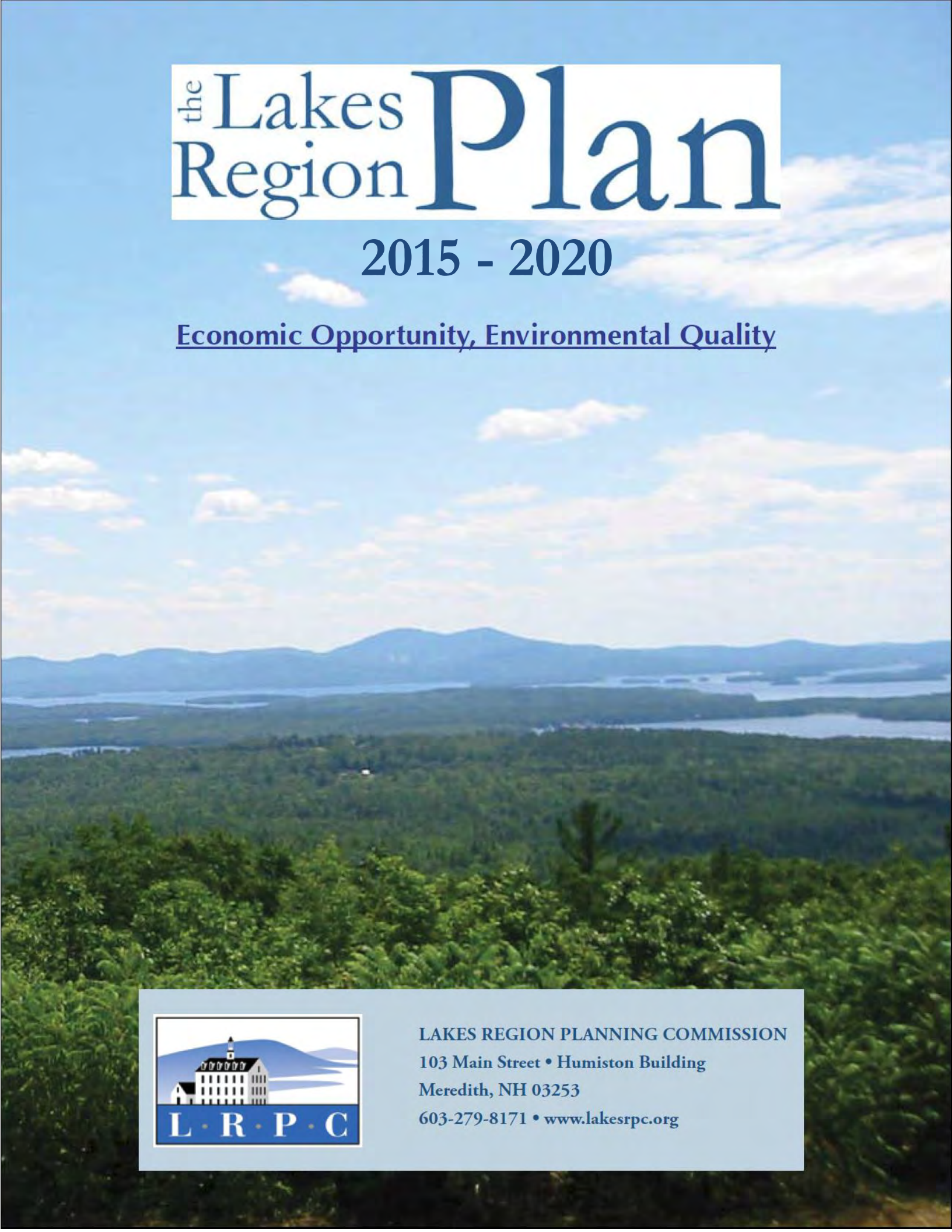

the Lakes Region Plan

2015 - 2020

Economic Opportunity, Environmental Quality

LAKES REGION PLANNING COMMISSION
103 Main Street • Humiston Building
Meredith, NH 03253
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CREDITS

The Lakes Region Planning Commission (LRPC) thanks the Lakes Region Plan Advisory Committee (LRPAC) for dedicated assistance in reviewing draft planning documents, offering comments and in guiding the process of plan preparation. As representatives of local governments, the LRPAC ensured the plan reflected local and regional concerns, issues, and aspirations. LRPAC members include LRPC Commissioners John Cotton, Andover; Jean Marshall, Chair, Freedom; Robert Snelling, Vice Chair, Holderness; Warren Hutchins, Laconia; Carmine Cioffi, Sanbornton; Joseph Jesseman, Tilton; Stephen Wingate, Tuftonboro; David Kerr, Transportation Advisory Committee (TAC), Barnstead; Shanna Saunders, Laconia City Planner; Mark Scarano, Grafton County Economic Development Council, Ashland; and Carol Pierce, Regional Leadership Committee, Laconia.

LRPC staff members, LRPC Commissioners, and Lyn O'Callaghan, Graphic Designer.

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The U.S. Department of Housing and Urban Development's Sustainable Communities Initiatives program provided the resources to complete the Lakes Region Plan, which enables the Commission to comply with the requirements of NH RSA 36:45 to 50.

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Lakes Region Plan 2015 - 2020

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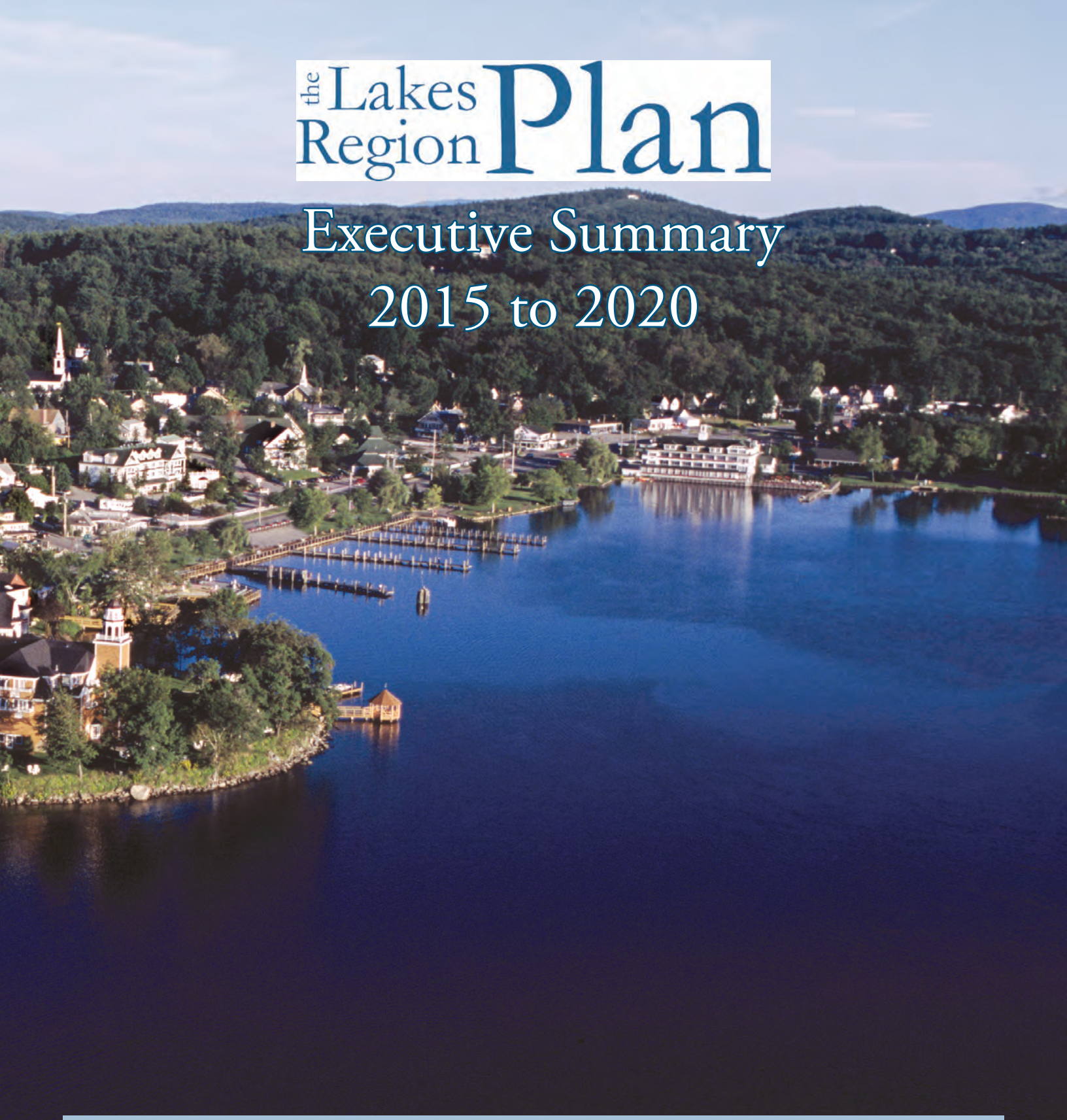
2015 to 2020



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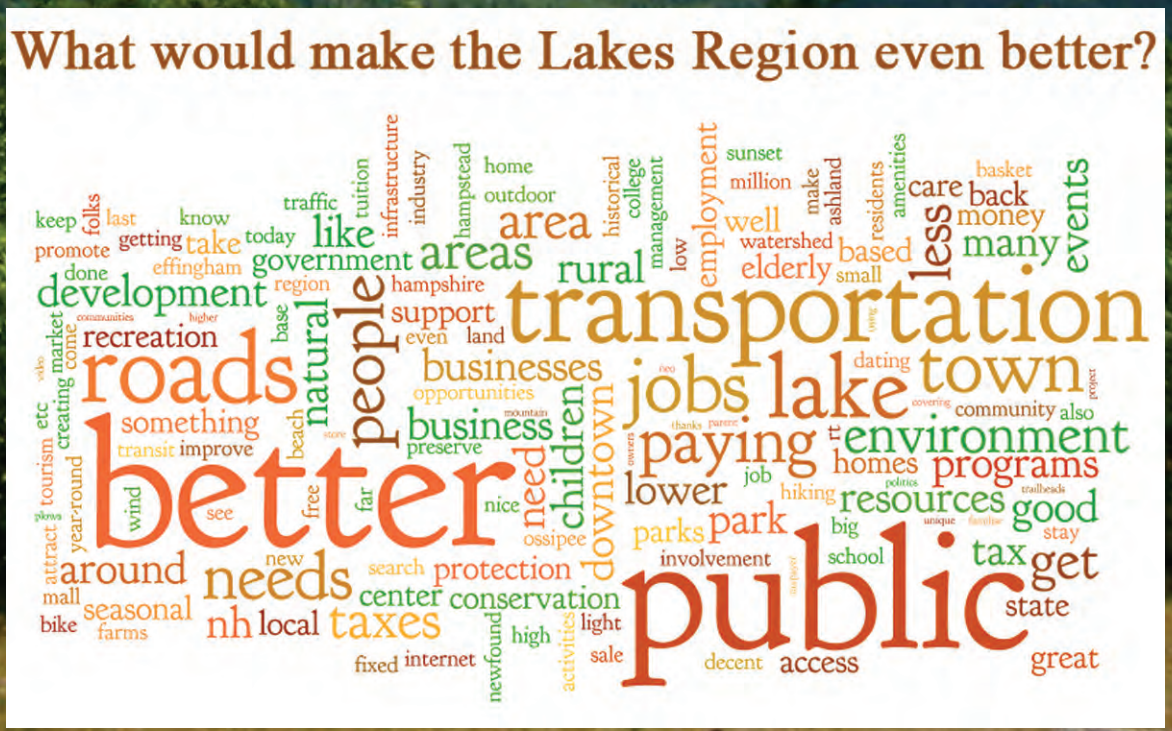
Introduction

This Executive Summary of the Lakes Region Plan provides a brief overview of the findings and conclusions of the Plan. For detailed information, please visit the LRPC website at www.lakesrpc.org/Extra1.asp and see the Summary and Telling the Story, the Vision Statement, and the Technical Plan components and background information. Established in 1968, the Lakes Region Planning Commission is a voluntary association of 30 municipalities in the Lakes Region who joined together to establish a regional planning commission in accordance with NH RSA 36:45 to 50. The powers of the regional planning commission are advisory.

The Vision

The initial vision statement consisted of a "sense of place, a sense of community." Over the period of the plan's preparation, this has slowly evolved into a more active vision of "economic opportunity, environmental quality." The two are interrelated and mutually supportive.

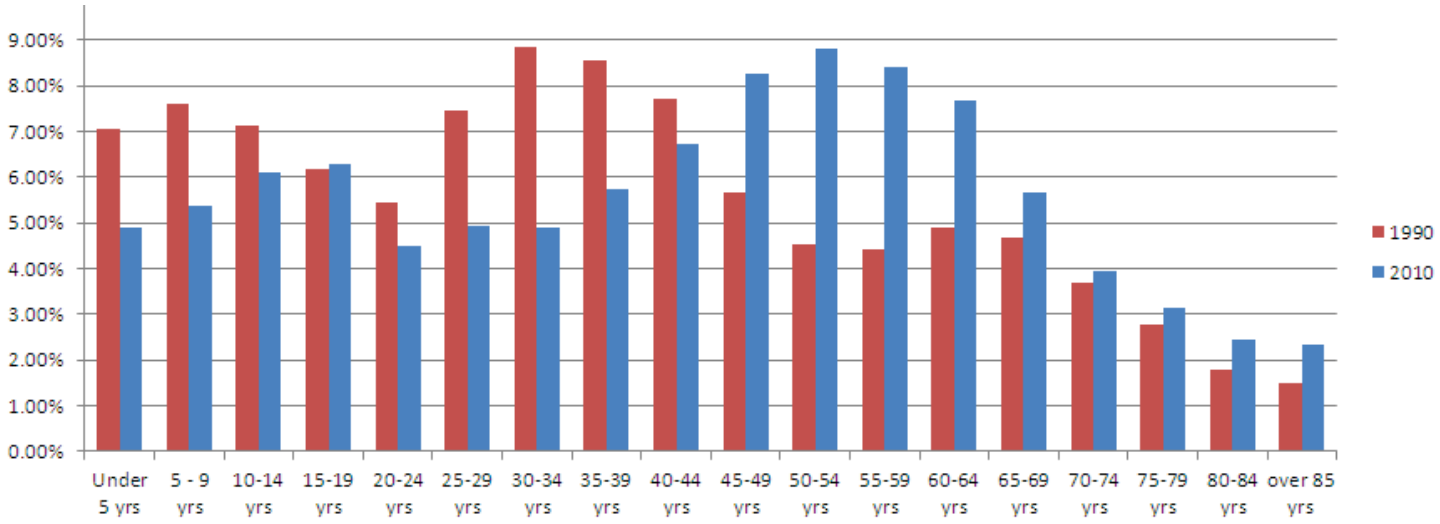


Demographics — *region ages with a reduced labor force … an aging population brings an increase in demand for health care, personal care services, and other services related to home maintenance.*

The change in demographics significantly influences planning for the future … more persons are 65 and older

- In the 30 year period, 1980 to 2010, the region's population increased by 34,609 persons, an average of 1.5 percent per annum. For the next 30 years, 2010 to 2040, projections indicate the population will increase by 11,200 persons, an average of 0.33 percent per annum.
- This suggests a reduction in the rate of increase from 1,153 persons to about 370 persons per year, which leads to a steady rise in the average age of the population.
- While the region's population more than doubled between 1960 and 2000, this strong population growth trend slowed down after 2004. The Lakes Region has experienced a slight decline in population from 2008 to 2013.
- Whether or not second home owners decide to retire permanently to the region, as the Baby Boomers get older and retire, they are likely to spend more time in the region. This will spur an increase in consumer spending.
- An aging population brings an increase in demand for health care, personal care, and other services related to home maintenance.

Lakes Region Population Shifts Older, 1990 to 2010



Economic Development & Housing

A drop in employment

- From 2005 to 2012, total employment in the Lakes Region dropped by 2,600 jobs. Nearly all of the jobs lost were attributable to a decline in goods-producing (i.e. manufacturing and construction) industries.
- Employment in manufacturing and construction declined by more than a quarter.

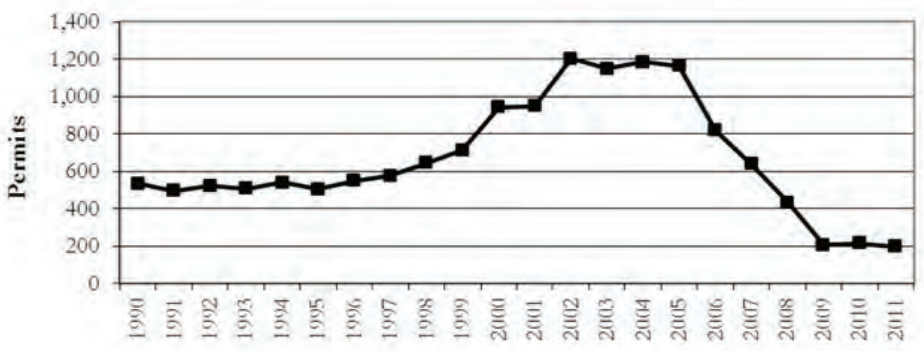
Seasonal employment is a stronger component of the regional economy

- Due to the decline of the goods-producing industries, the region has become more dependent on service-providing jobs, mostly related to tourism.
- Historically, both labor force and the number of employed residents increase by more than ten percent from a low level in April to a high level in July. By November, labor force and employment usually contracts to its low point.
- For some residents, seasonal jobs are a way of life, working summer jobs in the Lakes Region and migrating to other regions for work during the winter months.
- Lack of employment opportunities during the winter months creates hardship for some residents.

The regional economy needs suitable affordable housing

- The demographics of the Lakes Region — an increase in the number of individuals and household over age 65 and a decline in the number of households age 35 to 55 — will change the regional housing mix.
- The housing market is adjusting to changes in employment and population.
- Residential building permits for the Lakes Region peaked in 2002 at 1,205, but remained above 1,150 from 2003 to 2005. New building permits plummeted by 2009 and now appear to have settled in at about 200 per year.
- Jobs created due to seasonal tourism are in relatively low paying occupations. An increase in demand for lodging during the summer months creates upward pressure on housing affordability in the region.

Total Residential Permits Issued in the Lakes Region: 1990 - 2011



- Public private partnerships have been successful in constructing necessary workforce housing.

The Lakes Region Plan recognizes the training programs in advanced manufacturing and the promotion of entrepreneurship.

Regional leaders in education, economic development, planning, banking, and local business people continue to collaborate to create a continuous supply of trained workers for local manufacturers so that they can find the talented and skilled labor locally. This is a challenge! The Lakes Region Community College (LRCC) and the Huot Technical Center continue to align their curriculums to better meet the needs of local manufacturers. Large investments in new equipment, facilities, and curriculum improvement are producing positive results. Instructional programs in manufacturing at the Huot Center have grown in enrollment from four students to more than 110 in less than three years. The LRCC is also experiencing enrollment growth and that growth is expected to continue.

The Belknap Economic Development Council (BEDC) encourages training for replacement and new employment opportunities in advanced manufacturing and promotes entrepreneurship and encourages young talented persons to move to the region.

Transportation

Transportation needs far outweigh available resources … especially for remote rural areas

- Over 60 percent of New Hampshire's major rural roads are in poor to mediocre condition. Nearly one third of New Hampshire's rural bridges are structurally deficient or functionally obsolete. Rural areas are at risk.

- Research shows that driving on poor roads costs New Hampshire's motorists an extra $259 per driver ($267 million annually).

- Vehicle travel on New Hampshire's major highways increased 32 percent between 1990 and 2008, rising from 9.8 billion vehicle miles traveled (VMT) in 1990 to over 13 billion miles statewide.

- The region's population will age … and the Lakes Region has few transportation alternatives to the private automobile.

- A significant challenge in the Lakes Region is the poor state of repair of secondary and unnumbered state routes. Sections of the following roads are of concern: NH 25B, NH 109, NH 113, NH 171, NH 175; and the three state routes leading to Freedom village center: Moulton Road, Old Portland Road, and Cushing Corner Road.

- Recent examples of complementary land use and transportation projects include:
  Lakes Region Trail Connector, Newfound Lake Pathways, Northern Rail Trail;
  Belmont and Bristol downtown improvements;
  Upgraded road standards in Sanbornton and Center Harbor;
  Northfield and Moultonborough Safe Routes to School travel plans;
  Ashland, Center Harbor, Gilford, Meredith, Ossipee, and Tilton Road Safety Audits;
  Barnstead, Moultonborough and Ossipee Road Surface Management System inventories;
  Meredith and Wolfeboro Context Sensitive Solutions state route planning efforts.

The Lakes Region Plan supports transportation planning that establishes priorities in a regional context.

The LRPC and the NH Association of Regional Planning Commissions monitor the impacts of proposed transportation related legislation, especially dealing with increases to funding sources dedicated to transportation projects. The LRPC Transportation Advisory Committee (TAC) monitors necessary transportation infrastructure improvements in the region and identifies funding shortfalls. The TAC supported the Bristol transportation enhancement project which provides for a pedestrian and vehicular friendly environment in the village center.

Environment

Water quality is the defining issue in the region and requires continual attention …

While the overall quality of the lakes is good, their transparency and clarity is declining. Due to phosphorus and fertilizers, the lakes are experiencing algae blooms and cyanobacteria. Increased stormwater runoff and problems associated with aging and outdated septic systems contribute to these problems.

Water Quality Action items:

1. Need for continued education, outreach and citizen involvement on water quality issues.
2. Regional cooperation on a watershed basis; review and update watershed management plans.
3. Enhanced local land use regulations and use of Best Management Practices.
4. Identify water quality issues and propose design alternatives. The design and construction of the bio-retention basin in Laconia is a good example.

Conservation and protection of key parcels will lead to improved water quality.

Land Conservation Action items:

1. Educate the public on the water quality and land conservation connection.
2. Education on the green infrastructure and the value it adds.
3. Maintain interest and support for land conservation.
4. Education on benefits of key parcels to be acquired.

In order to maintain the high level of water quality, local and state governments will need to make investments in the local wastewater treatment facilities and in the Winnipesaukee River Basin Program.

The Lakes Region Plan recommends that LRPC and its partner institutions keep local officials, citizens, volunteers and the general public engaged in the process.

The LRPC will work and cooperate with the Lake Winnipesaukee Watershed Association and other watershed associations to educate the public on water quality issues and best management practices (BMPs). The LRPC will support land use planning effots and assist with educational efforts regarding future investments in wastewater treatment facilities and stormwater management programs.

Natural Hazards and Climate Change

The climate change is causing more severe and frequent weather events that strain the local infrastructure … communities need to plan for these events and become more resilient.

- New England has experienced 70 percent more extreme precipitation in recent years as evidenced by dramatic downpours that increase the risk of flooding; experiences more severe weather events than other parts of the country.
- Unusual events such as tornados and severe ice storms are occurring.
- Changes in climate will have adverse economic impacts.

The regional response … help communities become more resilient.

The LRPC will continue to work with communities on hazard mitigation planning and assist them with land use plans that address resiliency issues.

Culverts, Straits Road, New Hampton old and new

July 24, 2008 tornado, Wolfeboro

Energy Efficiency and Green Building

There is strong interest in energy efficiency, renewable energy and green buildings ... energy efficiency and green building techniques provide Lakes Region communities with options to lower energy costs.

- Local and County government have implemented innovative energy efficiency and renewable energy projects, such as solar array in Sandwich, geothermal heating system at Kingswood Regional High School, wood boiler at the Carroll County Nursing Home, lighting upgrades in Laconia and others.

- The Lakes Region Community College (LRCC) is a valuable regional resource for its energy services and technology program and overall energy knowledge base.

- Region-wide energy efficiency can best be implemented when other public policies are taken into consideration. Implementation of energy measures work best when integrated with programs dealing with other regional issues such as land use, air quality, transportation, housing and economic development and other issues.

The Lakes Region Plan recognizes the interest in energy issues and the potential role of the LRPC in cooperation with partner institutions.

The LRPC will collaborate with partner organizations (NH DES, LRCC, The Jordan Institute, and others) regarding public information, education and outreach, information sharing and technical assistance with small scale energy efficiency, and renewable energy projects and green building projects. LRPC hopes to be in a position to assist local energy committees.

Lakes Region Commmunity College

We welcome your comments.

The Lakes Region Plan can be a valuable resource and source of information for communities as they consider future land use issues, update chapters of their Master Plans and explore ways to collaborate on regional issues such as transportation, watershed planning, economic development and others.

The LRPC wishes to sincerely thank the Lakes Region Plan Advisory Committee (LRPAC) for assistance and dedication in reviewing draft planning documents, offering comments and in guiding the process of plan preparation. As representatives of local governments, the LRPAC grounded the process and made sure the plan reflected local and regional concerns, issues and aspirations. LRPAC members include LRPC Commissioners John Cotton, Andover; Jean Marshall, Chair, Freedom; Bob Snelling, Vice Chair, Holderness; Warren Hutchins, Laconia; Carmine Cioffi, Sanbornton; Joseph Jesseman, Tilton; Steve Wingate, Tuftonboro; TAC David Kerr, Barnstead; Shanna Saunders, Laconia City Planner; Mark Scarano, Grafton County Economic Development Council, Ashland; Carol Pierce, Regional Leadership Committee, Laconia.

LRPC staff members, Jeffrey Hayes, Executive Director, and Gerald Coogan, AICP Project Manager, welcome your comments. Contact jhayes@lakesrpc.org or jcougain@lakesprc.org.

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Summary & Lakes Region Story

INTRODUCTION

The Lakes Region Plan Executive Summary provides a summary of local and regional data, collected for the preparation of this Plan. It includes a summary of each of the six chapters. It also provides information on how and why the Regional Plan was prepared.

The Lakes Region is at an important point in its development. Over the last 40 years, the population of the region increased by 52,274 people, or an average of 2.1% per annum. It is projected to increase by 11,200 people over the next 30 years, or an average of 0.33% per annum. This suggests a reduction in the rate of increase from 1,300 persons to about 370 persons per year. This slower growth in the region leads to a steady rise in the average age of the population; this trend will make New Hampshire one of three states with the oldest population in the nation followed by Maine and Vermont.

What we heard

A sense of community and sense of place

The Vision Statement

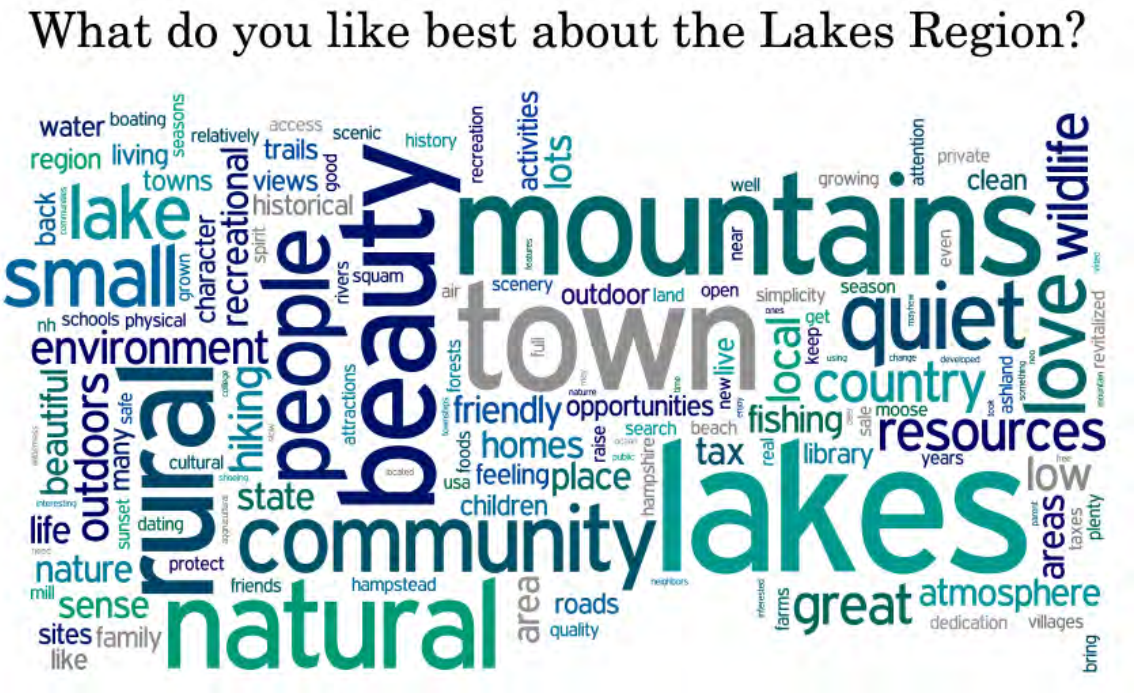
> *Recognizing the critical importance of maintaining and nurturing our natural environment and diverse cultural heritage, the Lakes Region Community will strive to improve the quality of life of its cities and towns through the increased capacity and prosperity of its businesses, civic, social, and education institutions, and its citizens. Respect, communication, cooperation and wise stewardship of the region's splendid natural resources are guiding principles.*

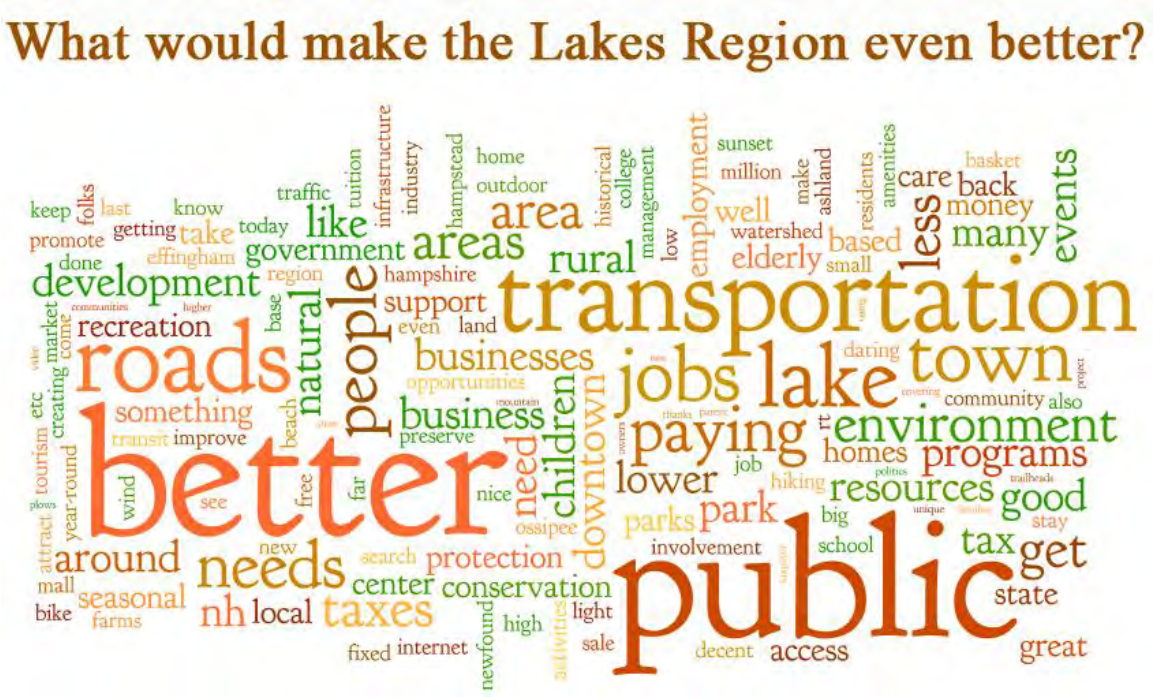
The Lakes Region exhibits a strong sense of community and sense of place, which the 28 towns and two cities embrace and desire to maintain. The communities appreciate and recognize the benefits of regional collaboration, coordination, and cooperation. The initial theme consisted of a "sense of place, a sense of community." Over the period of the plan's preparation, this has evolved into a more active vision of "economic opportunity, environmental quality." The two are interrelated and mutually supportive. In order to strengthen the sense of community and sense of place, the vision for the Lakes Region includes:

- Continued protection of the region's environment and natural resources as top priorities.
- Quality schools and education for all students.
- Energy efficiency and renewable energy choices at reasonable costs for all residents.

- Safe and affordable housing opportunities in all communities.
- A balanced transportation system that has good roads, bridges, reliable public transit, mobility options for seniors and special needs, and available bike paths.
- Employment opportunities supplemented by prospects for small businesses, entrepreneurship, and local agriculture.
- Communities that encourage historic preservation.
- Communities resilient from natural hazards and extreme weather conditions.
- Support for the creative economy.

Responses from the listening boxes in late 2012 and early 2013 provided the foundation for the following two word clouds.





During the last year, the LRPAC considered all the information that was generated and determined the following theme best represents the planning effort --- *Economic Opportunity, Environmental Quality.*

The Lakes Region Story

The regional economic and demographic trends that fueled the growth of the Lakes Region from the 1960s to about 2005 have run their course. Those trends included growth of baby boom generation, net migration to the state and region, a "back to the country" movement in the 1970s, reasonable economic opportunities, an attractive lifestyle and a growing state and national economy. After four decades of economic tailwinds, the region now faces a strong headwind: an aging population, new out-migration, stable or declining school enrollments, decreased labor productivity and less economic opportunity. The following provides more detailed information on these trends.

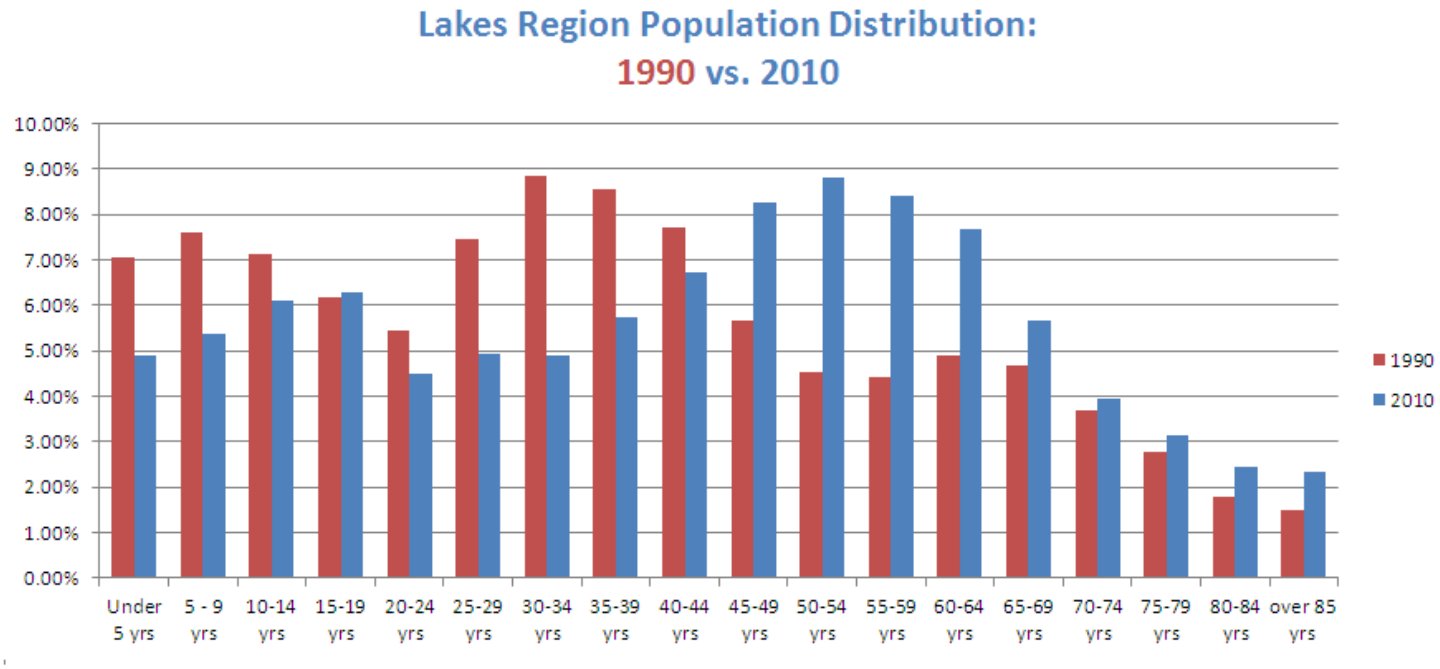
In cooperation with the nine regional planning commissions, the NH Office of Energy and Planning (OEP) prepared population projections for New Hampshire counties and municipalities in November 2013. In 2010, the US Census reported a total of 112,735 residents in the Lakes Region and the projections estimated an increase of 277 persons by 2015 for a total of 113,012.

For the next 25 years (2015 to 2040), the population projections call for the Lakes Region to grow very slowly in contrast to the past. The projections call for an increase to 123,940 persons in 2040 for a total increase of 10,968 or 9.7% over the 25 year period. That represents an annual average increase of about 0.4% per year. The median age for New Hampshire is 41.5 years, the third oldest state in the United States (37.2) following Maine (43.2) and Vermont (42.0). In Belknap County, the median age is 44.7 years. These demographic trends have implications for many aspects of life and planning in the Lakes

Region such as housing, transportation, the educational system, the local tax base, available labor force, school enrollments and others. These are significant trends that require further exploration and examination.

Figure 1 demonstrates how the population has shifted from younger people in the 20 to 44 age groups to older people in the 45 to 69 age groups in 2010. The source of information is the American Community Survey and the 1990 and 2010 U.S. Census.

Figure 1



http://www.gencourt.state.nh.us/rsa/html/III/36/36-47.htm

Despite these trends, the future for the region remains positive. The aspects of life in the Lakes Region that attracts visitors and year-round residents remain – an attractive lifestyle, lakes, mountains, good internet service, proximity to urban centers. Regional development corporations are encouraging your entrepreneurs to move here and are developing training programs in advanced manufacturing.

The Lakes Region Plan can be a valuable resource and source of information for communities as they consider future land use issues, update chapters of their Master Plans and explore ways to collaborate on regional issues such as transportation, watershed planning, economic development and others.

How the Regional Plan was Prepared

In New Hampshire, Regional Planning Commissions (RPCs) are advisory only and serve as a resource for local governments. Local governments acting through their land use boards, are responsible for local land use decisions. The Lakes Region Planning Commission (LRPC) prepared the plan in accordance with NH RSA 36:47. See http://www.gencourt.state.nh.us/rsa/html/III/36/36-47.htm

In June of 2013, the LRPC established the Lakes Region Plan Advisory Committee (LRPAC) to review, comment on and provide guidance to the Commission in the preparation of the draft Lakes Region Plan. In preparing the 2014 Lakes Region Plan, the LRPAC considered information and data from the following sources:

- Comment cards from the listening boxes.
- Vision statements from the 30 Lakes Region communities.
- Major Lakes Region Planning documents.
- Meeting with officials and interested citizens.
- UNH Survey Center –statewide and regional survey.
- Community of Place meeting held on May 7, 2013 in Laconia.
- Community of Interest meetings.
- Topical workshops on housing, transportation and the environment.
- The NH Smart Growth principles as contained in NH RSA 9-B:2.
- The NH Livability Principles in the context of the Lakes Region.

The Lakes Region Plan utilized a significant amount of existing local and regional data and information along with the statewide information

The ongoing American story playing out in the Lakes Region – the story of immigrants, refugees and new Americans.

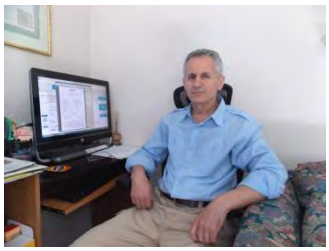
Demographic trends show the region is losing a pool of talented educated and motivated young people. Refugees and immigrants offer a promising alternative to that trend

For many years Carol Pierce served as the Chair of the City of Laconia's Human Relations Committee. She has helped many political refugees make the transition from a refugee situation, often a refugee camp, to being a person contributing to the Lakes Region economy. Carol organized Laconia's successful Multicultural Festival for eleven years. Refugees leave a country because of terror, political repression, or war which the United Nations recognizes. The following are brief stories of recent arrivals to the Lakes Region.

Bhutanese brothers Bal Krishna Timsina and Damo Timsina spent 16 years living in a refugee camp in Nepal, coming to the United States and Laconia in 2008. Damo began work at the Lakes Region General Hospital (LRGH) in housekeeping and through hard work, determination and education now works as an Operating Room Technician at the LRGH. Bal Krishna expects to graduate from Clarkson University in Potsdam, NY in 2015 with a BS in Electrical Engineering.

Fleeing the tribal civil war that engulfed Sierra Leone in the late 1990s, Ulimatu Kamara arrived in Laconia in 2000. She has held several positions, including administrative assistant, work with autistic children at the Spaulding Youth Center. She has taken an Administrative Assistant course at the NH Currier Institute and also studied accounting at the Lakes Region Community College. Being the single mother of three children, she faced many challenges during her life but is able to retain her smile and pleasant disposition.

Rasim Gusinac and his wife fled from Bosnia to Turkey in 1992 where they spent eight years living in Istanbul. In Bosnia, he taught history and geography in the Middle School. In Turkey he was a businessman. They arrived in the U.S. in 2000, coming to Laconia. Rasim currently works as a Group Leader at Freudenberg NOK, Northfield. Since 2005 he has also been an interpreter for Lutheran Social Services, the resettlement agency in Concord.



"Leaving your war torn homeland to come to the United States requires courage, fortitude, and determination. These new Americans have embraced America –they strive to work hard and contribute to society," Pierce said. "They are educated, speaking English well, adding much to our economy, culture, and community," she added.

SUMMARY OF THE LAKES REGION PLAN CHAPTERS

Economic Development

Trends: The 2013 unemployment rate for the Lakes Region was 5.1%. To a large degree, the economic trends in the Lakes Region parallel those of the state, with some deviations. During the 2000 to 2010 period, the population growth was less than the state's and the percent of persons over 65 years was higher. 17.5% of the Lakes Region population is over 65 years and 13.0% of New Hampshire's is over 65 years. Generally, the unemployment rate in the Lakes Region follows New Hampshire, about 5.0%. The following are trends found in the Cluster Analysis, which the Chapter discusses in detail.

- There was a significant loss of private sector jobs during 2006 to 2011.
- A 9.2% loss of manufacturing jobs for the Lakes Region during the period. The large job loss numbers resulted from the retirement of low-skilled jobs in manufacturing; now a high level of skills is required and all manufacturers are presently constrained in their growth by the lack of a high skill manufacturing workforce. The U.S. experienced a 5.7% loss of manufacturing jobs in that period.
- Management forecasts – will be difficult to replace retiring workers.
- Lakes Region Community College provides high skill manufacturing training and training on "soft skills."
- A perception that the Lakes Region is dependent on tourism and second homes, despite the region's strong manufacturing base.
- The professional technical sector, including accounting, consulting, computer service, et cetera is growing.

From anecdotal information, it appears the 2013 summer tourism season was very positive with a healthy level of visitors and that the 2014 season is off to a good start. Discussions with a few manufacturers indicate manufacturing orders are increasing, which could lead to an increase in employment.

Issues: The LRPAC noted the following key issue:

1. With a significant number of older persons retiring in the next several years, there is concern regarding the number of persons with the interest and skill set to fill jobs in manufacturing, health care and finance. Businesses may need assistance in finding new employees.
2. The workforce appears to have more self-employed persons, people with more than one job, and older persons remaining in the workforce beyond age 65, the traditional retirement age. Current data and information on these trends and information on the appropriate support structure for self-employed and freelancers will be helpful. Affordable health care is an issue for these people.
3. As the population continues to age, many Lakes Region communities lack the services and infrastructure necessary to accommodate these additional older people.

4. While the Lakes Region attracts tourists and retirees because of the region's natural amenities, the economy needs to be more multi-faceted. The CEDS Committee advocates that the region should also focus on the retention and attraction of high quality, better paying employment opportunities in the professional, service and manufacturing sectors. This may require additional emphasis on attracting young professionals, professional service firms, and small growth oriented entrepreneurial businesses.
5. The region needs to work together to help promote and encourage employment opportunities for the workforce while keeping our communities healthy and balanced.

New opportunities: The following new themes emerged: agriculture and farming, arts and the creative economy and entrepreneur support system in the region.

Economic Development Goals: The fundamental regional economic development goal is to:

Create suitable well-paying jobs, consistent with the stewardship of the region's natural resources.

1. *Workforce Development:* Improve the preparation of the workforce by ensuring extensive coordination between educational and training organizations and the needs of business and industry.

2. *New Economy*: To define where digitization, the internet, social media, and other future-oriented communications modes will take the regional economy so that the region can better take advantage of these new opportunities; to improve the region's technology infrastructure, specifically related to increases in bandwidth, reliability, redundancy, predictability, and access.

3. *Social Capital and Cultural Heritage:* To strengthen social networks and build engaged communities through planning and the creation of opportunities for economic growth.

4. *Sustainability - Energy and the Natural Environment:* The built environment of the Lakes Region should be maintained and enhanced in an environmentally sustainable manner. To assist the Lakes Region in adjusting to the need for lower-cost and renewable fuels, while considering the impacts of these potential developments on the natural environment. Effectively protect or enhance natural resources through conservation efforts.

5. *Entrepreneurship*: Expand entrepreneurship in the region by supporting entrepreneurs of all types, especially farmer entrepreneurs and artist entrepreneurs.

6. *Creative Economy:* Support development of catalyst projects that can spur the creative economy such as public art, programming and other projects that enhance the visibility of the creative sector.

7. *Improve Quality of Place:* Support projects that make the Lakes Region a more attractive, inviting, and affordable place for young people to live, work and play.

Action Plan: The stratified priority list of projects are:

- Downtown Riverwalk, Laconia
- Missing Link Pedestrian Bridge, Tilton
- NH Route 140 Sewer Extension, Northfield
- Comprehensive Redevelopment Project, Franklin
- Nickerson Business Park, Water Extension, Tilton
- Garden Theatre, Laconia
- Ossipee Mt. Grange Hall, Ossipee
- Winnipesaukee Pier, Laconia
- Surf Coaster Property, Laconia
- Burial of Utility Wires in the Weirs, Laconia

Housing

Economic Trends: Housing, economic opportunity and population characteristics are closely interrelated.

- The demographics of the Lakes Region --- an increase in the number of individuals and household over age 65 and decline in the number of households age 35 to 55 --- will change the regional housing mix.

- In the year ending June 30, 2013, population change for Belknap County was negative for both natural increase (births minus deaths) and net migration.

- Some of the drop in the labor force is likely associated with residents leaving the area but the majority of the drop in both labor force and employment is due to retirement.

- Overall, a decline in jobs (employment for workers covered by unemployment insurance declined by 2,790 jobs between 2006 and 2012), labor force and population are indicators that affect future housing and economic demand.

Housing trends:

- Stricter lending requirements and a decline in home ownership in New Hampshire is causing fewer new homes to be built.

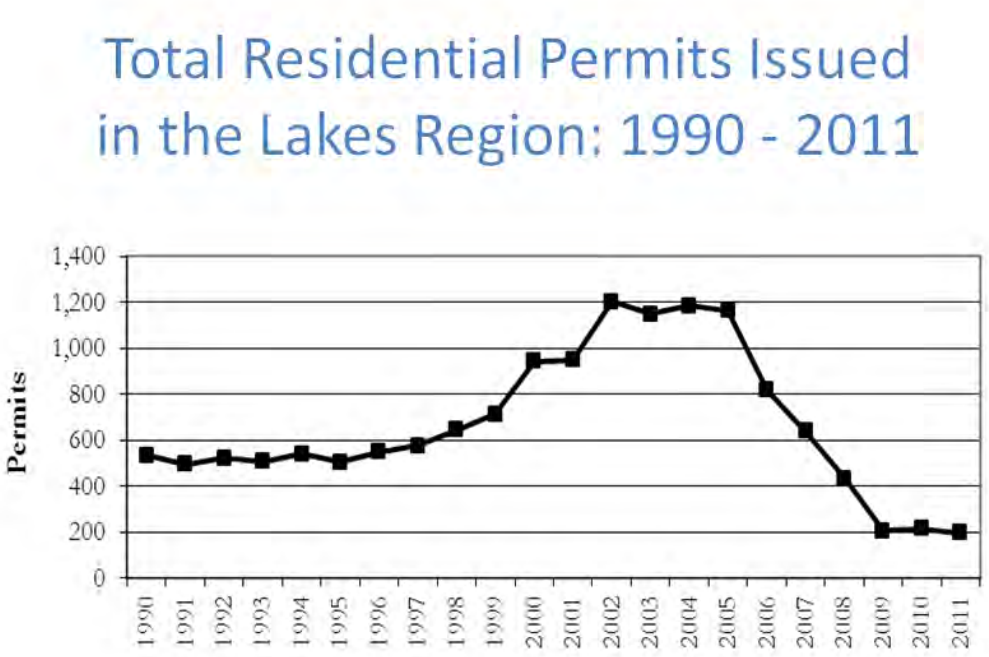
- New Hampshire's current housing supply is poorly aligned with evolving preferences among different age groups – older people want smaller houses

- Seniors will occupy a growing proportion of the state's housing units --- they have different needs – an increase in demand for nursing homes, assisted living facilities, and residential care facilities; and

- The number of new residential permits in 2011 (200) was about 35% of the amount of permits issued in 1991 (570). See Figure 2.

- New construction will likely be limited in a projected era of slower population growth --- more emphasis on rehabilitation and modification of existing units to accommodate two or more families, an accessory apartment et cetera.

Figure 2



Affordability is a continuing challenge in the Lakes Region. About, 32 percent of homeowner households in the Lakes Region earn less than 50 % of the 2014 median household income for the Lakes Region ($44,776), compared to 68 percent of renters.

Municipalities and grouping of communities should explore the future demand and need for affordable housing and workforce housing. The current balance between owner-occupied housing and rental housing will likely change in the future based on demographic changes.

Projected future housing needs in the Lakes Region indicate a total of 2,100 additional housing units will be needed by 2020 to accommodate a projected 2.4 % increase in population or approximately 210 new housing units annually. Between 2010 to 2013 an average of 207 residential permits have been issued annually in the Lakes Region,

While there appears to be little racially or ethnically segregated areas in the Lakes Region, there are communities with economic distress characteristics. In the last five years, there

have been few cases of discrimination identified in the Lakes Region and those identified are primarily disability issues.

What we heard

While the UNH survey indicated a preference for single family homes, service workers, government employees, school employees and other need workforce housing. The business community has been instrumental in encouraging the construction of workforce housing.

An interesting story… About Ossipee Village Apartment

A married couple with two children moved in to the apartments when they first opened. Both had connections to Ossipee and both worked in retail and hospitality in relatively low wage jobs. Both lost their jobs at different times during the recession and now are reemployed. The apartment was a source of stability for them and their children during a very tough difficult period in their lives.

Recommendations: The LRPC should assist with the following:

- Identify regional housing needs every five years;
- Assist decision makers in understanding current and projected demographic and economic conditions;
- Assist local government in addressing local workforce housing needs

Local efforts lead to workforce housing at Harriman Hill, Wolfeboro:

According to Donna Young with the Eastern Lakes Region Housing Coalition, the Coalition identified a parcel of "in village" land in Wolfeboro that met the Master Plan goal of village in-fill, access to public utilities, and close to services and employment. The coalition was able to negotiate the purchase of the land and secured feasibility funding from NH Housing Finance Authority (NHHFA). "Since our local banks invest in NHHFA, we felt bringing those funds back to our community would be appropriate, "stated Young. Soon thereafter, a summer resident contacted the chairman of ELRHC regarding his wish to make a donation in memory of his late wife, and the Nancy Clement Beck Memorial Fund was created. This enabling fund, currently valued at just under $300,000, is owned by the ELRHC and can be borrowed to promote workforce housing in the area. It has provided the bulk of the pre-development costs for Harriman Hill. The 42 workforce housing units were completed in 2010 and are occupied by renters working for the town, hospital, local schools and similar institutions. A local bank holds the mortgage for Harriman Hill.

Transportation

Transportation Vision: To provide an integrated, all-mode transportation system in the Lakes Region which offers efficient, effective and safe movement of people and goods, and provides mode choice wherever possible while enhancing and preserving the character and livability of the neighborhoods, quality of water in our lakes and streams as well as the natural, socio/economic, and historical environments where transportation facilities are located.

New Hampshire overview: Over 60 percent of New Hampshire's major rural roads are in poor to mediocre condition. Nearly one third of New Hampshire's rural bridges are structurally deficient or functionally obsolete. Driving on poor roads costs New Hampshire's motorists an extra $259 per driver ($267 billion annually). In 2012, New Hampshire ranked 40th in the U.S. for the highest cost of automobile ownership.

People are driving more. Vehicle travel on New Hampshire's major highways increased 32% between 1990 and 2008, rising from 9.8 billion vehicle miles traveled (VMT) in 1990 to over 13 billion miles statewide in 2010 and has increased by nearly nine percent per capita since 1990. Additionally, the number of registered vehicles in New Hampshire increased 20.6 percent between the years 2006 and 2011. The NH Department of Environmental Services indicates the transportation sector is the most significant single source of greenhouse gas emissions in New Hampshire, and its relative contribution is projected to increase further based on current trends.

Demographic trends: While the over-all trend is for a slow population growth, the rate of growth for those 65 years of age and older will be the most of any age cohort for the next 27 years. Research indicates that the travel patterns of those 65-75 years of age do not differ from other adults. While mobility challenges will not affect all people 65 years of age and older equally, the Lakes Region has few transportation alternatives with an aging population.

Funding shortfalls have forced the re-evaluation and prioritization of focus areas of greatest concern for the transportation system. The NHDOT states that maintenance of existing infrastructure (in favor of building new roads or expanding capacity) and improved safety are the primary areas of focus. A significant challenge in the Lakes Region is the poor state of repair of secondary and unnumbered state routes. The following roads are of concern: sections of NH 25B, NH 109, NH 113, NH 171, NH 175, and the three state routes leading to Freedom village center: Moulton Road, Old Portland Road and Cushing Corner Road.

Regional Coordination Councils address public transportation needs. The Carroll County Regional Coordination Council goals are: transportation accessible to all; inviting to all ages and all walks of life; collaboration among human service agencies, municipalities; businesses, and citizens; expanded public transportation services and options, including volunteers, carpooling, taxi services, and rail, bicycle and pedestrian paths; and transportation within the counties and connections with other regions.

The state of New Hampshire has debated the future of rail both for both passenger and freight service; at present there is no policy direction as to how to proceed with the NH

State Rail Plan, 2012. The analysis in the state plan will include an assessment of freight and the impacts on the Lakes Region.

Recent of examples of complementary land use and transportation projects include: WOW Trail, Friends of the Northern Rail Trail, Newfound Lake Pathways, Belmont and Bristol downtown improvements, upgraded road standards in Sanbornton and Center Harbor, Northfield and Moultonborough Safe Routes to School travel plans, Ashland, Center Harbor, Gilford, Meredith, Ossipee, and Tilton Road Safety Audits, Barnstead, Moultonborough, and Ossipee Road Surface Management System inventories, Meredith and Wolfeboro Context Sensitive Solutions state route planning efforts among others.

What we heard

Several methods were used to capture public input during the development of this chapter including a statewide survey, comment cards at prominent locations in each community, a transportation workshop and listening sessions. Common themes expressed by the public during the development of the Transportation Chapter fall into three general categories:

Transportation Costs: concern about personal and environmental costs
Transportation Options: needed options for walking/biking**,** public transportation**,** and commuter rail
Infrastructure: improvements needed to address condition and connectivity

More than 50% of respondents in a statewide survey conducted by the UNH Survey Center stated they would be willing pay more in taxes for maintaining roads, highways, and bridges with an additional 27% indicating that this should be a focus for transportation investment. At the transportation workshop, participants agreed that LRPC should continue to be a strong advocate for increased funding for local and state projects.

Bristol's Transportation Enhancement (TE) Project
May 2014

Bristol's Downtown traffic and landscape project

Patience and perseverance prevailed and in the fall of 2013 downtown Bristol experienced a rebirth with improved pedestrian and traffic flow and enhanced landscaping. The Town sits in the middle of NH Route 104, an important east-west road, connecting the Lakes Region with west central New Hampshire. The downtown area experiences a significant amount of traffic. The Town is situated in a river valley with main roads built to handle the horse and buggy days. For the past 50 years, several individual groups have tried to develop a plan to improve the flow of traffic. The very first Master Plan in 1963 addressed this issue with a very detailed approach, but with a town's population of 2400, the idea was too expensive.

In 2003, Steve Favorite joined the Bristol Planning Board and Chair Dan Paradis said ".. Do something with the 2003 Master Plan … in particular the downtown …" Steve and others formed the first Bristol Downtown Revitalization Committee. Raising funds proved to be very challenging. Contact was made with Alan Hanscom, the District NH DOT Engineer in Enfield to initiate a dialogue with the Department. Alan advised "to get involved in the with the Lakes Region Planning Commission's Transportation Advisory Committee (TAC)." Connections with other town road agents and LRPC staff along with an understanding of the opportunities of a Transportation Enhancement planted a seed. LRPC staff assisted and pointed the town and its representatives in the right direction. Competition for these grant monies and having Town support was also a challenge. The Town passed a large hurdle when it scored first for a 2009 TE grant. The next step was to secure the 20% local share.

Assistance from the NH DOT traffic staff demonstrating the need at the state and the town level helped to secure the local match in 2010. Construction began in the spring of 2013 and after some minor changes, the project was finally completed in October 2013. NH Route 104 through downtown Bristol is now a much safer and attractive road which enhances both pedestrian and vehicular traffic. A major selling point was the safety of the children crossing the Main St (NH Route 104) walking to and from school. The project improved parking, sidewalks and new lighting to offer a more updated version to the 196 year old town square. Reducing the five roads entering into the town square down to three provided a better traffic flow along with a straighter and more visible pedestrian walkway. "My dad envisioned this plan staring back in 1963 and we are all proud to see it happen after 50 years," recounted Favorite, a longtime resident and member of the LRPC TAC and Executive Board.

The Bristol project brings together the NH livability principles of traditional settlement patterns, enhancement of the village area and proving a range of transportation choice. The project includes a mix of funding from TE, Safe Routes to Schools, Community Development Block Grant and Town funds.

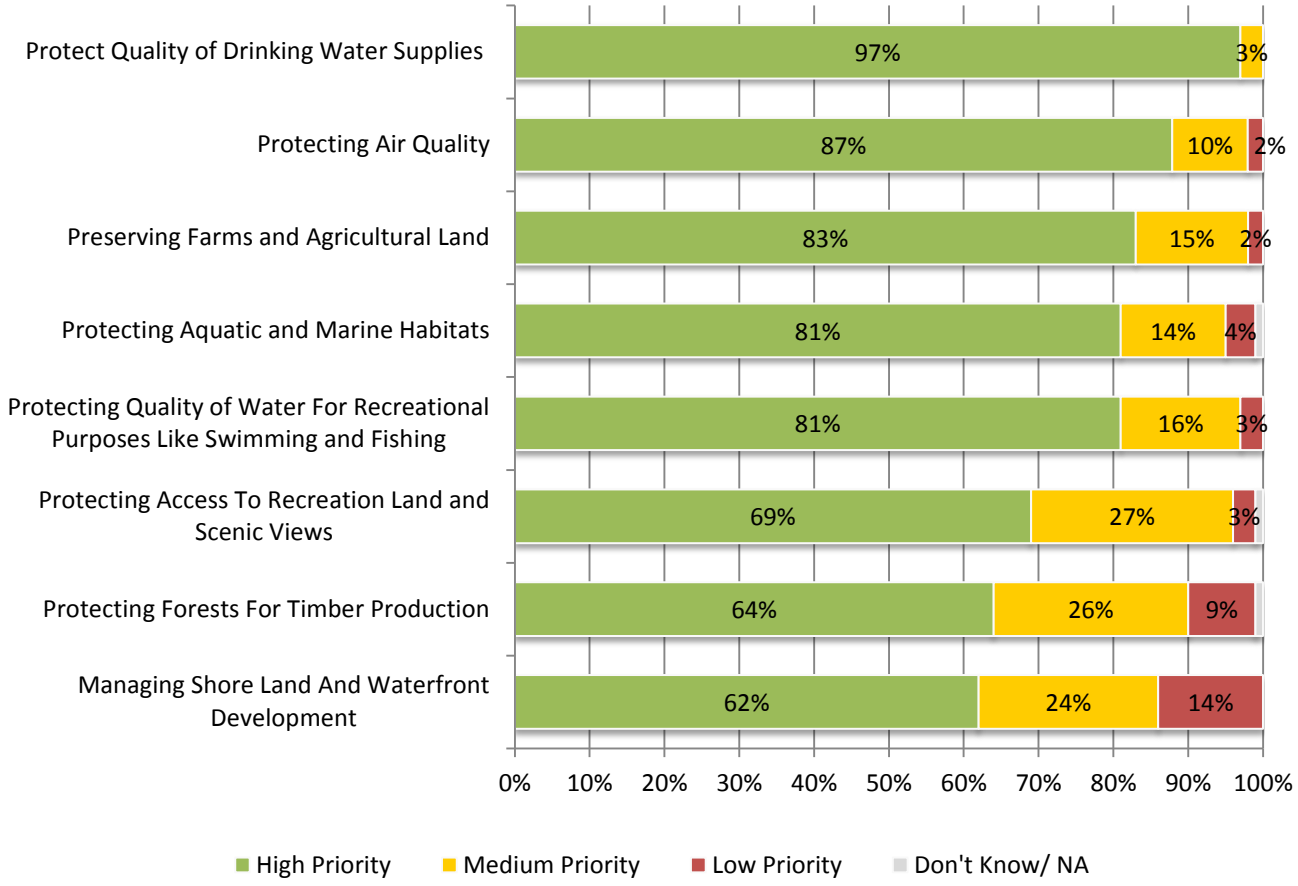
Environmental

The Lakes Region Environmental Chapter includes a review of the significant issues and challenges facing the management, use and conservation, condition and supply of natural resources in the Lakes Region of New Hampshire. It is not intended to serve as a comprehensive inventory of or management plan for the Region's natural resources. Nor, is it intended to establish regional policy or regulation. This Plan proposes recommendations and strategies for communities, organizations, and others to consider in addressing natural resource and water infrastructure issues at the regional and local level. It highlights existing and potential opportunities for regional coordination and action around these identified issues and outlines resources municipalities and others can use to advance certain objectives. It is an opportunity to educate and inform community leaders about current natural resource conditions, issues and management options. The Natural Resources section includes information on: water, forest, wildlife, air, agricultural resources, land conservation and recommendations. The Water Infrastructure section includes information on: wastewater treatment systems, septage, septic systems, water supply systems, stormwater, regional opportunities, resources and goals/recommendations.

What we heard

From the comment cards, listening sessions and meetings, citizens reported there is strong support for maintain and enhancing the region's environmental; quality. The Central and Lakes regional UNH survey stated: "Nearly all residents (97%) view protecting water quality for drinking as a high priority for their community, followed by protecting air quality (87%), preserving farms and agricultural land (83%), protecting aquatic and marine habitats (81%), protecting water quality for recreational purposes like swimming and fishing (81%), protecting access to recreation land and scenic views (69%), protecting forests for timber production (64%), and managing shore land and waterfront development (62%)."

Figure 3 Priority Placed on These Environmental Issues



See the story on Water Quality. The innovative Winnipesaukee Gateway Project is a web based one stop source of information for maps, environmental and water quality data.

Recommendations for Natural Resources:

- Consider Smart Growth principles along with sustainable development and natural resource principles.
- Encourage municipalities to review the Natural Resource Chapter of the Master Plan for opportunities to incorporate new information and planning approaches.
- Determine if any additional natural resource regulations are needed.
- Coordinate with neighboring communities for watershed management planning.
- Educate the public and municipalities on the Lakes Region Conservation Plan prepared by the SPNHF.
- Monitor trends in land protection, open space acquisition and farmland preservation.

- Encourage communities to be aware of important and key properties in their community and in the Lakes Region and to establish priorities for land conservation efforts.
- Encourage communities to understand land use and natural resource issues in neighboring communities so that planning among communities can be better coordinated.

Resources for Communities – Water

There are many environmental, natural resource and water quality organizations that can assist communities. The LRPC can facilitate the process by providing information on these organizations and identifying an agency or organization with a particular need.

Sub-watershed plans have been completed in several communities in the Lakes Region. These plans have multiple benefits. Citizens who participate learn about how we affect water quality and how to prevent negative outcomes. Current problem sites are identified as well as future areas of concern. Land owners and governments can find solutions before problems develop. New plans sponsored by Lake Winnipesaukee Watershed Association will continue to be initiated as grant money becomes available. There are a number of consulting firms familiar with our area who can assist in the preparation of watershed plans with community support.

Models and online tools that can help property owners and associations measure their environmental foot print as well as help them find solutions. This service is free and can be found at, New Hampshire Homeowner's Guide to Stormwater Management and the A Shoreland Homeowner's Guide to Stormwater Management

Goals and Recommendations

Goal: Recognize the role and value of, and then protect and improve the quality of lakes, rivers, agricultural, forest, wildlife and other natural resources within the Lakes Region by utilizing management practices that represent the most economical and effective technique to protect water quality and the natural resource base and by encouraging regional cooperation.

Recommendations for Water Infrastructure:

- Promote public awareness and education wherever possible. State and local governmental bodies and conservation groups cannot change our environmental course alone. The population must want to and community leaders must be willing adopt practical solutions.
- Ensure that business and local governments are aware of the economic consequences of declining water quality.
- Support watershed planning efforts to ensure that current problem areas are addressed and future effects are predicted and mitigated.

- Provide knowledge, planning tools and other information to help property owners and communities find and develop solutions.
- Support monitoring efforts that demonstrate how water quality is declining or improving so that full time and seasonal residents can see the changes taking place.
- Publicize positive and negative water resources events such as cyanobacteria outbreaks or community storm water remediation projects; and
- Recognize volunteers, organizations and leaders who donate their valuable time and effort toward supporting environmental protection and ensuring resource health into the future.

Water Quality in the region --- early and ongoing efforts --- eternal vigilance is needed.

"Back in the early 1960s, there was great concern for the health of the two Lakes --- Winnisquam and Winnipesauke," stated Thomas Burack, Commissioner of the NH Department of Environmental Services. At that time, Lake Winnipesaukee was used by parties as an "open sewer" causing untreated sewerage to flow directly into Lake Winnisquam and creating green algal foam that rendered the lake unsuitable for swimming.

At that time, Esther Peters, Peter Karagianis, Don Foudriat and Jim Walker established the Lakes Region Clean Waters Association and formed the nucleus of local Laconia citizens, who brought a lawsuit to the City to make improvements to the City's sewerage treatment plant on the basis that water pollution has caused a 30% decline in property values. In 1970, President Nixon established the Environmental Protection Agency (EPA) and named William Ruckelshaus as EPA's first Administrator. In 1972, Congress passed the Clean Waters Act, which provided funding for the improvements to and construction of new wastewater treatment facilities. Soon thereafter, "Bill Ruckelshaus flew up to New Hampshire, met with Laconia officials and interested citizens and approved funding for an upgrade to the Laconia facility and laid plans for the Winnipesaukee River Basin Project (WRBP)," stated Burack. In a 2011 documentary, Ruckelshaus commented that the EPA was looking for a demonstration project and the Lakes Region effort was a natural fit. "All levels of government had a role plus the citizens; nothing much will happen without the citizens," stated Ruckelshaus. The WRBP is a cooperative regional wastewater treatment facility serving ten communities in the Lakes Region and operated by the NH Department of Environmental Services. The WRBP was completed in the early 1980s.

The Lakes Region Clean Waters Association received the first Environmental award from the US EPA in 1975. The LRPC's 208 Non Point Water Quality Plan prepared in 1977 was an important planning program in the overall clean-up effort.

Now some 40 years later, while the overall quality of the lakes is good and improving, their transparency and clarity is declining. Due to phosphorus, pesticides and fertilizers, the lakes are experiencing algae blooms and cyanobacteria. Increased stormwater runoff and problems associated with aging and outdated septic systems are contributing to these new water quality challenges.

Today, efforts to protect water quality focus on reducing the use of fertilizers, upgrading septic systems, making effective use of buffers and vegetative buffers near developments and encouraging best management practices for stormwater management. The citizen efforts to monitor and improve water quality continues today with such groups as the Winnipesaukee Gateway Project, an umbrella organization and one stop location for information about the lakes and several lake watershed associations. LRPC created and maintains the website and regularly updates watershed plan information with the help of watershed groups. The purpose of the website is to provide an innovative web-based plan which acts as an umbrella for groups involved in watershed planning throughout the region.

Today, watershed associations in the region have prepared Watershed Management Plans, which identify and address the issues of water quality on individual lakes. "Citizen and landowner awareness and involvement is key to maintaining and enhancing water quality," stated Burack. According to John Edgar, the Town of Meredith's Community Development Director, the take away message is that the planning process is "never done, (plans) need to be reviewed, updated, and sustained … education of the community and landowners is ongoing."

The four citizen volunteers, Esther Peters, Peter Karagianis, Don Foudriat and Jim Walker, received the Kim Ayers award at the 2013 Lakes Region Planning Commission annual meeting for their past and ongoing efforts to make the water quality in the lakes a source of pride for all who live, work and recreate in New Hampshire.

Esther Peters, Jim Walker,
Don Foudriat and Peter Karagianis

Natural Hazards and Climate Change

Most people recognize that more frequent natural hazards are occurring because of climate change.

The most frequently occurring hazard events in the Lakes Region are flooding, severe winter weather, and severe wind events. Others include earthquake, fire, health hazards (epidemic, water contamination, and radon). Weather is the hourly and daily changes in local conditions such as temperature, precipitation, humidity, and wind. Climate is the 30-year average of these indicators. Changes in climate will have an effect on some of the hazards impacting the region. As communities consider how best to protect people, infrastructure, and properties from hazards, it would be prudent for them to consider these anticipated changes in the region's climate.

Key data points**:** While the potential exists, New Hampshire's Lakes Region is fortunate not to have suffered from truly catastrophic events. Most of the impacts to communities stemming from hazard events have come from erosion and washout along roads during heavy rain storms or damage to structures and compromised emergency services due to downed trees and wires (ice and wind). There certainly is the potential for damage as a result of conflagration, dam failure or miss-operation, large earthquake, or health hazard. Between 1986 and 2013 there were 28 Presidentially Declared Disasters or Emergency Declarations that impacted one or more of the four counties in the Lakes Region. Ten of those declared events occurred prior to 2002, while eighteen declared events have occurred since 2003.

Current trends: Southern New Hampshire has grown warmer over the past century; the greatest increase was found in the nighttime minimum temperatures, especially during the winter. The number of very heavy precipitation events, those producing over four inches of precipitation in a 48-hour period, has shown a marked increase. The majority of these changes have occurred during the last 50 years.

Models project that there will be further increases in temperatures and heavy precipitation events. This will result in fewer days in which the ground is covered by snow. Exactly how much change can be expected in these environmental characteristics depends on how much heat-trapping carbon emissions are produced during the next several decades.

Summary of Goals and Objectives:

1. Promote planning efforts that reduce the likelihood of impact due to hazards such as flooding, erosion, winter weather, high winds, fire, and health hazards.
2. Encourage efforts to identify and remedy any "choke points" in the regional energy infrastructure system.
3. Encourage energy use practices that result in lower carbon emissions.
4. Provide opportunities for local decision-makers to learn more about state and national hazard planning efforts and opportunities.

Key strategies/projects to achieve the goals:

1. Continue to work with communities, FEMA, NH DES, and other regional and state entities to update local hazard mitigation plans, Fluvial Erosion Hazard mapping, provide mapping assistance, and provide asset inventory and assessment assistance.
2. Assist communities in land use planning efforts that reduce stormwater runoff, enhance the fire protection of structures.
3. Encourage communities to ensure that preventative maintenance is occurring on local and regional infrastructure and utilities.
4. Encourage energy audits and any recommended retrofitting of municipal buildings to efficiently reduce carbon emissions (and lower operating costs).
5. Promote the use of public transportation and Bicycle/Walk efforts as another means of lower carbon emissions.
6. Develop/Host lectures or workshops on regional, state, and national hazard mitigation efforts for community leaders.
7. Explore opportunities for funding of projects that have regional importance.

Energy Efficiency and Green Building

Introduction: Energy is a very complex geopolitical and economic issue that transcends local, state, multi state, national and international levels. Energy and green building connects with many planning functions including land use, housing, transportation, environment, and natural resources. Through local efforts and the sharing of information regarding innovative approaches to energy efficiency, the Lakes Region can reduce its dependence on fossil fuels and become more resilient.

Existing Energy Conditions: New Hampshire has a Renewable Portfolio Standard (RPS) that requires 24.8% of electricity sold to come from renewable energy resources by 2025; in 2013, 16% of New Hampshire's net electricity generation came from renewable energy. In 2011, NH was the ninth lowest per capita consumer of energy among the states and the transportation sector accounted for 35% of the state's energy consumption.

A major contributor to New Hampshire's economy is forest products including wood pellets that are the mainstay of the state's biomass energy industry. Petroleum products dominate New Hampshire's energy consumption, and the state's residential consumption per capita is among the highest in the nation, in part because of heavy dependence on heating oil during the long winters. New Hampshire neither produces nor refines petroleum. While natural gas is not produced in New Hampshire, the state still consumes it and about two-thirds of natural gas is used to generate electricity. Homeowners have been switching to using natural gas for home heating in recent years. Renewable energy projects in New Hampshire are powered by wind or biomass and nearly 14% of New Hampshire net electricity generation comes from renewable resources, with hydroelectric facilities providing slightly more than half, and biomass facilities supplying most of the rest. Most biomass resources use wood and wood waste-derived fuels, such as wood pellets.

Community Attitudes: In the summer of 2013, the UNH Survey Center conducted a telephone survey with 400 residents living in in the Lakes and Central Regions for the purpose of identifying residents' views about energy efficiency. Results of this survey show that 78% of residents support higher energy efficiency standards in new buildings, over 70% of residents support an expansion of incentives for home energy efficiency improvements and promotion of renewable energy sources such as solar, wind, and geothermal. Not as many residents supported electric car charging stations.

When it comes to government involvement, 49% of residents think local government should be very involved and 12% think local government should not be very involved or should not be involved at all. When asked about prioritizing investment of public dollars, top priority responses were for environmental protection and conservation of natural resources (26%).

Local Energy Efforts: Local governments in the Lakes Region have improved the energy condition in their respective communities. This section highlights the efforts of many Lakes Region communities that have taken part in improving their communities including Center Harbor, Laconia, Wolfeboro, Meredith, North Hampton, Sandwich, and Tuftonboro.

Impacts of Energy Consumption and Energy Choices: The planning community recognizes that energy, in its various aspects, impacts the health, safety, quality of life, and economic vitality of any region and should be addressed at state and local levels through the planning process. Costs for coal, gas, and oil continue to increase and lessening our dependence on these fuels can be very beneficial to the community. These benefits may include: reduction of operating costs for buildings and vehicles, more efficient and longer-lasting buildings, diversifying energy supplies and using more local, renewable resources, and creation of safer streets with multiple transportation options.

Energy Planning and Green Building**:** The building sector consumes nearly half of all energy produced in the United States and similarly in New Hampshire. Half of CO2 emissions in New Hampshire are emitted by the building sector and the state faces a great challenge with cold climate winters and the increasing temperatures of summer. Creating resilient buildings by following green building guidelines will be better for overall energy use and will increase the ability of the building to withstand New England weather. Energy conservation and energy efficiency are also ways that building owners can lessen their energy use.

New Hampshire's Potential for Energy: Wind. A resource map provided by the US Department of Energy's Wind Program and the National Renewable Energy Laboratory indicates that New Hampshire has wind resources consistent with community-scale production. The excellent wind resource areas in the state are on the ridge crests. The White Mountain region in northern New Hampshire is the most prominent area. Certain ridge crests in the western part of the state can also have excellent wind resource.

Biomass. In New Hampshire, biomass generally refers to low value wood generated from traditional harvesting practices. Currently, there are eight existing biomass plants in the state located in Alexandria, Berlin, Bethlehem, Bridgewater, Springfield, Portsmouth, Tamworth and Whitefield. The Lakes Region shows significant potential for small scale biomass projects.

Solar. New Hampshire now has several solar arrays including one at Manchester Airport parking garage and an array on the roof of the Stonyfield Farm Yogurt Factory in Londonderry. Building owners can install their own on-site arrays or participate in group net metering which allows a certain number of members to own a portion of the energy that a larger array can produce. Large-scale solar installations could prove to be an effective means of alternative energy production for large businesses or communities.

Integrating energy with traditional planning concepts: Energy touches all areas of planning including and use, housing, transportation and environmental issues. More and more communities are making these connections and are trying to promote energy efficiency and conservation in land-use planning. This includes changing to a mix-use zoning, encouraging other alternative forms of transportation design, encouraging residents to buy local, and setting new building policies and codes for efficiency. Other land-planning tools are outlined in this section.

Recommendations for an energy future: Depending on the level of interest and enthusiasm, local governments can play an effective role through a local energy committee which works to make energy efficiency improvements to municipal buildings, encourages the use of

renewable energy, enforces the State's energy code and is an advocate for energy efficiency and green building design. There is a need for continued assistance and involvement of the LRPC. In the energy field, the role of the Lakes Region Planning Commission should involve public information, education and outreach, information sharing and technical assistance with small scale energy efficiency and renewable energy projects.

Focus for local governments - The following is a menu of energy activities local government can consider.

Solar: The solar aggregation program involves a lead local government or several local governments or a region working together to advertise for and retain a third party solar developer or developers

Lighting: Public Service New Hampshire and the NH Electric Cooperative can assist local governments in converting municipal lighting to efficient LED (light – emitting diode) street lights.

Transportation: The transportation sector is a major contributor to greenhouse gas emissions. Through the LRPC's Transportation Advisory Committee, local government can encourage measures to reduce travel demand such as additional public transit, car and van pooling, ride sharing and others.

Education: Organizations such as New Hampshire Local Energy Solutions, Energy Efficiency and Sustainability Board and the New Hampshire Sustainable Energy Association can develop an integrated education, outreach and workforce training programs for the region.

Energy Efficient Buildings: Local governments can consider establishing green building ordinances for municipal buildings which incentivize the use of new construction or major renovations of town buildings to meet US Green Building Council LEED standards.

Land Use Planning: The way communities are designed, planned, and built influences the amount of energy used, how energy is distributed, and the types of energy sources that will be needed in the future. Energy efficiency can be incorporated into land use planning.

A Regional Approach - Coordinated and integrate policies - Region-wide energy efficiency can best be implemented when other public policies are taken into consideration. Implementation of energy measures work best when integrated with programs dealing with other regional issues such as land use, air quality, transportation, housing and economic development and other issues.

Goals

The core goals for energy efficiency are listed below.

1. Strive to provide affordable renewable energy.
2. Increase renewable energy incentives.

3. Increase education on energy efficiency issues and alternatives.
4. Encourage a sustainable funding pattern for energy efficient infrastructure.
5. Promote and encourage smart growth and green infrastructure planning techniques.
6. Increase energy efficiency of existing and future buildings.

Recommendations

- Develop a Comprehensive Region-wide Sustainability Plan/Energy Plan.
- Utilize Smart Growth and Livability Principles.
- Coordination between energy and policies.
- Increase small-scale local energy production.
- Increase the energy efficiency of existing and future buildings in the Region.
- Increase regional use of and support for renewable energy.
- Encourage and support the work of local energy committees.

If the LRPC were to assist and follow through on energy efficiency and green building initiatives, the commission would require an additional funding source through a dedicated source.

APPENDICES

Appendix A - Email from John Edgar, Meredith Community Development Director

Appendix B - Scenario Planning

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APPENDIX A

E-mail dated September 24, 2013 from John Edgar to Gerald Coogan:

What follows are a few of my thoughts and observations about planning.

Local people work across political boundaries to identify issues and solve problems. This occurs in Meredith, and most assuredly it occurs throughout the Lakes Region and the State of New Hampshire. Often motivated out of a sense of necessity, vulnerability or a desire to achieve economies of scale, communities of interest voluntarily organize to address common interests. This is part of our DNA as Northern New Englanders. A few local examples:

- **Public Education**: Meredith is a member of a 3-town cooperative school district (Inter-Lakes School District) which includes the towns of Meredith, Center Harbor and Sandwich.
- **Solid Waste**: Meredith has partnered with the Town of Center Harbor to provide residents from both communities with a solid waste transfer station and recycling facility.
- **Mutual Aid**: Meredith participates in three mutual aid organizations (fire, police, public works) recognizing that individual vulnerabilities can be overcome through collective assistance.
- **Emergency Services**: Meredith and three other communities (Center Harbor, Sandwich and Moultonborough) jointly contract with a private vendor for ambulance/ EMT services.
- **Communication**: Meredith is a member of the Lakes Region Cable TV Consortium. The 14-member municipal consortium negotiates a master contract with the cable TV provider on behalf of its members.
- **Public Infrastructure**: Meredith is member of the Winnipesaukee River Basin Program (WRBP). The WRBP is a ten-member entity responsible for a regional sewer collection and treatment system. The other communities include Moultonborough, Center Harbor, Sanbornton, Laconia, Belmont, Tilton, Franklin, Northfield and Gilford.
- **Public Health**: Meredith participates as a member of the Lakes Region Partnership for Public Health (LRPPH). The LRPPH develops strategies to respond to the public health needs of our community. Partners include human service agencies, local and state government, police, fire, educators, businesses, etc.
- **Household Hazardous Waste**. Meredith together with 23 other Lakes Region communities participates in the annual Household Hazardous Waste Collection Day. This annual event is coordinated by the Lakes Region Planning Commission.
- **Municipal Finance.** Meredith is one of twenty-eight communities/school districts that jointly purchase fuel oil resulting in considerable savings to

taxpayers. Additionally, the town has pooled a portion of its long term debt with that of 49 other communities to refinance at a more favorable borrowing rate.

- **Land Conservation:** The Meredith Conservation Commission has partnered with the New Hampton Conservation Commission on two occasions to conserve shorefront along the Snake River located in New Hampton. These parcels afford significant protection to Meredith's public drinking water supply, Lake Waukewan.

Local Planning. Likewise, in a local planning context there are numerous challenges that by their very nature extend beyond the political boundaries of any one community. Communities do not exist in a vacuum. Community planning should consider issues where inter-municipal, sub-regional, regional and intra-regional cooperation serves as a means to advance locally determined interests. Local citizens are best prepared to plan for and meet the challenges facing their respective communities. Local citizens are most directly vested in issues and outcomes. However with local control comes substantial local responsibility. Local planning needs to: (1) reflect the collective interests of the community's, (2) respect the rights of private citizens, (3) reflect upon the longer range consequences of local action or inaction; and (4) consider the whole emphasizing the interrelatedness between plans, plan elements and implementation strategies.

Regional Planning. In New Hampshire, regional plans do not have the force of law. This too is part of our DNA in New Hampshire. The regional plan can and should be a resource available to communities as they develop and implement their own plans and coordinate with other willing communities seeking some level of cross-community horizontal relationship. The regional plan should not represent a challenge to local planning authority, but rather a means to contextualize and inform it. In this light, the regional plan can serve as an important resource (together with other resources) to aid our citizenry in addressing the challenges facing our communities. In doing so, meaningful progress can be made on important broader issues facing communities, the planning regions and the state.

How can regional plans/the regional planning process be structured so as to assist communities as they develop and implement their own plans and coordinate with one another? For purposes of this discussion, consider this analogy. We take a hot air balloon ride to photograph our landscape. At our highest elevation the view is broad with considerably context, but lacks detail. As we come down in elevation, the breadth of the view is less, but features and details become much more discernible. As the balloon descends closer to ground elevation, the breadth of the view becomes much more limited, however the detail within this view is sharp, focused and very informative. No one view of the landscape is more important than the other. Together the photographs taken at the three elevations are distinctly different yet afford a continuum of perspective that is transitory and related. As we describe challenges and strategies in the regional plan, we need to provide perspective from two distinctly different elevations. First, the descriptions and strategies should be of sufficient breadth (higher elevation) to effectively convey the regional significance, and in some instances intra-regional significance which in turn will contribute to discussion of vertical relationships of interest to statewide policy-makers. Secondly, and equally important if not more important, the descriptions and strategies should have sufficient depth (lower elevation) to effectively convey opportunities for municipal, inter-municipal or sub-regional consideration.

Participation. Everyone has the right to opinion, expression and ideological belief. The planning process, however messy must provide meaningful opportunities for constructive engagement with our citizenry, the intended beneficiaries of our plans and plan implementation. This can lead to a multiplicity of positions that can become difficult to reconcile into a cohesive plan. No one said planning is easy. Identifying shared values, such as the importance of local control over land use matters is foundational. To do otherwise would result in a plan lacking credibility and utility.

Regards,

John C. Edgar, AICP
Community Development Director
Town of Meredith

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APPENDIX B

Scenario Planning

Scenario Planning is a planning exercise that provides information to inform the Lakes Region Plan. The LRPC completed two scenario planning exercises:

- Advanced Manufacturing and Entrepreneurship;
- Community VIZ Build out

Advanced Manufacturing and Entrepreneurship: This impact analysis of promoting *Advanced Manufacturing* employment and *Entrepreneurship* in the Lakes Region was conducted using the NH Economic and Labor Market Information Bureau's New Hampshire Econometric Model – a REMI Policy Insight product. The Lakes Region Planning Commission is interested in promoting economic opportunity through a vibrant economy and high quality jobs. LRPC is interested in qualitative growth and sustainable development. A scenario of an aging population combined with slow population growth could lead to a shortage of talent in manufacturing. In addition, slow population growth could decrease the number of young professionals in the region, which are usually viewed as the prime demographic group for creating new entrepreneurial businesses. Derived from this overall slow population growth are the following two concerns for which scenarios were developed:

- Attracting skilled workers in *Advanced Manufacturing* to support the manufacturing base in Laconia, Meredith, and Bristol.
- Attracting more entrepreneurs

The first scenario was built upon an initiative in the Lakes Region to facilitate the training and hiring of skilled workers in *Advanced Manufacturing*. Lakes Region Community College and the Huot Technical Center (part of Laconia High School) are currently offering educational degree programs related to *Advanced Manufacturing*. A leading manufacturing employer in the region has indicated that the company will employ any qualified persons that complete such a program.

The second scenario is an attempt to estimate the economic impact of attracting more entrepreneurs to the region. Attracting an additional 25 entrepreneurs to the region over the next five years was set as a reasonable goal.

Results: Impact from promoting job creation in Advanced Manufacturing

- In 2014, a total of 38 direct, indirect and induced jobs would be created in Belknap County. Additionally, 1 job would be created in Carroll County.

- By 2018, at full implementation of the *Advanced Manufacturing* training and hiring scenario, total impact on jobs will have increased to 453 direct, indirect and induced jobs for the entire region. (The combined results for Belknap and Carroll counties). The jobs are mostly replacement jobs along with some new ones.

- By 2023, five years after the full implementation of the scenario, total job creation will reach 463 jobs above the employment baseline in the region. (The combined results for Belknap and Carroll counties).

Results: Impact from promoting entrepreneurship in the region:

- In 2014, a total of 28 direct, indirect and induced jobs would be created in Belknap County. There would be a minimal impact on Carroll County.
- By 2018, at full implementation of the increased entrepreneurship scenario, total job impact would be 138 direct, indirect and induced jobs.
- By 2023, five years after the full implementation of the scenario, total impact on jobs has declined to 125 jobs above baseline in the region. This indicates that the secondary job impact of entrepreneurship declines over time. Based on the declining impact, a conclusion may be drawn that entrepreneurship needs to be nurtured on an ongoing basis.
- By 2018, the distribution of the secondary jobs created would be as follows: Construction would create 14 jobs; Retail trade would create 6 jobs; and *Administrative and waste management service* as well as *Health care and social assistance* each would create 3 jobs. State and local government would create 8 jobs

Summary:

The two scenarios create very different results. This is partly due to the different size of the employment base: 220 *Advanced Manufacturing* jobs versus the 100 jobs created by increased entrepreneurship.

- In the *Advanced Manufacturing* scenario, GDP continued to grow throughout the entire simulation period, versus the *Increased Entrepreneurship* scenario, where the additional GDP value started to decline as the employment was stabilized.
- The job multiplier of an Advanced Manufacturing job was between 1.9 and 2.1 jobs, whereas the job multiplier of a job created by increased entrepreneurship was 1.4.
- The total economic activity due to the hiring of 220 *Advanced Manufacturing* workers will account for 1.7 percent of the Belknap County's GDP whereas total economic activity due to an increase in entrepreneurship (25 additional entrepreneurs creating a total of 100 new jobs) in the region will account for only 0.2 percent of the county's GDP.
- An economic development strategy involving goals for multiple avenues is important due to the need for diversification of the regional economy. There are risks associated with both strategies; mergers and acquisitions of the larger corporations can lead to plant closure and displacement of manufacturing employment. Manufacturing employment in the Lakes Region Planning Commission dropped 27.4 percent from 2005 to 2012. However, if the region is known for highly skilled workers in a specific industry cluster, the likelihood that other highly specialized manufacturers will relocate to the area is greater.

Community VIZ build out: Scenario planning provides a better understanding of how current land use policies and practices may impact future conditions. Build-out analysis is a method of scenario planning utilized by planners to help inform decisions regarding land use. In Build-out analysis, growth is projected based upon existing zoning regulations by calculating the number of buildings, dwelling units, commercial square footage or other types of development that could be built if the study area were to be developed to the full extent allowed by zoning. While build-out analysis results are hypothetical, they provide meaningful insight about the effects of zoning over time and are an exploratory tool for community leaders concerned about the future of New Hampshire's Lakes Region.

The build-out analysis process was facilitated using CommunityViz software. CommunityViz is supplementary software for ArcGIS and can be used to perform various tasks related to land use analysis and projection of growth and development. The software performs build-out calculations based upon dimensional values, constraints, whether mixed land uses are allowed, the number of dwelling units per building, minimum building separation distance, and an efficiency factor (meaning the completeness of build-out). The software is designed principally for use at the community level. Since this analysis was conducted at a regional scale, it was necessary to create a limited set of hypothetical zoning districts.

Based on current zoning practices, approximately one third of land in the Lakes Region is considered to be built out. Since slow population growth is projected for the next 25 years, at this time, this is no need for consideration of any significant zoning changes.

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Economic Opportunity, Environmental Quality

Lakes Region Plan 2015 - 2020

Vision

LAKES REGION PLANNING COMMISSION
103 Main Street • Humiston Building
Meredith, NH 03253
603-279-8171 • www.lakesrpc.org

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Vision

INTRODUCTION

An essential component of the Lakes Region Plan is the preparation of a future Vision for the region. For the State Development Plan, the New Hampshire legislature defines the vision section as: "An overall vision section that serves as the direction for the other sections of the plan. This section shall contain a set of statements, which articulates the desires of the public relative to the future. It shall contain a set of guiding principles and priorities to implement that vision, with special emphasis on maximizing the smart growth principles in RSA 9-B."

The vision section will be the primary theme of how the region should develop and will represent the Lakes Region Planning Commission's overall image for the region in consideration of the livability principles and individual plan components. The vision section will identify what the regional plan is trying to achieve such as the preservation of the environment and natural resources, increased economic opportunity, greater opportunities for safe and affordable housing, a region where all residents can live in a peaceful, sustainable future. The Lakes Region vision is unique and builds upon local values, existing visions from community master plans, regional outreach and public involvement during the preparation of the plan.

Throughout its 45-year history, the Planning Commission has prepared goals and objectives, mission statements, and visions of the future. Recent examples may be found in the 2006 Lakes Region Regional Goals and Objectives (attached) and the Lakes Region Comprehensive Economic Development Strategy completed in 2013.

Using the considerable information and data compiled during the initial phases of this Lakes Region Plan, the following represents an updated vision for the future of the Lakes Region:

VISION FOR THE LAKES REGION

A sense of community and sense of place

> Recognizing the critical importance of maintaining and nurturing our natural environment and diverse cultural heritage, the Lakes Region Community will strive to improve the quality of life of its cities and towns through the increased capacity and prosperity of its businesses, civic, social, and education institutions, and its citizens. Respect, communication, cooperation and wise stewardship of the region's splendid natural resources are guiding principles.

The Lakes Region exhibits a strong sense of community and sense of place, which the 28 towns and two cities embrace and desire to maintain. The communities appreciate and recognize the benefits of regional collaboration, coordination, and cooperation. In order to strengthen the sense of community and sense of place, the vision for the Lakes Region includes:

- Continued protection of the region's environment and natural resources as top priorities;
- Quality schools and education for all students;
- Energy efficiency and renewable energy choices at reasonable costs for all residents;
- Safe and affordable housing opportunities in all communities;
- A balanced transportation system that has good roads, bridges, reliable public transit, mobility options for seniors and special needs, and available bike paths;
- Employment opportunities supplemented by prospects for small businesses, entrepreneurship, and local agriculture;
- Communities that encourage historic preservation;
- Communities resilient from natural hazards and extreme weather conditions; and
- Support for the creative economy.

With relevant information and continued access to planning assistance, municipalities will have the tools to make informed local land use decisions. Strong vibrant communities and effective local decision-making will help the Lakes Region grow and prosper for many years.

VISION PROCESS

In preparing the future vision for the 2014 Lakes Region Plan, the Lakes Region Plan Advisory Committee considered information and data from the following sources.

- Comment cards from the listening boxes;
- Vision statements from the 30 Lakes Region communities;
- Major Lakes Region Planning documents;
- Meeting with officials and interested citizens;
- UNH Survey Center --- statewide and regional survey;
- Community of Place meeting held on May 7, 2013 in Laconia;
- Community of Interest meetings;
- The NH Smart Growth principles as contained in NH RSA 9-B:2; and
- The NH Livability Principles in the context of the Lakes Region

The following is a summary of the information from each of those efforts.

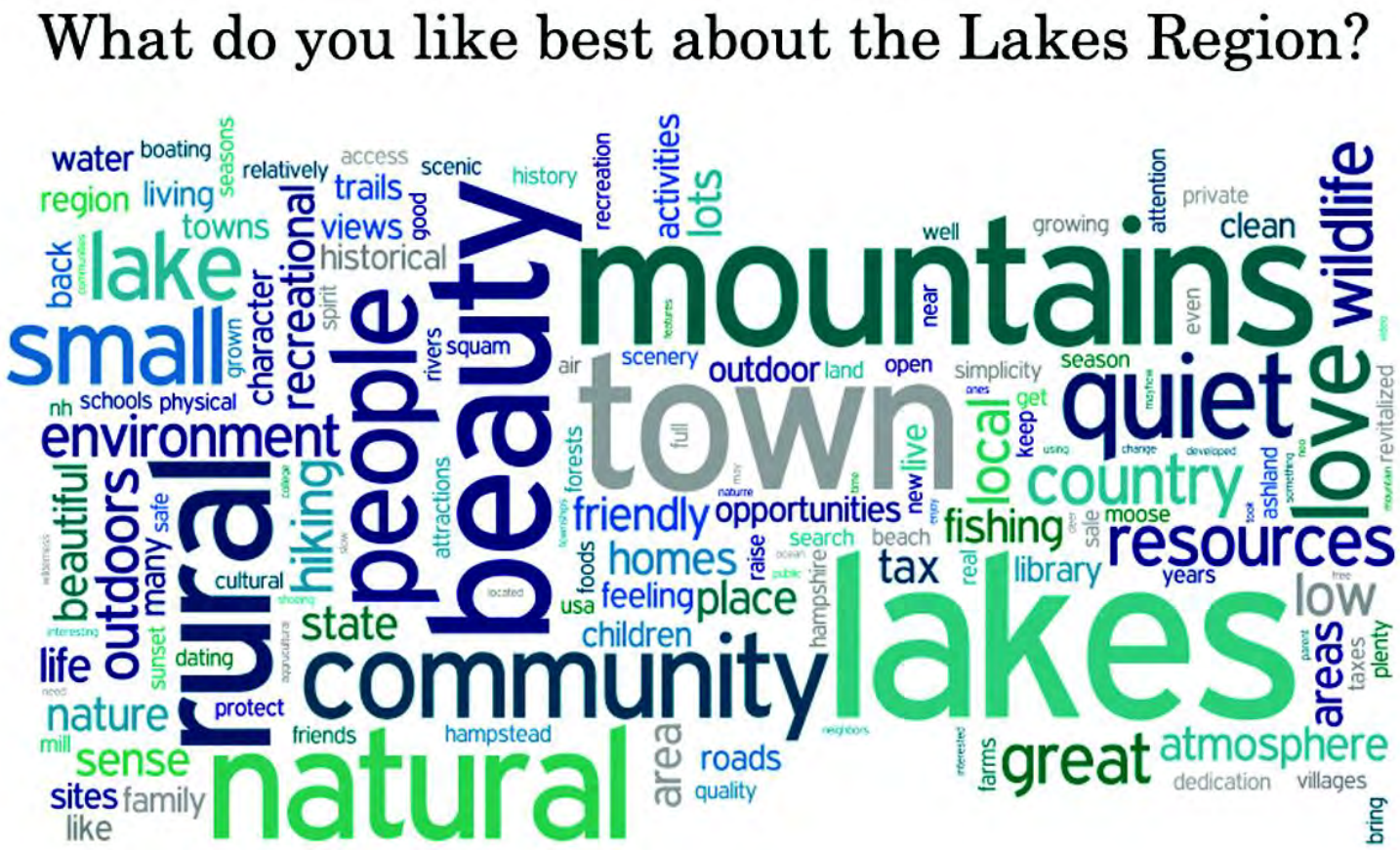
Comment cards from the listening boxes

Citizens could communicate their responses online via the Granite State Future website or by completing a comment card entitled Granite State Future Wants to Hear from You. During the late summer of 2012, LRPC placed listening boxes or suggestion boxes in the 30 municipalities that comprise the Lakes Region. LRPC placed Listening boxes at the Lakes

Region General Heathcare and Lakes Region Community College. The listening boxes remained in place through the early spring of 2013.

The two basic questions were:

What is best about this area?
What could make this area even better?



About 110 responses were received from Lakes Region residents and the following is a brief summary.

What is best about this area?

1. Natural Resources (lakes, mountains, beauty, clean water) — mentioned 29 times;
2. Small town /village (community, neighborhood) — mentioned 16 times;
3. Rural atmosphere — mentioned 16 times;
4. Outdoor recreational activities — mentioned 10 times;
5. People — mentioned 7 times;
6. Low taxes — mentioned 5 times;
7. Historical and cultural features — mentioned 5 times;
8. Quiet – mentioned 4 times

What could make this area even better?

1. More business (industry, employment) — mentioned 15 times;
2. More public recreation (trails, bike paths, beach areas) — mentioned 13 times;
3. More/better public transportation — mentioned 12 times;
4. Natural resources (protect environment, preserve rural areas) — mentioned 11 times
5. Lower property taxes — mentioned 5 times;
6. Less tourists — mentioned 3 times
7. Watershed management — mentioned 2 times;
8. Revitalization of downtown — mentioned 2 times.

Vision statements from the 30 Lakes Region communities

Individual local Master Plans within the region are less than 10 years old. Those plans completed prior to 2008 place an emphasis on growth management. Most of the 30 Master Plans contain a reference to "protecting or maintaining the rural character" of the community. Other common themes for local Master Plans include "conservation of natural resources," "encourage of economic development" and "protection of the town's historical assets." In reviewing the vision statements from the 30 municipalities, the following two are typical of a thoughtful vision statement.

Andover:

The Andover Planning Board developed eight guiding principles for the Vision statement. They are:
1) Maintain Andover's small town rural character;
2) Encourage commercial activity that builds on the regional recreation and tourism economy;
3) Create specific zones where small-scale light industry and commercial activities are allowed and encouraged;
4) Preserve views, especially along major highways;
5) Conserve natural resources – farm and forest lands, water resources, and wildlife habitat;
6) Provide choices in housing types;
7) Preserve Andover's historical places and assets; coordinate with Proctor Academy on our respective plans for the future;
8) Develop community infrastructure.

Northfield:

Strong Community Identity: Northfield will remain a close-knit, rural community, which puts people first.
Preservation of Rural Character: Northfield will continue to preserve the rural character that people cherish so much.
Preservation of Natural Resources: Northfield will be a place where Town residents and the natural environment co-exist.
Viable Village Area: The village area will represent an historic district for the town.
Commercial and Industrial Opportunities: Commercial and industrial opportunities will expand in the future, providing new levels of economic vitality.
Fair, Realistic and Affordable Community Facilities: The town of Northfield will remain a safe place to live and visit, with an excellent police department and fire department.
Safe and Integrated Transportation System: Automobile transportation will remain the dominant mode of travel. Discussion of pedestrians, bicyclists and transit.
Managed Growth and Development: Develop and implement a long-term Growth Management Ordinance.

Major Lakes Region planning documents

The LRPC reviewed recent major regional planning documents in transportation, economic development, water quality and others with particular attention as to what the document stated regarding vision, mission statement, goals/objectives/strategies, recommendations and action steps. Not all of the planning documents included these components. These planning documents are another piece of information that helps shape the regional vision statement. The following are vision statements that appeared in major planning documents.

(Transportation) Mission statement:
"To provide an integrated, all-mode transportation system in the Lakes Region which offers efficient, effective and safe movement of people and goods, and provides mode choice wherever possible while enhancing and preserving the character and livability of the neighborhoods and the natural, socio/economic, and historical environments where transportation facilities are located."

The 2013 CEDS Vision Statement:
"Recognizing the critical importance of maintaining and nurturing our natural environment and diverse cultural heritage, the Lakes Region Community will strive to improve the quality of life of its cities and towns through the increased capacity and prosperity of its businesses, civic, social, and education institutions, and its citizens. All our efforts will be characterized by respect, communication, cooperation and integration with others and will exhibit stewardship toward our magnificent natural resources."

Winnipesaukee Gateway (Lake Winnipesaukee Sub-Watershed Management Plan) project: Shared Goal: Lake Winnipesaukee is a shared resource. Our communities share the benefits of being located on "The Lake". We share the risks associated with degradation of this resource. We also share the responsibility of effective watershed stewardship, essential to the successful long-term health of Lake Winnipesaukee.

Outreach effort with local organizations, officials and interested citizens

Since July 2012, the LRPC staff have participated in multicultural events, meetings with seniors and business organizations and conducted a well-publicized and well-attended open house on March 7, 2013. Many individuals with whom the Commission communicated expressed interest in economic development, maintaining the rural character of their community and the preservation and enhancement of the region's natural resources. A small minority attended and expressed concern with the role of the federal government in the regional planning effort, expressing an opinion that a loss of local control over local land use decisions would occur. Consistent with state law (NH RSA 36) a regional plan is only an advisory document, and local control regarding land use decisions in New Hampshire will remain intact.

UNH Survey Center --- statewide and regional survey

At the request of the nine Regional Planning Commissions in order to better inform planning recommendations as part of the Granite State Future program, the University of New Hampshire Survey Center conducted a scientific telephone poll of 2,935 New Hampshire adult residents regarding their thoughts on housing, transportation, economic development, broadband and other related topics. The survey occurred between May 9, 2013 and July 21, 2013. The response rate was 33% and the margin of sampling error is +/- 2.2%. In addition, the Central NH Planning Commission and the Lakes Region Planning Commission jointly funded a more detailed survey that includes respondents from both of those regions. The key findings from the statewide and joint surveys are as follows:

Key statewide findings:

- Residents are largely split between wanting a smaller house that is close to services and wanting a larger house that is farther away from services.
- Residents view maintaining our bridges and highways to be the most important priority for transportation funding.

- Residents view quality schools as the most important thing to have in their community.

- 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 are largely in favor of all the proposed energy efficiency projects, except for the idea of having public charging stations made for electric vehicles.

- Most residents (87%) think local governments should at least be somewhat involved in developing these sorts of policies.

- Residents believe that environmental protection should be the top priority for investing dollars, while a majority believes that all environmental protection measures mentioned should be high priorities for policymakers.

- Nine in ten NH residents (91%) have internet access at home, and most of them (92%) consider their internet access adequate for their uses. Almost as many (85%) would not be willing to pay any additional money in exchange for faster internet speeds.

Key regional findings:

- Residents believe that environmental protection and natural resource protection should be the top priority for investing public dollars, and a majority believes that all environmental protection measures mentioned should be high priorities for policymakers.

- Responses from residents of the Central and Lakes Region were largely similar to those of statewide residents. The big differences involved what type of neighborhood residents live in (more Central and Lakes residents live in rural locations away from the town center) and why they have their current internet provider (more Central and Lakes residents say it is their only option available).

- Residents view energy efficiency and energy choices as the second most important priority for investing public dollars. Residents are largely in favor of all the proposed energy efficiency and renewable energy projects, except for the idea of having public charging stations made for electric vehicles.

- 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 say that the top activity that their community should actively encourage is promoting local agriculture (93%). Majorities want to encourage many other

activities as well, including protecting historic buildings and neighborhoods (90%) and expanding or promoting current businesses (84%).

- Residents view quality schools as the most important thing to have in their community (93%). Other important aspects of a community include having farms, farm stands and forestry (88%), nearby job opportunities (85%), small businesses and retail stores (85%), and grocery stores (80%).

- Residents view maintaining bridges and highways to be the most important priority for transportation funding (77%). Residents were split on funding for other transportation initiatives, with a narrow majority favoring funding for senior and special needs transportation (53%), and the availability of bike paths (50%).

- The vast majority of residents (93%) have internet access at home, and almost all of them (91%) consider their internet access adequate for their uses. Almost as many (88%) would not be willing to pay any additional money in exchange for faster internet speeds.

Community of Place meeting on May 7, 2013 in Laconia

New Hampshire's nine regional planning commissions requested UNH Cooperative Extension and NH Listens to design and host an opportunity for the area community neighbors to meet and discuss and consider a critical question: How should the community and region plan for the future? What core considerations should be the basis of planning for a thriving future? The effort focused on identification of local assets, local needs, and ways to effectively use limited government resources. The work focused on the NH Livability Principles of traditional settlement patterns; housing choices; transportation choices; natural resources; community and economic vitality; climate change and energy efficiency.

Of the 12 Community of Place (CoP) meetings held throughout the state, the Lakes Region meeting in Laconia experienced the largest turnout with 113 persons. Since the CoP meeting in Laconia provided so much recent, rich and relevant information, LRPC includes a summary below.

a) State Populations

- The majority of groups (6/8) discussed the issue of migration from the State of New Hampshire. This conversation centered mostly on young people leaving the state, either for more affordable higher education or for job opportunities.

- Three out of eight groups also discussed the issue of a decline in school age children. Several groups (3/8) commented on an influx of immigrant and refugee populations.

- Almost all of the groups (7/8) spent time discussing the "graying" of New Hampshire as a state. As elderly populations increase, groups questioned where resources for aging populations would come from – in particular there was a concern

about healthcare, transportation, and care for the elderly. Several groups expressed concern about crime and drug and alcohol use in their communities.

b) Jobs and Economic Development

- The majority of groups (7/8) commented on the need for greater economic development and job opportunities. Several groups commented that in particular there was a lack of jobs for young people. Two groups suggested that the regional area focus on attracting manufacturing opportunities.

- Several groups commented on a lack of job opportunities and industry necessary to attract and keep individuals in the community. Some groups discussed the phenomenon of individuals who live in the community and work elsewhere, or individuals who work in the community but live elsewhere.

- Many groups recommended that the regional area focus on educational quality and affordability a means of creating future job opportunities.

- Several groups (3/8) commented on a lack of internet availability and issues exacerbated by a digital divide in communities.

- Several groups commented on the potential for tourism as a pathway of economic development, though it was made clear that a balance between industry and the regional area's local rural character was crucial.

- Three groups discussed tax issues – some claiming that the taxes were too high, some that the taxes were not high enough.

- Two groups expressed concern about regulation and restrictions from the government or local authorities.

- Several groups commented on the need for strategic planning of how land and community spaces would be used and zoned.

- Several groups commented on the need to create access to local resources without a car and to create town centers with various support systems.

- Several groups placed value on maintaining the regional area's rural character in the face of economic development.

- Several groups discussed the complexity of the issue of land conservation.

c) Housing and Transportation

- Housing availability and affordability was a widely discussed subject at the Lakes Region event. Five groups expressed concerns over a lack of affordable housing in

the regional area. Two groups commented on the high cost of renting housing. Three groups spent time discussing the pros and cons of subsidized housing such as Section 8 housing. Two groups discussed an increase in homeless populations.

- Two groups expressed a concern over a lack of walkability from residential areas to local businesses and resources.

- All of the groups spent time discussing transportation in the regional area. Four groups expressed concern that the current transportation structure was not affordable. Four groups expressed concern that the transportation was of poor quality and that individuals who could not access transportation faced further challenges such access to jobs and healthcare. Three groups felt that it was challenging to access non-automobile forms of transportation. Two groups talked about the need for a broader public transportation system that connected the regional area to other cities and towns in the state.

d) Environmental Issues

- Five groups discussed issues related to water quality. There issues ranged from septic systems to commercial extraction of water to infrastructural upgrades. One group felt that there were differences in water quality from town to town in the regional area.

- Five groups discussed the relationship between water such as lakes and ponds and tourism.

- Several groups discussed ways to support local agriculture. Two groups expressed concerns over keeping and maintaining clean forests.

- Three groups discussed issues related to climate change, though there was disagreement about the roots of this trend.

- The majority of groups (6/8) spent time discussing current and alternative forms of energy and fuel. There was a desire to have more strategic and extended conversations about steps for the future in relation to energy and fuel cost and conservation. Oil, wind power, and solar energy were all discussed, with a particular focus on wind power.

Community of Interest meetings

University of New Hampshire Cooperative Extension held 20 focus groups (two in Laconia) with "underrepresented populations" as part of the community engagement framework for the Granite State Future project. These are populations who share a common bond or interest and have not traditionally participated in community planning. UNH Cooperative Extension staff has a history of working with many of these underrepresented populations which include: low income, minority, immigrant, senior and youth populations along with veterans and young adults. Nine UNH Cooperative Extension staff worked throughout the

state to meet with these populations to ask about their experiences where they live, work, play and learn. Each population reported challenges with transportation options in the state. The meetings identified the need for jobs, housing cost and availability, access to social services and youth recreation as being areas of priority.

The following are top themes for the Community of Place and Community of Interest.

COMMUNITY OF PLACE	COMMUNITY OF INTEREST	COMBINED
Transportation	Transportation	Transportation
Housing	Housing	Housing
Jobs	Jobs	Jobs
Taxes	Access social services	Schools/Education
Aging Population	Youth recreation	Higher Education

The NH Smart Growth principles

NH RSA 9-B: 2 below is the state legislature official policy on smart growth principles.

In this chapter, "smart growth" means the control of haphazard and unplanned development and the use of land which results over time, in the inflation of the amount of land used per unit of human development, and of the degree of dispersal between such land areas. "Smart growth" also means the development and use of land in such a manner that its physical, visual, or audible consequences are appropriate to the traditional and historic New Hampshire landscape. Smart growth may include denser development of existing communities, encouragement of mixed uses in such communities, the protection of villages, and planning so as to create ease of movement within and among communities. Smart growth preserves the integrity of open space in agricultural, forested, and undeveloped areas.

The results of smart growth may include, but shall not be limited to:

I. Vibrant commercial activity within cities and towns.
II. Strong sense of community identity.
III. Adherence to traditional settlement patterns when sitting municipal and public buildings and services.
IV. Ample alternate transportation modes.
V. Uncongested roads.
VI. Decreased water and air pollution.
VII. Clean aquifer recharge areas.
VIII. Viable wildlife habitat.
IX. Attractive views of the landscape.
X. Preservation of historic village centers.

THE NH LIVABILITY PRINCIPLES IN THE CONTEXT OF THE LAKES REGION

Attachment A includes the NH Livability Principles

SUMMARY OF MAJOR THEMES

Having considered and reviewed the nine major sources of information identified above, the following are major themes for regional development.

Maintenance and enhancement of the region's rural character; we can call this the *region's sense of place and sense of community;*

Traditional development patterns with new growth located in the city core, downtown area, village center or village district;

Economic development efforts that wisely utilize the region's natural resources, human resources and educational resources;

Proper management of the region's natural resources through conservation practices;

Environmental protection activities and measures are a high priority;

Provision for a range of housing opportunities for persons of all income levels;

A balanced transportation system with an emphasis on a safe and efficient roadway system and an affordable public transit system;

A responsive educational system for elementary, secondary and post secondary educational opportunities; and

Recreational opportunities for youth.

NEW HAMPSHIRE LIVABILITY PRINCIPLES AND THE LAKES REGION

TRADITIONAL SETTLEMENT PATTERNS AND DEVELOPMENT

In the Lakes Region, there is a variety in the pattern of historic development. Residents appear to prefer the current type of development and desire that future development be located in the downtown area, village center or downtown core where the existing infrastructure is available to accommodate development.

HOUSING CHOICES

According to the Lakes Central UNH survey results, 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. At the Community of Place session, housing availability and affordability for both owners and renters was identified as a regional concern. While the single family home is the preferred housing choice of many, there is recognition of the need for affordable housing for town employees, school teachers, entry level professionals and service and retail workers. There is a need for housing opportunities for all.

TRANSPORTATION CHOICES

Seventy-seven percent (77%) of the UNH survey respondents identified maintenance of bridges and existing highways as the major priority and a little more 50% identified senior and special transportation needs and bike paths as a priority for funding. However, those attending the Community of Place meeting and completing a comment card identified public transportation as a high priority. At the Community of Place meeting in Laconia, four groups noted that transportation was of poor quality and that individuals who could not access transportation faced further challenges such as access to jobs and healthcare The Lakes Region should encourage a balanced transportation system with ample opportunities for walking, driving, biking, public transportation, carpooling, or taking a train or plane, while preserving the character and livability of villages, town centers and downtown areas.

NATURAL RESOURCE FUNCTIONS AND QUALITY

Of all the planning functions, a very large majority of residents believe that environmental protection, especially for drinking water quality and air quality and natural resource protection, especially agricultural lands should be the top priority for investing public dollars. A large majority believes that all environmental protection measures should be high priorities for policymakers. Protection and enhancement of the region's environmental characteristics and natural resources will remain the region's highest priority.

COMMUNITY AND ECONOMIC VITALITY

At the Community of Place meeting, a majority of groups (7/8) commented on the need for greater economic development and job opportunities. Several groups noted the lack of jobs for young people. Regarding the issue of community, residents consider quality schools as the most important element in their community (93%). Other important aspects of a

community include active farms, farm stands and forestry (88%), nearby job opportunities (85%), small businesses and retail stores (85%), and grocery stores (80%). These are the attributes that residents in the Lakes Region enjoy about their community.

The 2013 Comprehensive Economic Development Strategy (CEDS) includes the following vision statement which has relevance for the Lakes Region Plan: "Recognizing the critical importance of maintaining and nurturing our natural environment and diverse cultural heritage, the Lakes Region Community will strive to improve the quality of life of its cities and towns through the increased capacity and prosperity of its businesses, civic, social, and education institutions, and its citizens. All our efforts will be characterized by respect, communication, cooperation and integration with others and will exhibit stewardship toward our magnificent natural resources."

Climate Change and Energy Efficiency

Lakes Region communities view climate change through the lens of the increased frequency of natural hazards and extreme weather events along with activities designed to become more energy efficient and more energy independent. Lakes Region communities wish to become more resilient from natural hazards and more energy efficient.

Local Decision Making

Historically, state law provides local governments with the authority to make local land use decisions. There is no interest in changing or modifying that approach. Residents believe equity is found in the local decision making process and wish to be involved in their communities and value a regional approach to land-use planning for the future in areas such as transportation, environmental quality, economic development, housing and planning for natural and man made emergencies.

APPENDIX A

The New Hampshire Livability Principles and their Relevance to the Lakes Region

As part of the Lakes Region Plan, the Lakes Region Planning Commission (LRPC) will consider the New Hampshire Livability Principles, a set of concepts that provide a common set of organizing ideas and principles for all nine regional plans. The New Hampshire Livability Principles represent a theoretical merger of the NH Smart Growth Principles found in NH RSA 9-A, the HUD-EPA-DOT Federal Partnership Livability Principles, and the NH Municipal Master Plan, Regional Comprehensive Plan and State Development Plan required components. The Lakes Region Planning Commission has slightly modified the NH Livability Principles to fit the context of the Lakes Region. Each Livability Principle is to some degree linked with other principles and planning concepts. The LRPC will utilize the lens of a Livability Principle when viewing each regional plan component.

Traditional Settlement Patterns and Development Design

Strive to maintain the traditional New Hampshire landscape intact by focusing development in the city center, town centers and village areas, while leaving open and rural areas for agriculture, recreation, forestry and other suitable uses.

This principle is characterized by:

- Efficient Land Use
- Compact Design Principles
- Invest in Existing Community Centers
- Mixed Use
- Traditional and Historic Character
- Conserve Working Landscape
- Unique Community Character
- Central Place

Housing Choices

Persons and families of all income levels should have convenient and affordable housing choices. This includes a variety of housing options and ownership types that appeal to people at any stage of life. Affordable housing is an important element in the region's economic strategy. Housing choices allows for and creates opportunities such as:

- Affordable Housing Options Integrated Throughout Community
- Energy-efficient
- Location-efficient
- Mixed-Use/Integrated Design
- Transportation Connections & Options
- Adaptive reuse of historic structures

- Changing demographics (older population)
- Variety of housing options and ownership types
- Flexibility of design to accommodate different populations
- Housing located in a neighborhood

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 choice allows for and creates a range of opportunities such as:

- Safety
- Movement of Goods to support the economy (freight, rail, air, etc.)
- Transportation Options (Air, Auto, Bike, Bus, Freight, Rail, Transit, Walk)
- Connectivity – linkages between modes, options and road networks
- Walkability – connecting housing, economic activity, and cultural/social activity
- Efficiency (energy use, traffic flow, goods transport, etc.)
- Parking Options

Natural Resource Functions and Quality

Especially important for the Lakes Region, the natural resources and beautiful natural landscape of the region should be preserved and enhanced for its beauty and overall economic contributions. Such a policy adds value to the municipalities and the existing man-made development. Natural Resource Functions and Quality considers features such as:

- Agricultural Resources and Industry
- Habitats
- Conserve and/or Protect Key Natural Resource Areas
- Working Landscape Maintained
- Maintain Natural Hydrology
- Water Quality & Quantity
- Drinking Water – Provision & Quality
- Water Infrastructure
- Air Quality
- Archeological Resources
- Recreation

Community and Economic Vitality

This refers to the development of hard and soft infrastructure, including financial investment, to attract and retain economic opportunity that foster community growth and ensure the highest quality of life for residents of the Lakes Region. This principle poses questions how the LRPC can contribute to making the Lakes Region a great place in which to do business, raise a family, recreate, visit, and retire. Our neighborhoods and communities

offer opportunities for an excellent education, good health, cultural happenings, and social connections. The principle includes:

- Economic Development Opportunities
- Employment
- Cultural Opportunities
- Education – K-12, technical, university, and job training opportunities
- Community and Individual Health
- Access to healthy Food Options
- Personal and Communal Safety
- Social Connectivity and Capital

Climate Change and Energy Efficiency

This principle identifies opportunities to save energy and costs and reduce risks to our communities, businesses and citizens caused by natural hazards. In recent decades, the Lakes Region and New Hampshire have experienced an increase in extreme storms and weather conditions, especially flooding. The cost of fuel and other energy supplies have steadily risen. How can we reduce dependence on outside sources of energy, construct homes and buildings that are more efficient, and reduce impacts to our communities and infrastructure from extreme storms and flooding? The principle considers:

- Energy Conservation
- Adaptation – ability to plan our communities in ways that reduce risks from natural disasters
- Low Impact Development – mitigating future negative impacts
- Renewable Energy
- Green Building and Reuse of Existing Structures
- Resiliency – the ability overcome disasters and large storms with minimized impacts or costs

Common themes and considerations to all NH Livability Principles include:

- Creating opportunities for all citizens
- Ensuring all voices are heard and included
- Public Health and Safety
- Funding Alignment – commonalities equate to efficiency
  - Invest in existing community centers
  - Advancement of plan objectives
  - Align Federal, State and local funding
- Plan and Program Alignment
  - Coordination between Federal, State and local planning and program requirements
  - Further direction toward joint plan implementation to identify cost and program efficiencies.

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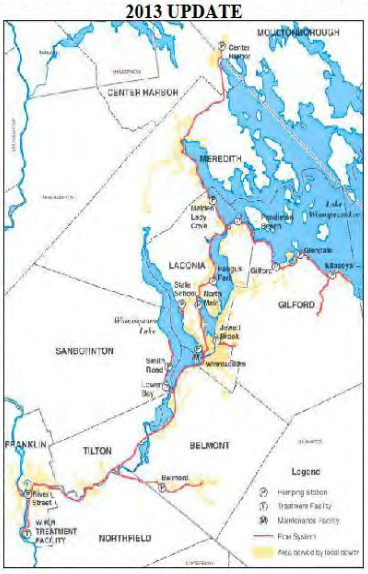
Economic Opportunity, Environmental Quality

Lakes Region Plan 2015 - 2020

Implementation Plan and Strategies

Bristol Square

WINNIPESAUKEE RIVER BASIN PROGRAM (WRBP)
CAPITAL IMPROVEMENTS PROGRAM (CIP)
2013 UPDATE



The Winnipesaukee River Basin Program (WRBP) is the state-owned sewer system, established in RSA 485-A:45-54, which serves portions of the New Hampshire Lakes Region member communities of Center Harbor, Moultonborough, Gilford, Meredith, Laconia, Belmont, Sanbornton, Northfield, Tilton, Franklin. The WRBP Advisory Board was established in RSA 485:A-52 for the purposes of reviewing matters of mutual concern to the member communities.

Andover Bike Path

WOW Trail, Laconia

Ashland Sidewalk

Lakes Region Community College - Solar

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Implementation Plan and Strategies

INTRODUCTION

The goal of the Lakes Region Plan is to provide for the orderly development of the Lakes Region, to be a resource and source of information for local governments as they prepare updates to the local Master Plan and to encourage local governments to understand the changing demographics. Due to significant population increases experienced beginning in the 1960s to the mid-2000s, there was concern and interest regarding planning and growth management. Beginning in the late 2000s, the regional situation has changed.

Due to changing demographics, the Lakes Region finds itself in a transitional stage. Over the 40 year period, 1970 to 2010, the population of the region increased by 52,274 people, or an average of 2.1 percent per annum. The region's population is projected to increase by 11,200 people over the 2010 to 2040 period, or an average of 0.33 percent per annum. This suggests a reduction in the rate of increase from 1,300 persons to about 370 persons per year. This slower growth in the region leads to a steady rise in the average age of the population; this trend will make New Hampshire one of three states with the oldest population in the nation followed by Maine and Vermont.

This important demographic trend has played a significant role in the preparation of the Lakes Region Plan. The Commission's outreach efforts in 2012 through 2013 led to the Plan's theme of *Economic Opportunity, Environmental Quality*. Outreach efforts have demonstrated that communities in the Lakes Region embrace a strong sense of community and sense of place. Protection of natural resources, especially water quality and water supply systems, and the protection of historic sites and scenic views are often identified as key strategies.

As noted, the theme of the plan is *Economic Opportunity, Environmental Quality*. The Lakes Region Plan embraces the work of the Regional Development Corporations, especially the Belknap Economic Development Council's efforts to train new workers in advanced manufacturing and the promotion of entrepreneurship.

PURPOSE OF THE IMPLEMENTATION CHAPTER

The purpose of the Implementation Chapter is to identify realistic projects that can help implement the vision for the future. The implementation chapter has two sections – planning projects and infrastructure projects. The Implementation and Strategies section contains action items for each of the chapters that comprise the Lakes Region Plan.

REGIONAL GOALS

The following are regional goals that appear in the matrix along with individual strategies, levels of actions, and partners.

Economic Development: Create suitable well-paying jobs, consistent with the stewardship of the region's natural resources.

Housing: Provide a range of housing opportunities for all persons.

Transportation: Provide an integrated, all-mode transportation system in the Lakes Region which offers efficient, effective and safe movement of people and provides mode choice whenever possible while enhancing and preserving the character and livability of the area.

Environmental (Natural Resources and Water Infrastructure): Recognize the role and value of the quality of the region's natural resources, lakes, water quality, rivers, agricultural and forest lands by utilizing management practices that represent the most economical and effective techniques to protect the resource through regional cooperation.

Natural Hazards and Climate Change: Promote planning efforts that reduce the likelihood of adverse impacts due to hazards such as flooding, erosion, severe winter weather events, high winds, fire, and health hazards.

Energy Efficiency and Green Building: Increase energy efficiency of existing and future buildings; increase education on energy efficiency issues and alternatives.

In order to be successful in the implementation phase, the LRPC needs to cooperate and partner with many organizations in the public, private and non-profit sectors. For project implementation, infrastructure projects include those transportation projects recommended by the LRPC's Technical Advisory Committee (TAC), wastewater treatment and water supply projects identified by the NH Department of Environmental Services and action items included in the Economic Development Plan.

There is an implementation matrix for planning projects for each chapter.

LAKES REGION PLAN IMPLEMENTATION MATRIX – SECTION 1 PLANNING PROJECTS

Economic Development – Goal: Create suitable well-paying jobs, consistent with the stewardship of the region's natural resources.

Strategy	Level of Action *	Potential Partners	Notes*
Workforce development – Encourage training in advanced manufacturing	• Region • State	LRCC,BEDC, NH DRED, NH Workforce Council	Economic Development Plan pg. 60: Advanced Manufacturing training to fill positions of retirees.
New Economy	• Region º Local	BEDC, NH DRED, Broadband, LRPC	Economic Development Plan pg. 61: Determine how technology impacts the economy.
Sustainability: Energy and Natural Environment – Encourage small scale renewable energy projects.	• Local • State	Municipalities, North Country RC&D, LRPC	Economic Development Plan pg. 61: NH OEP, NH PUC
Entrepreneurship – Promote new business startups; encourage entrepreneurs to locate in the region; use local retired talent	• Local • State	BEDC, GCEDC, WEDCO, NH DRED, SCORE	Economic Development Plan pg. 62: Collaboration.
Action Plan: Implement the CEDS by providing assistance to sponsors for project development. Examples – Northfield and Tilton. TA to local EDCs to develop projects and marketing efforts.	• Local • State	Municipalities, RDCs, NH DRED, LRPC	Economic Development Plan pg. 64 – 7: Potential funding sources are CDBG, EDA, and NH DOT.
Social Capital and Cultural Heritage	•Local •Private	Municipalities, non-profits, LRPC	Economic Development Plan pg. 61.
Creative Economy	•Local •State	BEDC, NH DRED, GCEDC, WEDCO, LRPC	Economic Development Plan pg. 62.
Improve Quality of Place	•Local •State •Private	Municipalities, HEAL, LRPHA, LRPC	Economic Development Plan pg. 63.
Technical Assistance – Assist municipalities with local Economic Development Chapters, Best Management Practices and other programs to encourage economic development		Municipalities, LRPC, RDCs	Economic Development Plan pg. 70-71.

Notes: This field can contain information on potential funding sources, fiscal impact (cost neutral), minimal investment, significant investment, and other relevant factors.

LAKES REGION PLAN IMPLEMENTATION MATRIX – SECTION 1 PLANNING PROJECTS			
Housing – Goal: Provide a range of housing opportunities for all persons.			
Strategy	**Level of Action ***	**Potential Partners**	**Notes***
Assist decision makers in understanding current and projected demographic trends	• Local • Region •State	LRPC, NH HFA	Housing Chapter pg. 50
Assist municipalities in addressing the requirements of the NH Workforce Housing law	• Local • Region	LRPC, NH HFA, LACLT, ELRHC	Housing Chapter pg. 50
Become knowledgeable on regional housing trends and needs	• Local • State	LRPC, LACLT, ELRHC, private developers	Housing Chapter pg. 50
Identify regional housing needs every five years	•Local •Region	NH OEP, NH HFA, municipalities	See RSA 36:47 II
Continue the annual Development Activity Report			Http://www.lakesrpc.org/documents/pdfs/DTR%20final%205-13-14.pdf
Monitor new housing construction			Housing Chapter pg. 50

Notes: This field can contain information on potential funding sources, fiscal impact (cost neutral), minimal investment, significant investment, and other relevant factors.

LAKES REGION PLAN IMPLEMENTATION MATRIX – SECTION 1 PLANNING PROJECTS

Transportation – Goal: To provide an integrated, all-mode transportation system in the Lakes Region that offers efficient, effective and safe movement of people and provides mode choice whenever possible while enhancing and preserving the character and livability of the area.

	Strategy	Level of Action *	Potential Partners	Notes*
	Project Development – Advocate for the priority projects in the 10 year plan; advocate for secondary regional priorities; identify and evaluate potential projects for inclusion in the Plan.	• Local • Region • State	Municipalities, TAC, NH DOT	Transportation Chapter pgs. 9 – 11
	Secondary and unnumbered state roads – Encourage NH DOT to allocate funding for these projects.	• Local • Region	Municipalities, TAC, NH DOT, NHARPC	Transportation Chapter pgs. 9 - 11
	Transportation Planning – participate in corridor studies such as the NH Rte. 16 Study	• Local • State	NH DOT, Municipalities	Transportation Chapter pgs. 15 – 17
	Public Transportation – Continue to assist the Regional Coordinating Councils as they plan and promote public transportation.		Municipalities, TAC, RCCs, NH DOT	
	Project Implementation			Transportation Chapter pgs. 40 - 42

Note: The LRPC Transportation Advisory Committee (TAC) is the responsible entity for this chapter of the Lakes Region Plan.

Notes: This field can contain information on potential funding sources, fiscal impact (cost neutral), minimal investment, significant investment, and other relevant factors.

LAKES REGION PLAN IMPLEMENTATION MATRIX – SECTION 1 PLANNING PROJECTS			
Environmental (Natural Resources and Water Infrastructure) – Goal: Recognize the role and value of the region's natural resources, lakes, water quality, rivers, agricultural and forest lands by utilizing management practices that represent the most economical and effective techniques to protect the resource through regional cooperation.			
Strategy	**Level of Action ***	**Potential Partners**	**Notes***
Natural Resources – Recognize that the natural resources provide the foundation for a comprehensive approach to land development.	• Local • Region • State	Local land use boards; private developers; state agencies	Environment pg. 1
Active role for LRPC – Assist with watershed planning efforts; promote an integrated watershed management approach; collect data and information; convene workshops; facilitate and coordinate programs; provide model ordinances; assist with grant preparation.	• Local • Region	Municipalities; watershed associations	Environment pg. 7.
Land conservation – Educate public and municipalities on SPNH Conservation plan; monitor trends; encourage municipalities to be aware of key parcels for future acquisition.	• Local • State	SPNHF, Land Trusts, Conservation Commissions, Municipalities	Environment pgs. 11, 23, 24.
Water infrastructure – Promote public awareness and education of the issues; support water quality monitoring.		Watershed Associations, Winnipesaukee Gateway	Environment pg. 40
Wastewater Treatment Facilities and Water systems – Develop cooperative working relationship with utilities.		Utilities, WRBP	Environment pg. 40
Watershed Planning – Facilitate discussions among watershed Associations			Environment pg. 7
Stormwater Management – Share information regarding innovative approaches to Storm Water Management			Environment pg. 38

Notes: This field can contain information on potential funding sources, fiscal impact (cost neutral), minimal investment, significant investment, and other relevant factors.

LAKES REGION PLAN IMPLEMENTATION MATRIX - SECTION 1 PLANNING PROJECTS			
Natural Hazards and Climate Change – Goal: Promote planning efforts that reduce the likelihood of adverse impacts due to hazards such as flooding, erosion, severe winter weather events, high winds, fire, and health hazards.			
Strategy	**Level of Action ***	**Potential Partners**	**Notes***
Local hazard mitigation plans – Continue to prepared and update Hazard Mitigation Plans (HMP) in cooperation with municipalities, NH DES, NHHS, FEMA, etc.	• Local • Region • State	Municipalities, NH DES, NHHS, FEMA, Cooperative Extension	Natural Hazards & Climate Change Chapter pgs. 19 – 21.
Stormwater runoff – Work with municipalities to reduce stormwater runoff	• Local • Region	Municipalities, LRPC, NH DES	Natural Hazards & Climate Change Chapter pgs. 19 – 21.
Infrastructure and utilities – Use preventative maintenance to reduce damage to infrastructure	• Local • State	Public Words Directors, NH DES	Natural Hazards & Climate Change Chapter pgs. 19 – 21.
Reduce carbon emission – Encourage retrofit of older buildings; encourage alternative transportation means such as public transportation, bicycle and walking	• Local • Private	Building owners	Natural Hazards & Climate Change Chapter pgs. 19 – 21.
Note: Much of the information in this Chapter is based on the Climate Change Assessment prepared by Dr. Cam Wake, UNH and local Hazard Mitigation Plans (HMPs).			

Notes: This field can contain information on potential funding sources, fiscal impact (cost neutral), minimal investment, significant investment, and other relevant factors.

LAKES REGION PLAN IMPLEMENTATION MATRIX - SECTION 1 PLANNING PROJECTS			
Energy Efficiency and Green Building – Goal: Increase energy efficiency of existing and future buildings; increase education on energy efficiency issues and alternatives.			
Strategy	**Level of Action ***	**Potential Partners**	**Notes***
Prepare a Comprehensive Regional Sustainability Plan and Energy Plan	• Local • Region • State	NH OEP, NH PUC	Energy Efficiency & Green Building Chapter pgs. 37 – 38.
Utilize smart growth and livability principles	• Local • Region	Municipalities, private developers	Energy Efficiency & Green Building Chapter pgs. 37 – 38.
Coordinate energy with other planning policies	• Local • State	NH OEP, NH PUC, municipalities	Energy Efficiency & Green Building Chapter pgs. 37 – 38.
Increase small scale local energy production	• Private • Local	NH OEP, NH PUC, municipalities	Energy Efficiency & Green Building Chapter pgs. 37 – 38.
Increase energy efficiency of existing and future buildings	• Private • Local	Private building owners, municipalities	Energy Efficiency & Green Building Chapter pgs. 37 – 38.
Increase the regional use and support of renewable energy	• Private • Local	NH OEP, NH PUC, municipalities, non-privates, private entities	Energy Efficiency & Green Building Chapter pgs. 37 – 38.
Encourage and support local energy committees	• Local • Region	Municipalities, non-profits	Energy Efficiency & Green Building Chapter pgs. 37 – 38.

Notes: This field can contain information on potential funding sources, fiscal impact (cost neutral), minimal investment, significant investment, and other relevant factors.

LAKES REGION PLAN IMPLEMENTATION MATRIX – SECTION 2 INFRASTRUCTURE PROJECTS				
Infrastructure Projects – Transportation, Wastewater, Water Supply and Stormwater.				
	Strategy	**Level of Action ***	**Potential Partners**	**Notes***
Transportation	Lakes Region Transportation Improvement Plan 2013	• State • Region • Local	Municipalities, NH DOT, US DOT	Pg. 11, 40-42LR Transportation Plan http://www.lakesrpc.org/GSF/Elements/LRP%20Transportation%2004%2007%2014.pdf
Wastewater	Lakes Region Environmental Plan	• State • Region • Local	Municipalities, Utilities, NH DES,	Attach I – Lakes Region Environmental Plan http://www.lakesrpc.org/GSF/Elements/Environmental%20Chapter_06232014.pdf
Water	Lakes Region Environmental Plan	• State • Region • Local	Municipalities, Utilities, NH DES,	NH DES source
Stormwater				Attach II- Lakes Region Environmental Plan http://www.lakesrpc.org/GSF/Elements/Environmental%20Chapter_06232014.pdf
Economic Development	Lakes Region Economic Development Plan	• State • Region • Local	Municipalities, local Economic Development Committees, funding partners	Pg. 64 – 69 Lakes Region Economic Development http://www.lakesrpc.org/GSF/Elements/LRP%20Econ%20Dev%20Chapter%2004%2007%2014.pdf

Notes: This field can contain information on potential funding sources, fiscal impact (cost neutral), minimal investment, significant investment, and other relevant factors.

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ACRONYMS

BEDC	Belknap Economic Development Council
CDBG	Community Development Block Grant
ED	Economic Development
EDA	Economic Development Administration
ELRHC	Eastern Lakes Region Housing Coalition
FEMA	Federal Emergency Management Agency
GCEDC	Grafton County Economic Development Council
HEAL	Healthy Eating, Active Living
HMP	Hazard Mitigation Plan
LACLT	Laconia Area Community Land Trust
LRCC	Lakes Region Community College
LRPC	Lakes Region Planning Commission
LRPPH	Lakes Region Partnership for Public Health
NHARPC	NH Association of Regional Planners
NH DES	NH Department of Environmental Services
NH DOT	NH Department of Transportation
NH DRED	NH Department of Resources & Economic Development
NHHFA	NH Housing Finance Authority
NH HHS	NH Health & Human Services
NH OEP	NH Office of Energy & Planning
NH PUC	NH Public Utilities Commission
RC&D	Resource Conservation & Development
RDC	Regional Development Councils
RSA	Revised Statutes Annotated
SCORE	Senior Core of Retired Executives
SPNHF	Society for the Protection of NH Forests
TAC	Transportation Advisory Committee
WEDCO	Wolfeboro Economic Development Council
WRBP	Winnipesaukee River Basin Program
US DOT	United States Department of Transportation

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Economic Opportunity, Environmental Quality

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Economic Development

I. Summary of Economic Development Conditions

A. National Trends

During the 2007–2009 period, the United States experienced its worst economic condition since the Great Depression of the 1930s. Economists refer to this recent period as the Great Recession as the U.S. economy contracted in 2007–2009 with a steep decline in retail sales, value of residential properties and the U.S. stock market along with a steep rise in unemployment, which topped out at 10.5 percent. Due to overleveraging in the residential market, unsecured loans and a freezing up of credit markets, the U.S. government took unprecedented actions to forestall an economic and financial collapse through the establishment of the Troubled Asset Relief Program (TARP), the bailout of the automobile industry and a $800 Billion economic recovery program (the Stimulus program) in early 2009. Since 2010, the U. S. Federal Reserve Bank has initiated a policy of buying $85 billion a month of government bonds and other long-term assets in order to maintain the economic recovery.

In late 2013 and into 2014, the U. S. economy showed signs of a slow recovery with a national unemployment rate of 7.4 percent in 2013 and the creation of approximately 160,000 new jobs every month for the last several months of 2013. By June of 2014, the national unemployment rate was seasonally adjusted at 6.1%. U.S. stock market has fully recovered from its low in 2009 and is experiencing a significant increase. Nationally, the U.S. housing market is improving. However, the types of new jobs created tend to be of a lower level and thus pay less. The gap in income equality has also increased. In the U.S., some regions are recovering faster than others. Overall, with the exception of Rhode Island, the six state New England region is doing better than other regions.

B. New Hampshire Trends

According to the Economic and Labor Market Information Bureau, NH Employment Security, New Hampshire's 2013 unemployment rate for 2013 was 5.3 percent, a decrease of 0.2 percentage point from 2012. The June 2014 seasonally adjusted rate was 4.4 percent. Nationally, the rate was 6.1 percent in June 2014.

The NH Center for Public Policy, a New Hampshire statewide think tank, reports that past economic engines such as consistent and strong population growth, increased productivity leading to a resilient economy and technological innovations that have fueled the state's economy may have run their course. Now, trends, such as out migration of the state's youth, aging of the population, decreased labor productivity, put a damper on the state's economy. *Measuring New Hampshire's Economic Health a Workforce Perspective*, prepared by the Economic and Labor Market Information Bureau, NH Employment Security provides the following valuable insights:

- While New Hampshire was impacted by the Great Recession, the state did fare better than the nation;
- Duration of the employment decline was shorter in New Hampshire than the nation as a whole;
- The state's annual 2012 unemployment rate of 5.5 percent ranked eight lowest among all the states and the District of Columbia;
- Labor force participation in New Hampshire remains high;
- Population growth is substantially slower than in the nation as a whole;
- The state's population is older than in nearly all other states;
- The largest share of the state's population is still of working age (25 to 64 years); and
- New Hampshire's population has a high level of educational attainment.

Through the middle of 2013, the economic recovery in New Hampshire is progressing, but for the state and nation, it has been a long, slow process. On a bright note, the manufacturing sector is expected to add employment and manufacturing is the third-largest employment sector in New Hampshire after retail trade and healthcare/social assistance.

C. Lakes Region Trends

The 2013 unemployment rate for the Lakes Region was 5.1 percent. In June 2014, the rate was 4.0 percent not seasonally adjusted. To a large degree, the economic trends in the Lakes Region parallel those of the state, with some deviations. During the 2000 to 2010 period, the population growth was less than the state's and the percent of persons over 65 years was higher. 17.5 percent of the Lakes Region population is over 65 years and 13.0 percent of New Hampshire's is over 65 years. Generally, the unemployment rate in the Lakes Region follows New Hampshire, about 5.0 percent. The following are trends found in the Cluster Analysis, which is contained in this report.

- There was a significant loss of private sector jobs during 2006 to 2011;
- A 9.2 percent loss of manufacturing jobs for the Lakes Region during the period; the large job loss numbers resulted from the retirement of low-skilled jobs in manufacturing; now a high level of skills is required and all manufacturers are presently constrained in their growth by the lack of a high skill manufacturing workforce; a 5.7 percent loss of manufacturing jobs in the U.S.;
- Management forecasts — will be difficult to replace retiring workers;
- Lakes Region Community College provides high skill manufacturing training and training on "soft skills";
- A perception that the Lakes Region is dependent on tourism and 2nd homes; however, the region still has a strong manufacturing base;
- The professional technical sector, including accounting, consulting, computer service, et cetera is growing.

From anecdotal information, it appears the 2014 summer tourism season is very positive with a healthy level of visitors. Also, from discussions with a few manufacturers, manufacturing orders are increasing, which could lead to an increase in employment.

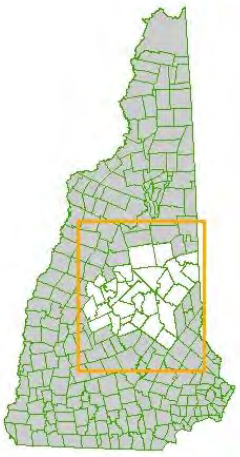
II. Regional Factors Influencing Economic Development

A. Natural and Environmental Capital

The Lakes Region is highly prized as a place of great natural beauty. The abundant mountains, lakes, and pastoral settings provide residents and visitors with incomparable views and recreational opportunities. As the name implies, the region is composed of a system of inter-connected waterways. Of the total 818,000 acres composing the Lakes Region, 15 percent of the region is covered by surface waters and wetlands (LRPC, 2012). Map 1 illustrates the land use for the Lakes Region. These waterways, natural resources, and corresponding quality of life have been noted as the most important benefit to regional businesses. The following environmental profile gives an overview of the region's highlights.

Geography

Situated between the White Mountains to the north and the more densely populated Merrimack Valley to the south, the Lakes Region serves as an easily accessible destination with an ideal mix of pristine natural resources and modern amenities. While the region's lakes and rivers remain the most sought after resource, the mountains, forests and wetlands of the area serve as not only a aesthetic and recreational resource, they also provide important ecosystem services such as habitat for native species and filtration of rainfall and runoff.



Lake Winnipesaukee, New Hampshire's largest lake, has a total surface area of 44,600 acres. Maximum and mean depths are 180 and 43 feet, respectively. The lake is natural, but is raised by damming to an elevation of 504 feet. Eighty-three relatively small tributaries draining a watershed of 215,133 acres provide the main water source for the lake.

There are 240 miles of shoreline (this includes the shoreline length of islands over five acres in area) and about 250 islands (the total number of islands is frequently debated, depending on definition of "island"). The shores and many of the islands are well developed with numerous dwellings, from cottages to mansions, but some areas between the developments remain forested

The table below list key features of other important water bodies in the region:

Table 2.1 Major Lakes of the Lakes Region

Lake	Area (acres)	Maximum Depth (feet)	Communities
Lake Winnipesaukee	44,600	180	Alton, Center Harbor, Gilford, Laconia, Meredith, Moultonborough, Tuftonboro, Wolfeboro
Squam Lake	6,700	99	Holderness, Sandwich, Center Harbor
Lake Winnisquam	4,300	150	Belmont, Laconia, Meredith, Sanbornton, Tilton
Newfound Lake	4,100	182	Alexandria, Bridgewater, Bristol, Hebron
Ossipee Lake	3,100	50	Freedom, Ossipee
Lake Wentworth	3,000	82	Wolfeboro
Lake Waukewan	900	70	Meredith, New Hampton

While not nearly as mountainous as other parts of the State, the Lakes Region has many peaks and sightseers enjoy breathtaking views at all times of year, but particularly in the fall, during foliage season. Table 1.2 lists the ten highest peaks in the Lakes Region:

Table 2.2 Highest Peaks in the Lakes Region

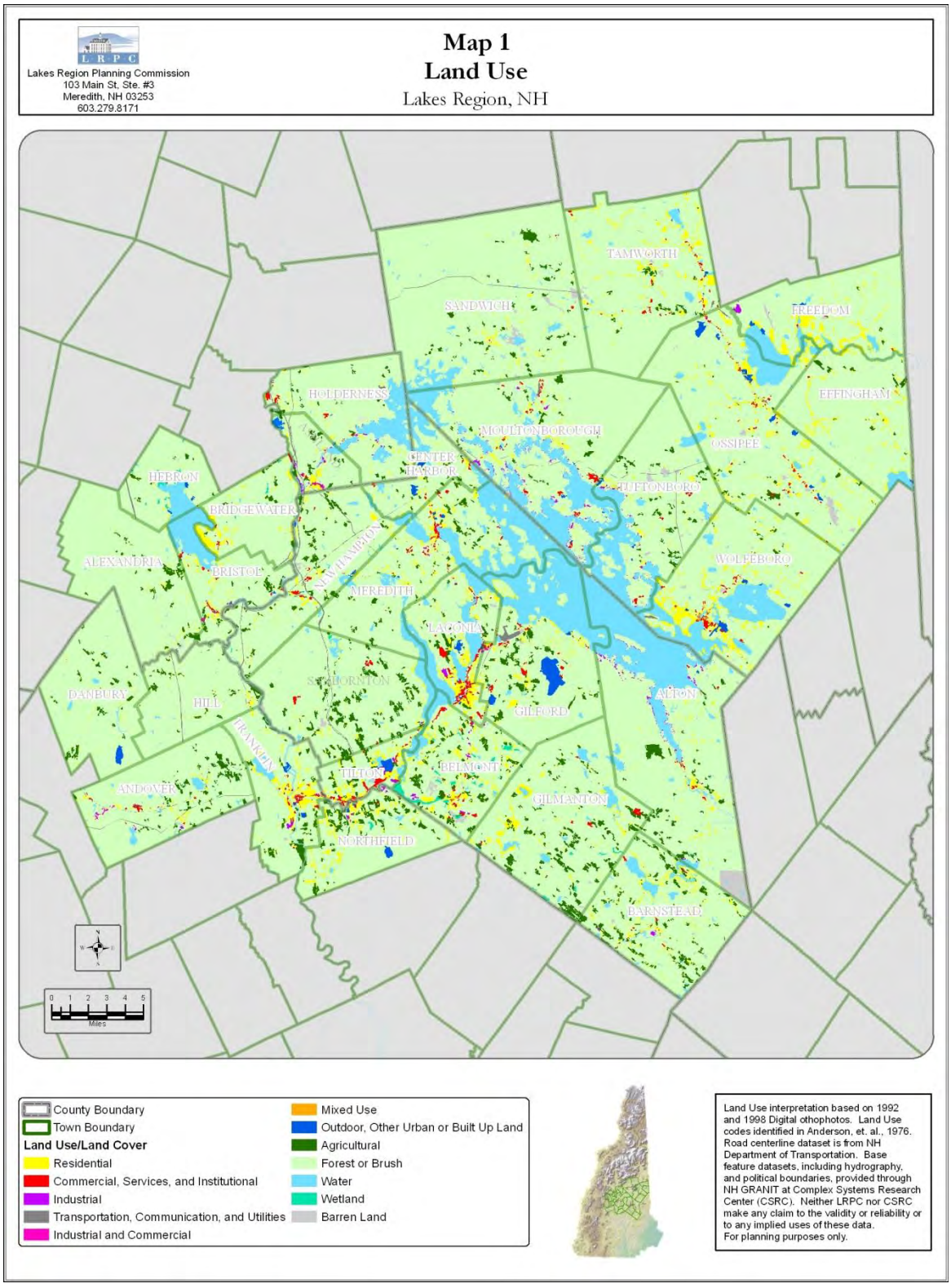
Mountain	Community	Elevation
Mt. Shaw	Tuftonboro	2,990'
Black Snoot	Tuftonboro	2,803'
Faraway Mountain	Moultonborough	2,782'
Black Mountain	Sandwich	2,732'
Mt. Israel	Sandwich	2,630'
Mt. Roberts	Moultonborough	2,582'
Mt. Flagg	Tuftonboro	2,390'
Belknap Mountain	Gilford	2,382'
Gunstock Mountain	Gilford	2,245'
Mt. Squam	Sandwich	2,223'

Agricultural Land

Historically, agriculture and forestry were widespread throughout the Lakes Region. As development pressures increased, many farms were subdivided. These pressures are still being felt throughout the region. Today, approximately 3.73 percent of the region is used as agricultural land (LRPC, 2012). There are efforts to conserve these fields, meadows and woods with various land trust tools like conservation easements or lease of development rights, thereby protecting the agricultural way of life and beautiful landscapes unique to the Lakes Region.

Although soils are not consistently fertile (only two percent of New Hampshire soils are classified as prime agricultural soils), certain areas are very productive for agriculture or forestry (see Map 2). The region has a wide range of agricultural businesses — both commercial and wholesale. Businesses include everything from large-scale farm product operations, farmers markets, pick-your-own fruits, dairies, Christmas trees, maple syrup, livestock operations, and horticultural growers to niche markets, agricultural tourism, and retail. There are also community gardens where people grow their own and surplus is given to food pantries.

Farming opportunities in the Lakes Region are diverse and expanding due to the farmers' resourcefulness and adaptability to new opportunities. Farms in niche markets, such as organic foods, are gaining in popularity. There are currently farmers markets and farm stands in nearly every town in the region, whereas in the 1990s there were about twelve in the entire state. In fact, some communities have now begun holding indoor markets in the winter as a way of providing year-round opportunities for local farmers to market to their neighbors. Several larger farms in the region are now pre-selling their produce to customers who pick them up each week. The New Hampshire Department of Agriculture believes this may be due, in part, to consumers looking for more local food sources amid fuel increases, national food recalls, and a focus on more sustainable living.


Lakes Region Planning Commission
103 Main St. Ste. #3
Meredith, NH 03253
603.279.8171
Map 1
Land Use
Lakes Region, NH
TAMWORTH
SANDWICH
FREEDOM
HOLDERNESS
EFFINGHAM
MOULTONBOROUGH
OSSIPEE
CENTER HARBOR
HEBRON
TUFTONBORO
BRIDGEWATER
NEW HAMPTON
ALEXANDRIA
BRISTOL
WOLFEBORO
MEREDITH
LACONIA
SANBORNTON
DANBURY
HILL
ALTON
GILFORD
FRANKLIN
TILTON
BELMONT
ANDOVER
GILMANTON
NORTHFIELD
BARNSTEAD
0 1 2 3 4 5
Miles
County Boundary
Town Boundary
Land Use/Land Cover
Residential
Commercial, Services, and Institutional
Industrial
Transportation, Communication, and Utilities
Industrial and Commercial
Mixed Use
Outdoor, Other Urban or Built Up Land
Agricultural
Forest or Brush
Water
Wetland
Barren Land
Land Use interpretation based on 1992 and 1998 Digital othophotos. Land Use codes identified in Anderson, et. al., 1976. Road centerline dataset is from NH Department of Transportation. Base feature datasets, including hydrography, and political boundaries, provided through NH GRANIT at Complex Systems Research Center (CSRC). Neither LRPC nor CSRC make any claim to the validity or reliability or to any implied uses of these data.
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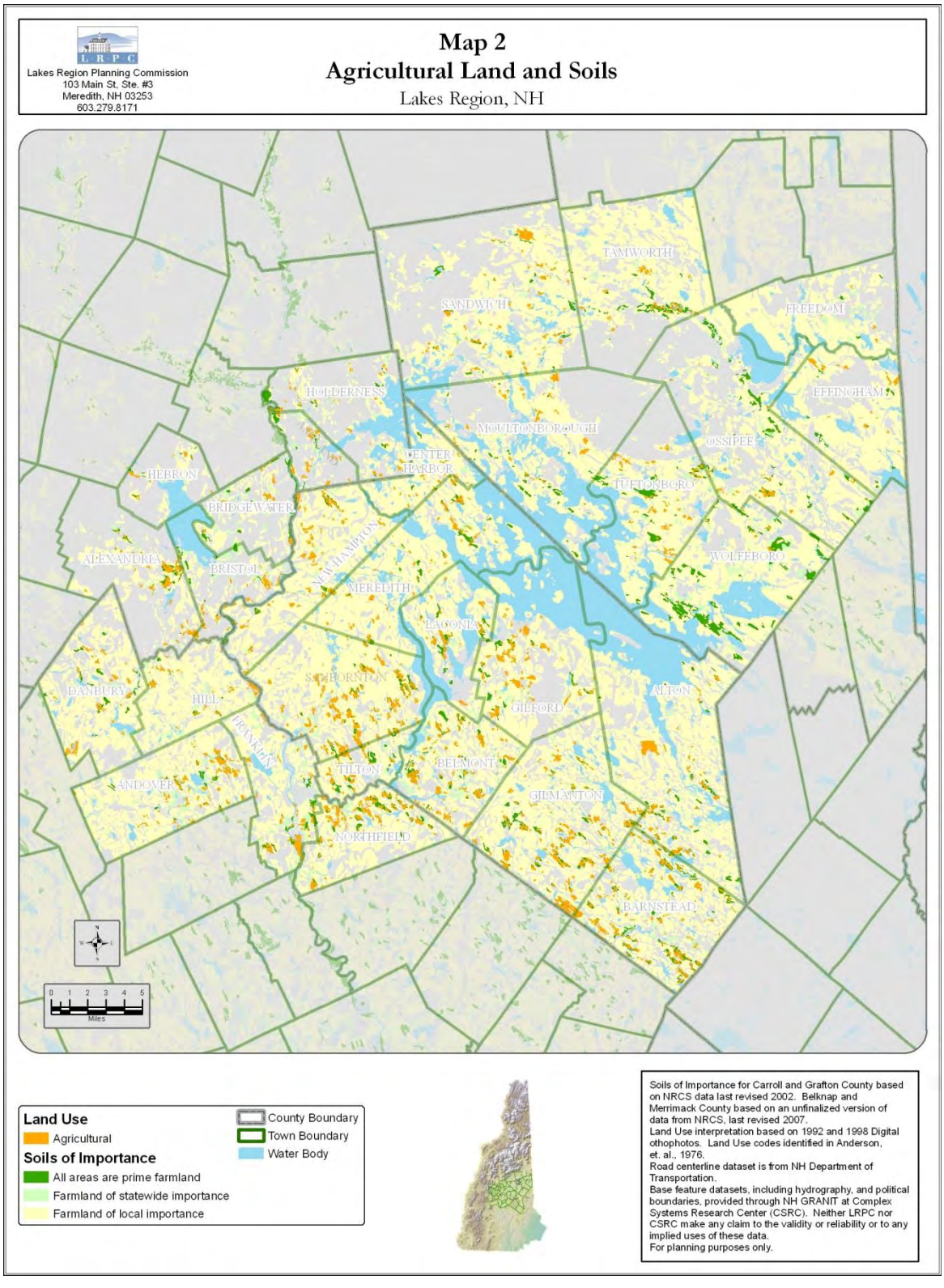

Lakes Region Planning Commission
103 Main St. Ste. #3
Meredith, NH 03253
603.279.8171
Map 2
Agricultural Land and Soils
Lakes Region, NH
TAMWORTH
SANDWICH
FREEDOM
HOLDERNESS
EFFINGHAM
MOULTONBOROUGH
OSSIPEE
CENTER HARBOR
HEBRON
TUFTONBORO
BRIDGEWATER
NEW HAMPTON
ALEXANDRIA
BRISTOL
WOLFEBORO
MEREDITH
LACONIA
DANBURY
HILL
SANBORNTON
ALTON
GILFORD
FRANKLIN
TILTON
BELMONT
ANDOVER
GILMANTON
NORTHFIELD
BARNSTEAD
0 1 2 3 4 5
Miles
Land Use
Agricultural
Soils of Importance
All areas are prime farmland
Farmland of statewide importance
Farmland of local importance
County Boundary
Town Boundary
Water Body
Soils of Importance for Carroll and Grafton County based on NRCS data last revised 2002. Belknap and Merrimack County based on an unfinalized version of data from NRCS, last revised 2007.
Land Use interpretation based on 1992 and 1998 Digital othophotos. Land Use codes identified in Anderson, et. al., 1976.
Road centerline dataset is from NH Department of Transportation.
Base feature datasets, including hydrography, and political boundaries, provided through NH GRANIT at Complex Systems Research Center (CSRC). Neither LRPC nor CSRC make any claim to the validity or reliability or to any implied uses of these data.
For planning purposes only.

Whereas agricultural land composes less than four percent of the region's land use, nearly 85 percent of the region is classified as forestland (LRPC, 2012). Map 1 shows the prevalence of forestlands. These forests function as habitat, rainwater infiltration sites, buffers for surface waters and wetlands, and provide the backdrop for tourism and recreation throughout the region. Many of these forests are also managed for timber harvesting, maintaining the livelihood of residents while contributing to the local economy and tax base. A symbiotic relationship between foresters, farmers, recreation, and tourism can maintain forestland and protect the base of the region's recreation and scenic values.

Recreation and Public Access

The vast majority of land ownership in the Lakes Region is private. Respecting private property rights while providing public access to the lakes and waterways, trails and trailheads is a challenge to communities in the region.

Lake access has been of particular concern to many communities. Swimming, fishing, and boating all require public access areas for parking or launching. Tourism and economic development are linked closely to water recreation in the region, and towns want to have the ability to further develop the avenues available to them. As development pressures on land use increase, public access points decrease. Many of the regions lakes and ponds currently have very limited access to non-shorefront owners.

Some communities did not establish public access points in years past and are finding it too late to do so as waterfront properties have skyrocketed in value. However, even those that did establish public access points are finding that they are becoming inadequate to handle the large number of boaters or hikers. As such, many outdoor recreational resources in the region rely on landowners to allow access to private lands. Incentives to keep this land open and accessible, such as the "current use" property tax relief program, will assist in protecting these recreational opportunities.

In 2003, approximately 97,330 acres (11.8 %) in the region were conservation or public lands. As of today, there are 128,428 acres of conservation or public lands, comprising 15.7 percent of the total land area in the region (see Map 3). Land trusts throughout the region have assisted landowners, towns, and organizations accomplish this increase. One such example is the Lakes Region Conservation Trust. Since 1979 it has worked with landowners in nearly every town in the region to protect over 21,700 acres of land with ecological, scenic, recreational, or historical value, including 32 miles of shoreline on Lake Winnipesaukee, Squam Lake, and other lakes, ponds, rivers, and streams throughout the Lakes Region, 19 summits, and 85 miles of hiking trails. Table 2.3 shows the total amount of conservation and public lands in each town in the region.

Table 2.3: Acres of Conservation and Public Lands in the Lakes Region by Town

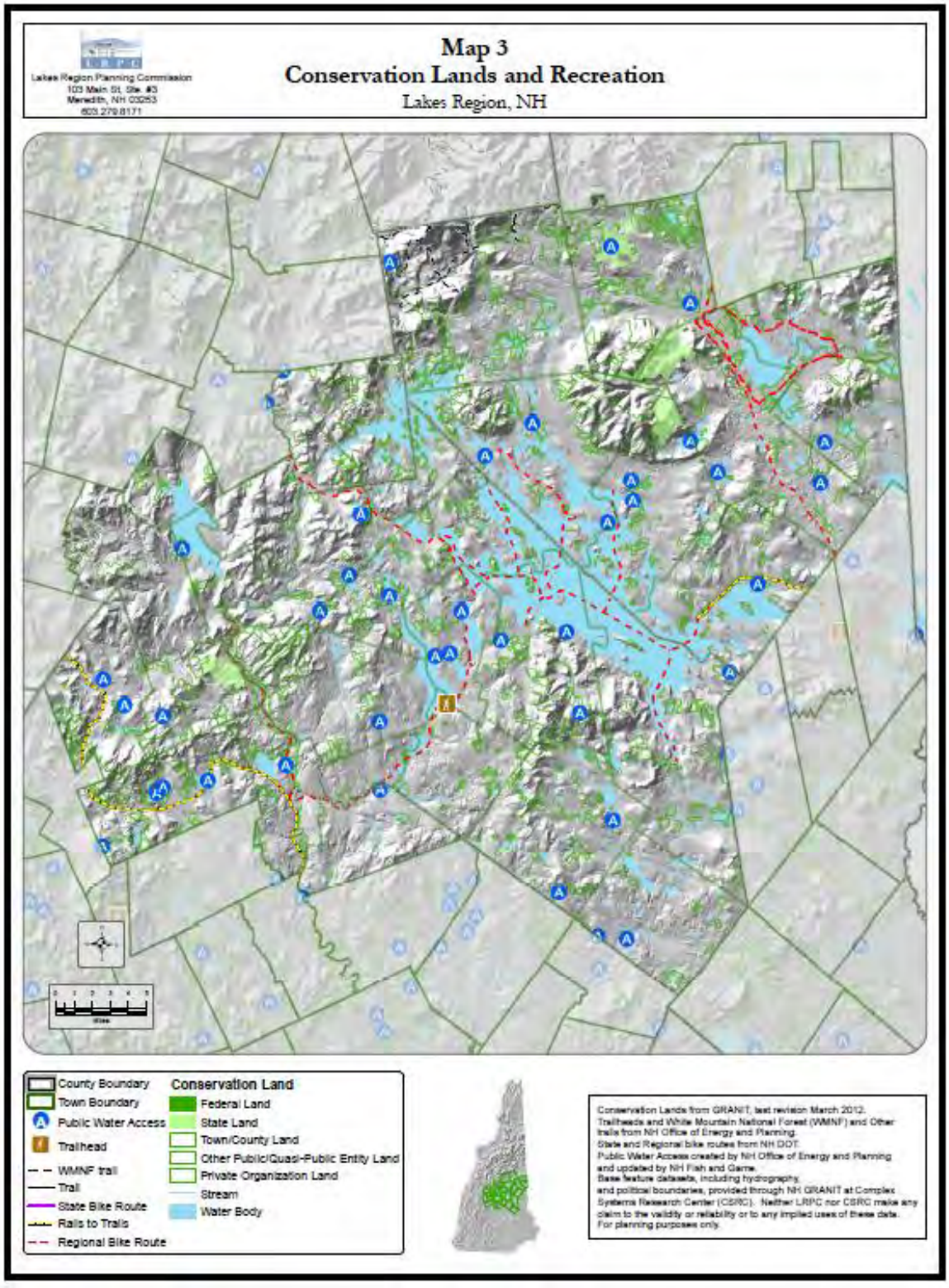
Municipality	Acres of Conservation and Public Lands*	Percent of Total Municipal Area (land and water)	Percent of Total Lakes Region Conservation and Public Lands
Alexandria	3,446	12.3%	2.7%
Alton	3,795	7.1%	3.0%
Andover	6,020	22.9%	4.7%
Ashland	968	13.1%	0.8%
Barnstead	1,221	4.3%	1.0%
Belmont	403	2.0%	0.3%
Bridgewater	161	1.2%	0.1%
Bristol	908	6.5%	0.7%
Center Harbor	574	5.5%	0.4%
Danbury	2,317	9.5%	1.8%
Effingham	6,252	24.5%	4.9%
Franklin	2,947	15.8%	2.3%
Freedom	4,609	19.0%	3.6%
Gilford	6,357	18.6%	4.9%
Gilmanton	6,058	15.9%	4.7%
Hebron	707	5.9%	0.6%
Hill	4,144	24.2%	3.2%
Holderness	1,661	7.2%	1.3%
Laconia	952	5.7%	0.7%
Meredith	2,455	7.0%	1.9%
Moultonborough	13,328	27.7%	10.4%
New Hampton	2,834	11.5%	2.2%
Northfield	197	1.1%	0.2%
Ossipee	8,739	18.1%	6.8%
Sanbornton	4,143	13.0%	3.2%
Sandwich	23,070	38.3%	18.0%
Tamworth	13,569	35.0%	10.6%
Tilton	99	1.3%	0.1%
Tuftonboro	4,165	13.1%	3.2%
Wolfeboro	2,329	6.2%	1.8%
Total	**128,428**	**15.7%**	**100%**

Society for the Protection of NH Forests 2012

If permanent protection is not possible, an agreement can be made between the town and landowner to allow the public access to the resource. Since they are non-binding, these agreements can be given or revoked at any time. One caveat to establishing public access on private lands is the treatment of those lands. If private property owners see an increase in vandalism, littering, or a disregard for their property, the accessibility will come to an end.

Educating the public at trailheads and sponsoring Adopt-a-Trail programs can help prevent these destructive activities from occurring.

There are numerous town forests in the region, as shown on Map 3. Four popular state parks are located in the Lakes Region. They are Wellington State Park in Bristol, Wentworth State Park in Wolfeboro, Ellacoya State Park in Gilford and White Lake State Park in Tamworth. The White Mountain National Forest borders the region to the north and extends south into the town of Sandwich, comprising the largest segment of conservation land in the region (shown on Map 3).


Lakes Region Planning Commission
103 Main St. Ste. #3
Meredith, NH 03253
603.279.8171
Map 3
Conservation Lands and Recreation
Lakes Region, NH
County Boundary
Town Boundary
Public Water Access
Trailhead
WMNF trail
Trail
State Bike Route
Rails to Trails
Regional Bike Route
Conservation Land
Federal Land
State Land
Town/County Land
Other Public/Quasi-Public Entity Land
Private Organization Land
Stream
Water Body
Conservation Lands from GRANIT, last revision March 2012.
Trailheads and White Mountain National Forest (WMNF) and Other trails from NH Office of Energy and Planning.
State and Regional bike routes from NH DOT.
Public Water Access created by NH Office of Energy and Planning and updated by NH Fish and Game.
Base feature datasets, including hydrography, and political boundaries, provided through NH GRANIT at Complex Systems Research Center (CSRC). Neither LRPC nor CSRC make any claim to the validity or reliability or to any implied uses of these data. For planning purposes only.

Tourism

According to the Institute for New Hampshire Studies at Plymouth State University, the State of New Hampshire hosted over 34 million visitor trips in Fiscal Year 2011 and total spending by tourists was estimated at $4.2 billion. This represents an incremental annual decline from 2008, when tourism receipts were estimated at $4.5 billion. Tourists primarily come to New Hampshire to visit relatives, engage in outdoor recreation, sightsee or participate in other leisure activities. Business trips constitute less than 13 percent of New Hampshire's tourism traffic. Scenic drives, shopping, sightseeing, beaches during the summer months and skiing during the winter months are among the most popular activities. Table 2.4 lists tourism activities by season in New Hampshire (Institute for New Hampshire Studies, Plymouth State University).

Table 2.4: Activities in New Hampshire

Activity	Spring	Summer 2010 & 2011	Fall	Winter '09-10 & '10-11
Visit Friends/Relatives	36%	44%	44%	37%
Sightseeing	24%	24%	24%	10%
Shopping	16%	17%	17%	24%
Ski/Snowboarding	4%	--	--	15%
Beach	5%	19%	19%	--
Fine Dining	11%	8%	8%	15%
Hiking/Backpacking	7%	10%	10%	6%
Historic Sites/Museums	8%	8%	8%	3%
State/National Parks	5%	9%	9%	2%

*Institute for New Hampshire Studies, Plymouth State University

B. Social and Human Capital

According to the 2010 U.S. Census, the population of the United States is 310 million and projected to grow to approximately 400 million by 2040. The Lakes Region's proximity to the Boston Metro area and Portland Maine area along with its popularity as a long-established recreation area and destination for retirees enhances its attractiveness. This section reviews past, present and projected future demographic trends in the Lakes Region through an examination of available data as well as a review of key issues that will likely influence population, housing, and employment trends in the future.

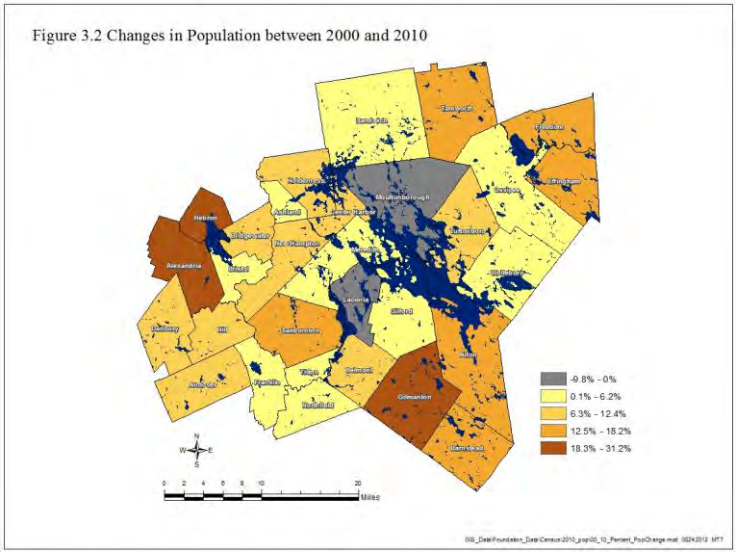
Figure 2.1, New England Megalopolis in 2050

Much of the Lakes Region is less that a two-hour drive from downtown Boston. The U.S. Census Bureau has identified a number of Mega regions or "megapolitan areas" throughout the U.S., with the Lakes Region being the northern edge of the New England Megalopolis in 2050. Seasonal housing, a wide variety of seasonal activities, accessibility to quality health care, and proximity to smaller, vibrant urbanized areas make the Lakes Region a strong draw.

Population Trends

The rapid rise in Lakes Region population began in the 1970s. During that 40-year period, the region's population increased by 52,274 people; from 60,461 in 1970 to 112,735, or an 86.5 percent increase. This followed generally slow, steady growth over the initial 70 years of the 20th century. The construction of Interstate 93, the maturing of the baby boom generation, immigration and the overall social, physical and fiscal attractiveness of New Hampshire contributed to the growth. The Lakes Region grew by 36 percent between 1900 and 1970 and then at more than twice that rate (87%) between 1970 and 2010.

Figure 2.2: Changes in Population between 2000 and 2010



However, from 2000-2010, the year-round resident population of the Lakes Region grew much more slowly (5.9 percent) with the addition of 6,307 people. The greatest net population growth occurred mostly in the southeast part of the region, in the towns of Alton (748), Gilmanton (717), Barnstead (707), and Belmont (640). These towns had some of the highest rates of growth as well. The addition of 2,812 people in these four communities accounted for 44.6 percent of the total net population change in the region between 2000 and 2010.

Hebron (31.2%), Gilmanton (23.4%), Alexandria (21.4%), and Barnstead (18.2%) had the fastest growth rates in the region since 2000, with Hebron, the least populous community in the region, growing at the fastest rate. On the other hand, Moultonborough (-9.8%), Laconia (-2.8%), Bristol (0.9%), and Franklin (0.7%) had the lowest rates of growth between 2000 and 2010, with Moultonborough and Laconia experiencing a loss of population, the only two such communities in the Lakes Region. For Moultonborough, this represents a substantial reversal after a period of accelerated growth during the 1990s,

Table 2.5: Lakes Region Population Trends

Year	Population	% Chg.
1773	2,809	-
1783	5,606	99.6%
1790	12,887	129.9%
1800	22,832	77.2%
1810	30,501	33.6%
1820	38,841	27.3%
1830	43,132	11.0%
1840	44,401	2.9%
1850	44,440	1.0%
1860	44,435	0.0%
1870	40,747	-8.3%
1880	45,873	12.6%
1890	44,416	-3.2%
1900	44,369	-0.1%
1910	45,561	2.7%
1920	44,565	-2.2%
1930	45,503	2.1%
1940	48,739	7.1%
1950	50,570	3.8%
1960	53,044	4.9%
1970	60,461	14.0%
1980	78,126	29.2%
1990	91,900	17.6%
2000	106,428	15.8%
2010	112,735	5.9%

when it grew by 51.7 percent, the highest rate of growth for the region during that decade.

One third of the communities in the Lakes Region grew at a rate slower than the region as a whole (5.9%), and 18 communities grew by 8.0 percent or more. While only eight of thirty communities grew at slow to moderate rates of 0.7- 5.0 percent, the flat growth in Franklin and declines in Laconia and Moultonborough somewhat offset the rapid growth in the majority of the region.

Since 1990, the population of the region has increased by 22.7 percent with Alton, Freedom, Effingham, Hebron, Barnstead, and Gilmanton all having grown by greater than 44 percent. During the same period, however, the two largest communities in the Lakes Region, Laconia and Franklin, where 26 percent of the region's population resided in 1990, have grown by only 1.3 and 2.1 percent, respectively.

Table 2.6 lists the population of Lakes Region towns, and the percent change relative to previous Census years from 1990 to 2010. The NH Center for Public Policy and NH Office of Energy and Planning believe the future population growth in the state will be significantly less than the last 40 years.

Table 2.6: Population Change in the Lakes Region of New Hampshire 1990-2010

	Population			Percent Change		
	1990	2000	2010	1990-2000	2000-2010	1990-2010
Alexandria	1,190	1,329	1,613	11.7%	21.4%	35.5%
Alton	3,286	4,502	5,250	37.0%	16.6%	59.8%
Andover	1,883	2,109	2,371	12.0%	12.4%	25.9%
Ashland	1,915	1,955	2,076	2.1%	6.2%	8.4%
Barnstead	3,100	3,886	4,593	25.4%	18.2%	48.2%
Belmont	5,796	6,716	7,356	15.9%	9.5%	26.9%
Bridgewater	796	974	1,083	22.4%	11.2%	36.1%
Bristol	2,537	3,033	3,054	19.6%	0.7%	20.4%
Center Harbor	996	996	1,096	0.0%	10.0%	10.0%
Danbury	881	1,071	1,164	21.6%	8.7%	32.1%
Effingham	941	1,273	1,465	35.3%	15.1%	55.7%
Franklin	8,304	8,405	8,477	1.2%	0.9%	2.1%
Freedom	935	1,303	1,489	39.4%	14.3%	59.3%
Gilford	5,867	6,803	7,126	16.0%	4.7%	21.5%
Gilmanton	2,609	3,060	3,777	17.3%	23.4%	44.8%
Hebron	386	459	602	18.9%	31.2%	56.0%
Hill	814	992	1,089	21.9%	9.8%	33.8%
Holderness	1,694	1,930	2,108	13.9%	9.2%	24.4%
Laconia	15,743	16,411	15,951	4.2%	-2.8%	1.3%
Meredith	4,837	5,943	6,241	22.9%	5.0%	29.0%
Moultonborough	2,956	4,484	4,044	51.7%	-9.8%	36.8%
New Hampton	1,606	1,950	2,165	21.4%	11.0%	34.8%
Northfield	4,263	4,548	4,829	6.7%	6.2%	13.3%
Ossipee	3,309	4,211	4,345	27.3%	3.2%	31.3%
Sanbornton	2,136	2,581	2,966	20.8%	14.9%	38.9%
Sandwich	1,066	1,286	1,326	20.6%	3.1%	24.4%
Tamworth	2,165	2,510	2,856	15.9%	13.8%	31.9%
Tilton	3,240	3,477	3,567	7.3%	2.6%	10.1%
Tuftonboro	1,842	2,148	2,387	16.6%	11.1%	29.6%
Wolfeboro	4,807	6,083	6,269	26.5%	3.1%	30.4%
Lakes Region	**91,900**	**106,428**	**112,735**	**15.8%**	**5.9%**	**22.7%**
New Hampshire	**1,109,252**	**1,235,783**	**1,316,470**	**11.4%**	**6.5%**	**18.7%**

Source: U.S. Census

Population Projections

In cooperation with the nine regional planning commissions, the NH Office of Energy and Planning (OEP) prepared population projections for New Hampshire counties and municipalities in November 2013. This was a challenging multi-year effort due to the changing demographics in the state and the slowdown in economic and population growth. In 2010, the US Census reported a total of 112,735 residents in the Lakes Region and the projections estimated an increase of 277 persons by 2015 for a total of 113,012. This projection is in sharp contrast to the history of last 40 years when the population increased by 86% from 60,461 in 1970 to 112,735 in 2010. The "baby boom" generation, the in migration from southern New England states, the tax climate in the state and the overall attractive lifestyle in the Lakes Region contributed to this high level of growth.

For the next 25 years (2015 to 2040), the population in the Lakes Region will be slow in contrast to the past. The projections call for an increase to 123,940 persons in 2040 for a total increase of 10,968 or 9.7 percent over the 25-year period. That represents an annual average increase of about 0.4% per year. These population projections have implications for many aspects of life in the Lakes Region such as housing, the local tax base, available labor force, school enrollments and others. It is a significant trend that needs further consideration and monitoring. Please see the table below for individual municipal population projections.

	2010	2015	2020	2025	2030	2035	2040
Alexandria	1,613	1,705	1,827	1,859	1,882	1,895	1,900
Alton	5,250	5,527	5,943	6,112	6,244	6,333	6,378
Andover	2,371	2,449	2,546	2,608	2,662	2,693	2,701
Ashland	2,076	2,061	2,077	2,114	2,139	2,154	2,160
Barnstead	4,593	4,863	5,258	5,407	5,524	5,603	5,643
Belmont	7,356	7,524	7,873	8,096	8,271	8,390	8,449
Bridgewater	1,083	1,100	1,135	1,155	1,169	1,177	1,180
Bristol	3,054	2,946	2,880	2,930	2,966	2,987	2,995
Center Harbor	1,096	1,124	1,178	1,212	1,238	1,256	1,264
Danbury	1,164	1,183	1,210	1,240	1,265	1,281	1,284
Effingham	1,465	1,523	1,616	1,675	1,724	1,758	1,773
Franklin	8,477	8,287	8,146	8,346	8,516	8,618	8,643
Freedom	1,489	1,543	1,631	1,691	1,741	1,775	1,790
Gilford	7,126	7,129	7,296	7,503	7,665	7,775	7,830
Gilmanton	3,777	4,072	4,474	4,602	4,701	4,768	4,802
Hebron	602	657	723	736	745	750	752
Hill	1,089	1,112	1,144	1,172	1,195	1,210	1,213
Holderness	2,108	2,123	2,171	2,209	2,236	2,252	2,258
Laconia	15,951	15,320	15,015	15,442	15,775	16,002	16,115
Meredith	6,241	6,252	6,407	6,589	6,731	6,828	6,876
Moultonborough	4,044	3,665	3,345	3,467	3,570	3,639	3,671
New Hampton	2,165	2,229	2,347	2,413	2,466	2,501	2,519
Northfield	4,829	4,851	4,906	5,026	5,129	5,190	5,205
Ossipee	4,345	4,275	4,291	4,448	4,579	4,668	4,709
Sanbornton	2,966	3,102	3,316	3,410	3,483	3,533	3,558
Sandwich	1,326	1,304	1,308	1,356	1,396	1,424	1,436
Tamworth	2,856	2,953	3,117	3,231	3,326	3,391	3,421
Tilton	3,567	3,530	3,572	3,674	3,753	3,807	3,834
Tuftonboro	2,387	2,440	2,547	2,640	2,719	2,771	2,796
Wolfeboro	6,269	6,163	6,183	6,408	6,598	6,726	6,785
Lakes Region	112,735	113,012	115,482	118,771	121,408	123,155	123,940

Source: NH Office of Energy and Planning, November 2013

Trends by Age

As the residents of the Lakes Region continue to age, there is a significant increase in the median age of residents of all 30 communities. As shown in Table 2.7, Hebron has the oldest median age in the Lakes Region at 55.1, and Northfield is the youngest at 39.1 years.

Table 2.8 shows the median age for each municipality for the two ten-year periods: 1990 to 2000 and 2000 to 2010. When comparing the Lakes Region (LR) median age to the state as a whole, one notes that 18 of the 30 LR communities exceeded the state's 2010 median age increase of 10.8 percent. Statewide, the median age increased by more than four years from 37.1 in 2000 to 41.1 in 2010. The median age of all four Lakes Region counties are above the state's 2010 median age of 41.1 years.

Several knowledgeable commentators refer to this trend as the "silver tsunami" whereby the aging of the state's population and the increase in those over 65 years will have significant impacts on local governments in the areas of health care, transportation, social services and housing. Leaders throughout the state and region are beginning to consider the impact of the "silver tsunami" on individual communities and the region's future economic prospects.

Table 2.7: Median Age by Rank in 2010

Rank	Highest	2010
1	Hebron	55.1
2	Sandwich	53.2
3	Freedom	53.1
4	Wolfeboro	52.1
5	Tuftonboro	50.8
6	Moultonborough	50.5
7	Center Harbor	49.9
8	Bridgewater	492
9	Meredith	49.7
10	Gilford	47.9

Rank	Lowest	2010
1	Northfield	39.2
2	Barnstead	39.9
3	Franklin	40.2
4	Andover	41.4
5	Belmont	42.1
6	Laconia	43.0
7	Gilmanton	43.1
8	Ashland	43.1
9	Bristol	43.5
10	Hill	43.6

Source: U.S. Census, 2010

Planning for the aging population boom will be a theme that the LRPC needs to consider along with its constituent communities.

Table 2.8 includes median age information for each municipality for the years 1990, 2000 and 2010. During the 2000 to 2010 decade, 19 of the 30 LR communities experienced a double-digit percentage increase in the median age of their residents. County 2010 median age is as follows:

- Belknap County 44.7 years
- Carroll County 48.3 years
- Grafton County 41.2 years
- Merrimack County 41.4 years

Table 2.8: Median Age

	Municipality	1990	2000	2010	% Change 90-00	% Change 00-10
Belknap	Alton	37.8	41.4	46.2	9.5%	11.6%
County	Barnstead	32.6	38.8	39.9	15.9%	2.8%
	Belmont	32.3	38.4	42.1	15.9%	9.6%
	Center Harbor	37.5	44.6	49.9	20.3%	11.9%
	Gilford	38.4	42.9	47.9	11.7%	11.6%
	Gilmanton	33.4	40.1	43.1	20.0%	7.5%
	Laconia	34.4	38.8	43.0	12.8%	10.8%
	Meredith	36.2	42.5	48.7	17.4%	14.6%
	New Hampton	34.0	38.3	42.4	12.6%	10.7%
	Sanbornton	34.9	40.1	46.5	14.9%	15.9%
	Tilton	36.8	39.6	45.2	7.6%	14.1%
Carroll	Effingham	35.2	38.5	45.6	9.4%	19.7%
County	Freedom	39.0	48.6	53.1	24.6%	9.2%
	Moultonborough	37.8	46.6	50.5	23.2%	8.4%
	Ossipee	36.8	41.5	47.4	12.7%	14.2%
	Sandwich	41.4	47.2	53.2	14.0%	12.7%
	Tamworth	36.3	40.6	47.6	11.8%	17.2%
	Tuftonboro	38.8	47.7	50.8	22.9%	6.5%
	Wolfeboro	41.0	45.3	52.1	10.5%	15.0%
Grafton	Alexandria	31.6	40.3	44.6	27.5%	10.7%
County	Ashland	32.6	36.8	43.1	12.9%	17.1%
	Bridgewater	37.4	45.4	49.2	21.4%	8.3%
	Bristol	33.1	38.5	43.5	16.3%	13.0%
	Hebron	42.3	50.1	55.1	18.4%	10.0%
	Holderness	35.2	42.1	46.9	19.6%	11.4%
Merrimack	Andover	35.7	40.1	41.4	12.3%	3.2%
County	Danbury	34.2	41.1	44.0	20.1%	7.0%
	Franklin	33.3	37.3	40.2	12.0%	7.7%
	Hill	34.6	38.7	43.6	11.8%	12.6%
	Northfield	31.2	36.0	39.2	15.3%	8.9%
New Hampshire		32.8	37.1	41.1	13.1%	10.8%
United States		32.8	35.3	37.2	7.6%	5.4%

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

A comparison of the number and percentage of senior citizens (those over age 65) in 2000 and 2010 in each Lakes Region community as well as the state of New Hampshire demonstrates how dramatically the region and state is aging. In 2000, New Hampshire had 147,970 seniors or 12 percent of its population; by 2010, the number grew by 22,361 to 170,331 or 13 percent of the state's population. In the Lakes Region, the number of seniors was 16,836 or 15.8 percent in 2000 and increased by 2,914 to 19,740 or 17.5 percent of the region's population. With the exception of Laconia, Moultonborough, Sandwich and

Franklin, all Lakes Region communities experienced a double-digit increase. As a retirement area, an older population is expected, yet this trend is not offset by younger families. Due to the size of the "Baby Boom" generation (those born from 1946-1964) the AARP has estimated that, over the next 18 years, Americans will be turning age 65 at the rate of 8,000 per day. Absent an increase in births or in-migration, these trends will be exemplified in the Lakes Region. These aging demographic changes will influence the region's future development patterns and likely cause seniors to choose housing located in more urban areas that are closer to services, shopping and other amenities.

Table 2.9 Number and Percentage of Senior Citizens: 2000 and 2010

		2000		2010		Change: 2000-2010	
	Municipality	**#**	**%**	**#**	**%**	**#**	**%**
Belknap	Alton	695	15.4%	887	16.9%	192	27.6%
County	Barnstead	423	10.9%	488	10.6%	65	15.3%
	Belmont	764	11.4%	990	13.5%	226	29.5%
	Center Harbor	173	17.4%	228	20.8%	55	31.8%
	Gilford	1,145	16.8%	1,358	19.1%	213	18.6%
	Gilmanton	359	11.7%	468	12.4%	109	30.3%
	Laconia	2,828	17.2%	2,881	18.1%	53	1.9%
	Meredith	999	16.8%	1,299	20.8%	300	30.0%
	New Hampton	241	12.4%	335	15.5%	94	39.0%
	Sanbornton	282	10.9%	408	13.8%	126	44.7%
	Tilton	587	16.9%	715	20.0%	128	21.8%
Carroll	Effingham	160	12.6%	223	15.2%	63	39.3%
County	Freedom	313	24.0%	400	26.9%	87	27.8%
	Moultonborough	891	19.9%	905	22.4%	14	1.5%
	Ossipee	748	17.8%	843	19.4%	95	12.7%
	Sandwich	308	24.0%	307	23.2%	(1)	0.6%
	Tamworth	394	15.7%	521	18.2%	127	32.2%
	Tuftonboro	475	22.1%	565	23.7%	90	18.9%
	Wolfeboro	1,495	24.6%	1,768	28.0%	273	18.2%
Grafton	Alexandria	150	11.3%	222	13.8%	72	48.0%
County	Ashland	266	13.6%	349	16.8%	83	31.2%
	Bridgewater	188	19.3%	241	22.3%	53	28.1%
	Bristol	430	14.2%	474	15.5%	44	10.2%
	Hebron	129	28.1%	168	27.9%	39	30.2%
	Holderness	248	12.8%	388	18.4%	140	56.4%
Merrimack	Andover	267	12.7%	324	13.7%	57	21.3%
County	Danbury	137	12.8%	156	13.4%	19	13.7%
	Franklin	1,233	14.7%	1,278	15.1%	45	3.6%
	Hill	101	10.2%	112	10.3%	11	10.9%
	Northfield	397	8.7%	439	9.1%	42	10.5%
Lakes Region		16,826	15.8%	19,740	17.5%	2,914	17.3%
New Hampshire		147,970	12.0%	170,331	13.0%	22,361	15.1%

Source: U.S. Census, 2000, 2010

Seasonal Housing Trends

An important trend in the housing market is the number of seasonal units in each community and the percentage of seasonal housing in relation to the overall housing stock. Seasonal housing accounts for a large percentage of the housing base in many communities, but this percentage has been decreasing since 1990. Table 2.10 below highlights this trend and identifies the changes between 2000 and 2010.

Table 2.10 Housing Units in 2000 and 2010

						All Units	Seasonal	%
		All Housing Units		Seasonal Units		% Chg.	Units %	Seasonal
	Municipality	**2000**	**2010**	**2000**	**2010**	**00-10**	**Chg. 00-10**	**2010**
Belknap	Alton	3,522	4,281	1,610	1,928	21.5%	19.7%	45.0%
County	Barnstead	1,994	2,319	528	516	16.3%	-2.3%	22.3%
	Belmont	3,113	3,615	351	495	16.1%	41.0%	13.7%
	Center Harbor	653	795	208	290	21.7%	39.4%	36.5%
	Gilford	4,312	5,111	1,427	1,863	18.5%	30.5%	36.5%
	Gilmanton	1,848	2,118	648	588	14.6%	-9.3%	27.8%
	Laconia	8,554	9,879	1,477	2,293	15.5%	55.2%	23.2%
	Meredith	4,191	4,728	1,611	1,710	12.8%	6.1%	36.2%
	New Hampton	944	1,083	180	185	14.7%	2.8%	17.1%
	Sanbornton	1,359	1,612	343	387	18.6%	12.8%	24.0%
	Tilton	1,631	1,845	186	212	13.1%	14.0%	11.5%
Carroll	Effingham	791	963	260	280	16.0%	-9.4%	29.1%
County	Freedom	1,406	1,580	771	827	3.5%	-13.4%	52.3%
	Moultonborough	4,523	4,940	2,519	2,991	17.5%	-0.3%	60.5%
	Ossipee	2,742	3,057	920	1,045	4.8%	-13.9%	34.2%
	Sandwich	965	1,057	360	373	11.7%	2.3%	35.3%
	Tamworth	1,662	1,969	526	493	9.1%	0.4%	25.0%
	Tuftonboro	2,019	2,435	1,043	1,293	-0.4%	-15.6%	53.0%
	Wolfeboro	3,903	4,943	1,194	1,322	7.5%	-11.2%	29.8%
Grafton	Alexandria	783	967	260	299	8.6%	6.1%	30.9%
County	Ashland	1,149	1,355	249	267	-1.1%	-14.7%	19.7%
	Bridgewater	850	995	420	502	1.3%	-11.0%	50.5%
	Bristol	2,073	2,488	772	1,089	-7.9%	-28.9%	43.8%
	Hebron	517	600	294	310	14.4%	10.1%	51.7%
	Holderness	1,208	1,510	404	568	6.3%	-3.1%	37.6%
Merrimack	Andover	1,038	1,121	176	163	21.4%	43.1%	14.5%
County	Danbury	596	684	121	149	10.2%	-27.1%	21.8%
	Franklin	3,676	3,938	215	193	-1.8%	12.6%	4.9%
	Hill	436	512	47	66	21.1%	-2.1%	12.9%
	Northfield	1,782	1,969	41	32	6.6%	-36.9%	1.6%
New Hampshire		547,024	614,754	56,413	63,910	8.6%	-1.3%	10.4%

Source: U.S. Census

Housing Costs

An important indicator of the strength of the housing market is the median purchase price. As shown on Table 2.11, the median purchase of a home in the Lakes Region significantly increased from 2001 to around the 2005-2006 periods, where it peaked at $215,000 for all homes and $210,000 for existing homes and $276,000 for new homes. Since that period, the median purchase price for all homes declined to $153,000 for the first four months of 2012. Unitil the economic conditions of the United States and New Hampshire improve and the number of foreclosures stabilizes, it is likely that home prices will fluctuate within this range.

Table 2.11: Housing Prices, Lakes Region

Year	All Homes		Existing Homes		New Homes		Single Family Det		Condominiums	
	Median Purchase Price	Sample Size	Median Purchase Price	Sample Size	Median Purchase Price	Sample Size	Median Purchase Price	Sample Size	Median Purchase Price	Sample Size
2013	$171,500	1,113	$170,000	1,065	NA	48	$175,000	1,014	$160,000	99
2012	$165,000	944	$162,000	922	#N/A	6	$165,000	862	$137,000	82
2011	$165,000	786	$162,000	750	#N/A	36	$166,000	724	$137,000	62
2010	$170,000	873	$167,600	814	$201,000	59	$173,000	789	$160,000	84
2009	$167,000	873	$162,000	811	$229,900	62	$169,900	790	$141,000	83
2008	$209,000	693	$204,000	616	$240,000	77	$210,000	636	$180,000	57
2007	$215,000	959	$210,000	812	$246,025	147	$220,000	847	$175,000	112
2006	$215,000	1214	$210,000	1040	$269,500	174	$222,000	1093	$165,000	121
2005	$215,000	1441	$205,000	1201	$276,000	240	$218,000	1308	$185,000	133
2004	$190,000	1660	$184,900	1354	$237,000	306	$195,000	1465	$161,000	195
2003	$169,900	1552	$165,000	1317	$199,900	235	$170,000	1417	$150,000	135
2002	$143,000	1489	$139,900	1281	$165,000	208	$145,000	1370	$121,153	119
2001	$126,000	1560	$124,000	1369	$149,500	191	$128,000	1421	$112,000	139

Source: NH Housing Finance Authority, 2014

Figure 2.3 shows the median purchase price trend of primary homes from 1990 to the first quarter of 2013.

Figure 2.3: Median Purchase of homes, 1990 to 2013

Lakes Region Planning Commission

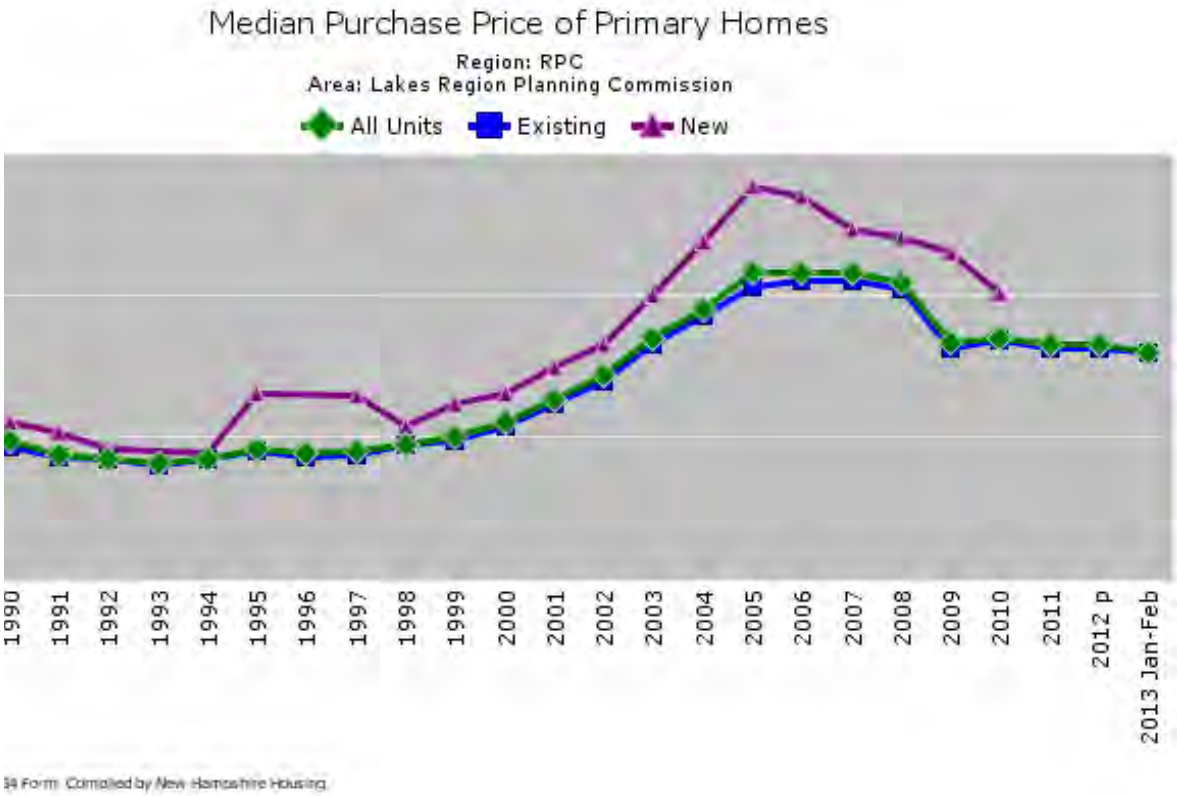


Table 2.12 includes information on gross housing rents in the Lakes Region from 2001 to the first quarter of 2012. Gross rent includes the contract rent plus the cost of utilities and fuel. For all housing units, in the last 11 years, the median gross rent of $915 increased $317 or 53 percent. For a 3-bedroom unit at $1,175 per month, during that period, the increase was $401 or 51.8 percent. In response to current economic conditions, it appears that more people are seeking rental opportunities. An affordable rental opportunity is an important factor in maintaining an adequate regional workforce. As a general rule, for an affordable housing unit, a renter should pay not more that 30 percent of his or her pre-tax income for rent. If three bedroom units rent for $1,175 per month or $14,100 per year, the individual or family would need an income of approximately $47,000 per year for the unit to be considered affordable.

Table 2.12: Gross Housing Rents, Lakes Region

	All Units		0-Bedroom Units		1-Bedroom Units		2-Bedroom Units		3-Bedroom Units		4+-Bedroom Units	
Year	Median Gross Rental Cost	Sample Size	Median Gross Rental Cost	Sample Size	Median Gross Rental Cost	Sample Size	Median Gross Rental Cost	Sample Size	Median Gross Rental Cost	Sample Size	Median Gross Rental Cost	Sample Size
2013	$920	956	$645	39	$753	285	$953	440	$1,212	155	$1,340	37
2012	$915	1,023	$585	64	$728	297	$945	461	$1,175	163	$1,407	38
2011	$915	929	$585	32	$746	281	$940	418	$1,170	162	$1,417	36
2010	$873	963	$585	58	$701	326	$925	390	$1,145	163	$1,336	26
2009	$867	936	$585	56	$722	316	$911	393	$1,105	147	$1,293	24
2008	$888	849	$590	49	$700	263	$914	371	$1,131	142	$1,395	24
2007	$823	811	$585	50	$674	260	$867	354	$1,027	123	$1,278	24
2006	$793	987	$575	62	$650	306	$857	437	$1,050	157	$1,276	25
2005	$731	856	$542	53	$604	296	$799	369	$957	122	#N/A	16
2004	$702	867	$480	39	$600	327	$786	357	$906	130	#N/A	14
2003	$668	940	$472	52	$561	367	$733	387	$866	118	#N/A	16
2002	$636	859	$440	49	$536	318	$694	369	$774	105	#N/A	18
2001	$598	894	$434	48	$509	325	$648	386	$766	115	$897	20

Source: NH Housing Finance Authority, 2014

Foreclosures affect the regional housing market and generally have the net effect of driving house prices down. Foreclosures appeared to have hit a plateau in 2011 and declined in state in the last year. For additional information see:

http://www.nhhf0a.org/rl_docs/housingdata/ForeclosureUpdate_08-02-12.html.

C. Employment

Employment in the Lakes Region

The existing and projected employment situation in the Lakes Region is an important component in the region's overall economic wellbeing. Table 2.13 includes the top 25 private sector employers by range of employer size. In the public sector, the SAU offices, local governments and various state agencies are large employers.

Please note the data available from the NH Economic and Labor Market Information Bureau provide the employer size in a range.

Table 2.13: Top 25 Private Employers

Employer	Partial Address	City	Employer Size
J Jill Group Distribution Ctr	Birch Pond Dr	Tilton	1,000 - 4,999
LRGHealthcare (aka LR Hospital)	Highland St	Laconia	1,000 – 4,999
Freudenberg-NOK	Pleasant St	Bristol	1,000 - 4,999
Huggins Hospital	S Main St	Wolfeboro	500 - 999
Webster Valve Inc	S Main St	Franklin	250 - 499
New Hampshire Ball Bearings	Lexington Dr	Laconia	250 - 499
Franklin Regional Hospital	Aiken Ave	Franklin	250 - 499
Lakeview Neurorehabilitation	High Watch Rd	Effingham	250 - 499
Whelen Engineering Co	Cedarwood Rd	Charlestown	250 - 499
Smiths Tubular Systems	Lexington Dr	Laconia	250 - 499
EFI Inc	Vutek Pl	Meredith	250 - 499
Rochester Shoe Tree Co Inc	Cedar Ln	Ashland	250 - 499
Wal-Mart	E Main St	Tilton	250 - 499
PCC Structurals Aluminum Oper	Granite St	Northfield	250 - 499
Vutek	Vutek Pl	Meredith	250 - 499
Freudenberg-NOK	Growth Rd	Laconia	250 - 499
Wal-Mart	Lake Shore Rd # 15	Gilford	100 - 249
Camp Winaukee	Winaukee Rd	Moultonborough	100 - 249
Shaw's Supermarket	Laconia Rd # 700	Tilton	100 - 249
Mountain View Nursing Home	County Farm Rd	Ossipee	100 - 249
Spaulding Youth Ctr	Shedd Road	Tilton	100 - 249
Proctor Academy	Main St	Andover	100 - 249
Brewster Academy	S Main St	Wolfeboro	100 - 249
Freudenberg-NOK	Axle Dr	Northfield	100 - 249
GI Plastek	Wickers Dr	Wolfeboro	100 - 249
Hannaford Supermarket & Pharmacy	Lake Shore Rd # 16	Gilford	100 - 249

Source: NHNetwork, NH Economic and Labor Market Information Bureau website, August 2013

Table 2.14 includes data on the civilian labor force, employment and unemployment for the Lakes Region Planning Commission area for the years 2002 to 2011. Generally, local municipal employment and unemployment data correspond closely to the Lakes Region data.

For the 12-year period from 2002 to 2013, the unemployment rate in the Lakes Region area generally paralleled the unemployment rate for the state of New Hampshire with some minor differences. The region's unemployment rate was lower than the state's from 2002 to 2006 and in 2007 both were the same at 3.5 percent. From 2008 to 2010, the Lakes Region unemployment rate was higher than the state's; in 2011, both the Lakes Region and state had an identical unemployment rate of 5.4 percent. In 2012 and 2013, the region's unemployment was lower. During the 2006 to 2008 period, the Lakes Region labor force peaked at about 61,000 persons and then declined to 59,122 in 2011. The labor force grew in 2012 and declined in 2013. When considering these two data points, it is likely that the Lakes Region experienced some out-migration due to unfavorable economic conditions and opportunities in the region and state and some people stopped seeking employment and did not appear in the labor force. Overall, considering national economic conditions, the Lakes Region and New Hampshire, with the 4th lowest unemployment rate in the United States, have managed the economic situation fairly well.

Table 2.14 includes the civilian labor force with employment and unemployment data for the years 2002 to 2011.

Table 2.14: Labor Force and Unemployment, Lakes Region 2002 to 2013

Year	Labor Force	Employed	Unemployed	Unemployment Rate	NH Rate
2013	58,792	55,748	3,044	5.10%	5.30%
2012	59,149	56,026	3,123	5.20%	5.50%
2011	59,122	55,889	3,233	5.40%	5.40%
2010	59,506	55,695	3,811	6.40%	6.10%
2009	60,948	57,062	3,886	6.30%	6.20%
2008	61,490	59,000	2,484	4.00%	3.90%
2007	61,073	58,886	2,187	3.50%	3.50%
2006	61,053	58,986	2,067	3.30%	3.50%
2005	59,403	57,373	2,030	3.40%	3.60%
2004	59,063	57,063	2,060	3.40%	3.90%
2003	58,997	56,653	2,344	3.90%	4.50%
2002	59,609	57,297	2,312	3.80%	4.50%

Source: NHNetwork, NH Economic and Labor Market Information Bureau website, July 2014

Table 2.15 includes data on changes in employment and wages from 2005 to 2010. In the five-year period, total private employment declined by 3,196 persons while government employment increased by 286 persons for a net decline of 2,910 in total employment. Manufacturing experienced the largest decrease: a loss of 2,005 jobs followed by declines in construction of 733, and in retail trade of 546. The loss of 2,005 manufacturing jobs represented 32 percent of the total manufacturing jobs in the Lakes Region in 2005. On a brighter note, the number of those employed in health care/social assistance increased by

475 or 9 percent. This information is consistent with labor force and unemployment in Table 2.14. In conclusion, total employment in the Lakes Region declined by 6.7 percent in the 2005 to 2010 period.

During the same five-year period, average weekly wages in goods producing industries increased by over 16 percent, service-producing wages increased by 12 percent, and government wages by 10 percent. Top paying jobs include those in utilities, wholesale trade, professional/technical services and mining, although there was a small decline in mining from 2005. Of the 7,221 persons employed in government in 2010, 81.6 percent worked in local government, 13.7 percent in state government, and 4.7 percent in federal government.

Table 2:15: Lakes Region, Annual Employment and Weekly Wage, 2005 – 2010

Industry	2005			2010		
	Units	Employ	Wk Wage	Units	Employ	Wk Wage
Goods Producing	724	9,220	$795	598	6,458	$922
Agriculture, Forestry, Fishing, Hunting	24	147	$381	25	133	$477
Mining	9	97	$1,178	8	88	$1,163
Construction	488	2,777	$870	400	2,044	$942
Manufacturing	203	6,199	$765	164	4,194	$922
Service Providing	2,534	27,132	$565	2,542	26698	$631
Utilities	18	228	$1,238	20	236	$1,470
Wholesale Trade	139	798	$1,051	144	754	$1,214
Retail Trade	558	7364	$487	529	6,818	$485
Transportation, Warehousing	65	623	$579	48	539	$90
Information	46	412	$665	42	394	$796
Finance and Insurance	124	1,025	$861	122	872	$887
Real Estate, Rental and Leasing	123	509	$559	106	387	$647
Professional and Technical Services	247	1,064	$1,010	267	$1,189	$1,200
Management	20	433	$1,041	20	417	$1,190
Administrative, Waste Services	172	1,330	$591	190	1,245	$691
Educational Services	32	984	$591	35	969	$687
Health Care, Social Assistance	245	5,117	$674	276	5,592	$797
Arts, Entertainment and Recreation	106	1,020	$377	94	1,093	$386
Accommodations and Food Services	352	4,990	$402	365	4,936	$326
Other Services except Public Administrator	285	1,224	$473	284	1,249	$540
Unclassified Establishments	5	12	`$719	No data		
Total Government	210	6,935	$619	221	7,221	$713
Total Private	3,258	36,353	$623	3,139	33,157	$688
Total Private plus Government	3,468	43,288	$623	3,361	40,378	$692

Source: Economic and Labor Market Bureau, NH Employment Security, 2012

Table 2.16 provides information on per capita income, household income and percentage of families below the poverty level for all 30 Lakes Region municipalities. The Economic and Labor Market Bureau, NH Employment Security, compiled this information using data from the American Community Survey. The information is based on the three-year average, (2008 to 2010 adjusted for inflation. Municipalities with the highest household incomes include: Moultonborough, Barnstead, Gilmanton and Hill. Municipalities on the low side include: Ashland, Bristol, Ossipee and Danbury. According to the U. S. Bureau of Census, the national poverty levels in 2010 are as follows: one person with an income of $11,484 or less; two people with an income of $14,657 or less; and a family of four with an income of

$23,021 or less. Ossipee (18.4%), Ashland (18.2%), Franklin (10.7%) and Northfield (9.7%) exhibited high levels of family poverty.

Table 2.16: Lakes Region Annual Income, 2010

Municipality	Per Capita Income	Household Income	Family < Poverty Level
Alexandria	23,008	56,367	4.90%
Alton	30,496	57,560	3.50%
Andover	30,147	62,782	2.20%
Ashland	20,428	35,857	18.20%
Barnstead	26,019	65,727	3.20%
Belmont	24,048	56,582	3.30%
Bridgewater	32,329	59,167	5.60%
Bristol	23,228	42,821	7.80%
Center Harbor	33,197	56,836	5.80%
Danbury	23,625	46,667	6.20%
Effingham	20,405	46,900	0.0%
Franklin	20,420	48,396	10.70%
Freedom	32,104	45,030	4.80%
Gilford	37,034	60,763	5.40%
Gilmanton	27,676	64,219	6.20%
Hebron	33,064	59,688	0.0%
Hill	23,934	62,800	4.40%
Holderness	31,377	61,786	2.0%
Laconia	26,640	46,027	8.10
Meredith	34,782	54,576	4.80%
Moultonborough	44,922	74,207	2.90%
New Hampton	23,039	58,059	8.50%
Northfield	21,733	56,917	9.70%
Ossipee	19,995	44,967	18.40%
Sanbornton	28,956	61,702	0.70%
Sandwich	30,956	57,105	6.40%
Tamworth	30,206	49,545	7.20%
Tilton	21,450	54,643	2.90%
Tuftonboro	29,544	52,679	6.60%
Wolfeboro	31,518	55,667	3.70%

Source: American Community Survey, 2010; compiled by Economic and Labor Market Information Bureau, NH Employment Security, 2012

D. Economic Clusters

LRPC retained the Belknap County Economic Development Council (BCEDC) to prepare an industry cluster analysis in the context of the 2013 update to the 2009 *Lakes Region Plan for Sustainable Development*, the region's Comprehensive Economic Development Strategy (CEDS). An industry cluster develops when businesses in inter-related industries choose to locate in close proximity to take advantage of a region's inherent advantages. One of the most well known examples of an industry cluster is Silicon Valley in California, known for its concentration of technology firms. While the Lakes Region does not possess industry clusters in this sense, this study provides critical insights into the make-up of the local economy which will help to focus regional economic development strategies so that they support critical industries and help foster future growth.

This study examines Quarterly Census of Employment and Wages (QCEW) data for the 30 municipalities in LRPC's service area for the 2006 to 2010 time period. The following are economic cluster trends in the Lakes Region:

- The Lakes Region lost 9.25 percent of private sector jobs from 2006 to 2010, compared to 5.79 percent lost at the national level (private sector job losses from 2000 to 2010 in the Lakes Region are about the same percentage). This is interesting because most analysts that discuss how New Hampshire and the Lakes Region economies are doing compared to the nation focus on our lower unemployment rates today and many other factors that make this state and region a great place to live and work, suggesting that New Hampshire has fared better than other parts of the country as the national economy improves slowly. It will be interesting to see if the Lakes Region recovery of jobs at business establishments was stronger than at the national level when data for subsequent years (2011 and beyond) are released. If not, one could surmise that our lower unemployment rate is attributable to other factors, such as out-migration and the shrinking of our workforce in general due to demographics, or higher numbers of self-employed workers and independent contractors. Many economists predict that the proportion of people working for themselves will continue to grow at a significant rate and will change the way businesses and jobs are defined in the future. Unfortunately, there are no good data available or even collected on this growing segment of the economy. It would be worthwhile to urge NH Economic and Labor Market Information Bureau to identify ways to measure this hidden economic activity, which will likely become more important to the Lakes Region in the future.

- Advanced manufacturing, in particular of primary metals and metal products, is still a critical industry in the Lakes Region despite major changes in the last decade. Manufacturing provided over 10 percent of jobs in the Lakes Region in 2010. Employment in Primary Metal Manufacturing in the Lakes Region is five times as concentrated as at the national level based on the Location Quotient analysis contained in this report and for Fabricated Metal Product Manufacturing it is nearly four times as concentrated here than at the national level. In addition, an analysis done to identify local industries with a comparative advantage in the region suggests that the Lakes Region's strong manufacturing heritage and workforce have

maintained our competitive edge in some manufacturing sub-sectors over the last 40 years.

- While total jobs in manufacturing declined by nearly 50 percent from 2000 to 2010, anecdotally we know that many local manufacturers have added jobs since the 2010 data were released. We also know that manufacturing jobs are some of the best paying jobs in the region. Many local firms in this industry specialize in components for defense and aerospace, so future changes in national defense policy could have a significant impact on demand for their products. In addition, these firms report experiencing increasing difficulty in finding qualified skilled workers, which could jeopardize the future of advanced manufacturing in the Lakes Region as it increasingly, relies on high technology for efficient production.

- Tourism and the second homeowner market continue to be major drivers of local economic activity and jobs. This is a double-edged sword because, while this activity attracts significant spending to the region, some of the jobs that this spending creates tend to be low-wage jobs that increasingly do not provide benefits or a living wage for local families, thereby creating greater demands on government and non-profit institutions. For example, poverty is higher (9.5% in Belknap County vs. 8.6% statewide in 2010 according to Census data) and significantly fewer adults in the Lakes Region have health insurance (77% here vs. 89% statewide according to LRGHealthcare). This means more people here than statewide cannot pay for the health care services they must consume. This is a serious problem because the health care industry is one of our top employers and provides quality jobs with benefits to Lakes Region residents.

- Looking toward the future, one potential bright spot is the growth in the Professional and Technical Services sector. Although total job numbers are relatively small, this sector grew during the recession, exhibits a growing concentration of employment, and possibly enjoys a comparative advantage in the region compared to the nation. Wages are high for this sector ($1,266 weekly in Belknap County in 2010) and many people who work in these jobs may fall into the unreported self-employed or freelancer category in the future, which could be a positive thing for our local economy in the future.

E. Infrastructure

Webster's Dictionary defines infrastructure as "the basic installations and facilities on which the continuance and growth of a community, state etc. depend such as roads, schools, power plants, transportation and communication systems etc." Over time infrastructure appeared in a broader context, which includes social/human infrastructure (health care, education, counseling, social services, etc.) and "green" infrastructure (open space, conservation, trails, etc.). The Economic Development Chapter mentions these two other types of infrastructure in recognition of their contribution to the overall economic wellbeing of the community and region as a whole. This section adheres to the traditional concept of infrastructure involving industrial parks, sewer and water systems, transportation and telecommunications. This concept of infrastructure consists of the facilities and services, such as roads, water and

sewer systems, broadband, and other items, necessary to support continued economic activities and continued private investment. Maintaining these services and facilities while planning for future needs enables communities to direct future growth and development to areas with infrastructure. These community facilities and services provide for a safe and healthy environment and allow communities to grow and expand. However, available services and facilities vary by town as many are rural and have not developed infrastructure.

Industrial Parks

Several municipalities in the region have established a designated industrial park, listed in Table 2.17. The parks are currently, or have future plans to be serviced by public sewer and water. Manufacturing and light industry are generally located in these parks, along with some commercial facilities. Map 5 shows the location of each of these parks.

Table 2.17: Industrial Parks in the Lakes Region

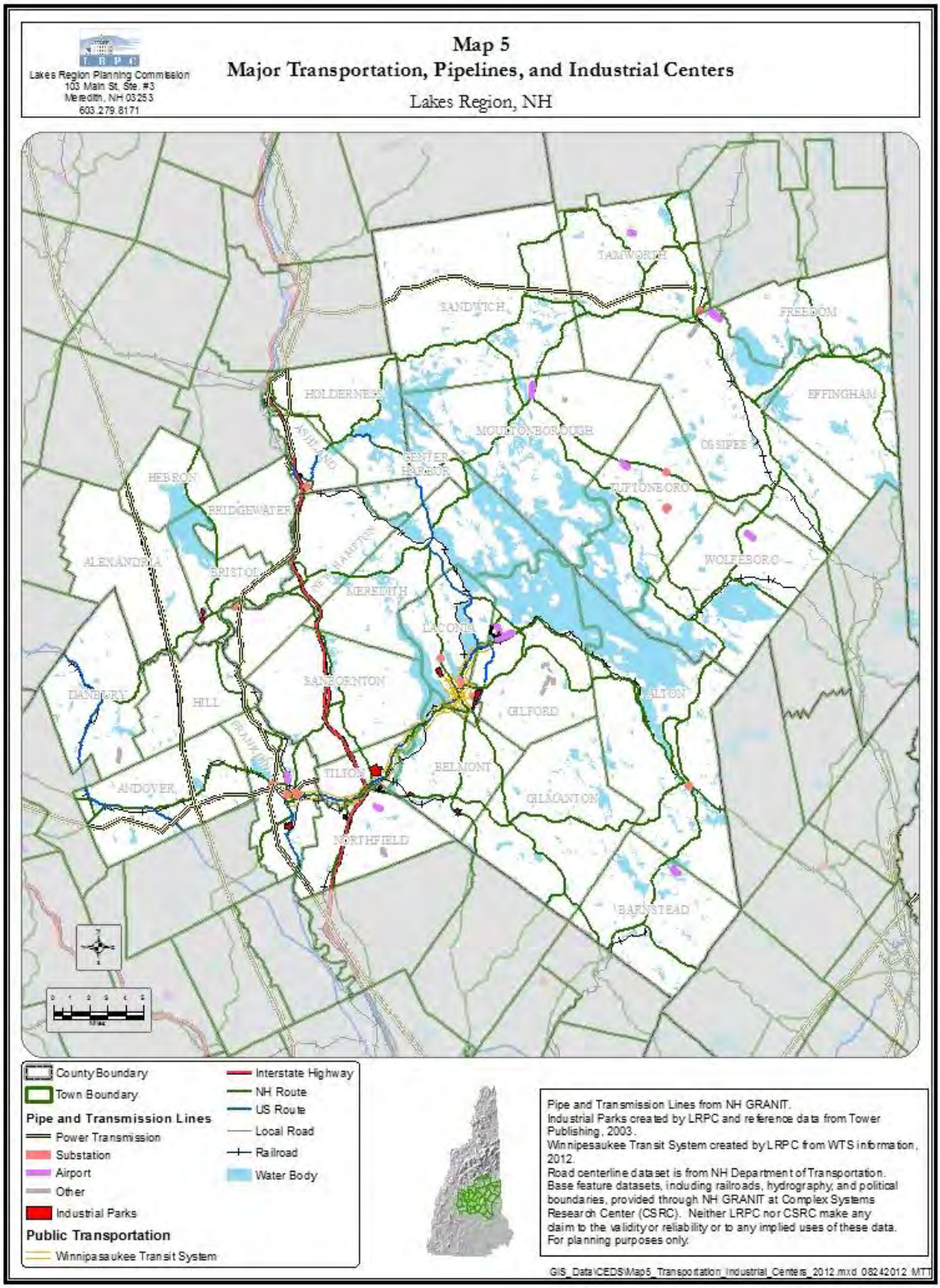
		Infrastructure				Status		
Name	**Town**	**Water**	**Gas**	**WW**	**Rail**	**Acres**	**Lots**	**Available**
Ashland Business Center	Ashland	Y	N	Y	Y	8.312	6	6 buildings
Belmont Industrial Park	Belmont	N	N	Y	N	38.31	8	5
Belknap Business & Ind. Park	Belmont	Y	N	Y	N	39.04	7	4
Cormier Industrial Park	Northfield	Y	Y	N	N	96.0	6	4
Franklin Business Park	Franklin	Y	Y	Y	N	120.00	14	5
Freudenberg-NOK & airstrip	Bristol	Y	N	Y	N			
Laconia Airport Business & Industrial Park	Gilford	Y	Y	Y	N	50	6	3
Lake Business Park (Phase 1)	Laconia	Y	Y	Y	N			
Lake Business Park (Phase 2)	Laconia	Y	Y	Y	N	54.00	19	14
Nickerson Business Park	Tilton	N	Y	Y	N	71.00	15	10
Northfield Industrial Park	Northfield	N	Y	N	N		14	8
O'Shea Industrial Park	Laconia	Y	Y	Y	N	110	18	None
Whitten Industrial Park	Gilford	N	Y	Y	N	34.74		

Source: LRPC

*Infrastructure Available:

- Y = available
- N = not available
- U = not known

Source: Local governments, property owners, real estate brokers


Lakes Region Planning Commission
103 Main St. Ste. #3
Meredith, NH 03253
603.279.8171
Map 5
Major Transportation, Pipelines, and Industrial Centers
Lakes Region, NH
TAMWORTH
SANDWICH
FREEDOM
EFFINGHAM
HOLDERNESS
MOULTONBOROUGH
OSSIPEE
CENTER HARBOR
HEBRON
BRIDGEWATER
TUFTONBORO
ALEXANDRIA
BRISTOL
NEW HAMPTON
WOLFEBORO
MEREDITH
LACONIA
SANBORNTON
DANBURY
HILL
GILFORD
ALTON
GRANTHAM
TILTON
BELMONT
ANDOVER
GILMANTON
NORTHFIELD
BARNSTEAD
County Boundary
Town Boundary
Pipe and Transmission Lines
Power Transmission
Substation
Airport
Other
Industrial Parks
Public Transportation
Winnipesaukee Transit System
Interstate Highway
NH Route
US Route
Local Road
Railroad
Water Body
Pipe and Transmission Lines from NH GRANIT.
Industrial Parks created by LRPC and reference data from Tower Publishing, 2003.
Winnipesaukee Transit System created by LRPC from WTS information, 2012.
Road centerline dataset is from NH Department of Transportation.
Base feature datasets, including railroads, hydrography, and political boundaries, provided through NH GRANIT at Complex Systems Research Center (CSRC). Neither LRPC nor CSRC make any claim to the validity or reliability or to any implied uses of these data.
For planning purposes only.
GIS_Data\CEDS\Map5_Transportation_Industrial_Centers_2012.mxd 08242012 MTT

Wastewater Treatment Systems

Modern and up-to-date wastewater treatment facilities and septic systems ensure that the water quality in the region will be maintained. Within the region, there are eight relatively small wastewater treatment facilities, with a large regional facility known as the Winnipesaukee River Basin Project (WRBP), operated by the NH DES and located in Franklin, NH. Table 2.18 lists the facility, its capacity, average daily flow, and treatment process. The Water & Sewer Services Map below shows the areas serviced by public sewer and public water. While some facilities have expansion plans, due to the region's current slow growth environment, no expansion projects are anticipated in the next three years. While wastewater treatment has become safer and more efficient, issues remain such as becoming more energy efficient, addressing climate change issues, and meeting or exceeding environmental regulations. It is now understood that fertilizing compounds like phosphorous and nitrates need to be removed from wastewater in order to prevent pollution of downstream waters.

Table 2.18: Waste Water Treatment Facilities in the Lakes Region

Facility	Area Services	Design Flow* (MGD**)	Daily Flow /Percent of capacity Used	Process
Ashland Wastewater	Ashland	1.6	0.97 / 60.6% Used	AL/CwDC
Bristol Wastewater	Bristol	0.5	0.205 / 41%	OD/CwDC
Center Harbor Wastewater	Center Harbor, Moultonborough	0.2		PS/FL
Franklin Wastewater - Winnipesaukee River Basin Project	Franklin, Laconia, Gilford, Belmont, Northfield, Tilton, Meredith, Sanbornton	11.51	5.90 / 51.3%	AS/UV/w C backup
New Hampton Village Precinct	New Hampton	0.08	Unknown	AL
Ossipee Wastewater	Ossipee	0.11	0.0605/ 55%	ST/SD
Plymouth Village Water & Sewer District	Holderness	0.7	0.430 / 61.4%	RBC/CW DC
Sandwich Wastewater	Sandwich	0.02	Unknown	ST/SF/SD
Wolfeboro Wastewater	Wolfeboro	0.6	0.380 / 63.3%	EA/SI

Source: NH DES Wastewater Engineering Bureau

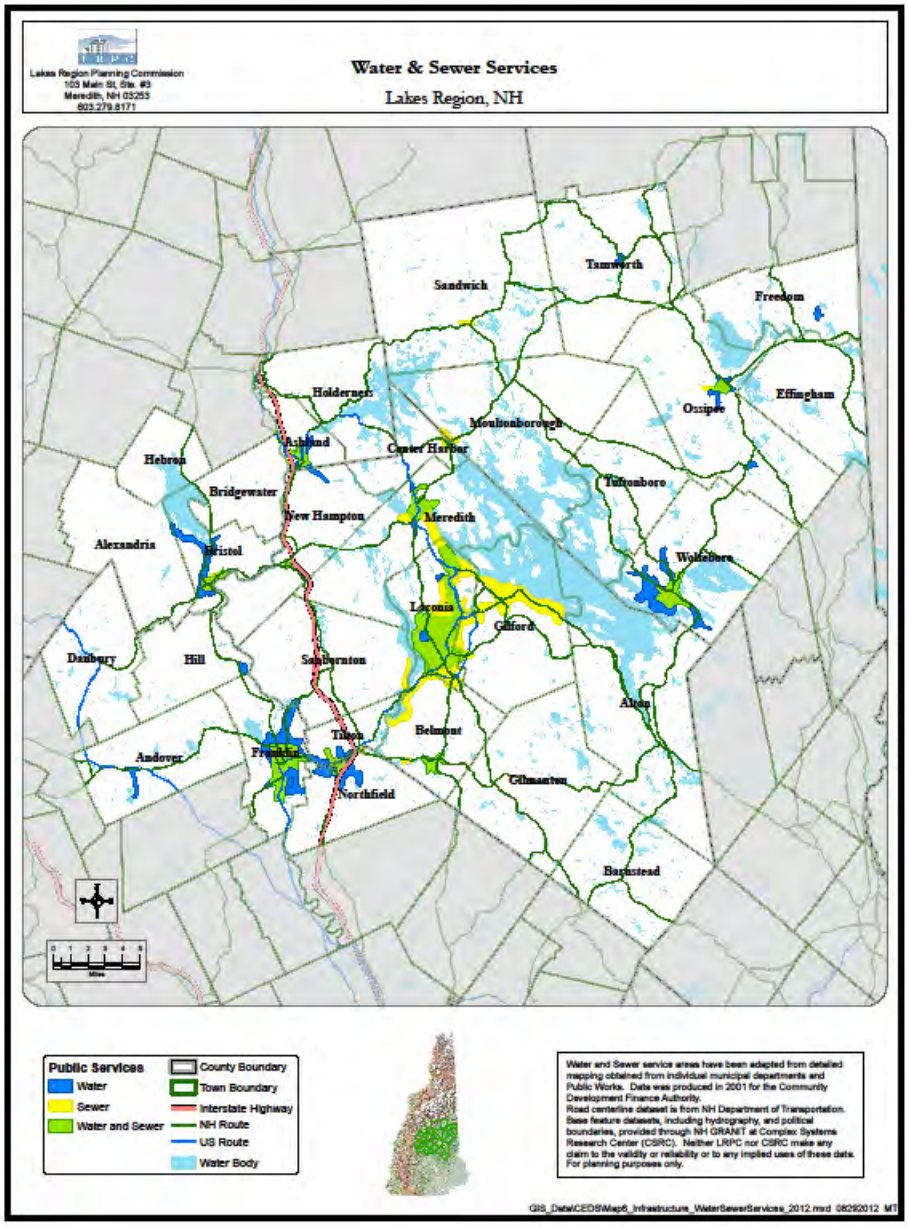
**The flow amount is what the WWTF is designed to treat - not what is being used.*

***MGD - Millions of Gallons per Day*

Wastewater Treatment Process and Disinfection Method Key		**Solids Disposal Key**
AL - Aerated Lagoon	RBC - Rotating Biological Contractor	LA - Land Application
AS - Activated Sludge	SD - Subsurface Disposal	LF – Landfill
CU/DC - Chlorination with dechlorination	SF - Sand Filter	CO – Composting
EA - Extended Air	SI - Spray Irrigation	TR - Transferred to another facility
	ST - Septic Tank	
OD - Oxidation Ditch	UV - Ultraviolet Disinfection	
OF - Overland Flor		
PS - Pump Station		

Source: NH Department of Environmental Services, 2014

As part of developing a complete asset management program, the operators and managers of wastewater treatment facilities should consider factors addressing risk. Areas of concern include potential for flooding, the impacts of climate change, criticality for each piece of equipment, and the capacity of individuals systems to handle economic growth. Asset management programs and energy efficiency programs are both critical for managing water and wastewater infrastructure in a sustainable way.



Regional highlights:

The NH Department of Environmental Services (DES) on behalf of several Lakes Region municipalities administers and manages the Winnipesaukee River Basin Project (WRBP) based in Franklin, NH, at the Franklin Wastewater Treatment facility. The WRBP facility treats wastewater from 10 surrounding communities with a capacity of 11.51 million of gallons per day (MGD) and a daily average usage of about 6.0 MGD. The system serves portions of the cities of Laconia and Franklin, towns of Belmont, Center Harbor, Gilford, Meredith, Moultonborough, Northfield, Tilton and Franklin. The system also receives the partially treated discharge from the Bay District, which serves portions of Center Harbor and

Moultonborough. Since many of these communities provide seasonal recreational opportunities, there is a significant increase in population served by the WRBP in the summer months. The WRBP serves approximately 38,000 sewer users year round and an estimated 68,000 during the summer. Potential users can connect to the system by following current DES, WRBP and each community's procedures. The WRBP is a significant regional asset that allows for continued economic development while preserving the Lakes Region's water quality. The WRBP has completed a facility-wide retrofit including an innovative aeration blower technology that reduces energy consumption by 20 percent, a new "green roof" that minimizes storm water runoff and reduces building heating and cooling costs, and a new Ultraviolent (UV) disinfection system designed to treat both normal and peak flows while reducing energy consumption by as much as 65 percent. The WRBP does not have any significant interceptor projects planned and is not expanding its collection system. All current WRBP capital improvements are included in the WWTP Capital Improvement Plan and do not result in an increase in the design capacity. The WRBP webpage includes its 10-year Capital Improvements Plan.
http://des.nh.gov/organization/divisions/water/wrbb/index.htm

- Ashland — the town operates a WWTF with series of aerated lagoons with a chlorination with dechlorination process and has a surface water discharge permit into the Squam River. Over the last 19 years, the facility experienced flooding three times. No expansion plans at present.

- Bristol — the town operates a WWTF with an active sludge - external aeration - oxidation ditch series with a chlorination with dechlorination process and has a surface water discharge permit into the Pemigewasset River. No expansion plans at present.

- Center Harbor-Moultonborough — The Bay District Sewer Commission operates facultative lagoons which pre-treat wastewater from portions of the towns of Center Harbor and Moultonborough and discharges the partially treated wastewater to the WRBP.

- New Hampton — the town operates two large facultative lagoons supporting the common and school areas. Lagoons use is alternated yearly. The facility has a groundwater discharge permit. There are no outstanding compliance issues and no expansion plans.

- Ossipee — operates a large subsurface disposal system (26 leach fields) and received primary treated wastewater pumped up from the village. It also has septage receiving capacity. The facility has permits for both activities. No proposed expansion plans.

- Sandwich — the municipal wastewater disposal site is a large septic system and existing flows do not make it eligible for a groundwater discharge permit. The system is operating as designed.

- Wolfeboro — operates a 600,000 gal/day WWTF, which includes a 90 million gallon treated effluent storage pond. The stored treated water is discharged to either the

spray irrigation site (May thru October) or to a remote rapid infiltration basin (RIB) disposal site. The groundwater permit for the effluent storage pond/spray irrigation site was renewed and is in effect until April 2016. The RIB site has experienced "unexpected issues" since it began operating in 2009. The groundwater permit for the RIB site was renewed at a reduced flow rate and is effect until September 2017. The "unexpected issues" are very serious, and the Town is working with NHDES and its new consultant, Underwood Engineers, to evaluate long-term sustainable solutions to its effluent disposal problems, including a possible connection to the WRBP.

Septage

Table 2.19 below provides information on the amount of septage in gallons received by the WRBP in 2011 and 2013. Although there is some fluctuation in the amount of septage coming to the WRBP facility each year, the volumes received have been relatively stable since the WRBP increased their tipping fees by $5/1000 gallons in 2011. The WRBP does not control the amount charged by haulers to customers. Amounts of septage received have always fluctuated with the economy and weather conditions (harsh winters and poor tourist seasons reduce septage tank maintenance). Municipalities may also have signed other 485-A:5b agreements (see http://www.gencourt.state.nh.us/rsa/html/L/485-A/485-A-5-b.htm) with other facilities. This statute provides for inter municipal agreements for septage disposal. Comparing the difference from CY 2011 and CY 2013, WRBP experienced an overall increase of 1% or 26,200 gallons of total septage received from Lakes Region communities. The WRBP annually receives a total of 5,000,000 gallons of septage from communities throughout New Hampshire and Vermont. WRBP's rates are consistent with the "market" rate changed by other WWTPs.

Table 2.19 Septage Received by the WRBP in 2011 and in 2013

Municipality	CY 2011		CY 2013		Change
Alexandria	31,800		41,400		30%
Alton	37,100		32,200		-13%
Andover	92,600		78,400		-15%
Ashland	7,800		7,500		-4%
Barnstead	1,200		1,000		-17%
Belmont	243,400		285,550		17%
Bridgewater	53,100		47,550		-10%
Bristol	133,900		107,300		-20%
Center Harbor	83,500		66,300		-21%
Danbury	17,250		37,900		120%
Effingham	4,500		3,800		-16%
Franklin	221,600		231,600		5%
Freedom	8,050		8,800		9%
Gilford	385,600		398,700		3%
Gilmanton	74,200		131,600		77%
Hebron	22,450		46,600		108%
Hill	25,400		34,600		36%
Holderness	46,950		68,500		46%
Laconia	139,050		157,200		13%
Meredith	422,700		381,100		-10%
Moultonborough	810,300		750,750		-7%
New Hampton	44,500		81,900		84%
Northfield	262,750		167,500		-36%
Ossipee	39,050		23,150		-41%
Sanbornton	298,300		293,300		-2%
Sandwich	47,300		41,600		-12%
Tamworth	36,850		54,700		48%
Tilton	193,700		195,200		1%
Tuftonboro	12,900		38,200		196%
Wolfeboro	0		10,100		100%
LR Total	3,797,800		3,824,000		1%

Source: Winnipesaukee River Basin Project, 2014

The WRBP does not have any significant interceptor projects planned and is not expanding its collection system. All current WRBP capital improvements are at the WWTP Capital Improvement Plan and do not result in an increase in the design capacity. The WRBP webpage includes its 10-year Capital Improvements Plan.
http://des.nh.gov/organization/divisions/water/wrbb/index.htm

Since a large portion of the Lakes Region is rural and not served by a wastewater treatment facility, most households and businesses use individual septic systems. These individual systems can pose a threat to the water quality due to the potential lack of proper maintenance and repair. Another issue of concern is that many septic systems are not

upgraded when small summer camps on the shorelines are converted to larger, year-round homes. These older septic systems have often been poorly maintained, do not have the capacity to handle the additional load, and are frequently nearing their life expectancy. These issues can contribute to sewage entering the lakes and rivers, and bacteria entering the ground water. Many locations along the shoreline are currently impaired due to *fecal coliform* and *Escherichia coli* bacteria, or chlorophyll A and algal blooms, leading to beach closures and unsafe water quality conditions. A few organizations in the region routinely provide education and outreach to homeowners in order to raise awareness about the maintenance requirements of a septic system, or how to identify a failing system.

As the population has increased, so has the amount of waste treatment by-products of septic and sludge, from both septic systems and wastewater treatment facilities. Traditional disposal methods are increasingly difficult to use and pose their own unique set of problems and issues. As research is conducted and the population becomes more aware of the issues, more informed decisions can be made to better recycle or dispose of these products.

Water Supply System

The Lakes Region contains 42 percent of the total water area in the state of New Hampshire. In addition to the nearly 12 percent of surface water covering the region, approximately five percent sits over stratified drift aquifers. Compared to bedrock aquifers, stratified drift aquifers are the more productive. However, they are also the most vulnerable to contamination. This is of particular importance when determining allowable land use activities over high yield (transmissivity) areas. Due to the characteristics of these high-yield areas, gravel pits are often located on them. Other sources of potential contamination sources include leaking underground storage tanks, failing septic systems, improper disposal of hazardous chemicals, or vehicular accidents. Planning and zoning are tools communities can use to address these potential problems by adopting an aquifer overlay district, wellhead protection district, greater setbacks from surface waters, and limiting contact recreation in surface waters providing drinking water.

While there is currently an abundance of clean, potable water for the region, protection of these vital resources should be paramount to communities. The majority of the region gets its water from private ground water wells. A permit is required from the New Hampshire Department of Environmental Services for any private water system withdrawing greater than 57,600 gallons per day (GPD).

Public water supply systems in the region provide town and business centers with water from mainly ground water sources (Map 6). All systems operating in the region are listed in Table 2.20.

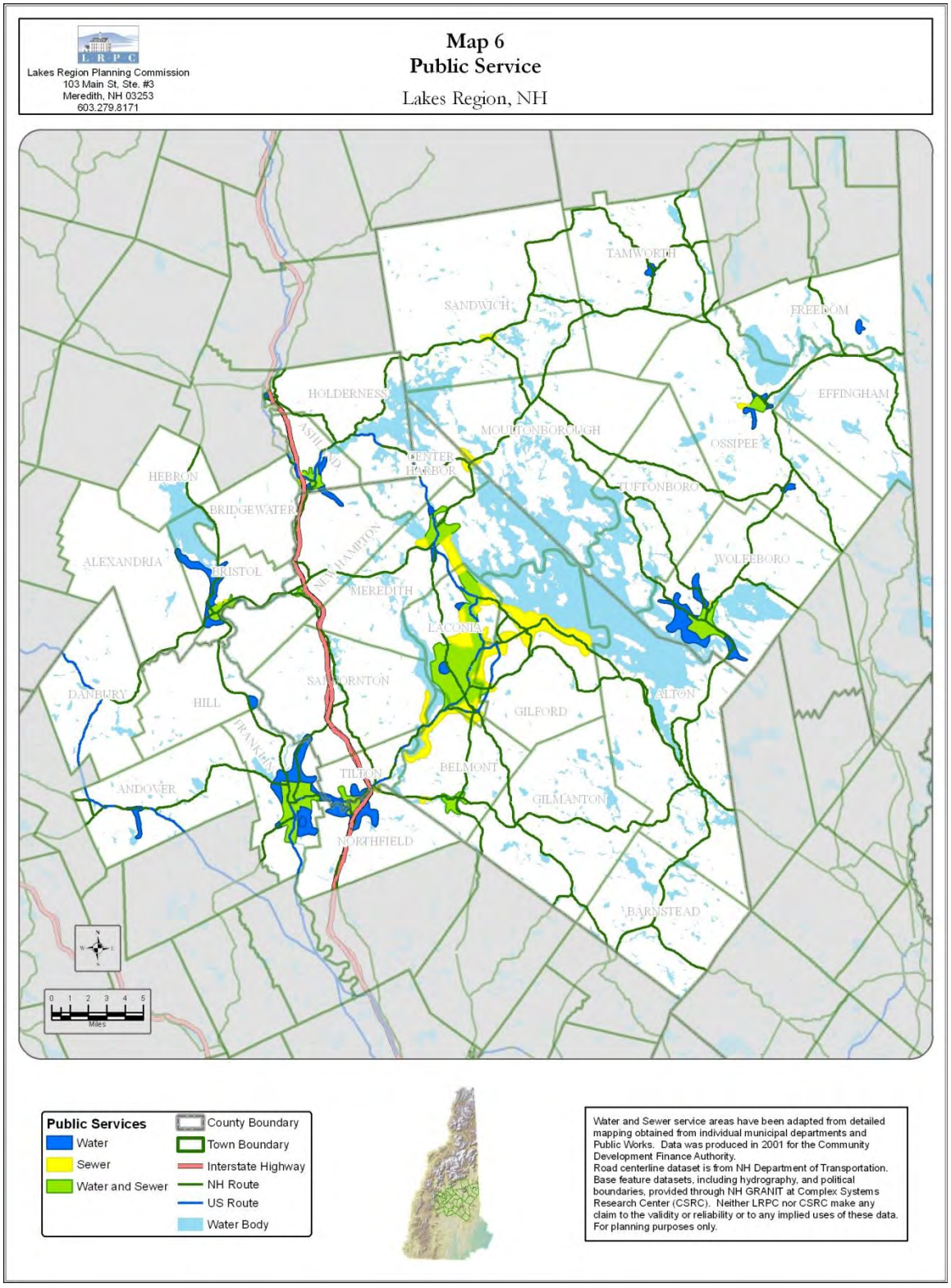

Lakes Region Planning Commission
103 Main St. Ste. #3
Meredith, NH 03253
603.279.8171
Map 6
Public Service
Lakes Region, NH
TAMWORTH
SANDWICH
FREEDOM
HOLDERNESS
EFFINGHAM
MOULTONBOROUGH
OSSIPEE
CENTER HARBOR
HEBRON
TUFTONBORO
BRIDGEWATER
ALEXANDRIA
BRISTOL
NEW HAMPTON
WOLFEBORO
MEREDITH
LACONIA
DANBURY
HILL
SANBORNTON
ALTON
GILFORD
FRANKLIN
TILTON
BELMONT
ANDOVER
GILMANTON
NORTHFIELD
BARNSTEAD
0 1 2 3 4 5
Miles
Public Services
Water
Sewer
Water and Sewer
County Boundary
Town Boundary
Interstate Highway
NH Route
US Route
Water Body
Water and Sewer service areas have been adapted from detailed mapping obtained from individual municipal departments and Public Works. Data was produced in 2001 for the Community Development Finance Authority.
Road centerline dataset is from NH Department of Transportation. Base feature datasets, including hydrography, and political boundaries, provided through NH GRANIT at Complex Systems Research Center (CSRC). Neither LRPC nor CSRC make any claim to the validity or reliability or to any implied uses of these data. For planning purposes only.

Table 2.20: Public Water Supply Systems in the Lakes Region

Community Water System (CWS)	Town	Category*	Population Served	Service Connections
Alton Water Works	Alton	Large CWS	1750	703
Andover Village District	Andover	Major CWS	650	120
Ashland Water Department	Ashland	Major CWS	1500	550
Pac Locke Lake Water System/SEC S	Barnstead	Small CWS	83	33
PEU Locke Lake Water System	Barnstead	Major CWS	2120	856
Belmont Water Department North	Belmont	Large CWS	150	50
Belmont Village Water District	Belmont	Large CWS	1612	645
Bristol Water Works	Bristol	Major CWS	3327	1331
Franklin Water Works	Franklin	Major CWS	7000	2600
Freedom Water Precinct	Freedom	Major CWS	163	67
Gilford Village Water District	Gilford	Small CWS	130	36
Gunstock Acres Village District	Gilford	Large CWS	1440	576
Hill Water Works	Hill	Large CWS	350	139
Laconia Water Works	Laconia	Major CWS	12000	5800
Meredith Water Department	Meredith	Major CWS	3500	1052
Paradise Shores	Moultonborough	Major CWS	1881	753
New Hampton Village Precinct	New Hampton	Major CWS	600	125
Tilton Northfield Water District	Northfield	Major CWS	2500	941
Carroll County Complex	Ossipee	Small CWS	210	37
Ossipee Water Department	Ossipee	Major CWS	850	325
Tamworth Water Works	Tamworth	Small CWS	265	60
Lochmere Village District	Tilton	Small CWS	345	138
Wolfeboro Water and Sewer	Wolfeboro	Major CWS	5550	2300

Source: NH DES website

*****Category - identifies the size/type of CWS:

- Major CWS (>1500 population or surface water)
- Large CWS (>1000 population)
- Small CWS (<1000 population)

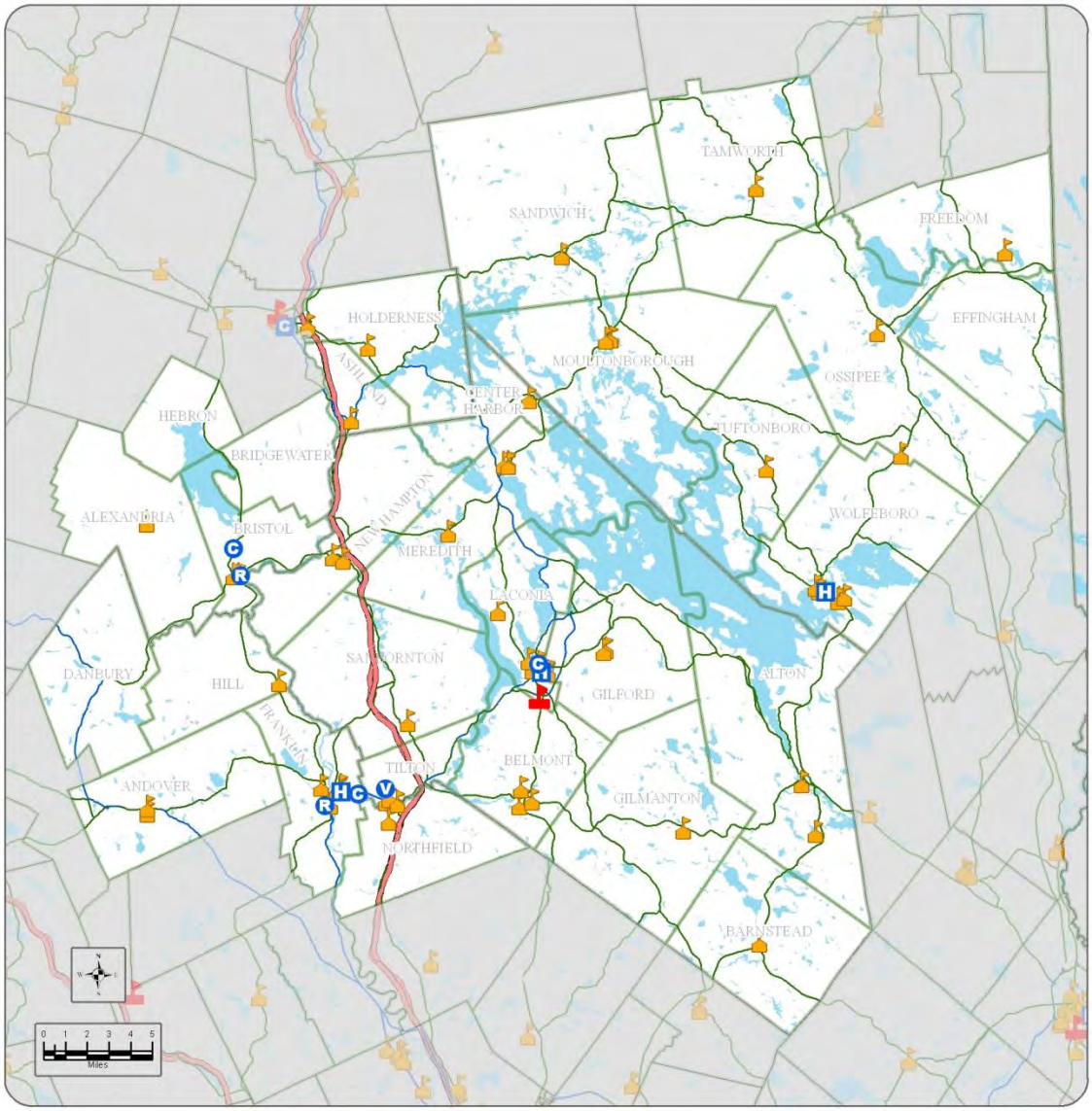
Source: NH Department of Environmental Services, 2012

Health Care Services

There are many health care facilities throughout the region (Map 7). Available health care services include specialty services such as physical therapists, pediatrics, and obstetrics, to hospitals and walk-in clinics. Several full-service hospitals are located in the region.

Lakes Region Planning Commission
103 Main St. Ste. #3
Meredith, NH 03253
603.279.8171

Map 7
Health Care and Education
Lakes Region, NH



- Community Health Center
- Rural Health Clinic
- VA Outpatient Clinic
- Hospital
- School: K-12
- School: Higher Education
- County Boundary
- Town Boundary
- Interstate Highway
- NH Route
- US Route
- Water Body

Community Health Centers and Rural Health Clinics created by LRPC, data from internet research and NH DHHS, 2007.
VA Outpatient Clinics created by LRPC, data from US Department of Veteran Affairs, 2007
Hospitals and Schools are from the Key Destinations dataset developed by NH DES and the NH RPC's and represent entrance points of key locations (revised, 2006).
Road centerline dataset is from NH Department of Transportation.
Base feature datasets, including hydrography, and political boundaries, provided through NH GRANIT at Complex Systems Research Center (CSRC). Neither LRPC nor CSRC make any claim to the validity or reliability or to any implied uses of these data. For planning purposes only.

LRGHealthcare — A charitable healthcare trust, which includes Lakes Region General Hospital and Franklin Regional Hospital.

Lakes Region General Hospital is located in Laconia and is a community and regional acute care facility. It has a licensed bed capacity of 137 beds and currently staffs 107 beds. In January 2000, the Hospital added the trade name LRGHealthcare to describe its growing continuum of services. This organization has grown into a full health care system for Lakes Region residents, offering a wide range of medical, surgical, psychiatric, diagnostic, and therapeutic services, wellness education, support groups, and other community outreach services. The hospital, which serves as a Level III Trauma Center, has 98 active staff physicians, 90 percent of whom are Board-certified.

Franklin Regional Hospital is a 25-bed critical access community hospital, serving 11 area towns with a population of approximately 32,000 people. The hospital provides a range of medical specialty areas including cardiology, audio laryngology, family practice, gynecology, internal medicine, neurology, obstetrics, ophthalmology, orthopedic, pediatrics, podiatry, pulmonary medicine, rheumatology, and urology. The hospital also offers a full range of rehabilitation services, education services, an occupational health program, and senior wellness and exercise classes at the Twin Rivers Intergenerational Program facility. It is also in the process of adding services in the areas of diabetes, heart failure, and wellness. In 2002, Lakes Region General Hospital and Franklin Regional Hospital merged under LRGHealthcare, a healthcare charitable trust.

Huggins Hospital is located in Wolfeboro. It is a non-profit, licensed, 55-bed community hospital with critical access designation. It provides primary and secondary medical services to 14 communities in and around the Lakes Region. Huggins' services include a 27-bed Skilled Nursing and Rehabilitative Care Unit, 15 assisted living suites, an adult day program, Back Bay Rehabilitation centers and 12 primary care and specialty medical practices in 12 locations. Several external sites provide physician diagnostic and outpatient services including restorative rehabilitation therapies.

Although located outside the Lakes Region, Speare Memorial Hospital in Plymouth, Dartmouth-Hitchcock Medical Center in Lebanon, and Concord Regional Hospital in Concord, New Hampshire, also provide comprehensive health care to many of the area's residents. Table 2.21 lists health care facilities.

There are a number of assisted living and long-term care residential facilities throughout the region, including a Veterans Home in Tilton. Many of the services offered in these facilities include residential, medical/dental and nursing care, physical/occupational therapy, recreation, dietetic and social services.

Table 2.21: Health Care Facilities in the Lakes Region

NAME	TOWN	TYPE
Mid-State Health Center	Bristol	Community Health Center
Health First Family Care Center	Franklin	Community Health Center
Health First Family Care Center	Laconia	Community Health Center
Mid-State Health Center	Plymouth	Community Health Center
Franklin Regional Hospital	Franklin	Hospital
Lakes Region General Hospital	Laconia	Hospital
Huggins Hospital	Wolfeboro	Hospital
Newfound Family Practice	Bristol	Rural Health Clinic
Westside Healthcare	Franklin	Rural Health Clinic
Tilton Outpatient Clinic	Tilton	Veteran Affairs

Source: Local health facilities, 2012

Higher Education Facilities

Quality education at all levels is a very important component for the economic prosperity of the region. Employers need educated persons to work at their facilities, which require a greater application of high technology. A common theme echoed received by many in the business community is that young workers entering the labor force at approximately 18 years lack basic English and math skills to perform well in the work environment. With the changing economic and technological work conditions, young people entering the workforce need not only basic educational skills and training but some level of college or advanced training. Access to quality education facilities is necessary to support the social, economic and cultural welfare of a community. For businesses trying to develop their workforce, access to a system of affordable and accessible higher education is crucial. A viable, diverse education system provides opportunities for children and adults alike by giving them the tools and a foundation for a productive, socially involved future. Without a well-educated workforce, New Hampshire and the Lakes Region will be unable to compete with other states for well-paying jobs. This has become a hot topic as "brain-drain" is of increasing concern among the business community. As young adults leave the state to seek education or opportunities elsewhere, they also leave a gap in the current workforce and potentially the future workforce since they take their children with them.

Lakes Region Community College in Laconia is the only higher learning facilities located within the Lakes Region; however, several facilities are close by. These include Plymouth State University in the neighboring town of Plymouth, and Dartmouth College in Hanover. Concord, 30 miles south of the region, is also home to the NH Technical Institute and the University of New Hampshire School of Law (formerly Franklin Pierce Law Center). The main campus of the University of New Hampshire is located in Durham, about an hour's drive southeast of the region. The Conway office of Granite State College, part of the UNH System, serves eastern New Hampshire.

Telecommunications --- Broadband

The distribution and quality of telecommunication services varies throughout the region. In order to better understand and plan for telecommunications service, a collaboration of multiple partners representing UNH, regional planning commissions, state agencies, and private, non-profit entities created the New Hampshire Broadband Mapping & Planning Program (NHBMPP). The NHBMPP is a comprehensive, multi-year effort that seeks to understand where broadband is currently available in New Hampshire, how it can be made more widely available in the future, and how to encourage increased levels of broadband adoption and usage. The Program, managed by the GRANIT System within the Earth Systems Research Center at the University of New Hampshire (UNH), includes two primary components: a mapping initiative, and a planning and technical assistance initiative.

In the mapping realm, GRANIT is collaborating with the nine regional planning commissions to map areas in the state where broadband service is currently available, as well as areas with no service and areas that are considered underserved. The mapping inventory relies on data collected semi-annually from the 70+ public and commercial entities, both landline and wireless (fixed and cellular) that provide broadband services in New Hampshire. Data is also being collected on broadband availability at individual community anchor institutions, including schools, libraries, medical/ healthcare locations, public safety offices, and state/county/municipal buildings. Finally, the mapping component includes a significant effort to develop the first public master address file for the state.

The results from the NHBMPP will be provided to the National Telecommunications Information Administration (NTIA) and the Federal Communications Commission (FCC) to assist in the development and maintenance of the national broadband availability map. The NHBMPP includes a significant effort to incorporate the information collected and the momentum generated by the mapping activities into a suite of planning and technical assistance services to benefit municipalities, businesses, institutions, and residents of New Hampshire. The planning activities focus on state broadband capacity building, on developing regional and statewide plans, and on providing technical assistance to various sectors in the state. For additional information and specific information relative to broadband service in a particular Lakes Region community, visit http://www.iwantbroadbandnh.org/ and check out the Town Profile maps.

Table 2.22: Internet cell providers in the Lakes Region

Internet and cell providers	Satellite providers	Others
AT&T	Wild Blue	Cyberpine Cooperative
Verizon Wireless	Hughes Communications	Lakes Region Wireless
FairPoint	StarBand Communications	Tamworth Wireless
T-Mobile		Wave Communications
US Cellular		Argent Communications
Sprint		Biddeford Internet
		Charter Communications
		Comcast

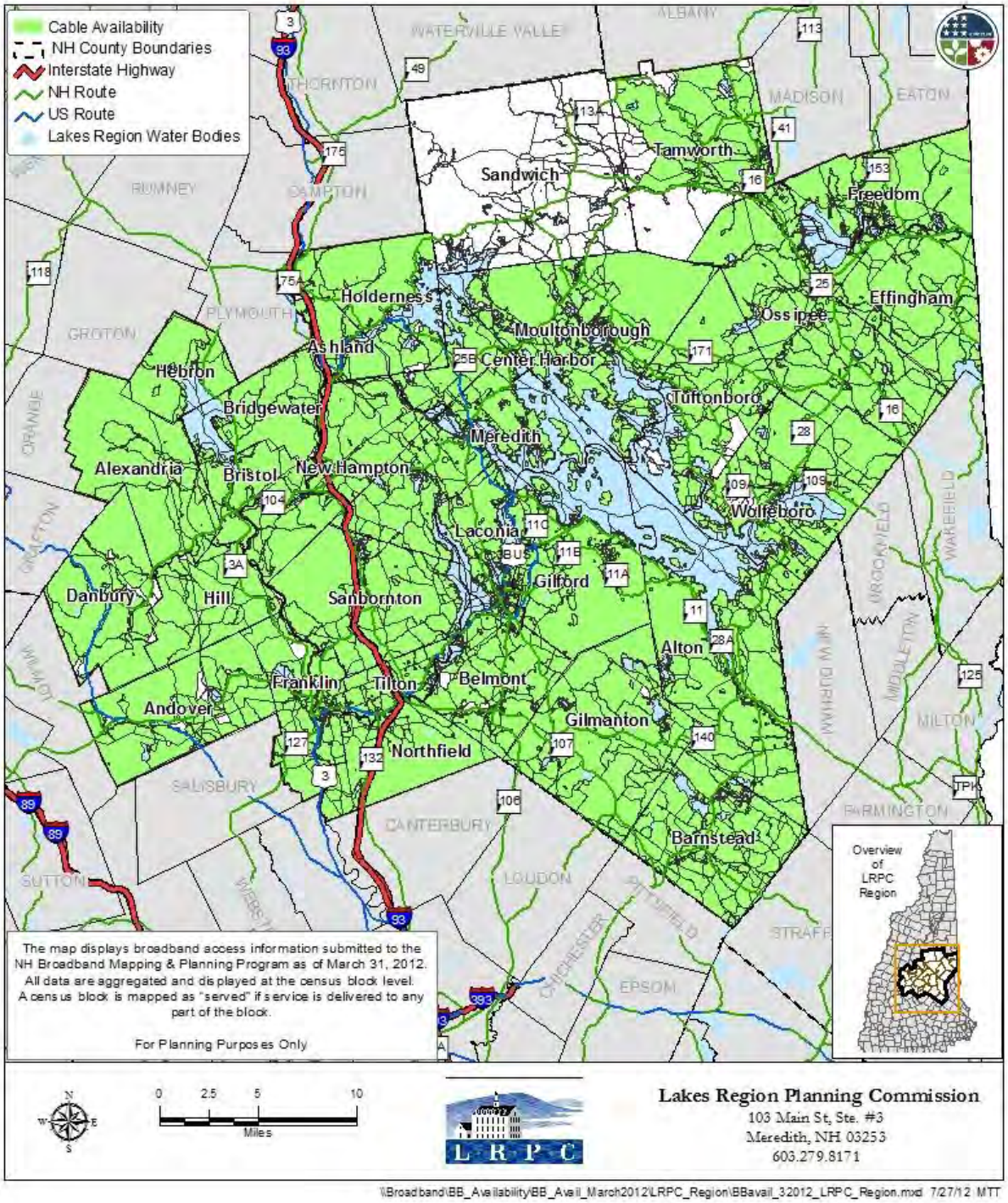
Source: NH Broadband Mapping & Planning Program; NH GRANIT

Fairpoint holds a NH PUC franchise to provide the state of New Hampshire telephone service, so the opportunity of dial-up internet service is available to most. High-speed internet, however, is dependent on the proximity of FairPoint's "hub stations" to the end-user. In most cases, a customer must be within a three-mile linear radius of the hub in order to have internet coverage.

Map 8 - 1

Broadband Availability in the Lakes Region, NH

Cable Technology



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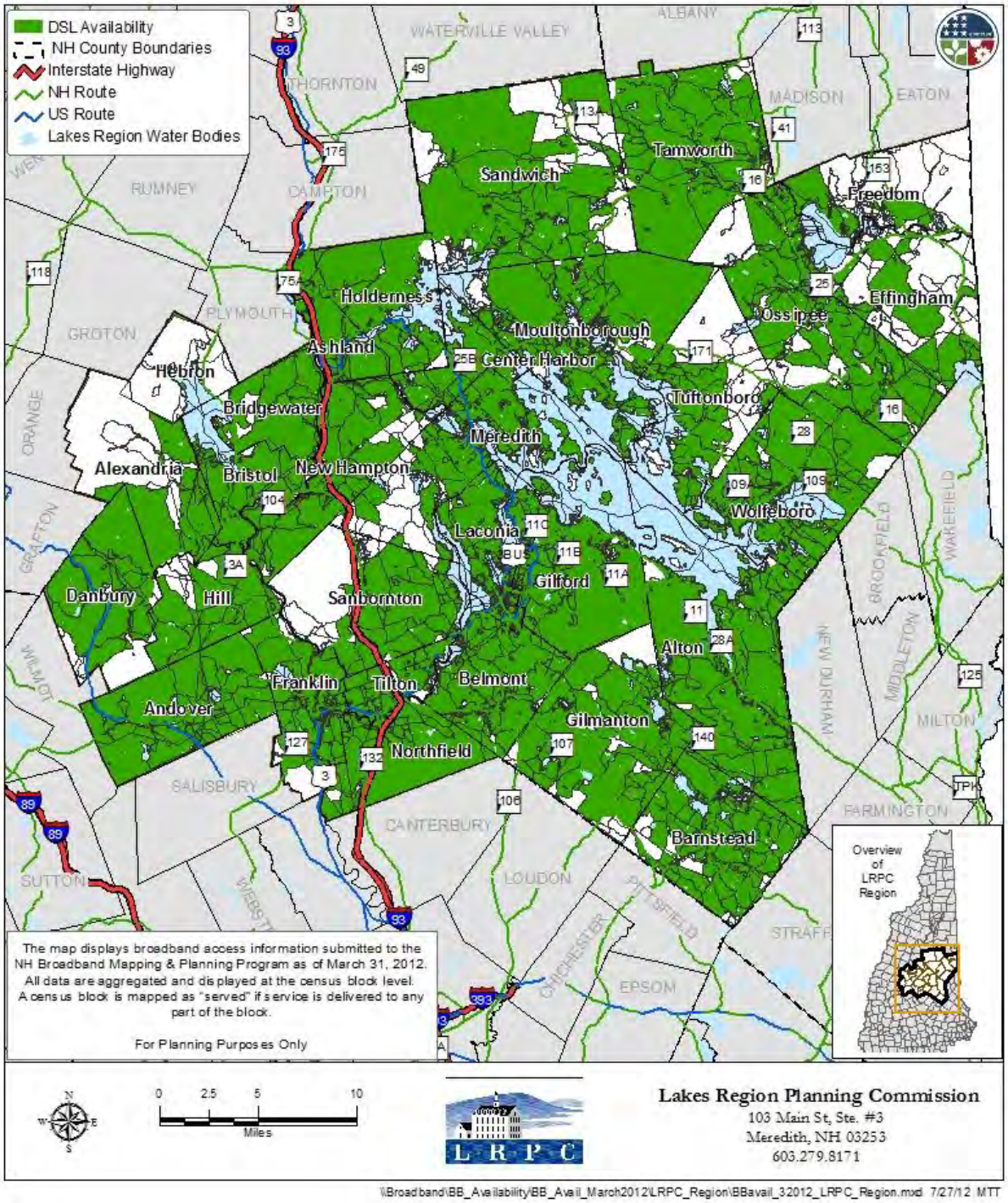
Map 8 - 2

Broadband Availability in the Lakes Region, NH

DSL Technology



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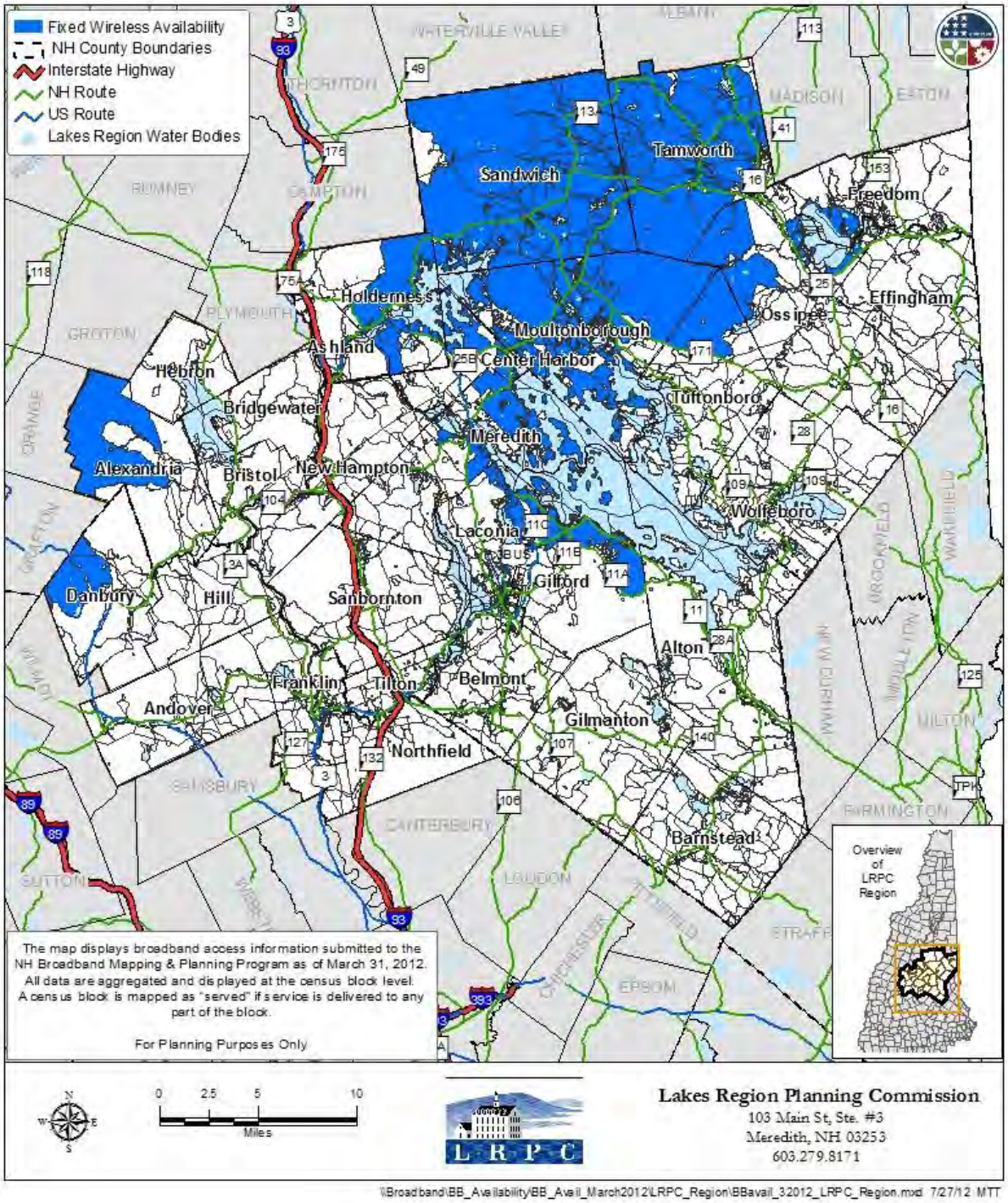
Map 8 - 3

Broadband Availability in the Lakes Region, NH

Fixed Wireless Technology



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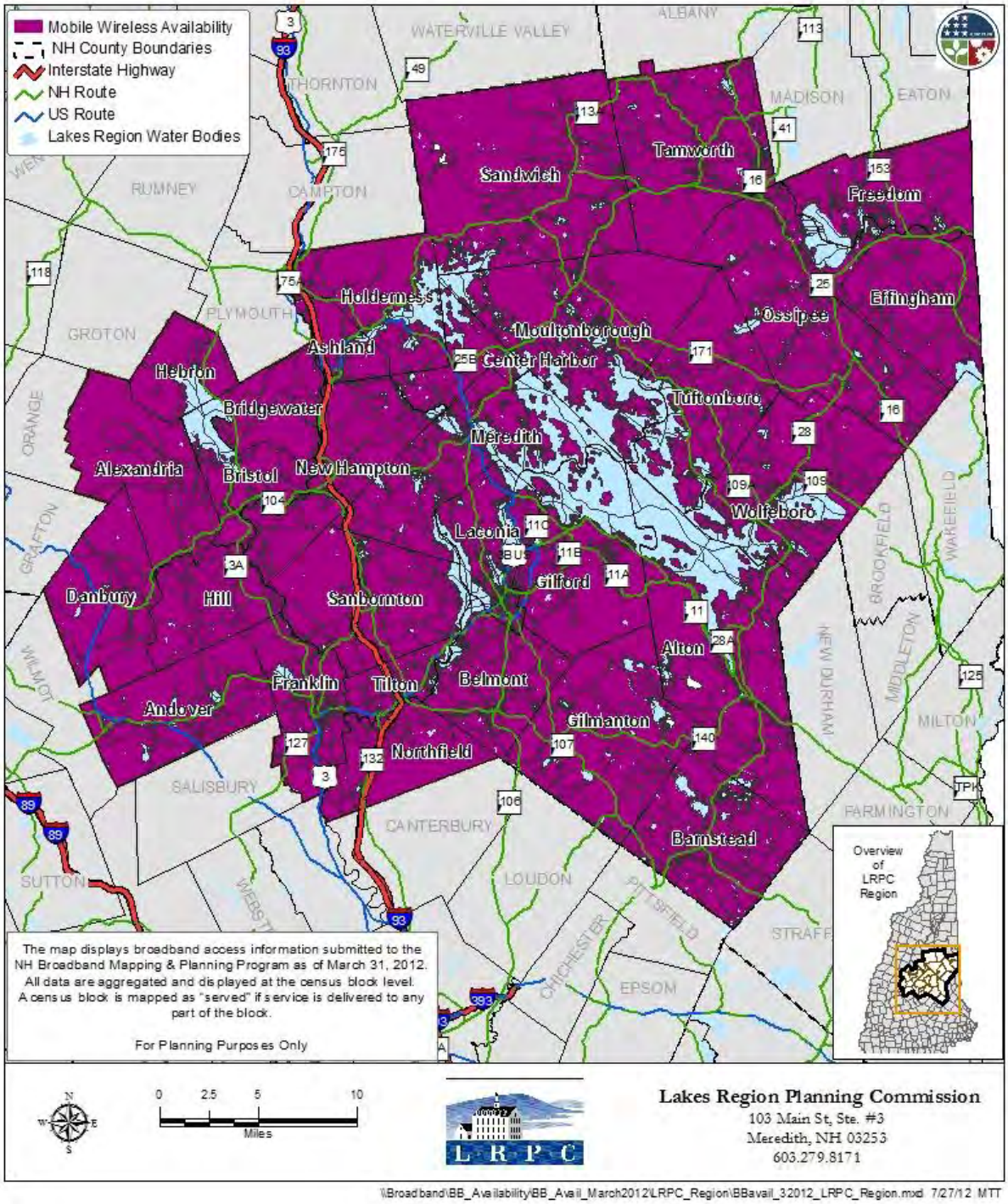
Map 8 - 4

Broadband Availability in the Lakes Region, NH

Mobile Wireless Technology



\\Broadband\BB_Availability\BB_Avail_March2012\LRPC_Region\BBavail_32012_LRPC_Region.mxd 7/27/12 MTT

Transportation – highway, transit, air and rail

A balanced and well functioning transportation system is a key ingredient for successful regional planning and economic development.

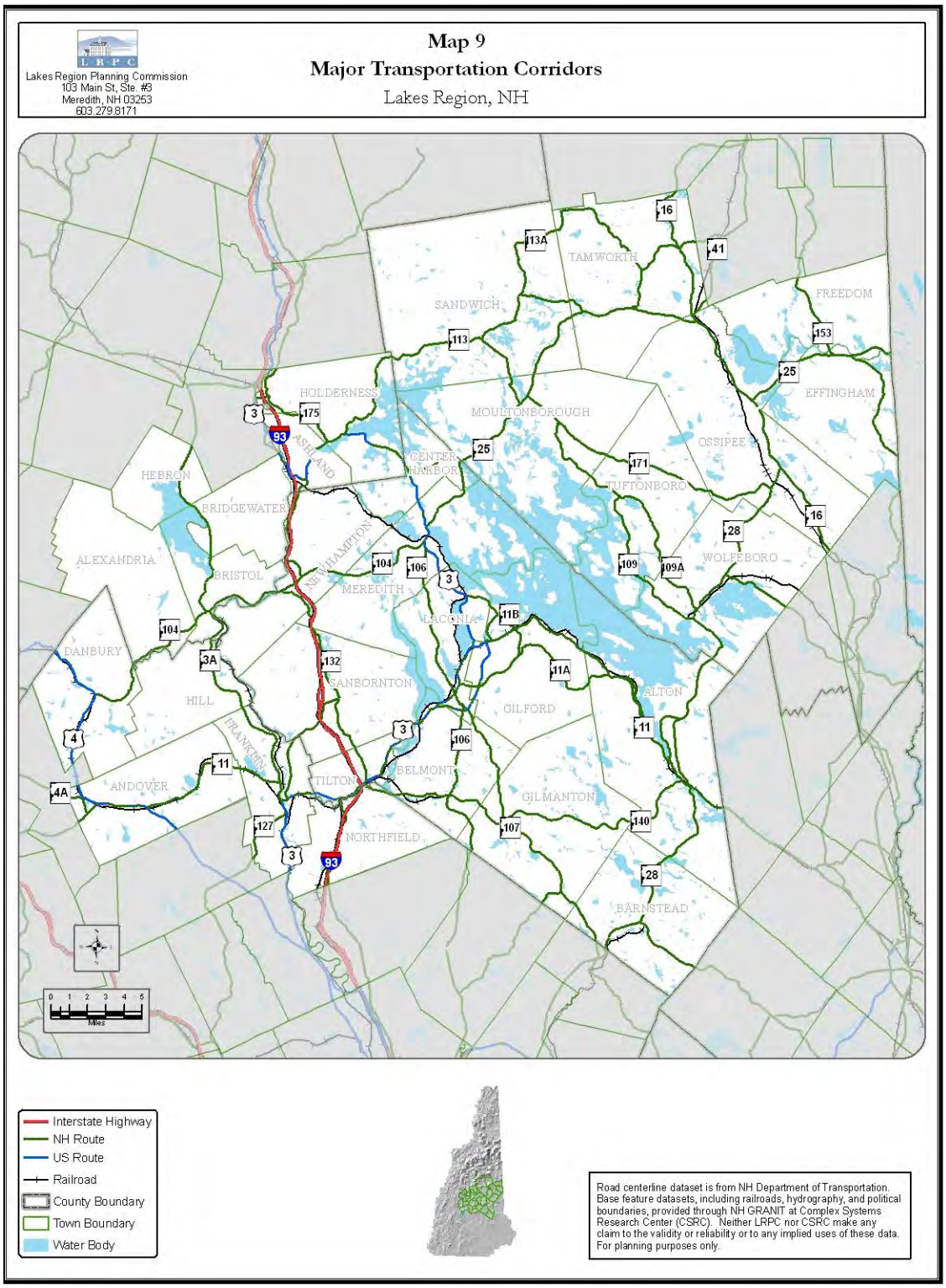
The regional transportation planning process in the Lakes Region is driven by community participation through the Lakes Region Transportation Technical Advisory Committee (TAC) and supported by LRPC and NHDOT staffing. Recommendations related to transportation planning are made by the TAC for consideration by the LRPC Commissioners, who approve the regional transportation policies. The TAC committee membership consists of representatives from LRPC area communities who act as a liaison to local City Councils and Boards of Selectmen.

There are several key elements to the regional transportation planning process in the Lakes Region. The first is the *2008 Lakes Region Transportation Plan*. The Plan outlines the overall transportation planning process and describes the goals and objectives that are the underpinnings of the Plan's strategies. The Lakes Region Transportation Mission Statement is as follows:

> "To provide an integrated, all-mode transportation system in the Lakes Region which offers efficient, effective and safe movement of people and goods, and provides mode choice wherever possible while enhancing and preserving the character and livability of the neighborhoods and the natural, socio/economic, and historical environments where transportation facilities are located."

Another important element in the planning process is the development of the regional transportation improvement program (TIP) every two years. The process to prepare the TIP usually begins with the LRPC soliciting project requests from local communities, followed by an evaluation process by the TAC where new and existing projects are prioritized. The prioritized projects are presented to the LRPC Commissioners for adoption. After LRPC approval, they are submitted to NHDOT for consideration in the statewide Ten Year Plan. Following a series of public hearings held by the Governors Advisory Commission on Intermodal Transportation (GACIT), and potential modifications of the Plan by GACIT and the Governor, the Ten Year Plan is submitted to the Legislature where it may be again amended before adoption.

Due to severe state and federal fiscal constraints, the NH Ten Year Plan is underfunded. The current 2011 TIP prepared by LRPC will be updated in 2013. NH DOT requested the LRPC and other regional planning commissions to reevaluate existing regional project priorities during the last TIP development process. Lakes Region transportation priorities can be found in Table 2.23. Map 9 shows the region's major transportation corridors.


Lakes Region Planning Commission
103 Main St, Ste. #9
Meredith, NH 03253
603.279.8171
Map 9
Major Transportation Corridors
Lakes Region, NH
TAMWORTH
SANDWICH
FREEDOM
HOLDERNESS
MOULTONBOROUGH
EFFINGHAM
OSSIPEE
CENTER HARBOR
TUFTONBORO
HEBRON
BRIDGEWATER
ALEXANDRIA
BRISTOL
NEW HAMPTON
MEREDITH
WOLFEBORO
LACONIA
DANBURY
SANBORNTON
HILL
ALTON
GILFORD
FRANKLIN
ANDOVER
TILTON
BELMONT
GILMANTON
NORTHFIELD
BARNSTEAD
Miles
Interstate Highway
NH Route
US Route
Railroad
County Boundary
Town Boundary
Water Body
Road centerline dataset is from NH Department of Transportation. Base feature datasets, including railroads, hydrography, and political boundaries, provided through NH GRANIT at Complex Systems Research Center (CSRC). Neither LRPC nor CSRC make any claim to the validity or reliability or to any implied uses of these data. For planning purposes only.

Transportation funding discussions in the 2013 Legislative session have caused NHDOT to develop and disseminate information that demonstrates the potential impacts of discontinuing the motor vehicle registration tax and betterment funding changes. According to information presented by NHDOT the potential impact for the Lakes Region is approximately $12 million in additional highway cuts. Adequate funding for Lakes Region projects in the Ten Year Plan to address the scope of each project is the leading regional priority. Specific Ten Year Plan projects are:

Table 2.23: Lakes Region Transportation Priorities, 2011

ID #	Project	Location
14121	NH 28 from Alton Traffic Circle south 7.0 miles	Barnstead/Alton
2787	US 3/NH 11 Bypass north .4 miles	Belmont/Laconia
10430	NH 25 from Center Harbor T/L south 3.2 miles	Meredith
10431	NH 16/28 Intersection Improvements	Ossipee
13910	NH 16/25/41 Intersection Improvements	Ossipee
14749	NH 16 from Chocorua River north 3.22 miles	Ossipee

Source: NHDOT Ten Year Plan 2011-2020: June 2010

While the state transportation funding debate continues, additional projects have been identified by Lakes Region communities for consideration in the regional Transportation Improvement Plan. Secondary regional transportation priorities include projects previously removed from the TYP and new projects for consideration in the regional TIP in relationship to regional "lifeline corridors." The lifeline corridors are the primary east/west and north/south corridors serving the majority of the traffic flow through and within the region, many of which also provide vital connectivity to other regions. Secondary regional priorities, after existing TYP projects, are located on lifeline corridors serving upwards of 12,000 average annual daily traffic volumes with considerable influx of seasonal traffic.

Secondary Regional Priorities		
Rank	**Project**	**Location**
1	NH 28 from Alton T/L to Wolfeboro Falls	Wolfeboro
2	NH 104 from I-93 to Meredith Center Road	New Hampton/Meredith
3	Central Square Redesign	Bristol

Public Transit

The Tri-County Community Action Program (TCCAP) operates the Carroll County Transit (aka Blue Loon bus). The service area includes much of Carroll County with a flex route system that operates from Wolfeboro to West Ossipee, West Ossipee to North Conway, West Ossipee to Laconia. The dial-a-ride service operates in North Conway, Conway, Bartlett, Albany, Madison, Tamworth, Chocorua, Moultonborough, Sandwich, Freedom, Effingham, Ossipee, West Ossipee, Center Harbor, and Wolfeboro. Carroll County Transit is working to recruit a larger base of volunteers to meet the needs of residents in towns within Carroll County who lack access to service.

The flex route service began operations in January 2012. Information for the first six months of 2012 is below:

Route	**Number of trips provided**
West Ossipee to North Conway	1,313
West Ossipee to Wolfeboro	871
West Ossipee to Laconia	529

The Blue Moon bus desires to expand its current operating hours and to expand its flex route service.

General observations

The services being provided are new to Carroll County and require education and marketing. A sense of trust needs to be built between the riders and the service so that riders know it is a dependable means of transportation for medical appointments, shopping, employment and other activities.

Because of the relative newness of the service in most of Carroll County, representatives of local government and the county do not fully appreciate the need for transportation for their residents. Residents using the services recognize the value of an affordable community transportation service.

The majority of the ridership consists of the elderly, disabled and low-income persons. The Advisory Committee for this project is promoting to others who would not normally utilize public transportation by encouraging them to help protect the environment by reducing their carbon footprint. Adequate funding is a problem in Carroll County.

The potential for transit-oriented development will evolve as the creation of workforce housing, development opportunities and sustainable communities occurs.

Car-pooling and ride sharing are currently set up at the state level.

Winnipesaukee Transit System

Belknap-Merrimack Community Action Program (BM-CAP) manages the Winnipesaukee Transit System. At present, the Winnipesaukee Transit System (WTS) serves most of the city of Laconia and the US Route 3 corridor through Belmont, the shopping district in Gilford and the business districts of Tilton and Franklin. WTS coordinates with Carroll County Transit to provide connections for customers riding Carroll County Transit coming from the West Ossipee area. WTS honors transfers for customers from the Blue Loon bus on the WTS route by providing access for these customers to the central Lakes Region. The entire route consists of 11 bus stops with scheduled times and deviations off the route by up to a quarter mile to pick up and drop off passengers at other locations.

The current deviated demand-response route offers all riders flexibility. Customers can call to schedule a pick-up or drop-off within one-quarter of a mile of the designated route when it is safe to do so. Customers can call for a ride from any location to another location (their house, a business, a social services organization, etc.) as long as it is within a quarter mile of the travel corridor. Customers call the WTS ride line a day in advance and deviations are on a first-come, first-served basis as the route schedule permits. To date, WTS has not refused any deviated trip due to too many requests. WTS does not charge for deviations.

There is limited service provided by Concord Trailways with stops in Meredith and Tilton. Unfortunately, the stop times make it difficult to connect with WTS during regular hours of operation. Customers report that they need to travel to Concord for medical appointments, and to make connections to transit services for more southern destinations. The Lakes Region Chamber of Commerce has received several inquiries from tourists needing to travel from Logan Airport to local destinations. WTS will explore the possibility of providing a connector/feeder service for customers needing access to services in Concord.

WTS ridership for FY 2011 was 3,370 vehicle hours of service, 40,794 vehicle miles recorded serving 7,310 customer trips. Seniors consist of 27% of the ridership. Customers report that WTS is their only reliable, affordable, transportation option. Since WTS is ADA accessible, it is also one of the only transportation options available in the region for low-income passengers riders using mobility equipment like wheelchairs, scooters, or walkers.

WTS received funding support from the City of Laconia and the Town of Tilton along with private assistance from Franklin Savings Bank in Gilford to support the expansion of service back out to the Gilford shopping district.

Aeronautics

The state of New Hampshire has 12 airports that are eligible for Federal Aviation Administration (FAA) Airport Improvement Program (AIP) funding. NHDOT provides a State match when federal funding is available. In the Lakes Region, the Laconia Municipal Airport, located in Gilford, is the only FAA / NH DOT eligible airport. The Laconia Municipal Airport is beginning the update of its Airport Master Plan.

There are another 12 airports in the state that are open to the public. Although they do not qualify for FAA funding, they do qualify for NHDOT funding based an 80 (state) 20 (local) split. Due to state budget reductions, there has been no funding for this activity for the past two bienniums. In the Lakes Region, there are three airports in this category: Alton Bay Seaplane Base (Ice Runway), Moultonborough Airport and the Newfound Valley Airport in Bristol.

More than 100 privately owned airports, heliports and seaplanes are available for private use in New Hampshire. They are not required to be registered with the State or with FAA. A website, maintained for FAA, is an excellent source of information: www.gcr1.com/5010web/ (enter "New Hampshire" and click Search). In the Lakes Region, the following "private" airports are registered with the FAA:

- Longview Heliport (Alton)
- Locke Lake Airport (Barnstead)
- Chickville Airport (Center Ossipee)
- Meader's Heliport (Center Ossipee)
- D.W. Heliport (Franklin)
- Franklin Regional Hospital Heliport (Franklin)
- Bossey's Seaplane Base (Meredith)
- Morrison Heliport (Meredith)
- Flying Ridge Heliport (Meredith)
- Smiling Jack Heliport (Meredith)
- Ward Field (Sanbornton)
- Gile Pond Airport (Sanbornton)
- Loons Nest Seaplane Base (Tuftonboro)
- Windsock Village Airport (West Ossipee)
- Winter Harbor Seaplane Base (Wolfeboro)
- Huggins Hospital Heliport (Wolfeboro)
- Mountain View Field (Wolfeboro)

Rail

The Lakes Region has limited rail service. At present there are three rail lines serving the region.

New England Central Railroad brings a limited amount of freight to the Laconia area.

New Hampshire Northcoast, owned by Boston Sand & Gravel, operates five days a week hauling aggregate material from Ossipee to Rochester for transfer to another railroad for downtown Boston. Aggregate material from the Ossipee pit was used for much of the construction of the I-93 "big dig" tunnel through downtown Boston.

The Plymouth and Lincoln Railroad (aka Hobo and Winnipesaukee Railroad) serves primarily as a tourist railroad during the summer season with limited service in the fall. It provides limited freight service.

The state of New Hampshire has debated the future of rail both for passenger and freight service and, at present, there is no clear policy direction as how to proceed. For further information rail, see the NH State Rail Plan, 2012 at: http://www.nh.gov/dot/org/aerorailtransit/railandtransit/documents/FinalStateRailPlan.pdf

Other investment

Federal agencies such as the USDA Rural Development, Department of Housing and Urban Development, and state organizations such as the NH Community Development Finance Authority and the NH Business Development Authority provide investments in the Lakes Region which stimulate economic growth.

III. Evaluation of the Regional Economy

Understanding and promoting economic growth in the Lakes Region is a fundamental principle of the Economic Development Chapter. For one year (July 2012 through July 2013), the Lakes Region Comprehensive Economic Development Strategy (CEDS) Committee worked on updating the region's vision for future growth along with regional goal and objectives. Similar to the rest of New Hampshire, the Lakes Region is experiencing a number of new trends that differ significantly from the more robust past. According to the NH Center for Public Policy, New Hampshire is faced with socioeconomic "headwinds" which include out-migration, an aging population, and decreased labor participation and productivity. These trends are projected to continue for the next several years.

2013 Trends

The CEDS document along with input from economic development professionals and involved citizens provided information and insight regarding emerging trends in the Lakes Region. The major regional economic and demographic trends include the aging of the population (aka "the Silver Tsunami"), out-migration, significant changes in the manufacturing sector, a decline in the number of persons in the 25 to 55 age group, and the overall slowdown in the creation of traditional employment opportunities.

In updating the CEDS goals, the CEDS Committee reviewed and discussed related social and economic trends in the region for guidance. The CEDS Committee noted the following key issue:

1. With a significant number of older persons retiring in the next several years, there is concern regarding the number of persons with the interest and skill set to fill jobs in manufacturing, health care and finance. Businesses may need assistance in finding new employees.
2. With the nature of work and a "job" changing, the workforce appears to have more self-employed persons, people with more than one job, and older persons remaining in the workforce beyond age 65, the traditional retirement age. Current data and information on these trends and information on the appropriate support structure for self-employed and freelancers will be helpful. Affordable health care is an issue for these people.
3. As the population continues to age, many Lakes Region communities lack the services and infrastructure necessary to accommodate these additional older and elderly people.
4. While the Lakes Region attracts tourists and retirees because of the region's natural amenities, the economy needs to be more multi-faceted. The CEDS Committee advocates that the region should also focus on the retention and attraction of high quality, better paying employment opportunities in the professional arena, service sector, manufacturing sector and others. This may require additional emphasis on attracting young professionals, professional service firms, and small entrepreneurial businesses.

5. The region needs to work together to help promote and encourage employment opportunities for the workforce while keeping our communities healthy and balanced.

Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis

In 2007, the Lakes Region CEDS Committee completed the original regional analysis of the Lakes Region's Strengths, Weaknesses, Opportunities, and Threats (SWOT), which included two interactive meetings with a broad cross section of stakeholders. The CEDS Committee made the following observations:

Over-reliance on Tourism Industry: How can we diversify tourism to include higher wage jobs with low environmental impact? What level of tourism growth can realistically be achieved and be sustainable, both environmentally and economically? The Economic Development Chapter should include strategies aimed at strengthening the tourism industry in these ways, and we should consider whether or not we want to encourage additional growth of this industry.

Environmentally Friendly and Clean Energy Business: Why do we not already see more entrepreneurial activity around environmental and clean energy ideas? It seems that the environment is an issue that brings people together and is a key part of our identity. Addressing the high cost of utilities by promoting alternative energy and energy conservation for homes and buildings could be a business opportunity.

Agriculture and Forestry: Another important part of maintaining our region's natural beauty, which is an important strength, is to make sure the "working landscape" (agriculture and forestry) is sustained. Better direct marketing to consumers through farmers' markets could support growing niche agriculture. Local wood processing could support forestry and keep our timber here.

Affordable Housing: The "real question" is how to make the provision of affordable housing realistic in the marketplace — how to provide incentives to property owners and developers to create affordable housing.

Workforce Development: With current information on the needs of the labor force in terms of training and education, the region could better target its efforts. How can we use partnerships to address workforce issues?

Building on Retiree Expertise: The expertise of the growing retiree population could be a significant resource for entrepreneurs and growing companies. How can we harness the expertise, energy, and civic-mindedness of this growing segment of our population?

Structures for Implementation: An important question is how do we define the intermediate steps to achieve goals identified through this process? What impediments stand in the way of achieving the goals we set? Which organizations or

entities in the region should be responsible for implementing the various aspects of the Economic Development Chapter? Implementation will involve partners.

In 2013, the Lakes Region Planning Commission decided to engage a larger pool of stakeholders using an online survey that was developed based on the 2009 SWOT results. Survey participants included the CEDS Committee, representatives of local governments and the business community, town and city planners, and the LRPC Commissioners.

Survey respondents reviewed and rated the priorities from the 2007 SWOT and provided comments. The priorities for each Strength, Opportunity, Weakness and Threat in the 2013 SWOT survey update are listed below in rank order. The online survey generated the ranking based on the number of positive responses to a particular question.

Strengths:

2013 Priority	2007 Priority
1. Natural beauty lakes and mountains	1.
2. Excellent location to raise a family or retire	5.
3. Strong tourism industry	6.
4. Internet access	4.
5. LRCC partnerships for business-specific training	2.
6. Local and Regional Eco Dev Councils support for business growth	3.
7. Manufacturing high-end specialty products	7.
8. Excellent location to Boston	8.

Weaknesses

2013 Priority	2007 Priority
1. Over-reliance on tourism, retail trade	1.
2. Lack of state support for quality education; dependence on local real estate taxes	4.
3. Lack of professional opportunities for young adults	6.
4. Lack of highly skilled workers, shrinking workforce	3.
5. Lack of affordable housing; no support	2.
6. Lack of workforce and capital for growing companies	8.
7. Growing wealth disparity; poverty	7.
8. Poor growth management at the local level	5.

Opportunities:

2013 Priority	2007 Priority
1. Telecommuting makes the Lakes Region a viable location	2.
2. Use significant expertise of retired executives	1.
3. Growing retiree population creates demand for health care	3.
4. Old mill buildings for creative spaces	4.
5. Return of locally born talent; now successful Lakes Region residents	5.
6. Capture Boston brain trust and seed capital	6.
7. Retirees to fill needs of seasonal employers	7.
8. Granite Media Center – foster growth of media industry	8.

Threats:

2013 Priority	2007 Priority
1. Continued increase in health care cost	3.
2. Continued reduction in manufacturing jobs	6.
3. Rise in the cost of housing due to 2nd homes & retirees	2.
4. Decline in seniors' incomes lead to poverty	1.
5. Weather patterns that affect tourism	8.
6. Changes in travel market could erode LR tourism economy	4.
7. Int'l ownership of corporations affects location decisions	7.
8. New business activity could threaten tourism and region's identity	5.

The following are brief observations of changes from 2007 to 2013.

Strengths: The natural beauty of the lakes and mountains retained its status as the number one regional strength, followed by an excellent place to either raise a family or retire; the latter was up several positions from 2007.

Weaknesses: While "Over-reliance on tourism and retail trade" retained its number one ranking, the lack of state support for education, with over reliance on local real estate taxes moved to second from fourth place.

Opportunities: The results are nearly identical to the 2007 ranking. Telecommuting and use of retiree executive experience flipped in ranking as the 1st and 2nd regional opportunities in 2013.

Threats: In 2013, continued increase in the cost of health care is seen as the top threat, followed by a decrease in the number of manufacturing jobs, which was perceived as a lessor issue six years ago.

The LRPC determined that the online survey provided ample opportunity for additional comments, and having analyzed the 2013 comments, the following new themes emerged for inclusion in the 2013 CEDS:

- Agriculture and farming;
- Arts and the creative economy;
- Entrepreneur support system in the region.

IV. Regional Goals and Objectives

Lakes Region Economic Development Vision Statement

The LRPC, working through its CEDS Committee, completed a review of the following Vision Statement, and determined it reflected a meaningful social and organizational future.

> Recognizing the critical importance of maintaining and nurturing our natural environment and diverse cultural heritage, the Lakes Region Community will strive to improve the quality of life of its cities and towns through the increased capacity and prosperity of its businesses, civic, social, and education institutions, and its citizens. All our efforts will be characterized by respect, communication, cooperation and integration with others and will exhibit stewardship toward our magnificent natural resources.

Economic Development Goals

The fundamental regional economic development goal is to:

> *Create suitable well paying jobs, consistent with the stewardship of the region's natural resources.*

In 2013, the CEDS Committee reviewed the 2009 goals and objectives and concluded that the goals of Building Employees, New Economy, Social Capital and Cultural Heritage, and Sustainability remain relevant. The Committee also added three new goals to foster Entrepreneurship, the Creative Economy, and Quality of Place.

In order to accomplish its goals and objectives, LRPC recognizes the critical importance of working closely with established economic development partners. The primary local partners are the regional economic development councils, local economic development committees, and the Lakes Region Community College. At the state level, support is available from the NH Department of Resources and Economic Development, and the Community Development Finance Authority.

In the next phase, the LRPC CEDS Committee will focus on implementation with assistance of representatives from the partner organizations to review and monitor the progress.

Workforce Development

Goal: Improve the preparation of the workforce by ensuring extensive coordination between educational and training organizations and the needs of business and industry.

Specific objectives include: To provide students with the necessary skills to fill positions in manufacturing resulting from attrition, retirement, and other causes; to enable displaced workers to qualify for jobs requiring high school diploma or GED as minimum educational requirements; and to inform students and the general public on the current nature and requirements of modern computer-assisted manufacturing processes.

To accomplish these goals, the CEDS Committee will collaborate with its regional partners to: encourage or host manufacturing roundtables, identify and advocate training opportunities, and sponsor Job Fairs.

New Economy

The term New Economy refers to an economy based on internet communications, social media and advanced technology.

Goal: To define where digitization, the internet, social media, and other future-oriented communications modes will take the regional economy so that the region can better take advantage of these new opportunities; to improve the region's technology infrastructure, specifically related to increases in bandwidth, reliability, redundancy, predictability, and access.

Specific objectives include: To increase bandwidth for the business community; to identify deficiencies and suggest improvements to the existing regional internet service; to work to improve reliability and redundancy.

To accomplish the objectives, the CEDS Committee will encourage the expansion of broadband in the region consistent with the forthcoming Regional Broadband Plan.

Social Capital and Cultural Heritage

Social capital refers to intangible aspects such as education, healthcare, a sense of community, and a general well being aspect of the community. Cultural heritage is the legacy of physical artifacts and intangible attributes of a society that are inherited from past generations, maintained in the present, and bestowed for the benefit of future generations

Goal: To strengthen social networks and build engaged communities through planning and the creation of opportunities for economic growth.

Specific objectives include: To promote civic engagement throughout the Lakes Region by developing a working list of civic engagement-promoting events; to develop a plan for advocacy for community engagement, and a community outreach strategy; to design an advanced and highly active website for volunteerism; to identify opportunities for expression around multiple issues affecting the common good in the region.

In July 2012, the Lakes Region Planning Commission established the Regional Leadership Team as a mechanism to reach out to minority, disadvantaged, and underrepresented persons as part of the Lakes Region Plan process.

Sustainability — Energy and the Natural Environment

In the context of the Economic Development Chapter, sustainability refers to a planned process of strategic activities and steps designed to increase local employment opportunities and community prosperity, while maintaining and improving the area's infrastructure, and

natural resource base for future generations. Renewable energy development also needs to be balanced by responsible stewardship of the region's natural resources.

Goal: The built environment of the Lakes Region should be maintained and enhanced in an environmentally sustainable manner. To assist the Lakes Region in adjusting to the need for lower-cost and renewable fuels, while considering the impacts of these potential developments on the natural environment. Effectively protect or enhance natural resources through conservation efforts.

Specific objectives include: To promote energy conservation in partnership with the Lakes Region Community College; to maintain and improve the air quality of the region; to protect or enhance natural resources through conservation efforts.

LRPC will work with the Regional Development Corporations and the Lakes Region Community College to promote the concept of sustainability, especially as it relates to energy and natural resources.

Entrepreneurship

Entrepreneurship is the act and art of the creation of new business enterprises that oftentimes involves innovations and brings together new activities, approaches, finance, and business acumen. The intent is to transform the new business activity or enterprise into economic goods or services. This may result in a new organization or may be part of revitalizing mature organizations in response to a perceived opportunity

Goal: Expand entrepreneurship in the region by supporting entrepreneurs of all types, especially farmer entrepreneurs and artist entrepreneurs.

Specific objectives include: To identify and promote resources such as micro-lending, business counseling, training and other related activities that foster an entrepreneurial spirit in the region; to provide entrepreneurs with the knowledge, tools, resources, and financing necessary to ensure they are successful; to encourage "buy local" themes targeted to local residents, businesses and visitors; to identify impediments to entrepreneurship; to encourage cities and towns to assist entrepreneurs through a procedure of timely regulatory reviews and through consideration of a Tax Increment Financing (TIF) district and Economic Revitalization Zones (ERZ) when appropriate; to explore the creation of a Lakes Region Economic Development District.

LRPC will work with the regional development councils to promote and encourage entrepreneurship.

Creative Economy

The creative economy includes individuals working in activities, including but not limited to, advertising, architecture, art, crafts, design, fashion, film, music, performing arts, publishing, research and development, software development, toys, games, TV and radio, etc.

Goal: Support development of catalyst projects that can spur the creative economy such as public art, programming and other projects that enhance the visibility of the creative sector.

Specific objectives include: To promote activities that encourage local art festivals, fairs, and celebrations that can lead to new economic activity; to inform local governments, the business community and non-profit organizations on the benefits of the creative economy; to provide members of the creative sector with the knowledge, tools, resources and financing necessary to ensure their success; to develop projects that will encourage the creative sector to collaborate and work together to increase opportunities and visibility.

LRPC will work with the regional development councils to promote and encourage the expansion of a creative economy.

Improve Quality of Place

Quality of place refers to those characteristics that make a place or community special or unique, as well as to those that foster a sense of authentic human attachment and belonging. The characteristics could include scenic features of the landscape, such as mountains, lakes, rivers, and streams, a vibrant downtown or village area, an area with open space and a trail network, outdoor recreation opportunities.

Goal: Support projects that make the Lakes Region a more attractive, inviting, and affordable place for young people to live, work and play.

Specific objectives include: To encourage planning boards to prepare and or update the cultural and historic resources chapter of a local master plan so that the community can identify and preserve unique areas and places that add value to the community; to work with and support the regional development councils in their efforts to increase employment opportunities that provide young people with livable wages and benefits.

LRPC will also encourage local governments and the private sector to recognize that recreational trails, the preservation of unique buildings, forest lands, agricultural lands and other areas are important to maintaining the region's quality of place, sense of community, and identity.

V. Plan of Action — Strategies and Projects

The Economic Development Chapter uses the information and research compiled from past extensive strategic planning efforts by the CEDS Committee in 2008-2009, the update of the Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis, and the updated Industry Cluster Analysis. Collectively, these documents and planning efforts contributed to the 2013 Lakes Region economic development goals. The purpose of the Plan of Action is to identify and develop strategies, policies and projects that contribute to the implementation of the Lakes Region's economic development goals. The fundamental intent of this effort is to improve the quality of job opportunities in the region and to increase the local real estate value of individual communities.

The following summarizes the process that the LRPC followed to develop the Action Plan, and concludes with a list of potential economic development and community development projects. These projects are intended to reflect, and be consistent with the overall vision and the updated economic development goals and objectives, formulated during the course of numerous public meetings over the past year.

The Project Development Process

A part of the preparation of the 2013 Lakes Region Comprehensive Economic Development Strategy (CEDS), the LRPC staff contacted the 30 municipalities in the region and solicited potential economic and community development projects consistent with the CEDS Goals & Objectives. In addition, the LRPC conducted two project solicitation workshops in February 2013, one in Laconia and the second in Center Ossipee. Furthermore, the staff re-contacted several communities to encourage the submission of a viable project for the CEDS.

The purpose of the above effort was to publicize the economic development process and generate applications for projects considered to have an economic development potential regardless of EDA funding eligibility. An emphasis was made to encourage the submission of projects that are eligible for EDA funding. Submittals included primarily local projects ranging from the future installation of a sewer line along NH Route 140 in Northfield, extension of municipal water in Tilton, redevelopment activities in Laconia, a comprehensive redevelopment program in Franklin, the "Missing Link Pedestrian Bridge" project (part of the Winnipesaukee River Trail) in Tilton, and the revitalization of the Ossipee Grange into a sustainable building.

Project Summaries

The project descriptions prepared and submitted by the project proponents are found below. The project submittal forms that include project cost estimates and more detailed explanations of how each project relates to the EDA and Economic Development Chapter evaluation criteria.

NH Route 140 Sewer Improvements

The town of Northfield proposes construction of approximately 3,600 linear feet of gravity sewer line along NH Route 140, a sewage pumping station located at the northern terminus of the gravity line, and approximately 1,700 linear feet of sewer force main from the pumping station across the Winnipesaukee River to an existing interceptor sewer in Tilton operated by the Winnipesaukee River Basin Project. The project will serve 34 properties containing approximately 332 acres zoned for development. Properties are located either directly on NH Route 140 or on industrial/commercial subdivisions adjacent to the highway. The project will serve two existing industrial/commercial parks in addition to properties adjacent to these parks. The total project cost is estimated to be $950,000.

Business Park Drive Municipal Water Extension

The town of Tilton proposes to extend municipal water to the Nickerson Business Park, LLC. Nickerson Business Park, LLC has proceeded with engineering plans to bring water into the park. Business Park Drive is town owned and maintained with municipal sewer to each lot. At present, there are three businesses in the park — PSNH, Spinnaker, and SeaLite LLC — each using a private well. In order to make it economically feasible for any further development to occur in this park, the park needs municipal water for fire suppression purposes.

The three improved lots have a combined assessed value of $4,718,200 with 67,000 square feet of manufacturing buildings and 33,000 square feet of warehouse/office space. The three companies employ well over 200 people. The Business Park has a very desirable location (Exit 20 of I-93 and NH Routes 3 and 11), which serves as the gateway into the Lakes Region. The potential exists to build out an additional 12 lots in the park. I n addition, there are two undeveloped commercial/industrial zoned tracts (89 acres and 32 acres) abutting Business Park Drive. The extension of municipal water to this park would entice future manufacturing, warehouse and office buildings. The estimated project cost is $1,300,000 to extend the municipal water distribution system along Business Park Drive.

Comprehensive Redevelopment Project for the City of Franklin

The city of Franklin proposes a broad comprehensive program to accelerate the city's economic development and redevelopment efforts for the core downtown business zone. According to the U.S. Bureau of Census, this zone experiences economic distress as evidenced by high unemployment and low per capita income. The redevelopment efforts will provide relief and assistance that help to reduce and/or minimize this distress. The projects include economic revitalization, new job and housing opportunities, local recreational opportunities with a business component, and planning in the context of smart growth initiatives. The intent is to advance the economic development process.

From mid 2013 to early 2014, the city will work on a detailed business development plan. Due to the early planning of this comprehensive project, the city has not prepared cost estimates but expects to develop cost estimates as specific work components are identified.

The "Missing Link Pedestrian Bridge"

The Winnipesaukee River Trail Association, Inc. (WRTA) proposes the "Missing Link Pedestrian Bridge" project. The WRTA is a unique coalition of volunteers representing local business, environmental, and health care organizations whose goal is to develop and maintain a multi-use trail along the Winnipesaukee River. By preserving and increasing access to the Winnipesaukee River and its natural surroundings, the trail connects the communities of Franklin, Northfield and Tilton, promotes economic development, and provides opportunities for recreation and alternative transportation designed to improve the physical health of community residents. The WRTA is in the process of constructing Phase II-A the "Missing Link Bridge" to bridge the gap in the Winnipesaukee River Trail. Completion of the bridge will link the downtown centers of Tilton, Northfield and Franklin, and the trail will eventually join the WOW trail in Laconia, and the Northern Rail Trail which runs from Lebanon through Franklin to Concord. The total project cost is approximately $1,625,000 of which $1,035,000 is committed with a gap of approximately $590,000. Note that the recreational trail network is making an important economic contribution to the Laconia-Tilton-Franklin area.

Laconia Redevelopment Projects

The city of Laconia submitted the following projects, several of which are in the planning stages.

- Downtown Riverwalk: The city is in the process of completing a riverwalk along the Winnipesaukee River with the intent of it being an economic generator for the downtown. Phase I and II are complete. The total project cost is approximately $500,000.
- Winnipesaukee Pier: This historic property is in need of redevelopment as a commercial recreation facility. The approximate total project cost is $3,800,000.
- Surf Coaster property: Redevelopment and renovation of the old water park into a hotel and major function facility. The total project cost is approximately $4,000,000.
- Garden Theatre: Redevelopment of the property with a mix of commercial and residential uses. The total project cost is approximately $2,000,000.
- Burial of utility wires in Weirs: Many of the tourists who visit the Weirs are attracted to the natural beauty and scenic views of Lake Winnipesaukee and the mountains. Since overhead utility wires detract from the overall attractiveness of the area, burial of these wires would add value and increase the potential for increased tourist activity. The approximate total project cost is $2,000,000.

Bridging Sustainability: A project to revitalize the former Ossipee Mt. Grange Hall

This project will reestablish the former Ossipee Mt. Grange Hall, located at #3 Pork Hill Road in Water Village, Ossipee, NH, as a center of economic, social, and civic activity. Each of the three floors of the building will host distinct ventures that together build local resiliency and improve quality of life. The first floor will serve as a local farmer and artisan "cottage industry cooperative." The second floor will be an assembly hall for arts, education, and civic engagement. And the third floor will serve as an entrepreneurial "green

job" incubator and affordable shared office space where people can learn about triple bottom line business planning while sharing the expenses of computers, printers, software, high-speed internet, and office supplies.

The operational three floors will bridge New England's heritage of self-reliance with emerging innovations and best practices in sustainable community development. The project is based on the idea that designating local spaces for people to gather and meet their social and economic needs will move us toward a more sustainable society. Grange Halls filled this niche in the late 1800s, specifically for the agricultural population. Though the Grange is much less active today, their buildings are still standing and the resurgence of a "local food" movement and entrepreneurial artisans presents great opportunity to reclaim these historic buildings as hubs for community building and local economic revitalization. Estimated cost is $500,000. The project is in the planning stage.

Combined Heat and Power: The North Country Resource Conservation and Development Project proposes small scale combined heat and power facilities that utilize renewable fuels as a strategy to fill vacant space in existing business and industrial parks by providing heat and/or power to tenants of the parks. The availability of this energy may make the difference in a business deciding to locate in the Lakes Region. Creating this energy will help reduce the region's dependency on fossil fuels and reduce CO_2 emissions. This project includes a survey of existing and proposed business and industrial parks in the Lakes Region and proposes a preliminary feasibility assessment around the creation of a combined heat and power facility to service one business or industrial park. The estimated cost: Phase 1 - Inventory: $5,000 and Phase 2 Feasibility: $40,000

Wood Pellet Feasibility Study: Belknap County proposes a Wood Pellet/Wood Chip Feasibility Study to explore the potential for using a wood pellet or wood chip boiler to provide heat and hot water for the new County House of Corrections and the County Complex including the County Nursing Home. The study will explore the cost and availability of wood pellets and compare that cost with the cost of the existing natural gas system. In addition to investigating the economic feasibility of this heating system, the study will explore the economic impact on the county and region. The estimated cost is approximately $75,000.

Improvements to Water Delivery and Emergency Response Capabilities: The North Country Resource Conservation and Development (NCRC&D) Project proposes the NH Rural Fire Protection Initiative (NHRFPI) to provide technical and planning assistance to rural communities in the Lakes Region to improve their water delivery capacity and emergency response capabilities. As of 2012, over seventy New Hampshire communities have worked with the NHRFPI to improve their ability to fight wild-land and structural fires in rural sections not served by pressurized water systems. This has created a workload of over 1,000 non-pressurized hydrant or cistern type facilities to be installed. Rural New Hampshire communities need continued technical assistance for the design and installation of these facilities. Technical assistance will also help new communities identify, evaluate, and/or develop water delivery sites. Planning assistance will include a review of a community's current mitigation strategies and activities, and an assessment of their emergency response capability, fire fighting capacity, water supply

resources, community development patterns, and identification of areas at risk. The review and assessment will be summarized in a Water Delivery and Emergency Response Plan. The estimated cost is $81,455 of which $40,000 is needed to initiate the plan.

Project Evaluation

A project scoring process was devised to quantify how each project met the EDA requirements and the 2013 Lakes Region economic development goals, as included in the project submittal form. The 2013 scoring process generally follows the prior process. Projects were initially reviewed to determine if they addressed the key subject areas of the CEDS, and then were given points if they addressed the individual scoring categories. Timelines or the readiness of the project was also assessed and is an important factor in the overall scoring.

Project Priority List

The following priority list stratifies the projects submitted to the CEDS Strategy Committee into two categories, (1) Implementation and (2) Planning/Organizational. The implementation projects are those that are ready or near ready for construction. Planning and organizational projects are still in the planning phase; supporters may elect to support them as development or construction activities in the future.

All submitted projects were evaluated and included in the overall priority list.

Projects Ranked in the 2013 Lakes Region CEDS

The stratified priority list of projects:

Implementation

- Downtown Riverwalk, Laconia
- Missing Link Pedestrian Bridge, Tilton
- NH Rt 140 sewer extension, Northfield
- Comprehensive redevelopment project, Franklin
- Nickerson Business park, water extension, Tilton
- Garden Theatre, Laconia
- Ossipee Mt. Grange Hall, Ossipee
- Winnipesauke Pier, Laconia
- Burial of utility wires in the Weirs, Laconia

Planning/Organizational

1. Wood Pellet Feasibility Study, Belknap County
2. Combined Heat and Power

VI. Implementation Plan and Performance Measures

This section addresses two important components: implementation and performance measures. The Lakes Region Planning Commission and its economic development partners will focus on the implementation of the economic development goals and identified projects. The Economic Development Chapter uses the EDA criteria as a tool to measure the success in implementation of the economic development goals. They include:

- Number of jobs created and retained as a result of the CEDS implementation effort;
- Number and type of investments undertaken in the region;
- Amount of private sector investment; and
- Changes in the economic environment of the Lakes Region.

An annual review of the region's economic environment using measures such as changes in employment and private sector investment is an effective way to monitor changes. Much of the current baseline socioeconomic data to start this comparison has been completed, and is found in Chapter II. The CEDS Committee will review these data as new information becomes available. It is important to note that monitoring the effectiveness of the economic development strategies and action steps is an ongoing process and will be refined over time.

The top economic development projects for the 2013 are:

- Downtown Riverwalk in Laconia;
- "Missing Link" Pedestrian Bridge, Tilton;
- NH Route 140 sewer extension in Northfield;
- Comprehensive redevelopment project, Franklin: and
- Nickerson Business Park water extension, Tilton.

The LRPC staff, in cooperation with the respective regional development corporation, will contact representatives from the above municipalities for the purpose of developing the specific project.

Qualitative Performance Measures

Each 2013 CEDS project is found in the Project Implementation and Performance Measures logic model worksheet following this page. The CEDS Committee, LRPC, and the Regional development Councils/Corporations will use the worksheets to monitor progress and performance.

Local Economic Development efforts

Most economic development activity occurs at the local level with regional and state partners often willing and available to provide technical assistance, information, and access to financing. In order for towns and cities to be effective in the economic development arena, there needs to be a level of local engagement in the process.

The following are potential work activities in which a local economic development entity can engage.

- Organize a local economic development committee;
- Provide leadership in the community for an appropriate level of growth based on local planning;
- Establish a business visitation program;
- Assist existing employers with retention and expansion issues;
- Cultivate new, entrepreneurial ideas and people;
- Identify business sectors and companies appropriate for the community;
- Consider branding the community by differentiating it from the competition;
- Be familiar with development financing alternatives such as grants, loans, credit enhancements, equity and when and where such financing may be needed;
- Real estate development — identify available land, buildings, and brownfield sites;
- Workforce development — encourage the retention and development of the existing labor force, and the building of the "smart skills" needed for tomorrow;
- Be knowledgeable of the industry clusters that drive the local economy, and what assistance/services they may need;
- Be knowledgeable of broadband and wireless tools, technology transfer from R&D facilities, creative economy opportunities, among others.
- Technology, innovation and productivity produce competitiveness and profitability; and
- Seek assistance from regional and state economic development organizations.

The regional economic development councils and corporations and the regional planning commission, listed below, can assist local governments and local economic development committees with the implementation of the 2013 CEDS. Assistance may also be available from state agencies such as DRED and CDFA.

Belknap Economic Development Council, 383 South Main Street, Laconia, NH 03246, 603-524-3057 info@belknapedc.org

Grafton County Economic Development Council PO Box 178, Plymouth, New Hampshire 03264, 603-536-011 or toll free at 1.888.535.0002 info@gcedc.org

Wentworth Economic Development Corporation PO Box 641, 7 Center Street, Wolfeboro, NH 03894, 603-569-4216 info@wedco-nh.org

Mt. Washington Valley Economic Council 53 Technology Lane, Suite 100, Conway, NH 03818, 603-447-6622 info@mwvec.com

Capital Regional Development Council, P.O. Box 664, Concord, NH 03302, 603-228-1872 sheavener@crdc-nh.com

APPENDICES

Appendix A – The Economic Outlook for the Lakes Region and actions being taken…

Appendix B – Belknap EDC: Promoting Economic Vitality in the Lakes Region

Appendix C – Economic Impact of Promoting Advanced Manufacturing Employment and Entrepreneurship in the Lakes Region, New Hampshire

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APPENDIX A

The Economic Outlook for the Lakes Region and actions being taken …

Shift away from good-producing industry employment

- From 2005 to 2012, total covered employment in the Lakes Region dropped by 2,600 jobs. Nearly all of the jobs lost were attributable to a decline in goods-producing industries. As a share of total private employment, goods-producing industries dropped from 25.4 percent in 2005 to 19.7 percent in 2012.
- The two main sectors in the goods-producing domain are *Manufacturing* and *Construction*. Between 2005 and 2012, employment in both of these sectors has dropped by more than a quarter of their original base.
- Still, in 2012 *Manufacturing* accounted for 13.3 percent of total private employment in the region and accounted for 17.8 percent of wages earned in private industries.
- Population growth in the Lakes Region was on average more than 1 percent annually from 1960 to 2004. The region's population more than doubled between 1960 and 2000. This strong population growth trend slowed down after 2004 and the Lakes Region has experienced a slight decline in population from 2008 to 2013. This current *no population growth* trend has diminished the demand for additional housing. Building permits for the Lakes Region peaked in 2002 at 1,205, but remained above 1,150 from 2003 to 2005. Since then building permits plummeted and by 2009, there were only 207 building permits issued.
- The value of real estate at the Lakes Region's waterfront will always be relatively higher than the regional average. Ongoing upkeep and maintenance of these homes will continue to create employment opportunities in *Construction*.

Seasonal employment stronger component of the regional economy

- Due to the decline on the goods-producing industries, the region has become more dependent on service-providing jobs. These types of jobs are often seasonal jobs related to tourism. From 2005 to 2012, covered employment in *Leisure and hospitality* barely grew and covered employment in *Retail trade* declined by nine percent. As employment in these two sectors grew slightly or declined less than employment in *Construction* and *Manufacturing*, the tourism dependent sectors carry more weight in the local economy today. In 2012, one in five jobs in the Lakes Region was in *Retail trade* and close to one in five jobs was in *Leisure and hospitality*.
- Employment related to seasonal tourism in the region is elevated from late May to mid October, as tourism in the region is dependent on swimming and boating activities around Lake Winnipesaukee as well as the region's many other lakes.
- Historically, both labor force and the number of employed residents increase by more than ten percent from a low level in April to a high level in July. By November, labor force and employment have usually contracted back to its low level.
- For some residents, seasonal jobs are a way of life, working summer jobs in the Lakes Region and migrating to other regions for work during the winter months. In

addition, many younger workers are able to work summer jobs in the region and these workers generally go back to school in the fall.

- Lack of employment opportunities during the winter months can create hardship for some residents.

Aging

- The region is aging, and so is the population of the state and the nation. However, the Lakes Region might age even faster than the natural rate for the current population due to a high level of retiree in-migration. If many of the region's second home owners choose to retire to their vacation home, the share of older population in the region will increase more rapidly.
- Whether or not second home owners decide to retire permanently to the region, as the Baby Boomers get older and retire, these second home owners are likely to spend more time in the region, which will spur an increase locally in consumer spending.
- With aging also comes an increase in demand for health care, personal care services and other services related to home maintenance.

Workforce Housing Affordability

- Jobs created due to seasonal tourism are in relatively low paying occupations. According to Occupational Employment Statistics May 2012 survey, the average wage for *Retail salespersons* and *Waiters and waitresses* in the Lakes Region were $11.88 and $11.15, respectively. In comparison, the average for *All Occupation* in the region was $19.36.
- An increase in demand for lodging during the summer months creates upward pressure on housing affordability in the region. Many of the pristine locations in the nation, and especially those with seasonal attractions (winter or summer), are likely to have housing affordability issues and might need to attract workers for only a limited period of time. Many resort communities will, therefore, have housing quarters located in nearby proximity to the resort facility. In the Lakes Region, most tourists rent or own homes that are not part of a larger resort community, which makes on-site workforce housing less feasible.
- An increase in tourism spending translates into more employment opportunities in *Accommodation and food services*, *Retail trade*, *Administrative and waste management services* (such as janitorial and landscaping services) and *other services* (such as boat repair and maintenance).

Source: All data for the combined area of the Lakes Region Planning Commission were extracted from the NHetwork application at http://nhetwork.nhes.state.nh.us/nhetwork/.

Solution to the Aging Workforce – Attachment to the larger regional economy

- The region's residents are an integrated part of the greater region.

- According to LED OnTheMap, 56 percent of the working residents commuted outside the LRPC area for work in 2011.
- Conversely, a large portion of the region's workers live outside the region. In 2011, about four out of ten job holders working in the *Lakes Region* commuted in from outside the region.

- Improvement in the transportation network (mostly roadways as opposed to public transportation) and broadband will make the region more accessible to the southern part of New Hampshire and the Greater Boston Metropolitan area. Improvement of the infrastructure promotes tourism as well as facilitating commuting.
- If there are no reasonable employment opportunities within a one-hour commute, families with children may not want to relocate to the region and young adults living in the region are more likely to migrate to other areas for better job opportunities.

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Justin Slattery, Executive Director of the Belknap Economic Development Council notes that many of the lost jobs were of the lower-skilled kind. The remaining manufacturing jobs are high-tech, clean, and in industries that will likely remain in the U.S. such as aerospace, defense, and medical manufacturing. The region has a healthy amount of advanced manufacturing firms still that account for a major percentage of total wages earned in the county.

On a positive note …

Regional leaders in the Lakes Region have received the message and are being proactive. Leaders in education, economic development, planning, banking and local business people continue to collaborate to build a "pipeline" of future workers for local manufacturers so that they can find the talented and skilled labor locally. This is a challenge! The Lakes Region Community College (LRCC) and the Huot Technical Center continue to align their curriculums to better meet the needs of local manufacturers. Large investments in new equipment, facilities, and curriculum improvement are producing positive results. Instructional programs in manufacturing at the Huot Center have grown in enrollment from four students to more than 110 in less than three years. The LRCC is also experiencing enrollment growth and that growth is expected to continue.

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APPENDIX B

Belknap EDC: Promoting Economic Vitality in the Lakes Region

Belknap EDC is committed to playing a leadership role in efforts to leverage new resources, build strong partnerships, and attract new investment to create better economic opportunities for Belknap County residents and businesses. Two key components of this vision are to support our local high-tech manufacturers with workforce development programming and assist entrepreneurs in gaining access to technical, financial, and marketing resources to grow and succeed.

Manufacturing is the leading industry in New Hampshire with workers earning an average salary of $75,000. Often thought of as a tourism and recreation destination, the Lakes Region has a significant base of high-tech manufacturers which account for 13.3% of total employment and 17.8% of total wages earned in the region. Local manufacturers specialize in product lines including aerospace, defense, and medical industries that support more than 3,500 jobs in the region. Jeff Hollinger, President of EPTAM Plastics in Northfield, stated, "We are a high-tech, clean, innovative company that is always seeking more skilled employees with technical backgrounds with critical thinking and communication skills." Belknap EDC collaborates with Lakes Region Community College, Huot Technical Center, local high schools, and other business partners to provide opportunities for students to learn more about the great careers available in their communities. With an aging workforce, partnerships have developed between education institutions in the region to build a "pipeline" of skilled talent for local manufacturers to ensure future economic prosperity. Efforts to promote manufacturing careers have included open houses at manufacturers which allow students and parents to learn more about career paths in manufacturing and the launching of LakesRegionInternships.com which connects students with internships at local businesses. Enrollment in manufacturing education classes in the past three years has grown 90% with 114 students enrolled at the Huot Technical Center. We need to continue these initiatives as we face demographics challenges from our aging workforce. Belknap EDC will continue to promote and support manufacturing as it is an important sector of our economy in Belknap County.

Each year, 3,000 small businesses in approximately 200 New Hampshire communities benefit from the advising and educational programs offered by the New Hampshire Small Business Development Center (SBDC). However, the Lakes Region has not had a locally based SBDC business advisor for more than a decade until Belknap EDC was successful in receiving USDA-Rural Development grant dollars to fund a business advisor for Belknap County's existing and future businesses in 2013. Sally Holder, SBDC Business Advisor, provides one-on-one long-term management advisement to small businesses at no cost to the client. "Client businesses come from all sectors seeking advice on financing, improving

operations, bringing new products to market, and where to start in launching a new business or purchasing an existing one," said Holder. In less than nine months, Holder has worked with more than 100 existing and new businesses in Belknap County, demonstrating SBDC's technical resources are a valuable asset to local businesses. In the coming year, Belknap EDC will create a sustainable plan to keep SBDC business services in the region in the future.

Belknap EDC will continue to collaborate with partners to create opportunities for students to discover manufacturing opportunities, thus building our region's future workforce. Assisting businesses with technical resources and advisement will also be a focus of Belknap EDC as we continue to help our businesses grow. Belknap EDC is committed to building a sustainable economic future for Belknap County.

APPENDIX C

Economic Impact of Promoting Advanced Manufacturing Employment and Entrepreneurship in the Lakes Region, New Hampshire

prepared by

Economic and Labor Market Information Bureau
New Hampshire Employment Security

for

Lakes Region Planning Commission

June 2014

The economic impact of promoting Advanced Manufacturing employment and Entrepreneurship in the Lakes Region

Definitions:

Advanced Manufacturing: Advanced manufacturing involves the use of technology to improve products and/or processes, with the relevant technology being described as "advanced," "innovative," or "cutting edge." For example, one organization defines advanced manufacturing as industries that "increasingly integrate new innovative technologies in both products and processes. The rate of technology adoption and the ability to use that technology to remain competitive and add value define the advanced manufacturing sector

Entrepreneurship: Entrepreneurship is a process of identifying and starting a business venture, sourcing and organizing the required resources and taking both the risks and rewards associated with the venture.

Gross Domestic Product (GDP): The market value of goods and services by labor and property in the United States, regardless of nationality. As the changes made in each of these scenarios were made at the county level, GDP would refer to the value of goods and services by labor and property in Belknap and Carroll counties.

This impact analysis of promoting *Advanced Manufacturing* employment and *Entrepreneurship* in the Lakes Region was conducted using the Economic and Labor Market Information Bureau's New Hampshire Econometric Model – a REMI Policy Insight + ® model.[1] Regarding advanced manufacturing, the Lakes Region Community College and Huot Technical Center provided information.

Using this econometric model, we are able to estimate both the number of direct jobs added in Belknap County, as well as the indirect and induced jobs gained in the region (the model results will include the impact on both Belknap and Carroll counties).

The Lakes Region Planning Commission is interested in promoting economic opportunity through a vibrant economy and high quality jobs. LRPC is interested in qualitative growth and sustainable development. A scenario of an aging population combined with slow population growth could lead to a shortage of talent in manufacturing. In addition, slow population growth could decrease the number of young professionals in the region, which are usually viewed as the prime demographic group for creating new entrepreneurial businesses.

Derived from this overall slow population growth are the following two concerns for which scenarios were developed:

1. Attracting skilled workers in *Advanced Manufacturing* to support the manufacturing base in Laconia, Meredith, and Bristol.
2. Attracting more entrepreneurs

[1] Product of Regional Economic Models, Inc. of Amherst, MA.

The first scenario was built upon an initiative in the Lakes Region to facilitate the training and hiring of skilled workers in *Advanced Manufacturing*. Lakes Region Community College and the Huot Technical Center (part of Laconia High School) are currently offering educational degree programs related to *Advanced Manufacturing*. A leading manufacturing employer in the region has indicated that the company will employ any qualified persons that complete such a program.

The second scenario is an attempt to estimate the economic impact of attracting more entrepreneurs to the region. Attracting an additional 25 entrepreneurs to the region over the next five years was set as a reasonable goal.

Scenario 1: Promoting Advanced Manufacturing

Inputs and assumptions:

The estimated number of direct jobs created in Belknap County was modeled based on an input of training and hiring in incremental number of students each year over a five-year implementation period, from 2014 to 2018. The employment estimate is accumulative, so by 2018, 220 jobs would be created in Belknap County. To capture the longer term impact of this scenario, the model time period was extended another five years to 2023, without additional program completions entering the labor force. These *Advanced Manufacturing* jobs were distributed across 54 detailed manufacturing industries in proportion to 2023 forecasted employment share, to account for future growth patterns.[2]

The assumed number of direct jobs in *Advanced Manufacturing* — students completing the training program and entering the local labor force — was added accumulatively to Belknap County's economy between 2014 and 2023 as follows:

Job Training Promotion	Five year implementation period					Stabilization period				
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Advanced Manufacturing Jobs	20	50	95	150	220	220	220	220	220	220

The direct jobs created in Belknap County were added to manufacturing industry employment based on the following shares:

[2] The REMI model is based on NAICS, the North American Industry Classification System, which is used to classify business establishments according to type of economic activity (process of production) in Canada, Mexico and the United States. An establishment is typically a single physical location, though administratively distinct operations at a single location may be treated as distinct establishments. Each establishment is classified to an industry according to the primary business activity taking place there.

REMI Model detailed Manufacturing NAICS Industries	**Share of 2023 forecasted employment base**
Other fabricated metal product manufacturing	21.70%
Foundries	17.00%
Computer and peripheral equipment manufacturing	16.88%
Machine shops; turned product; and screw, nut, and bolt manufacturing	11.24%
Coating, engraving, heat treating, and allied activities	4.38%
Semiconductor and other electronic component manufacturing	3.78%
Medical equipment and supplies manufacturing	3.77%
Textile mills and textile product mills	2.72%
Cement and concrete product manufacturing	2.69%
Electrical equipment manufacturing	1.99%
Ship and boat building	1.88%
Apparel manufacturing; Leather and allied product manufacturing	1.57%
Household and institutional furniture and kitchen cabinet manufacturing	1.51%
Forging and stamping	1.37%
Other miscellaneous manufacturing	1.35%
Architectural and structural metals manufacturing	1.05%
Printing and related support activities	0.86%
Navigational, measuring, electromedical, and control instruments manufacturing	0.70%
Other wood product manufacturing	0.51%
Aerospace product and parts manufacturing	0.44%
Sawmills and wood preservation	0.43%
Engine, turbine, power transmission equipment manufacturing	0.39%
Sugar and confectionery product manufacturing	0.39%
Other electrical equipment and component manufacturing	0.34%
Beverage manufacturing	0.16%
Cutlery and handtool manufacturing	0.15%
Glass and glass product manufacturing	0.10%
Communications equipment manufacturing	0.08%
Bakeries and tortilla manufacturing	0.08%
Dairy product manufacturing	0.07%
Pulp, paper, and paperboard mills	0.06%
Petroleum and coal products manufacturing	0.06%
Motor vehicle body and trailer manufacturing	0.04%
Converted paper product manufacturing	0.03%
Rubber product manufacturing	0.03%
Soap, cleaning compound, and toilet preparation manufacturing	0.03%
Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	0.03%
Pharmaceutical and medicine manufacturing	0.03%
Paint, coating, and adhesive manufacturing	0.03%
Pesticide, fertilizer, and other agricultural chemical manufacturing	0.03%
Basic chemical manufacturing	0.02%
Other chemical product and preparation manufacturing	0.02%
Industrial machinery manufacturing	0.01%
Metalworking machinery manufacturing	0.01%
	100.00%

It is assumed that the anticipated increase in output due to these 220 *Advanced Manufacturing* jobs is driven by an increase in demand for the products from outside the Lakes Region. In other words, the output produced by these added workers is mainly exported to markets outside of Belknap County as well as outside of the United States (international exports).

The following results are the anticipated implications of training and hiring 220 *Advanced Manufacturing* workers in Belknap County. The results include the direct jobs generated in the Belknap County, as well as the secondary (in-direct and induced) jobs added in Belknap and Carroll Counties. The results also include the impacts that this expansion will have on the region in terms of added gross domestic product, personal income and population.

Results: Impact from promoting job creation in Advanced Manufacturing

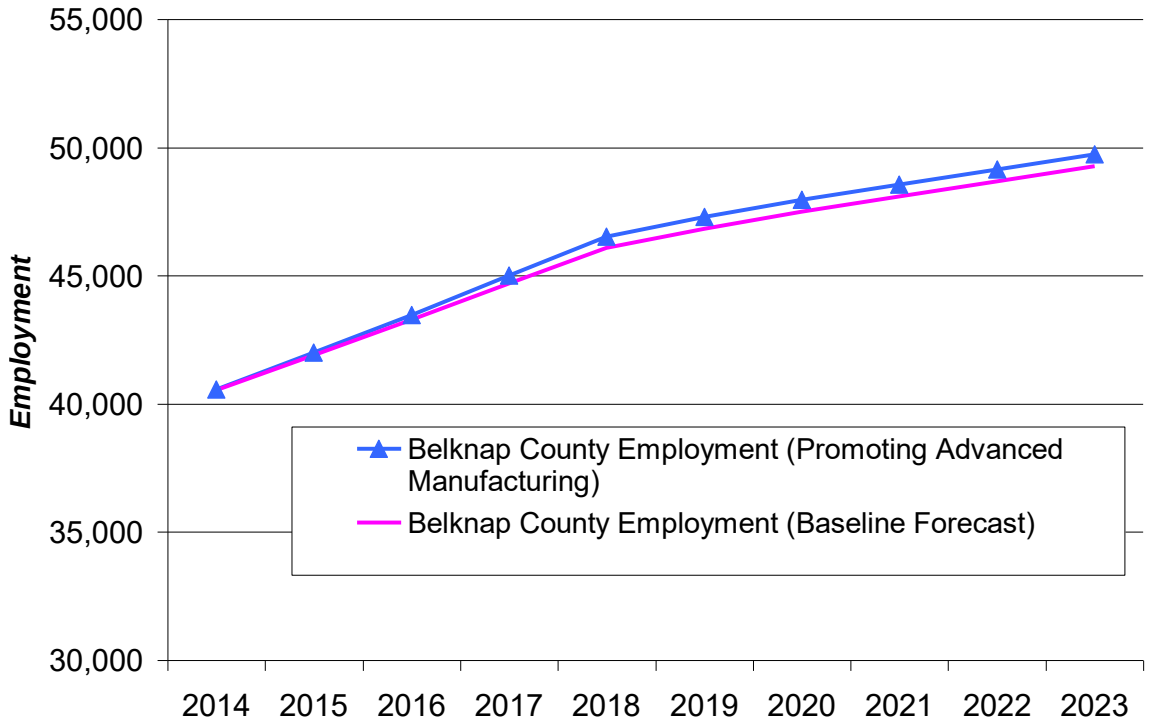
- In 2014, a total of 38 direct, indirect and induced jobs[3] would be created in Belknap County. Additionally, 1 job would be created in Carroll County.

- By 2018, at full implementation of the *Advanced Manufacturing* training and hiring scenario, total impact on jobs will have increased to 453 direct, indirect and induced jobs for the entire region. (The combined results for Belknap and Carroll counties). The direct jobs created in this scenario should be interpreted as replacement jobs in the region's Advanced Manufacturing sector. The indirect and induced jobs are those created as the ripple effect of replacing these highly skilled workers in Advanced Manufacturing as opposed to letting Advanced Manufacturing jobs go unfilled or having those types of jobs leave the region altogether

- By 2023, five years after the full implementation of the scenario, total job creation will reach 463 jobs above the employment baseline in the region. (The combined results for Belknap and Carroll counties).

[3] Employment in the REMI model is 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. The employment count in the REMI model is larger than what is regularly reported by the Economic and Labor Market Information Bureau (ELMIB), New Hampshire Employment Security, which excludes self-employment. The REMI model does not distinguish between full-time and part-time jobs.

Comparison of the baseline employment outlook for Belknap County with the employment outlook with the *Advanced Manufacturing* scenario



- By 2018, the distribution of the secondary jobs created in Carroll County would be as follows: Construction would create 56 jobs; Retail trade would create 21 jobs; and Wholesale trade would create 19 jobs. State and local government would create 64 jobs[4].

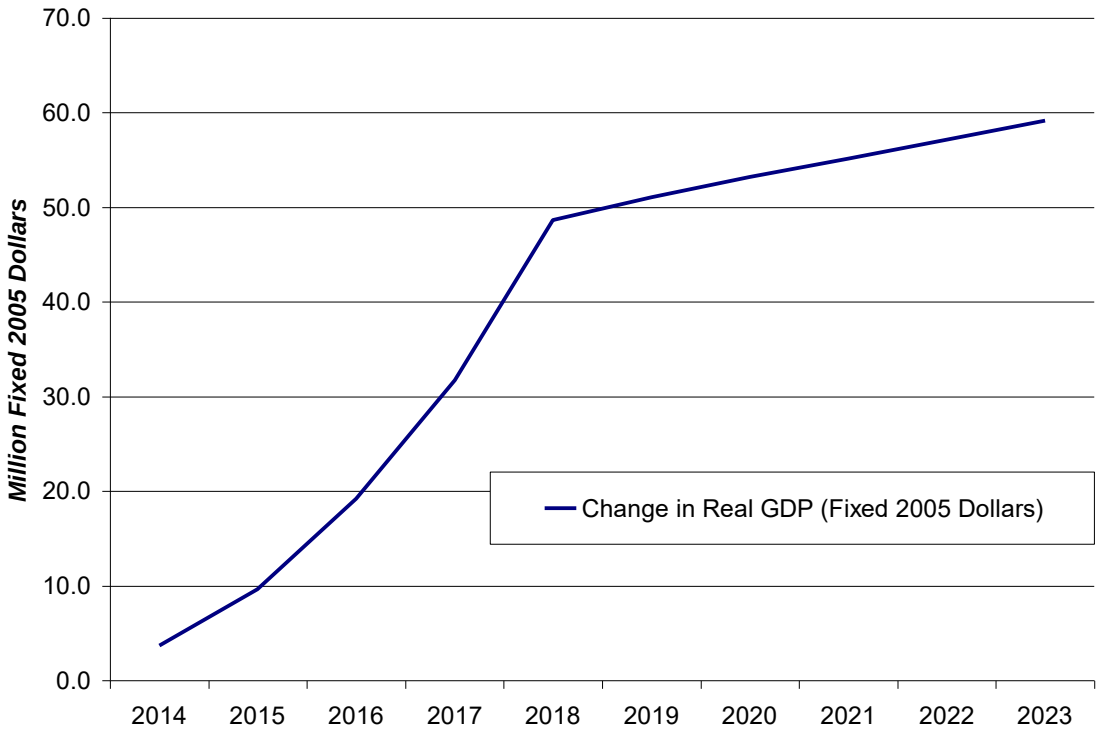
[4] The impact on local and state government jobs would best be interpreted as employment (above the baseline projected government employment) that would be required in order to provide for the overall increase in the demand for shared government services. Shared services could include education, public safety, water and sewage treatment, road construction and maintenance, and other services related to an increase in business activity and resident population.

Industry	2018	
	Direct Jobs	Total jobs created
Manufacturing	220	223
Construction		56
Retail Trade		21
Wholesale Trade		19
Administrative and Waste Management Services		13
Health Care and Social Assistance		11
Real Estate and Rental and Leasing		10
Accommodation and Food Services		10
Other Services, except Public Administration		7
Professional, Scientific, and Technical Services		6
Arts, Entertainment, and Recreation		2
Utilities		1
State and Local		64
Total Jobs	220	443

Gross Domestic Product

- For this scenario, Gross Domestic Product (GDP) in the region in 2014 will have increased above the baseline by 3.7 million in fixed 2005 dollars. By 2018, the GDP in the region will have grown to $48.7 million in fixed 2005 dollars above the baseline, and GPD will continue to grow throughout the forecast period.
- The economic activity of this scenario will account for 0.2 percent of total GDP in Belknap County. By 2018, total economic activity due to the hiring of 220 *Advanced Manufacturing* workers will account for 1.7 percent of the county's GDP.

The impact on GDP from the hiring of *Advanced Manufacturing* workers in the Lakes Region



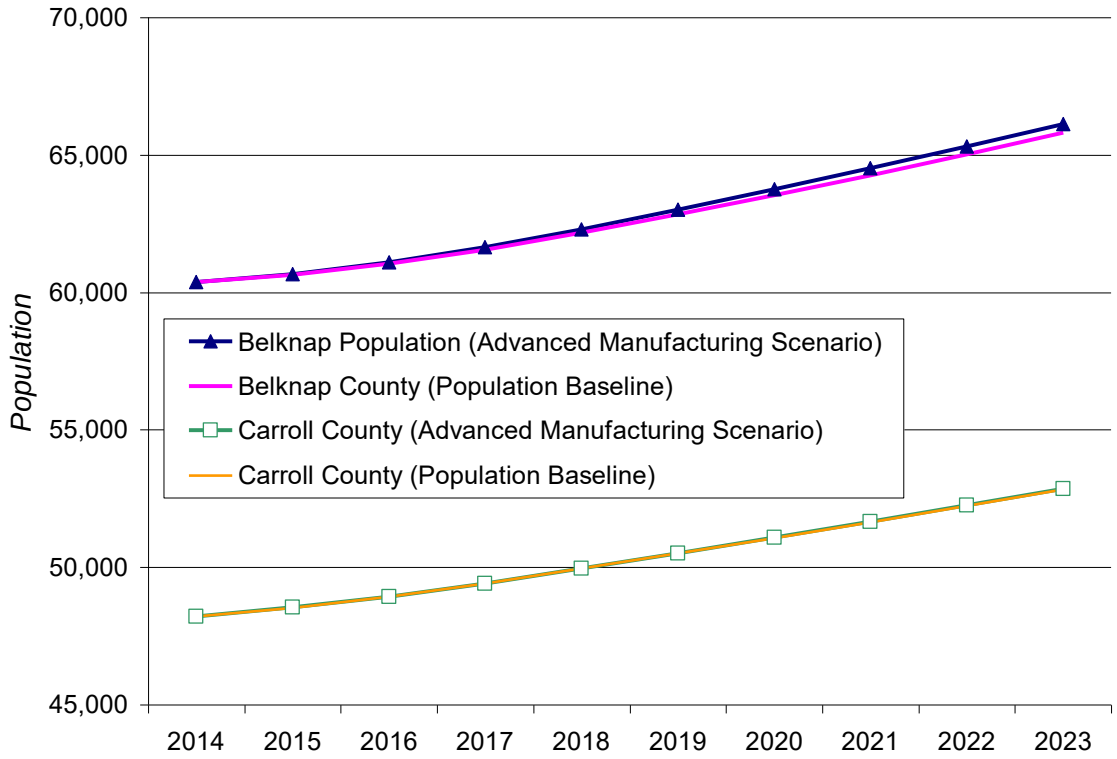
Personal Income

- Based on this scenario, total real personal income will have increased by $1.2 million in fixed 2005 dollars in 2014. By 2018, the increase in real personal income will have grown by $16.2 million in fixed 2005 dollars.
- Real personal income per capita in Belknap County will gain $15 fixed 2005 dollars in 2014. By 2018, real personal income per capita will be $153 in fixed 2005 dollars above the original baseline for the county. The impact on real personal income per capita in Carroll County will be minimal in 2014 but will increase to $12 fixed 2005 dollars in 2018.

Population

- There would be no significant changed to population in 2014. By 2018, Belknap County would gain 125 residents above the forecast baseline and Carroll County would gain 11 residents. By 2023, the population of Belknap County would gain 319 persons above the projected population baseline (a 0.5 percent increase above the forecasted baseline) and Carroll County would gain 25 residents above baseline.

The anticipated population growth in Belknap and Carroll counties due to the hiring/retaining of 220 *Advanced Manufacturing* workers



Job Multiplier

- The multiplier effect on the Lakes Region for each Advanced Manufacturing job created is between 1.9 and 2.1 jobs annually [5] — including the direct job created — over the entire simulation period.

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

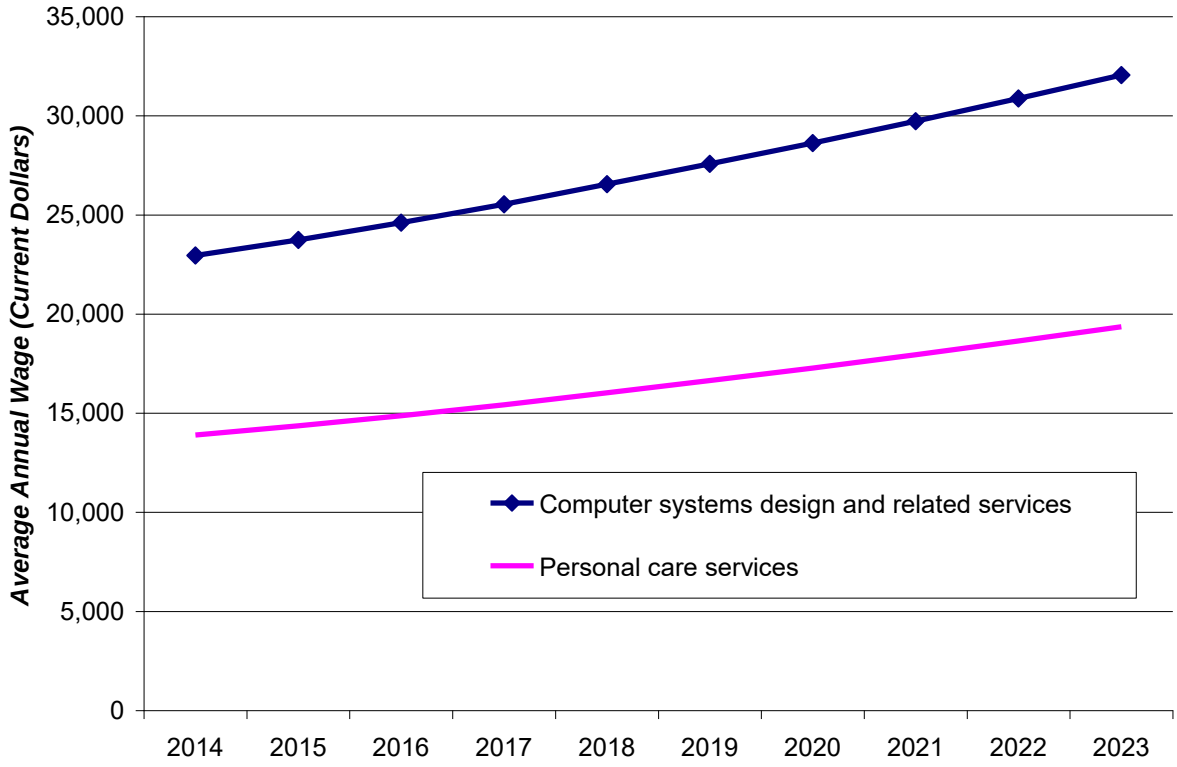
Scenario 2: Promoting Entrepreneurship

Inputs and assumptions:

The direct jobs created in Belknap County due to an increase in the number of entrepreneurs in the region were entered into the REMI model for the time period of 2014 to 2018. It was assumed that on average, four jobs would be created with each entrepreneur. These 25 entrepreneurs were phased in over a five-year period in increments of 5. It is assumed that each entrepreneur is producing 4 jobs on average, so 20 jobs will be created in the first year. Accumulatively, by 2018, 100 additional jobs will be added.

To capture the longer term impact of this scenario, the period for running the model was extended to 2023. The additional jobs created due to the increase in entrepreneurs in the region were distributed equally into the following two NAICS industries[6]: *Computer systems design and related services* and *Personal care services*.

Baseline average annual wages for Belknap County in the two selected industries



[6] See NAICS explanation on page 3.

These two industries were chosen as businesses in these service-oriented industries are likely to be created by entrepreneurs, are mostly made up of small-scale operations, and are likely to be developed within the region. As the chart above indicates, the average pay rates in the two selected industries are very different. Keep in mind that these averages are based on both full- and part-time positions.

The assumed number of direct jobs created in Belknap County was added to the REMI model as follows:

Increased Entrepreneurship										
	Five year implementation period					**Stabilization period**				
NAICS Industry	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Computer systems design and related services	10	20	30	40	50	50	50	50	50	50
Personal care services	10	20	30	40	50	50	50	50	50	50
Total Jobs Created	20	40	60	80	100	100	100	100	100	100

It is assumed that the anticipated increase in output due to the increase of entrepreneurship in the region is driven by an increase in total regional demand. In other words, the output produced by these added workers is either exported to markets outside of Belknap County or the output is provided to people from outside the region, such as tourists or seasonal homeowners, or to residents that currently travel outside the region to obtain these services.

The following is the anticipated implications of increasing entrepreneurship in the region.

Results: Impact from promoting entrepreneurship in the region.

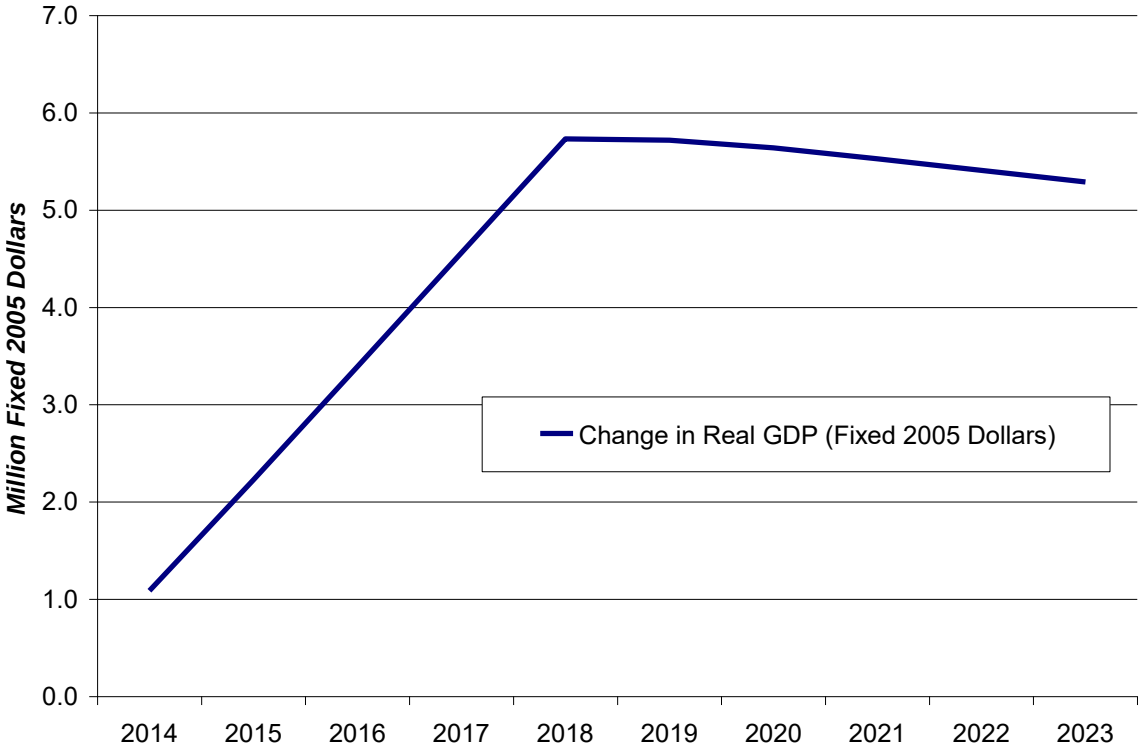
- In 2014, a total of 28 direct, indirect and induced jobs would be created in Belknap County. There would be a minimal impact on Carroll County.
- By 2018, at full implementation of the increased entrepreneurship scenario, total job impact would be 138 direct, indirect and induced jobs.
- By 2023, five years after the full implementation of the scenario, total impact on jobs has declined to 125 jobs above baseline in the region. This indicates that the secondary job impact of entrepreneurship declines over time. Based on the declining impact, a conclusion may be drawn that entrepreneurship needs to be nurtured on an ongoing basis.
- By 2018, the distribution of the secondary jobs created would be as follows: Construction would create 14 jobs; Retail trade would create 6 jobs; and *Administrative and waste management service* as well as *Health care and social assistance* each would create 3 jobs. State and local government would create 8 jobs (See footnote 4 on page 5).

Industry	2018	
	Direct Jobs	Total jobs created
Professional, Scientific, and Technical Services	50	50
Other Services, except Public Administration	50	50
Construction		14
Retail Trade		6
Administrative and Waste Management Services		3
Health Care and Social Assistance		3
Accommodation and Food Services		3
Real Estate and Rental and Leasing		2
Wholesale Trade		1
State and Local		8
Total Jobs	100	140

Gross Domestic Product

- In 2014, Gross Domestic Product (GDP) in the region will have increased above the baseline by $1.1 million in fixed 2005 dollars. By 2018, the GDP in the region will have grown to $5.7 million in fixed 2005 dollars above the baseline. After 2018, the GPD added above the forecasted baseline will start to decline.
- The economic activity of this scenario will account for 0.05 percent of total GDP in Belknap County. By 2018, total economic activity due to increased entrepreneurship in the region will account for 0.2 percent of the county's GDP.

The impact on GDP from the promoting entrepreneurship in the Lakes Region



Personal Income

- Total Real personal income will have increased by $0.8 million in fixed 2005 dollars in 2014. By 2018, the increase in real personal income will have grown by $4.7 million in fixed 2005 dollars.
- Real personal income per capita in Belknap County will gain $12 fixed 2005 dollars in 2014. By 2018, real personal income per capita will be $62 in fixed 2005 dollars above the original baseline for the county.

Population

- Belknap County's population would gain two persons above baseline in 2014. By 2018, Belknap County would gain 19 residents and by 2023, the population of Belknap County would gain 37 persons above the projected population baseline.

Job Multiplier

- The multiplier effect on the Lakes Region of each job created by entrepreneurs is 1.4 annually — including the direct job created — during the implementation period. After the implementation period, the job multiplier declines.

Summary

The two scenarios create very different results. This is partly due to the different size of the employment shock to the model; 220 *Advanced Manufacturing* jobs versus the 100 jobs created by increased entrepreneurship. But there are two comparisons important to note:

- In the *Advanced Manufacturing* scenario, GDP continued to grow throughout the entire simulation period, versus the *Increased Entrepreneurship* scenario, where the additional GDP value started to decline as the employment shock to the model was stabilized.
- The job multiplier of an Advanced Manufacturing job was between 1.9 and 2.1 jobs, whereas the job multiplier of a job created by increased entrepreneurship was 1.4.
- The total economic activity due to the hiring of 220 *Advanced Manufacturing* workers will account for 1.7 percent of the Belknap County's GDP whereas total economic activity due an increase in entrepreneurship (25 additional entrepreneurs creating a total of 100 new jobs) in the region will account for only 0.2 percent of the county's GDP.
- Despite the fact that the economic impact of an *Advanced Manufacturing* is much less than the overall impact of jobs created by entrepreneurs, an economic development strategy involving goals for multiple avenues is still important due to the need for diversification of the regional economy. There are risks associated with both strategies, but mergers and acquisitions of the larger corporations can lead to plant closure and displacement of large amount of manufacturing employment. Manufacturing employment in the Lakes Region Planning Commission dropped 27.4 percent from 2005 to 2012. However, if the region is known for highly skilled workers in a specific industry cluster, the likelihood that other highly specialized manufacturers will relocate to the area is greater.

Please note that Economic and Labor Market Information Bureau under New Hampshire Employment Security projects that there will be 55 openings, annually, in the *Production occupations* in the Lakes Region and more than 1,000 annual openings in *Production occupations* for New Hampshire. ELMIB also projected 5 annual openings for *Engineers* and *Drafters, Engineering Technicians, and Mapping Technicians*. These numbers of projected job openings are based on a Manufacturing sector that is <u>not</u> projected to experience employment growth over the ten-year period from 2010 to 2020.

The explanation below is the economic theory and empirical data behind the REMI model.

The REMI Model

REMI Policy Insight® is a structural model, meaning that it clearly includes cause-and-effect relationships. The model is based on two key underlying assumptions from mainstream economic theory: households maximize utility and producers maximize profits. Since these assumptions make sense to most people, lay people as well as trained economists can understand the model. The tool is often used by economic developers and planners to gage the potential impact on a regional economy of proposed projects such as transportation infrastructure, office and retail development, relocation or expansion of businesses, etc.

In the model, businesses produce goods and services to sell locally to other firms, investors, governments, and individuals, and to sell as exports to purchasers outside the region. The output is produced using labor, capital, fuel, and intermediate inputs. The demand, per unit of output, for labor, capital, and fuel depends on their relative costs, since an increase in the price of any one of these inputs leads to substitution away from that input to other inputs. The supply of labor in the model depends on the number of people in the population and the proportion of those people who participate in the labor force. Economic migration affects the population size. People will move into an area if the real after-tax wage rates or the likelihood of being employed increases in a region.

Supply and demand for labor determine the wage rates in the model. These wage rates, along with other prices and productivity, determine the cost of doing business for each industry in the model. An increase in the cost of doing business causes either an increase in prices or a cut in profits, depending on the market for the product. In either case, an increase in costs would decrease the share of the local and U.S. market supplied by local firms. This market share, combined with the demand described above, determines the amount of local output. Many other feedbacks are incorporated in the model. For example, changes in wages and employment impact income and consumption, while economic expansion changes investment, and population growth impacts government spending.

The effects of a change scenario to the model are determined by comparing the baseline REMI forecast with an alternative forecast that incorporates the assumptions for the change scenario.

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HOUSING

I. EXECUTIVE SUMMARY

Housing, economic opportunity and population characteristics are closely interrelated.

- The region will continue to experience slow growth. The expectation for slow population growth will have implications for many aspects of life in the Lakes Region such as housing, the local tax base, available labor force, school enrollments and others.

- The demographics of the Lakes Region, an increase in the number of individuals and household over 65 and a decline in the number of households 35 to 55, will change the regional housing mix.

- In the year ending June 30, 2013, population change for Belknap County was negative for both natural increase (births minus deaths) and net migration.

- Some of the drop in the labor force is likely associated with residents leaving, but the majority of the drop in both labor force and employment is due to retirement.

- Overall, a decline in jobs (employment for workers covered by unemployment insurance declined by 2,790 jobs between 2006 and 2012), labor force and population are trends that will affect future housing and economic demand.

Recent shifts in the New Hampshire's demographic and economic trends are impacting the current housing infrastructure and could become a drag on future economic growth and stability. The reasons are multiple: an aging population, shifts in housing preferences among younger generations, a misalignment between housing supply and future demand, and changes in traditional financing paths for homeownership. Major housing trends in the state and region include:

- Overall homeownership demand in New Hampshire is declining.

- New Hampshire's current housing supply is poorly aligned with evolving preferences among different age groups — older people want smaller houses with single floor options.

- Seniors will occupy a growing proportion of the state's housing units — they have different needs — an increase in demand for nursing homes, assisted living facilities, and residential care facilities.

- New construction will likely be limited in a projected era of slower population growth — more emphasis on rehabilitation and modification of existing units to accommodate two or more families, an accessory apartment, et cetera.

Affordability is a continuing challenge in the Lakes Region. About, 32 percent of homeowner households in the Lakes Region earn less than 50 percent of the 2014 median household income for the Lakes Region ($44,776), compared to 68 percent of renters.

Municipalities and grouping of communities should explore the future demand and need for affordable housing and workforce housing.

The current balance between owner-occupied housing and rental housing will likely change in the future based on demographic changes.

Projected future housing needs in the Lakes Region indicate a total of 2,100 additional housing units will be needed by 2020 to accommodate a projected 2.4 percent increase in population or approximately 210 new housing units annually. Between 2010 to 2013 an average of 207 residential permits have been issued annually in the Lakes Region,

While there appears to be little racially or ethnically segregated areas in the Lakes Region, there are communities with economic distress characteristics.

In the last five years, there have been few cases of discrimination identified in the Lakes Region and those identified are primarily disability issues.

II. INTRODUCTION

Background and Purpose

The preparation of a housing plan is a responsibility of a regional planning commission. NH RSA 36:47, II sates: "For the purpose of assisting municipalities in complying with RSA 674:2, III(l), each regional planning commission shall compile a regional housing needs assessment, which shall include an assessment of the regional need for housing for persons and families of all levels of income. The regional housing needs assessment shall be updated every 5 years and made available to all municipalities in the planning region." The Lakes Region Planning Commission (LRPC) prepared Lakes Region Housing Needs Assessments in 2004 and 2010. The LRPC is preparing this Housing Needs Analysis (HNA) and Fair Housing & Equity Assessment (FH&EA) as a component of the Lakes Region Plan.

The 2004 and 2010 Lakes Region Housing Needs Assessments described the affordable and workforce housing needs of the area in the context of regional market trends; the document assisted member communities in exploring their role in meeting regional housing needs. LRPC prepared the region's first Fair Housing & Equity Assessment. The LRPC updates the regional housing need assessments every five years and provides a copy to all municipalities within the region. The housing section of a local master plan should assess local housing conditions and project future housing needs of residents of all levels of income and ages in the municipality and the region as identified in the regional housing needs assessment. The assessment is a report on existing conditions and does not normally include a vision statement, goals/objectives or recommendations. This report includes the following:

1. Household income of homeowners and renters
2. Housing cost burden by tenure and age
3. Trends in home purchase price and gross rent
4. Housing supply required to meet anticipated growth
5. Workforce housing needs as defined by statute
6. Local government response in enabling workforce housing

Part 1 of the 2010 Housing Needs Assessment explored the extent of housing cost burden in the region as of 2008 and projected total housing production needs for ownership and rental units from 2008-2015. The Assessment explored trends in Lakes Region housing costs and estimated the range in workforce housing and total housing units needed in 2015. The Assessment recognizes that community capacity to support various levels of density and development intensity varies according to the availability of public sewer and water utilities, soil type, distance from jobs and essential services and other factors. But even smaller scale opportunities in the most rural communities such as accessory apartments and duplexes are important contributors to the affordable supply of the region.

Part 2 of the 2010 Assessment discusses the rationale for affordable and workforce housing and provides a framework for communities to evaluate the housing options they offer. Allowing for housing diversity in local regulations encourages more flexibility to achieve affordable housing

development. Experience from past Regional Housing Needs Assessments in 2004 and 2010 demonstrates that opportunities for higher density or more flexible site development must include appropriate covenants to create and preserve affordable or workforce housing. Major assessment findings include:

- In 2009, New Hampshire passed legislation that defines "workforce housing" and which requires each municipality to enable reasonable opportunities to create housing affordable to the workforce;
- The affordability gap in 2008 was far greater than indicated by U.S. Census data for the Lakes Region in 1990 or 2000;
- About 36 percent of homeowners have gross housing costs that consume 30 percent or more of household income;
- Home prices increased much faster than wages or income, while changes in rental costs were more gradual. Both prices and rents have increased faster than average wages;
- In the Lakes Region, about 52 percent of homeowners and 55 percent of renters are estimated to have incomes at or below the statutory workforce income guidelines for each tenure group;
- Housing demand modeling and building permit data indicate that the Lakes Region is not producing enough multifamily or rental housing stock, especially in consideration of an aging population;
- Under NH RSA 58 to 61, each municipality should examine whether land use regulations need to be modified to enable workforce housing creation.

In preparing this new version of the HNA and first FH&EA, LRPC uses data and information from several sources including the 2004 and 2010 Lakes Region Housing Assessments, housing planning documents prepared by the NH Housing Finance Authority, the U.S. Department of Housing and Urban Development, the U.S. Census and the American Community Survey (ACS). The state's Housing Production Analysis prepared for the NH HFA by a consultant team is particularly noteworthy as it contains information on future housing needs in the state by housing type such as single family, duplex and multifamily housing.

Definitions and Glossary of Housing Terms: Some misunderstanding exists among local officials and the general public regarding housing issues and programs. The following list of housing definitions and terms attempts to clarify the situation.

Affordable Housing: The term affordable housing is typically used to refer to housing with covenants, subsidies, or other mechanisms to ensure availability to low and moderate-income households at a cost that leaves an adequate amount of household income for other necessities. NH RSA 674:58 I states "Affordable means 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."

Area Median Family Income (AMFI): The area median family income divides the distribution of area incomes for a group of two or more people who reside together and who are related by birth, marriage, or adoption into two equal parts: one-half of the family households falling below the median value and one-half above the median.

Assisted Rental Housing Units: Assisted housing developments are housing facilities that provide subsidized or below-market rental housing units for low and very low income households. Assisted housing units are generally classified in three groups: special needs, elderly, and general occupancy or "family" units.

Barrier Free Housing: A general term for housing that is fully accessible (the building and the housing unit) by a person using a wheelchair.

Equalized Assessed Valuation (EAV): An estimate of the full value or market value of taxable real estate, based on adjustments to municipal property valuation adjustments, made by the NH Department of Revenue Administration. Property values by community must be equalized for the purpose of equivalent assessments of county taxes to each municipality.

Fair Market Rent (FMR): Fair market rents are gross rent estimates established by the U.S. Department of Housing and Urban Development. Fair market rents are established based on the dollar amount below which 40 percent of the standard-quality rental housing units are rented within a 15-month period. Public housing units and units less than two years old are not included in fair market rent distributions.

Fair Share: Municipal accommodation of a reasonable proportion of the low to moderate income housing needs of a market area or region. In some states, fair share is a numerical quantity, goal or quota defined by state or regional housing allocation plans. This quantity may be defined by various proportionate distribution factors relative to community share of property wealth, income, total housing units, population, employment or other factors. In New Hampshire, fair share is used in the context of either hosting a supply of workforce housing units, or providing reasonable opportunities for the creation of such housing, without a specific numerical formula for its measurement.

Gross Rent: The cost of rental housing to a tenant including rent paid to the landlord plus any additional cost paid by the tenant for water, sewer, heat, hot water, cooking fuel, and domestic electricity.

Headship: Refers to the ratio of households by age of the head of household to the total population within the same adult age groups. Headship ratios may be used to convert population estimates by age to estimates of the number of households by age using these relationships.

Housing Cost Burden: The percentage of total household income that is spent on gross monthly housing costs. For renters, this includes rent plus any additional utility or fuel costs for heat, hot water, cooking fuel, and electricity. For homeowners, the costs include mortgage principal and interest, property taxes, hazard insurance, and utilities, plus any applicable condominium association fees or site rent within a manufactured housing park. An affordable housing cost burden is generally considered to be not more than 30 percent of a household's gross income. A high housing cost burden is one that exceeds 30 percent of a household's income.

Linkage: Linkage refers to the relationship between commercial development and job creation and the workforce housing demand it generates. In some parts of the United States, development policies and ordinances can require commercial developments to provide a certain number of affordable units to help meet the workforce housing demand generated by expected employment, or

to pay linkage fees based on the relationship between jobs, wage levels of related service workers, and local development costs.

Low Income Housing Tax Credit (LIHTC): A program used to leverage the development or rehabilitation of rental housing serving low income households. In New Hampshire, the New Hampshire Housing Finance Authority administers this program, which awards a share of federal income tax credits to qualifying projects or investors. At least 20 percent of the units in a LIHTC project must be occupied by households earning less than 50 percent of the area median family income (AMFI); or at least 40 percent must be occupied by households earning not more than 60percent of the AMFI. The remaining units in a development need not be subject to restrictions on income.

Market Rate: Refers to prices or rents that are not subsidized by government programs, and where the there are no restrictions on the property that would limit the price or rent from rising or falling according to market demand.

Median Household Income: The median household income divides the distribution of incomes for the occupants of a housing unit that is their usual place of residence into two equal parts: one-half of the households falling below the median value and one-half above the median.

New England City and Town Area (NECTA): Effective in 2003, the federal Office of Management and Budget (OMB) designated certain core based statistical areas in New England as metropolitan or Micropolitan NECTAs. Two of the seven Micropolitan NECTAs are in the Lakes Region: the Laconia Micropolitan NECTA and the Franklin Micropolitan NECTA. These are core based statistical areas with at least one urban cluster that has a population of at least 10,000, but less than 50,000. Each Micropolitan NECTA must also have adjacent cities and towns or groups of cities and towns that have a high degree of social and economic integration with the "core" as measured through commuting ties. In New Hampshire, the NECTAs comprise the statistical labor market geographies for those locations. The US Bureau of Labor Statistics, with input from the Economic and Labor Market Information Bureau of New Hampshire Employment Security, divides the remainder of the state that is not within a metropolitan or Micropolitan NECTA into small Labor Market Areas.

Moderate, Low, and Very Low-Incomes: The US Department of Housing and Urban Development (HUD) provides income limits based on US Census data. Estimates are based on percent of median family income and calculated at three income levels: Moderate-Income (80 percent), Low-Income (50 percent), and Very Low-Income (30 percent). These benchmarks are published annually and are frequently used as income limits applicable to various regions within each state for affordable housing programs.

Private Covered Employment: Non-government employment that is subject to employment compensation insurance payments by the employer. Covered employment generally excludes self-employed persons and fully commissioned salespersons.

Tenure: In the context of housing analysis, a classification of households into two groups: ownership versus rental occupancy.

Universal Design: A broad range of efforts to produces buildings, products and environments that are usable by everyone, not limited to specialized designs for specific age groups or people with disabilities. With increased life expectancy, there is a growing interest in universal design to deal with adaptation of design that serves an aging population, various disability levels, as well as general needs. Curb cuts or sidewalk ramps, essential for people in wheelchairs but used by all, are a common example. Additional examples include cabinets with pull-out shelves, or kitchen counters at several heights to accommodate different tasks and postures.

Workforce Housing: Workforce housing includes a variety of housing types affordable to households deriving their income from local or area employment, most typically referring to working residents and households with incomes at or below the area median family income of a region. In New Hampshire, workforce housing has been more specifically defined in RSA 674:58 to include ownership housing affordable to households with incomes up to 100percent of the HUD area median family income (AMFI), and for rental housing up to 60percent of the AMFI for a household of three persons. Workforce housing options available in the community must include allowances for multifamily structures with five or more units.

Description of the Lakes Region

The Lakes Region is an area of great natural beauty. The abundant mountains, lakes, and pastoral settings provide residents and visitors with scenic views and recreational opportunities. The region is composed of a system of inter-connected waterways. Of the total 818,000 acres in the Lakes Region, 15 percent is covered by surface waters and wetlands (LRPC, 2012). These waterways, natural resources, and corresponding quality of life have been noted as the most important benefit to regional businesses.

Situated between the White Mountains to the north and the more densely populated Merrimack Valley to the south, the Lakes Region serves as an easily accessible destination with an ideal mix of pristine natural resources and modern amenities. While the region's lakes and rivers remain the most sought after resource, the mountains, forests and wetlands of the area serve as an aesthetic and recreational resource and provide important ecosystem services such as habitat for native species and filtration of rainfall and runoff.

Lake Winnipesaukee, New Hampshire's largest lake, has a total surface area of 44,600 acres. Maximum and mean depths are 180 and 43 feet, respectively. The lake is natural but is raised by damming to an elevation of 504 feet. Eighty-three relatively small tributaries draining a watershed of 215,133 acres provide the main water source for the lake.

There are 240 miles of shoreline (this includes the shoreline length of islands over five acres in area) and about 250 islands (the total number of islands is frequently debated, depending on definition of "island"). The shores and many of the islands are developed with numerous dwellings, from cottages to mansions, but some areas between the developments remain forested. The region is heavily dependent on the recreation and tourism industry.

The Housing Plan Process

The Housing Needs Assessment includes a review of existing housing conditions such as demographic trends, population, employment, community of interest needs, segregation, concentrated poverty, housing affordability and access to opportunity. The chapter will include a section on housing supply based on the recent work of the NH Housing Finance Authority. A major component involves a section on "Affordable and Equitable Housing Opportunities and Barriers" and sections on recommendations and conclusion.

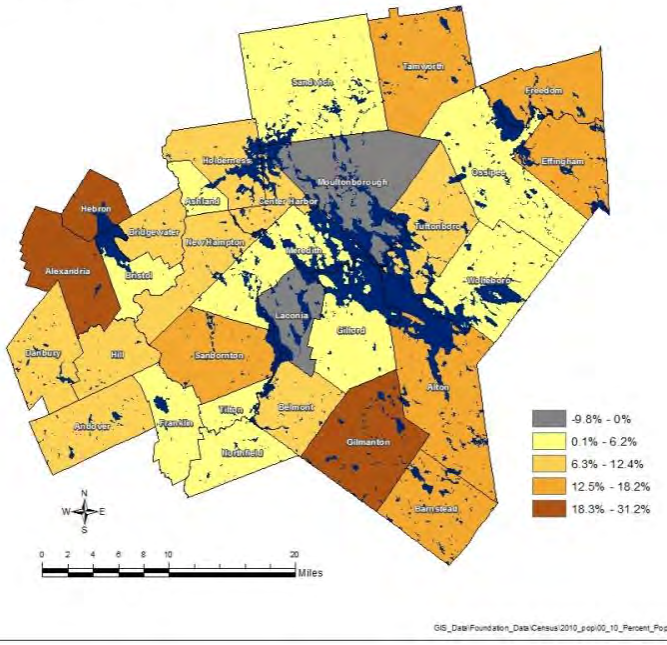
III. ANALYSIS OF EXISTING CONDITIONS AND TRENDS

A. Demographic/Socioeconomic Trends

1. Total Population

During a 40-year period, the population of the Lakes Region increased by 86 percent from 60,461 in 1970 to 112,735 in 2010. However, from 2000 to 2010, the year-round resident population of the Lakes Region grew much more slowly (5.9 percent) with the addition of 6,307 people. The greatest net population growth occurred mostly in the southeast part of the region, in the towns of Alton (748), Gilmanton (717), Barnstead (707), and Belmont (640). These towns had some of the highest rates of growth as well. The addition of 2,812 people in these four communities accounted for 44.6 percent of the total net population change in the region between 2000 and 2010.

Figure 3.1 Changes in Population between 2000 and 2010



One third of the communities in the Lakes Region grew at a rate slower than the region as a whole (5.9 percent), and 18 communities grew by 8.0 percent or more. While only eight of 30 communities grew at slow to moderate rates of 0.7- 5.0 percent, the flat growth in Franklin and slight declines in Laconia and Moultonborough somewhat offset the rapid growth in the majority of the region.

Since 1990, the population of the region has increased by 22.7 percent with Alton, Freedom, Effingham, Hebron, Barnstead, and Gilmanton all having grown by greater than 44 percent. During the same period, however, the two largest communities in the Lakes Region, Laconia and Franklin, where 26 percent of the region's population resided in 1990, have grown by only 1.3 and 2.1 percent, respectively.

Table 3.1 lists the population of Lakes Region towns, and the percent change relative to previous Census years from 1990 to 2010. The decade of the 1990s experienced 15.8 percent population increase while the decade of the 2000s was 5.9 percent. Both the NH Center for Public Policy and NH Office of Energy and Planning project that future population growth in the state and Lakes Region will be significantly less through the year 2040.

Table 3.1: Population Change in the Lakes Region, New Hampshire 1990-2010

	Population			Percent Change		
	1990	2000	2010	1990-2000	2000-2010	1990-2010
Alexandria	1,190	1,329	1,613	11.7%	21.4%	35.5%
Alton	3,286	4,502	5,250	37.0%	16.6%	59.8%
Andover	1,883	2,109	2,371	12.0%	12.4%	25.9%
Ashland	1,915	1,955	2,076	2.1%	6.2%	8.4%
Barnstead	3,100	3,886	4,593	25.4%	18.2%	48.2%
Belmont	5,796	6,716	7,356	15.9%	9.5%	26.9%
Bridgewater	796	974	1,083	22.4%	11.2%	36.1%
Bristol	2,537	3,033	3,054	19.6%	0.7%	20.4%
Center Harbor	996	996	1,096	0.0%	10.0%	10.0%
Danbury	881	1,071	1,164	21.6%	8.7%	32.1%
Effingham	941	1,273	1,465	35.3%	15.1%	55.7%
Franklin	8,304	8,405	8,477	1.2%	0.9%	2.1%
Freedom	935	1,303	1,489	39.4%	14.3%	59.3%
Gilford	5,867	6,803	7,126	16.0%	4.7%	21.5%
Gilmanton	2,609	3,060	3,777	17.3%	23.4%	44.8%
Hebron	386	459	602	18.9%	31.2%	56.0%
Hill	814	992	1,089	21.9%	9.8%	33.8%
Holderness	1,694	1,930	2,108	13.9%	9.2%	24.4%
Laconia	15,743	16,411	15,951	4.2%	-2.8%	1.3%
Meredith	4,837	5,943	6,241	22.9%	5.0%	29.0%
Moultonborough	2,956	4,484	4,044	51.7%	-9.8%	36.8%
New Hampton	1,606	1,950	2,165	21.4%	11.0%	34.8%
Northfield	4,263	4,548	4,829	6.7%	6.2%	13.3%
Ossipee	3,309	4,211	4,345	27.3%	3.2%	31.3%
Sanbornton	2,136	2,581	2,966	20.8%	14.9%	38.9%
Sandwich	1,066	1,286	1,326	20.6%	3.1%	24.4%
Tamworth	2,165	2,510	2,856	15.9%	13.8%	31.9%
Tilton	3,240	3,477	3,567	7.3%	2.6%	10.1%
Tuftonboro	1,842	2,148	2,387	16.6%	11.1%	29.6%
Wolfeboro	4,807	6,083	6,269	26.5%	3.1%	30.4%
Lakes Region	**91,900**	**106,428**	**112,735**	**15.8%**	**5.9%**	**22.7%**
New Hampshire	**1,109,252**	**1,235,783**	**1,316,470**	**11.4%**	**6.5%**	**18.7%**

Source: U.S. Census

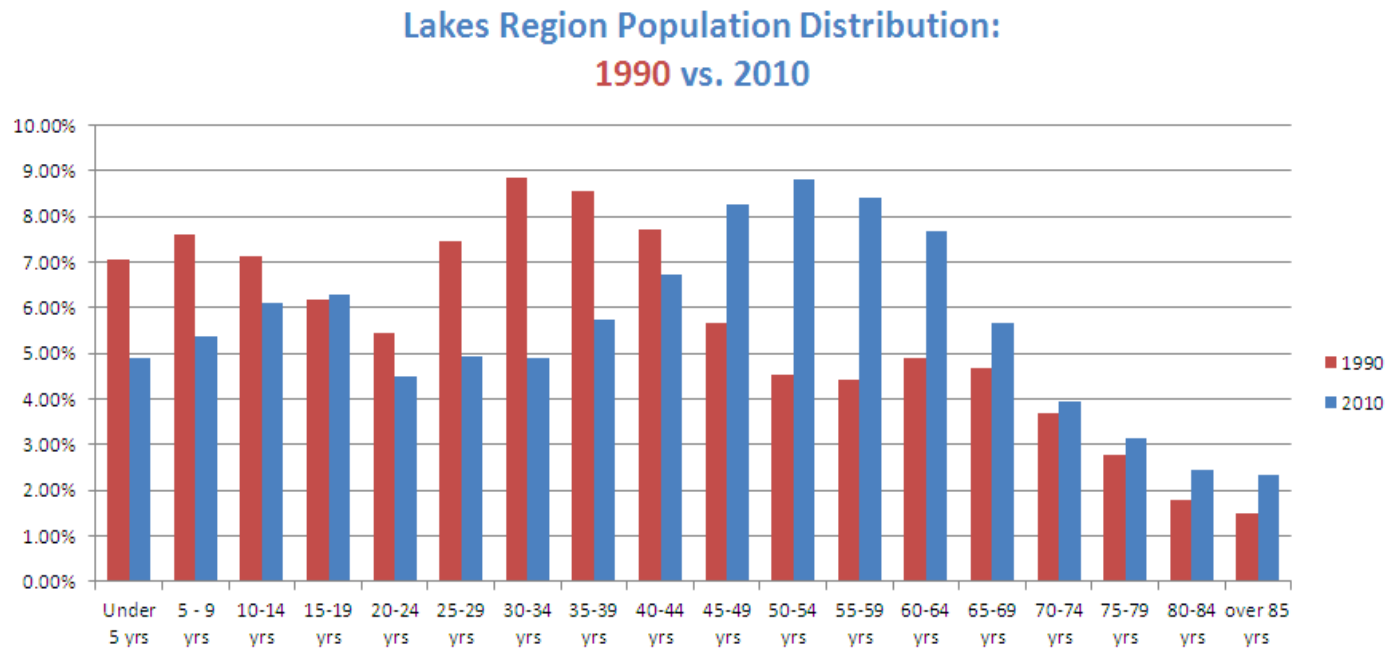
2. Population Projections

In cooperation with the nine regional planning commissions, the NH Office of Energy and Planning (OEP) prepared population projections for New Hampshire counties and municipalities in November 2013. This was a challenging multi-year effort due to the changing demographics in the state and the slowdown in economic and population growth. In 2010, the US Census reported a total of 112,735 residents in the Lakes Region and the projections estimated an increase of 277 persons by 2015 for a total of 113,012. This lower projection is in sharp contrast to the history of last 40 years when the population increased by 86 percent from 60,461 in 1970 to 112,735 in 2010. The "baby boom" generation, the in-migration from southern New England states, the favorable New Hampshire tax climate and the overall attractive lifestyle in the Lakes Region contributed to this high level of growth.

For the next 25 years (2015 to 2040), the population projections call for the Lakes Region to grow very slowly in contrast to the past. The projections call for an increase to 123,940 persons in 2040 for a total increase of 10,968 or 9.7 percent over the 25-year period. That represents an annual average increase of about 0.4 percent per year. The population projections have implications for many aspects of life in the Lakes Region such as housing, the local tax base, available labor force, school enrollments and others. It is a significant trend that needs further consideration and monitoring. Please see Figure 3.2 below.

Figure 3.2 demonstrates how the population has changed from younger people in the 20 to 44 age groups to older people in the 45 to 69 age groups in 2010. This shows the aging of the "baby boom" generation. The source of information is the American Community Survey and U.S. Census.

Figure 3.2



3. Housing Trends

In April 2014, the NH Housing Finance Authority (NHHFA) prepared a report entitled "Big Houses, Small Households: Perceptions, Preferences and Assessment." Since this analysis has direct applicability to the Lakes Region, the following is provided.

"In the decades before the Great Recession of 2008-09, New Hampshire's housing market was a major driver in the state's expanding economy. But with recent shifts in the state's demographic and economic trends, New Hampshire's current housing infrastructure could end up becoming a drag on future economic growth and stability. The reasons are multiple: an aging population, shifts in housing preferences among younger generations, a misalignment between housing supply and future demand, and changes in traditional financing paths for homeownership. In the 1970s, 1980s, and 1990s, housing demand was driven by the Baby Boomers moving to New Hampshire. But as we have seen in many policy areas, much of New Hampshire's housing industry (builders, planners, public officials, etc.) have yet to fully transition away from the mindset of the past, in which consistent rates of high population growth (especially among young families) was the norm. Instead, they need to prepare for a housing model defined by less growth overall, more senior households, fewer young households, financially strained first-time buyers, and changing lending standards."

Using updated population forecasts, the report projects New Hampshire's future housing needs, by age group and by type of housing. In addition, numerous focus groups were consulted, representing a broad swath of the state's people and businesses: builders, lenders, realtors, young professionals, senior groups, regional planners, workforce housing groups, and others. Finally, as a way of assessing the potential impact of New Hampshire's aging population on the housing market, national analyses of housing needs and preferences among senior populations were reviewed. Among the major findings from this work:

Overall homeownership demand in New Hampshire is declining. The reasons for this include the weak economy, lower rates of in-migration, and difficulties in obtaining financing. Among older homeowners, low levels of liquidity continue to pose problems, while high levels of student debt and mediocre wage growth limit home-buying options for younger generations. In the more rural parts of the state this decline in demand has been particularly apparent in communities that are more than two towns removed from major transportation networks. Real estate professionals, in particular, noted significant differences in demand geographically. Moreover, growth in low-wage service jobs and housing costs are described as creating a growing affordability problem, particularly north of Concord.

New Hampshire's current housing supply is poorly aligned with evolving preferences among different age groups. This mismatch exists both for aging Baby Boomers and younger workers. Older residents are likely to seek to "down-size" to smaller living arrangements, yet housing units of 3+ bedrooms far outnumber one- and two-bedroom units in the state. Given the relatively small number of young households in the state, it is unclear whether the larger units built for Boomers during their child-rearing years will draw sufficient interest from buyers in the future.

In addition, younger age groups are, in general, less likely to be homeowners compared to previous generations. In fact, each new group of young people is increasingly less likely to be homeowners. Moreover, financial pressures cause younger generations to gravitate toward more non-conventional

housing solutions, including co-ownership and "doubling up," and a preference for the flexibility associated with renting.

Affordability and the New Hampshire advantage. These factors have an impact on the affordability of housing in New Hampshire, something which may have been a big part of New Hampshire's attraction to new migrants from higher-priced states over the past four decades. While the median price of homes is more affordable than just a few years ago, this is not necessarily true for first-time buyers, who have traditionally provided important liquidity to the housing market. The home purchases of first-time buyers enabled those who were selling their homes to "move up" or "down-size." But younger residents now face inferior job prospects and high levels of student debt, and they are delaying marriage, and are unsure of the benefits of homeownership — including the ability to easily resell at a later date.

In addition, the state's rental market has grown less affordable in recent years. The New Hampshire Housing Finance Authority's (NHHFA) 2013 rental housing survey indicated that since 2006, the median monthly gross rent rose by 4 percent (in contrast to the 40 percent drop in the monthly mortgage cost) and vacancy rates decreased, meaning renters were paying more, with fewer options from which to choose. This reflects a national pattern for a growing percentage of households in rental housing.

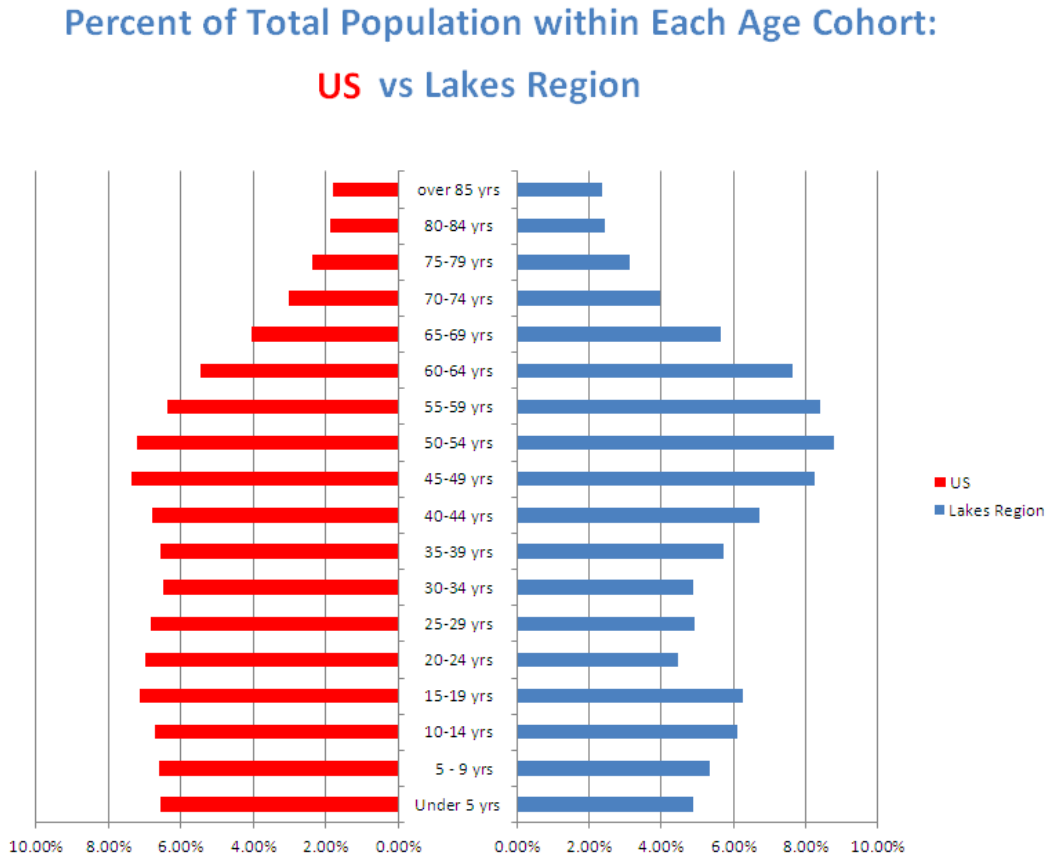
Seniors Will Occupy a Growing Proportion of the State's Housing Units. New Hampshire's senior population is expected to nearly double between 2010 and 2015, from 178,000 to 323,000 people, a change that is not matched among younger age groups. As a result, seniors will occupy a growing proportion of the state's housing units, filling one in three units by 2025. The number of senior households in the state, both owners and renters, will nearly double by 2025. While seniors generally want to age in place, this desire is complicated by several factors, including high rates of disability, lower median income and savings, declining caregiver population and other factors. The median income of the state's senior homeowners is barely half that of the state median, and their home equity has been significantly reduced by the state's housing downturn.

New construction will likely be limited in a projected era of slower population growth. The rehabilitation of the existing housing stock may become more needed, yet much of New Hampshire's housing regulations, including local planning and zoning ordinances, are not currently geared towards this segment of the market."

4. Population by Age Group

Figure 3.3 below displays similar information regarding age cohort by five -year increments and compares the United States and the Lakes Region. When compared to the United States, the Lakes Region has fewer persons in the younger cohorts and a larger number of persons older than 50 years.

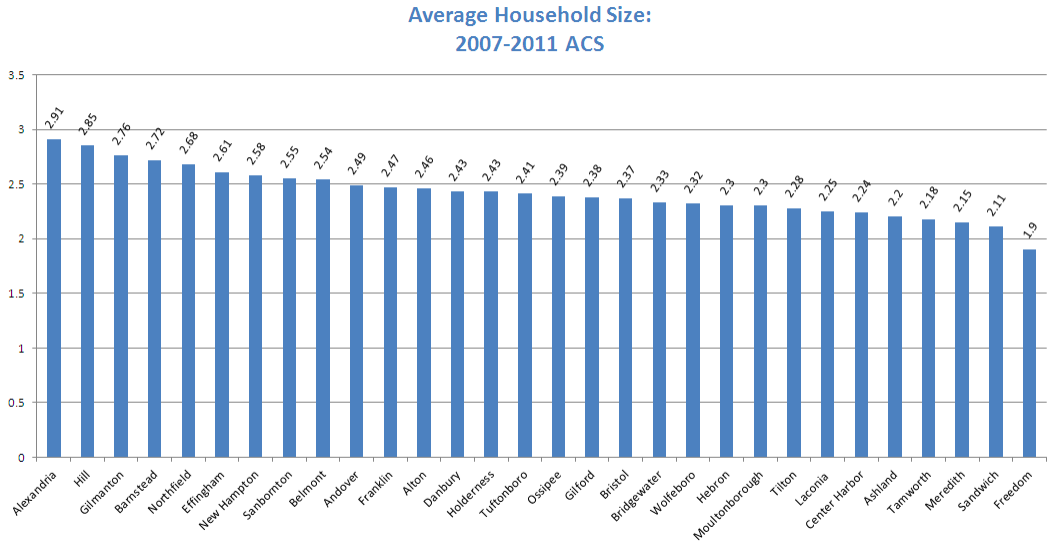
Figure 3.3



5. Total Population in Households

For the past two decades, the average household has declined to about 2.4 persons per household for the Lakes Region. The household size ranges from a high of 2.91 in Alexandria to 2.41 in Tuftonboro as a mid-point and 1.9 in Freedom as the lowest. Figure 3.4 shows the average household size for communities in the Lakes Region.

Figure 3.4



6. Change in Employment

Table 3.2 includes data on the civilian labor force, employment and unemployment for the Lakes Region Planning Commission area for the years 2002 to 2012. Generally, local municipal employment and unemployment data correspond closely to the Lakes Region data.

For the 12-year period from 2002 to 2013, the unemployment rate in the Lakes Region generally paralleled the unemployment rate for the state of New Hampshire with some minor differences. The region's unemployment rate was lower than the state's from 2002 to 2006 and in 2007 both were the same at 3.5 percent. From 2008 to 2010, the Lakes Region unemployment rate was higher than the state's; in 2011, both the Lakes Region and state had an identical unemployment rate of 5.4 percent. During the 2006 to 2008 period, the Lakes Region labor force peaked at about 61,000 persons and then declined to 59,122 in 2011. Employment also peaked during 2006 to 2008 at about 58,900 persons declining to 55,889 in 2011. Employment rose in 2012 but declined back to 55,748 in 2013, which was slightly more than in 2011, the lowest point in the 12-year period. When considering these two data points, it is likely that the Lakes Region experienced out-migration due to unfavorable economic conditions and opportunities in the region and state, some people stopped seeking employment and thus did not appear in the labor force. The regional employment picture shows more jobs in retail sales and services and less in manufacturing.

Note that from July 1, 2012 to July 1, 2013, the population in Belknap County dropped by 213 persons, the largest decline of any of NH's ten counties. According to the U.S. Census, the population change for Belknap County was related to a decrease in natural growth (births minus

deaths) and net migration. Some of the drop in the labor force is likely associated with residents leaving but the majority of the drop in both labor force and employment is due to retirement. As residents in the area age, many of them retire and are therefore not included in neither the employment count nor the labor force.

Overall, a decline in jobs (covered employment declined by 2,790 jobs between 2006 and 2012), labor force and population are all negative economic trends in terms of future demand. But as the area south of the region starts to expand, there could be an increase in demand due to additional second home owners spending more time in the region. Considering national economic conditions, the Lakes Region and New Hampshire, with the fourth lowest unemployment rate in the United States, have managed the economic situation fairly well. Table 3.2 includes the civilian labor force with employment and unemployment data for the years 2002 to 2012.

Table 3.2: Labor Force and Unemployment, Lakes Region 2002 to 2013

Year	Labor Force	Employed	Unemployed	Unemployment Rate	NH Rate
2013	58,792	55,748	3,044	5.1%	5.3%
2012	59,646	56,485	3,161	5.2%	5.5%
2011	59,122	55,889	3,233	5.4%	5.4%
2010	59,506	55,695	3,811	6.4%	6.1%
2009	60,948	57,062	3,886	6.3%	6.2%
2008	61,490	59,000	2,484	4.0%	3.9%
2007	61,073	58,886	2,187	3.5%	3.5%
2006	61,053	58,986	2,067	3.3%	3.5%
2005	59,403	57,373	2,030	3.4%	3.6%
2004	59,063	57,063	2,060	3.4%	3.9%
2003	58,997	56,653	2,344	3.9%	4.5%
2002	59,609	57,297	2,312	3.8%	4.5%

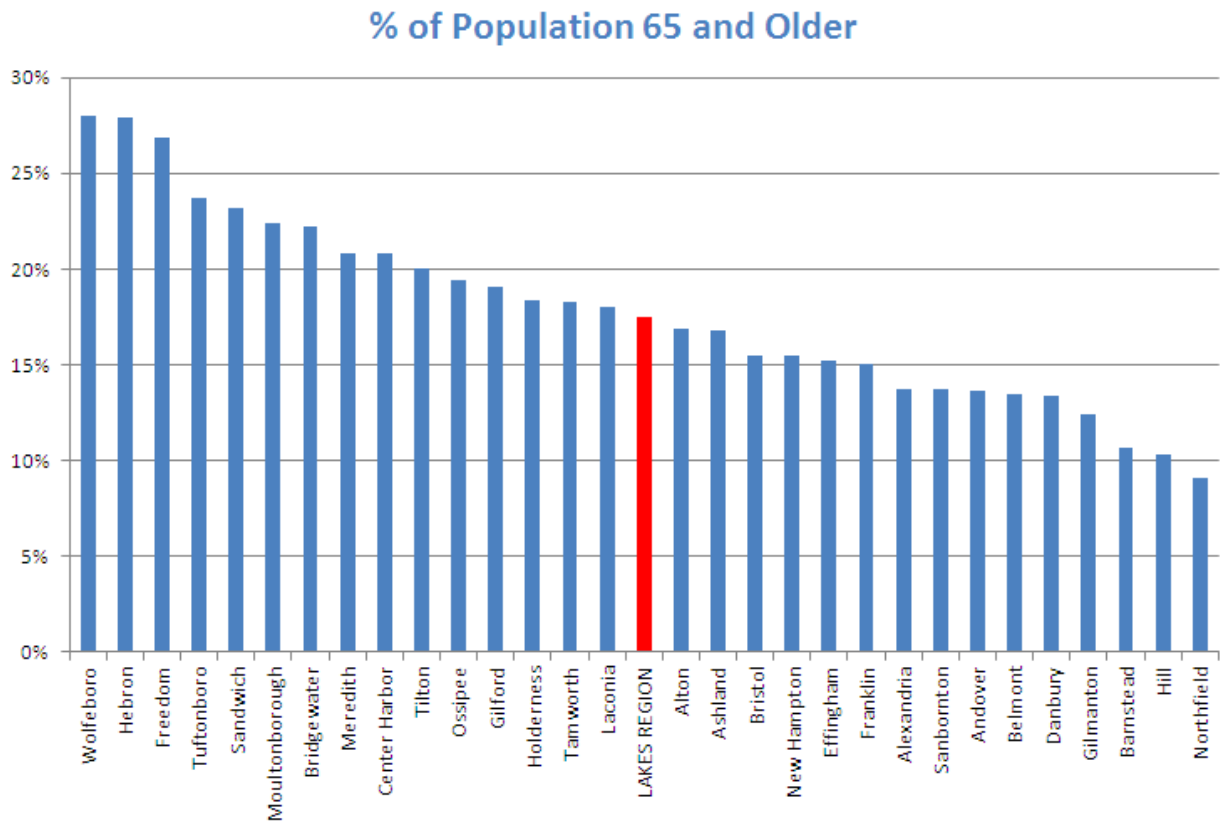
Source: NHetwork, NH Economic and Labor Market Information Bureau website, October 2013

B. Community of Interest

Groups such as elderly seniors, minorities, single heads of households, persons without a vehicle, persons in poverty and those with limited proficiency in English have lower incomes and often experience difficulty securing safe, decent, and affordable housing.

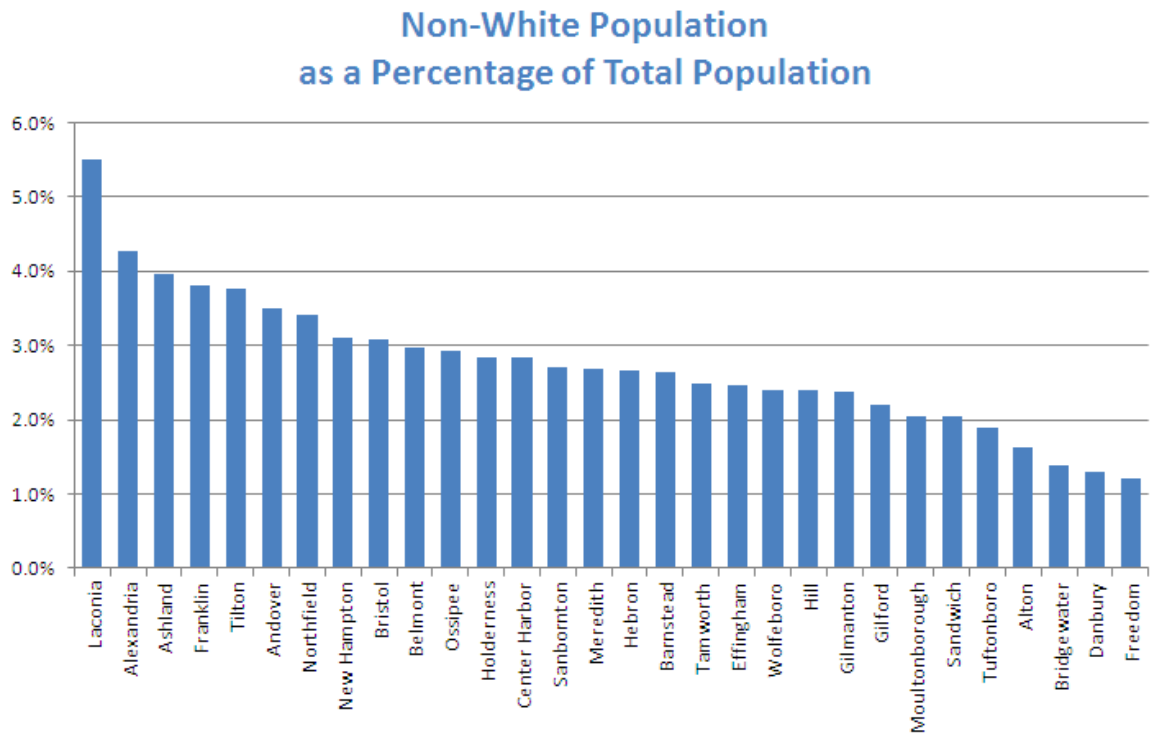
Seniors over 65 years. Figure 3.5 shows the percentage of persons over 65 years in each of the Lakes Region communities. The average in the region is about 17 percent with three towns (Wolfeboro, Hebron and Freedom) exceeding 25 percent. The percentages in the towns of Northfield, Hill and Barnstead are about 10 percent. The median age in the Lakes Region is about 44 years. As noted in the NH HFA report entitled "Big Houses, Small Households: Perceptions, Preferences and Assessment", those over 65 years who live in larger homes may wish to downsize, but are experiencing difficulty in selling their homes and finding a suitable smaller home.

Figure 3.5



Minorities: In 2010, the total population of the Lakes Region was 112,735 persons. Of that amount, 108,257 or 96 percent are white. The 4 percent balance includes Black/African Americans (438), Hispanic/Latino (1,287), Asians (1,022), Native Americans (281) and others. Figure 3.6 below shows the Non-White Population as a percentage of the total population in each municipality. The City of Laconia has the largest percentage of non-white population with 5.5 percent of the population and Freedom has the lowest with 1.2 percent.

Figure 3.6



Single parents: Figures 3.7 and 3.8 show the number and percentage of single parent households with children under 18 years of age. In these families, the husband or wife is absent. The City of Laconia has the most single-family parent households with 800, followed by the City of Franklin with about 440 and Belmont with 350.

Figure 3.7

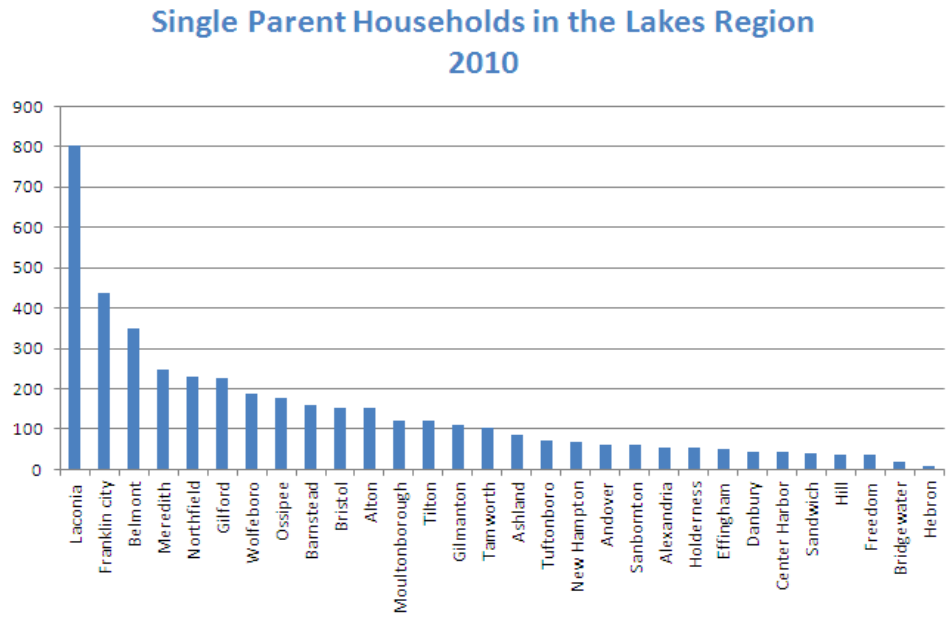
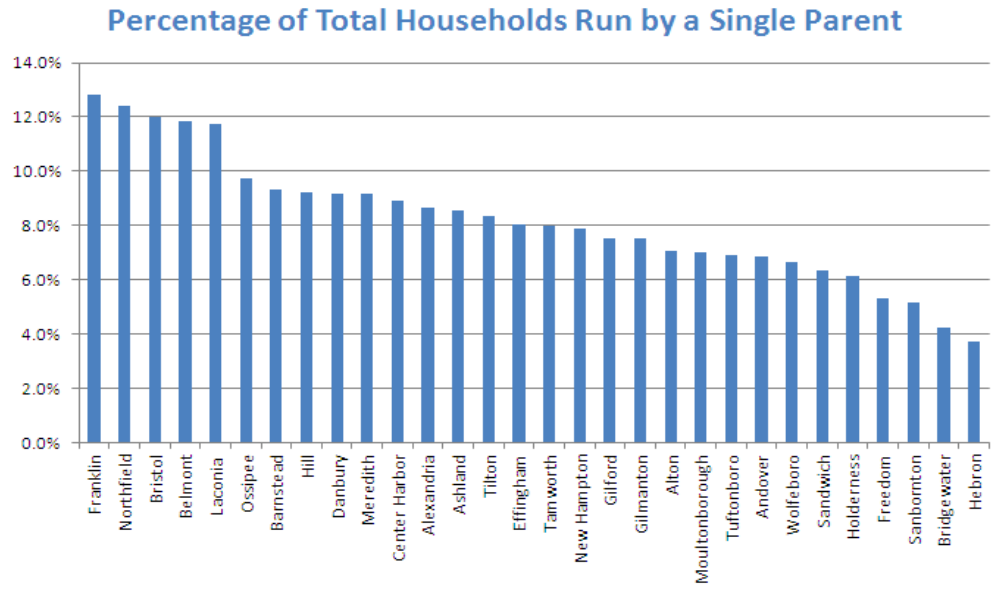


Figure 3.8



Vehicle availability: As expected in a rural area with limited public transportation, there are few households lacking a vehicle. Laconia, Belmont, Ossipee, Meredith and Franklin have largest number of households without a vehicle, while Ossipee, Hebron and Danbury have the highest percentage of households with no vehicles. There is limited transit service in the more populous communities. See Figures 3.9 and 3.10 below.

Figure 3.9

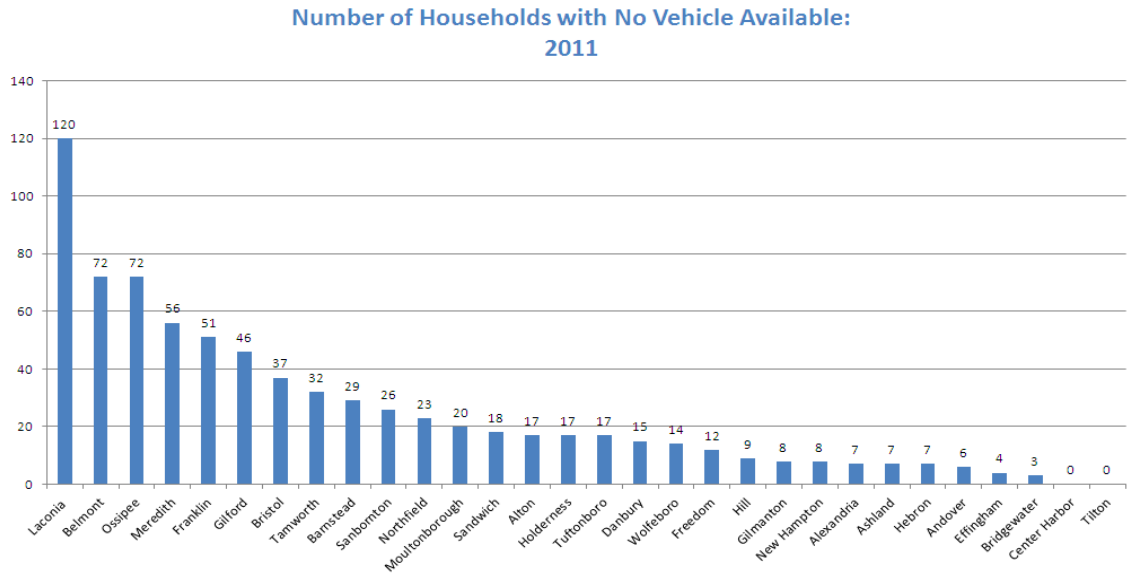
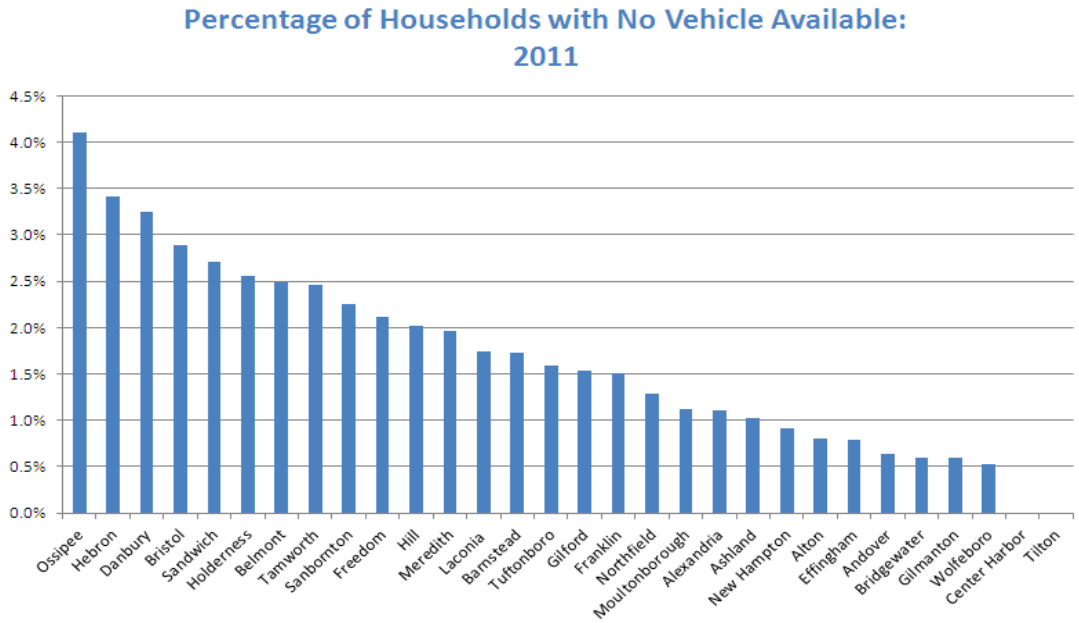


Figure 3.10



Poverty: The US Census established a threshold level for poverty for the entire United States. The amount is $11,720 for one person, $14,937 for a two-person household, and $18,284 for a three-person household. Figure 3.11 shows the percentage of population below 150 percent of the poverty level.

Figure 3.11

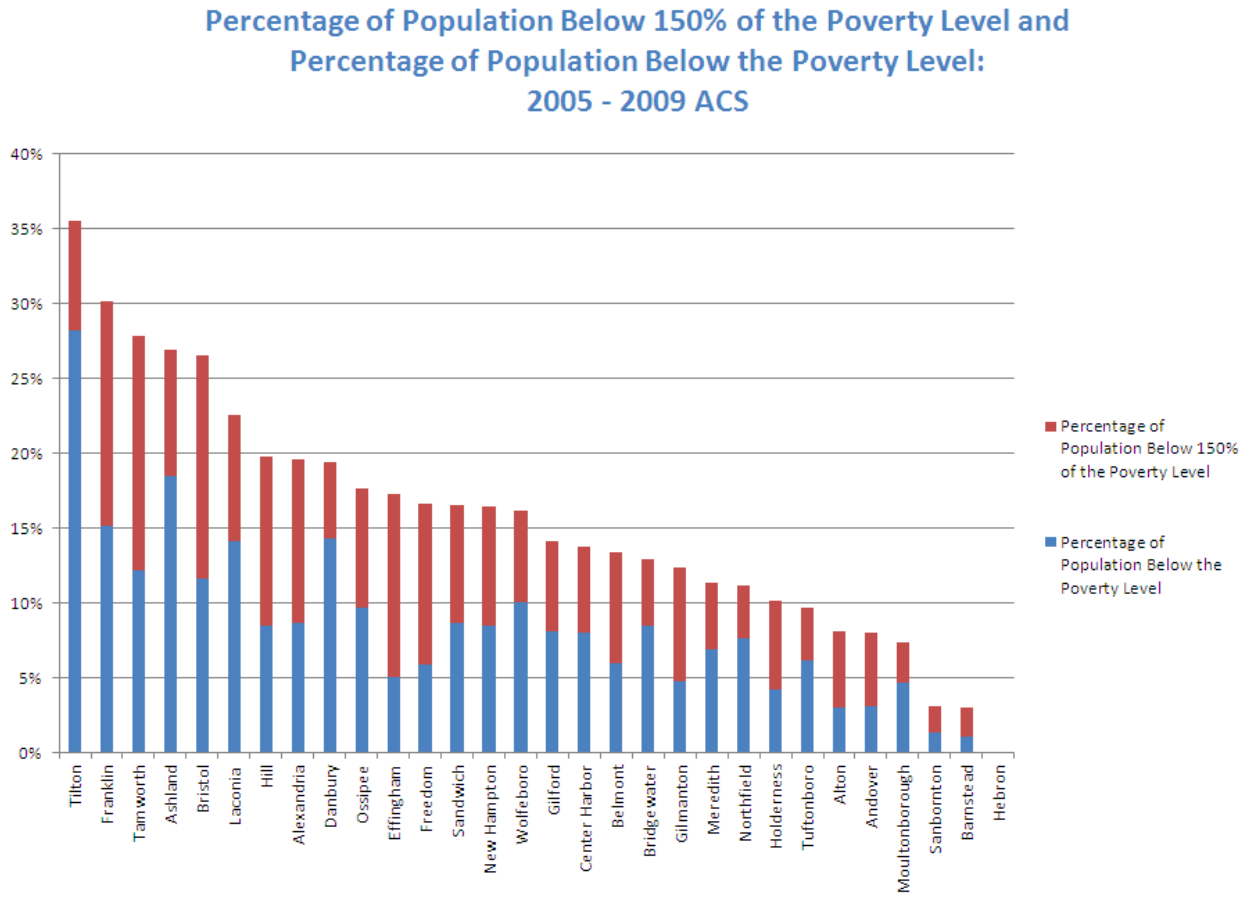
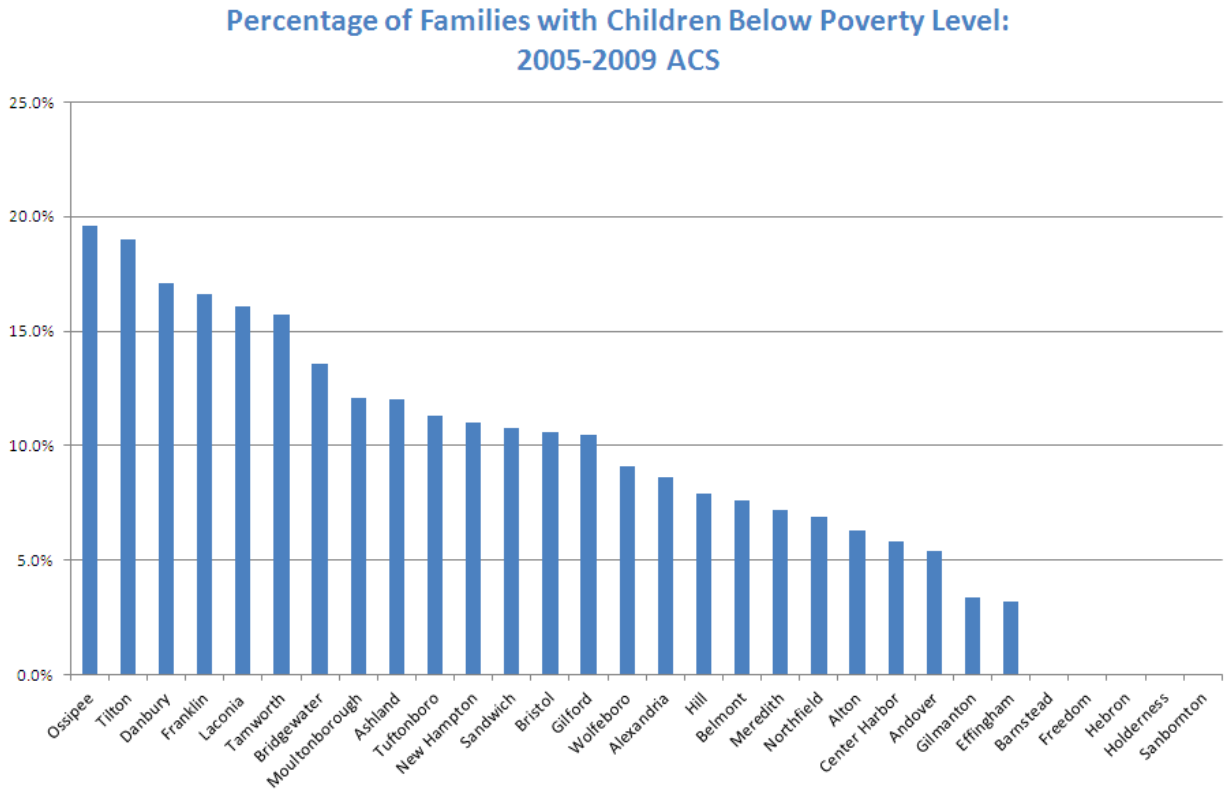


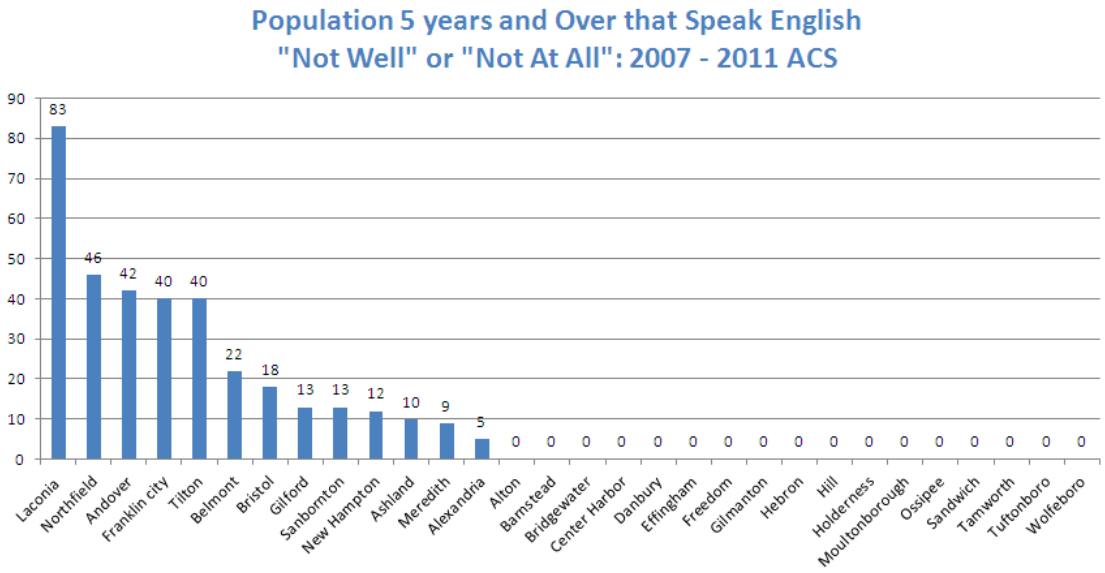
Figure 3.12 shows the percentage of families at or below the poverty level with children. Ossipee, Tilton, Danbury, Franklin and Laconia have the highest percentages.

Figure 3.12



Limited English Proficiency: Figure 3.13 shows the population over five years who speak English "Not Well" or "Not at All." Laconia, Northfield, Andover, Franklin and Tilton have the largest number of children in that category.

Figure 3.13



Other communities of interest: The following groups have special housing needs that need review and consideration. Interviews with groups provided much of the information.

Persons with disabilities/physically disabled: As a general rule, persons with a disability or handicap do not wish to be defined by that disability and wish to function normally in society. With every workforce housing development or government subsidized housing facility, the development includes a number of units that are fully accessible for persons with a disability. The Laconia Area Community Land Trust (LACLT) states there is not a strong demand for these types of units. While the LACLT and other housing developers set these units aside for a period of time, they are not retained indefinitely for disabled persons.

Low Income Housing: As noted previously, there is a distinction between affordable housing (very low income persons pays no more than 30 percent of their income for housing) and workforce housing (housing for persons at 100 percent of the Annual Family Median Income (AFMI) for homeownership and 60 percent of the AFMI for rental). Persons living in a workforce housing development are employed. Persons with low and very low incomes are eligible for Housing Choice vouchers (formerly known as Section 8 housing). The US Department of Housing and Urban Development provides assistance for the Housing Choices which are portable. The Laconia Housing Authority and NH Housing Finance Authority administer the Housing Choice vouchers.

The Lakes Region has 1,652 assisted units, with 54 percent of the units located in Laconia (442), Franklin (312) and Meredith (137).

Refugees and Recent Immigrants: A refugee is a person who has fled his or her country of origin or habitual residence because they have suffered or may fear persecution on account of race, religion, nationality, political opinion, or because they are a member of a persecuted social group or because they are fleeing a war. In the Lakes Region, Lutheran Social Services, an official Resettlement Agency, finds housing for new refugees. Housing that is secured is close to local services. The City of Laconia's Human Relations Committee assists and monitors refugees in making helpful social and employment connections. There are about 100 refugees in Laconia.

An immigrant is a person who comes to the area on their initiative to take up permanent residence for social, family or economic reasons. The Lakes Region immigrant population is about 1,000 persons. They are responsible for their own housing needs.

Veterans: Harbor Homes, New Horizons and other groups assist veterans in finding suitable housing.

Youth: Youth housing issues is a subset of the larger housing affordability issue.

Homeless: The Salvation Army operates the only homeless shelter in the Lakes Region. Located in Laconia, the Carey House is a 30-bed facility. The average occupancy is around 96 percent and has reached 100 percent on several occasions. The Salvation Army believes there is a need for a second homeless shelter in the region.

C. Segregation and Concentration of Poverty

HUD requested the regional housing chapter include a discussion of segregation and concentration of poverty. The Lakes Region is fairly homogenous and is not nearly as culturally diverse as other parts of the United States and other parts of New Hampshire. The chapter reviewed nationally established thresholds in order to identify areas of concern that affect housing conditions. In order to analyze regional areas of concern, a weighted average was developed for the regional percentage of each of the following criteria:

- Non-white population (3.1%);
- Households with no vehicle (1.6%);
- Population 75 and over (7.9%);
- Households headed by a single parent (9.2%); and
- Population below poverty level (9.3%)

The LRPC staff calculated the standard deviation across the 30 Lakes Region communities for each criterion and 0.8 of one standard deviation was added to the regional average, establishing the concentration threshold for a particular criterion. Table 3.3 below indicates areas where each community exceeds the regional threshold for the various categories. For example, in Alton, the percentage of the population over 75 is 8.09 percent, which exceeds the regional threshold of 8.06 percent. The column at the right of the table totals the number of criteria for which each municipality exceeds the regional threshold. As shown below, the City of Laconia exceeds the regional threshold for all five criteria, Bristol for four of the five, and the communities of Ashland, Franklin, Ossipee and Tilton exceed three of the thresholds. Using data from these sources, the five

communities of Ashland, Bristol, Franklin, Laconia, Tilton and Ossipee would appear to have the largest need for assisted housing.

Table 3.3
Economic and Diversity Characteristics

	%non-white population	% households w/ no vehicle	pop% 75 and over	% single parent households	% population below poverty level	Number Of Factors Indicting Concentrated Areas of Concern
Weighted Average + (0.8)Standard Deviation)	*3.26%*	*1.67%*	*8.06%*	*9.50%*	*9.61%*	
Alexandria	4.30%					1
Alton			8.09%			1
Andover	3.50%					1
Ashland	3.90%		12.28%		18.50%	3
Barnstead		1.73%				1
Belmont		2.49%		11.87%		2
Bridgewater						0
Bristol		2.89%	9.63%	12.00%	11.60%	4
Center Harbor			10.63%			1
Danbury		3.25%			14.30%	2
Effingham			9.58%			1
Franklin	3.80%			12.80%	15.10%	3
Freedom		2.12%	14.76%			2
Gilford						0
Gilmanton						0
Hebron		3.41%	18.48%			2
Hill		2.02%				1
Holderness		2.55%				1
Laconia	5.50%	1.74%	9.27%	11.73%	14.10%	5
Meredith		1.96%	8.20%			2
Moultonborough						0
New Hampton						0
Northfield	3.40%			12.43%		2
Ossipee		4.11%		9.75%	9.70%	3
Sanbornton		2.25%				1
Sandwich		2.71%	10.63%			2
Tamworth		2.46%			12.20%	2
Tilton	3.80%		11.62%		28.20%	3
Tuftonboro			8.75%			1
Wolfeboro			14.57%		10.00%	2

Source: US Census and the American Community Survey

The non-white population of the Lakes Region is 3.26 percent; this percentage is the weighted average with standard deviation added of the total population. The City of Laconia has the largest non-white population with 5.5 percent followed by Ashland at 3.9 percent, and Franklin and Tilton at 3.8 percent each. HUD provided the data in Table 3.4 which shows little segregation in the Region's larger communities.

Table 3.4

Lakes Region Planning Commission

Table 1 - Race/Ethnic Segregation

	Share of Population		Dissimilarity Index	
	Program Participant Area (2000) (1)	Program Participant Area (2010) (2)	Program Participant Area (2000) (3)	Program Participant Area (2010) (4)
Non-White/White	3%	4%	0.21	0.17
Black-African American/White	0%	0%	0.00	0.00
Hispanic/White	1%	1%	0.00	0.19
Asian/White	0%	1%	0.00	0.36
Pacific-Islander/White	0%	0%	0.00	0.00
Native-American/White	0%	0%	0.00	0.00

	Share of Population		Isolation Index	
	Program Participant Area (2000) (1)	Program Participant Area (2010) (2)	Program Participant Area (2000) (5)	Program Participant Area (2010) (6)
Non-White/White	3%	4%	0.01	0.01
Black-African American/White	0%	0%	0.00	0.00
Hispanic/White	1%	1%	0.00	0.00
Asian/White	0%	1%	0.00	0.01
Pacific-Islander/White	0%	0%	0.00	0.00
Native-American/White	0%	0%	0.00	0.00

Notes: Values in column (1) and (2) are the share of racial/ethnic groups in the participant geography in years 2000 and 2010, respectively. Columns (3) and (4) are the dissimilarity index for years 2000 and 2010. The index compares the spatial distribution of the two groups identified in the left-hand column, summarizing neighborhood differences over a larger geography (program participant geography or metro). Higher values of dissimilarity imply higher residential segregation. Column (5) is the isolation index calculated over the program participant geography for the year 2000, column (6) is the same for the year 2010. The isolation index compares average neighborhood minority share for a minority person to the average minority share in the larger geography (program participant geography or metro). Again, higher values imply higher levels of segregation. These index are calculated using block group 100% count data from the 2000 and 2010 Decennial Census SF1.

D. Housing Unit Trends and Characteristics

Figure 3.14 shows the total number of residential building permits issued each year during the 21-year period from 1990 through 2011. In 1990, municipalities issued about 480 permits with a peak number of about 1,200 during the 2002 to 2005 period. A sharp decline began in 2006 to 2009 where total residential building permits in the Lakes Region declined to 200. Building permits issued have remained at that level for the last four years.

Figure 3.14

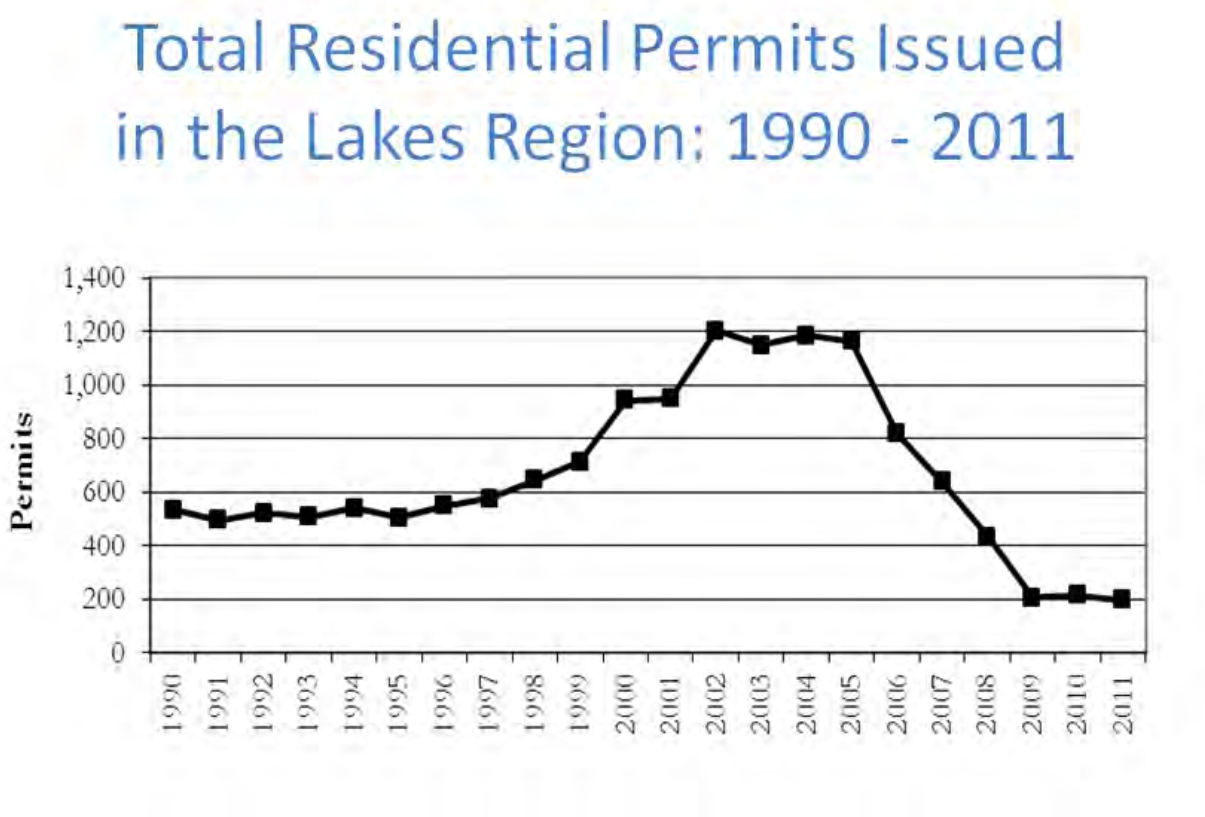
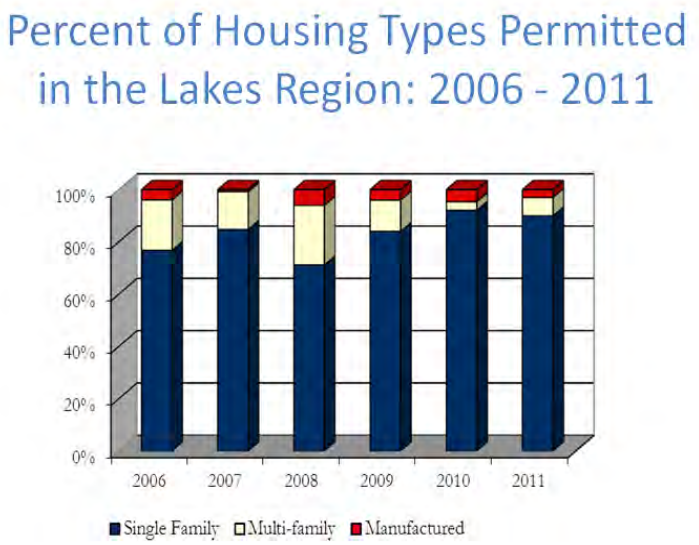

Total Residential Permits Issued in the Lakes Region: 1990 - 2011
Permits
1,400
1,200
1,000
800
600
400
200
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011

Figure 3.15 shows the type of housing units permitted in the region. As expected, single family homes represent about 85 percent of new housing in 2010 and 2011, followed by multi-family and manufactured housing. The UNH Granite State Future survey indicated a strong preference for single family homes. However, there is a need for additional multi-family housing as younger individuals and families appear to prefer multi-family housing for both mobility and economic reasons.

Figure 3.15



E. Housing Cost and Affordability Factors

Within the Lakes Region, applicable HUD income standards are based on the county of residence. For the 2013 base year, the Area Median Family Income (AMFI) standard for homeowners in the Lakes Region was estimated at $69,700. This also constitutes the maximum income applicable to "workforce housing" for homeowners as of 2013. The maximum workforce income applicable to renters is defined in NH RSA 674:58 at 60% of the AMFI for a household of three persons, or $43,500 for the Lakes Region.

Table 3.5
2013 Maximum Workforce Household Income

	2012 HUD Income Schedule	
County	**NH WF Owner Maximum 100% of AMFI**	**NH WF Renter Maximum 90% - 60% of AMFI**
Belknap	$69,000	$43,120
Carroll	$63,900	$43,120
Grafton	$69,400	$43,320
Merrimack	$79,700	$49,720
LR Weighted	$69,700	$43,500

Source: U.S. DHUD, and NH HFA 2013

Figure 3.16 illustrates the potential future economic development challenge associated with a gap between wages and rental housing costs. This graphic is based on two key factors 1) 2013 Housing Wage; and 2) wages for workers in the fastest growing jobs. How these key factors were developed is described below:

1) Housing Wage: the hourly wage needed to afford the median priced two-bedroom Lakes Region apartment with utilities included is $19.23. The 2013 Lakes Region Housing Wage of $19.23 per hour assumes a 40-hour work week (2,080 hours annually) and rent with utilities does not exceed 30 percent of income. The median rental unit in Belknap, Carroll, Grafton, and Merrimack Counties varies between $964 (Belknap) and $1,064 (Merrimack). The average for the counties that comprise the Lakes Region is approximately $1,000 per month. ($40,000 annual wage * 30 percent = $12,000 per year to spend on rent and utilities or $1,000 per month; $19.23 per hour * 2080 hours per year = $40,000 annual income).

2) Experienced Wage: the hourly wage earned by experienced workers in the ten employment sectors projected by the Economic Labor Market Information Bureau to create the most jobs during the period 2010–2020. The "experienced wage" is used (instead of an entry-level wage) to illustrate potential challenges for some industries to attract skilled labor that can afford area rental housing. For example, six of the ten fastest growing employment sectors pay skilled workers less than the cost of the Lakes Region median two-bedroom rental unit.

The same calculations can be applied locally or for a labor market to explore rental housing needs.

Figure 3.16: Lakes Region Housing Wage Compared to Wages for Experienced Workers in Ten Employment Sectors Forecasted to Produce the Most Jobs, 2004 - 2014

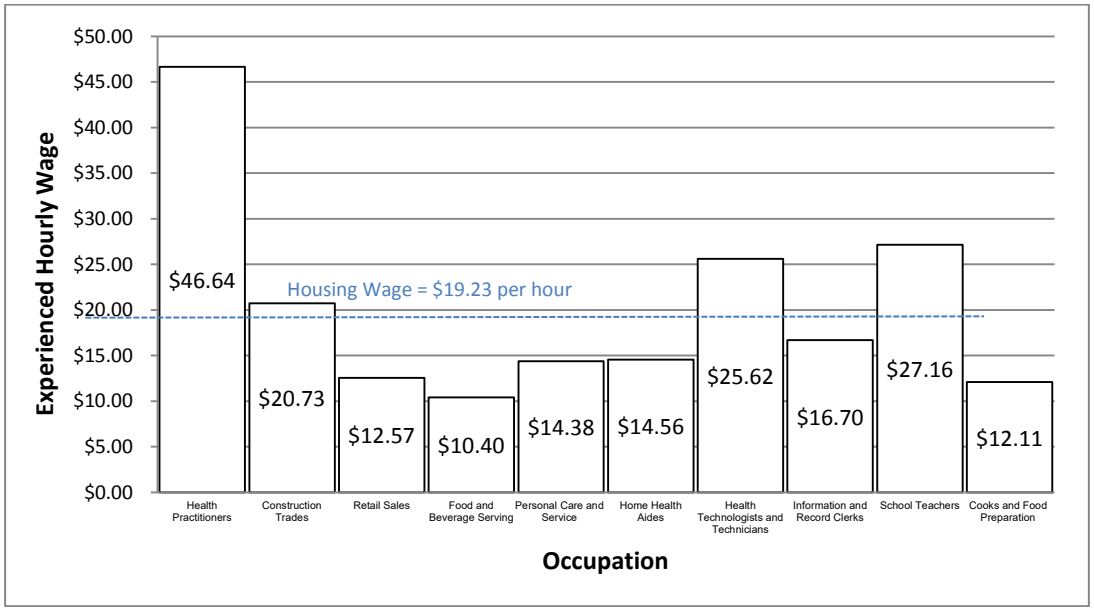
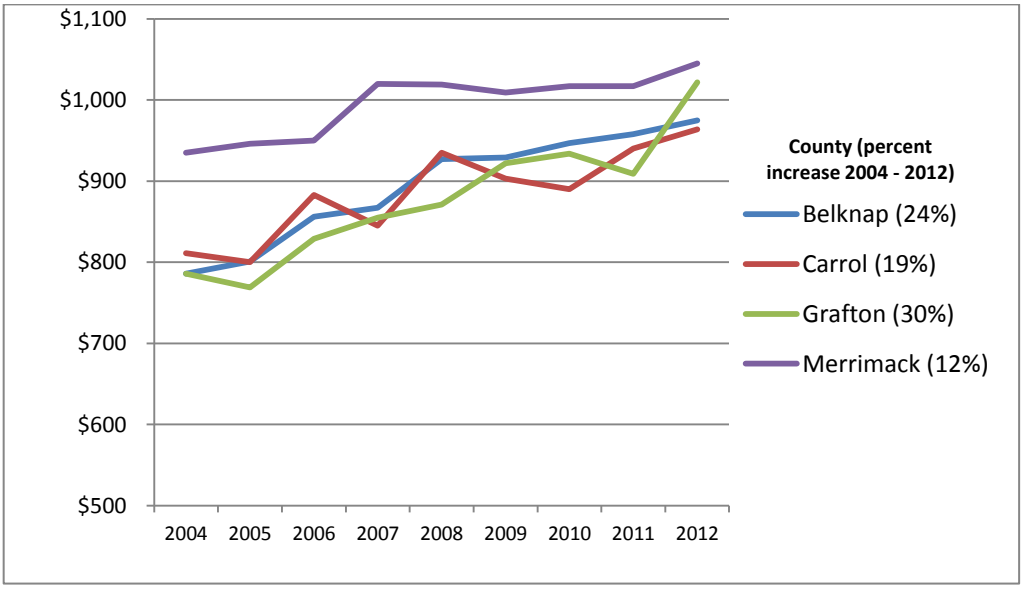


Figure 3.17 illustrates the increase in gross rent for counties that comprise the Lakes Region, where between 2004 to 2014 costs have increased from 12 percent in Merrimack County to as much as 30 percent in Grafton County in an eight year period. The median individual wage in Belknap County is estimated as $32,966 (average from 2008-2012), below the $40,000 annual income needed to afford the median two-bedroom rental units.

Figure 3.17: Gross Rent in Counties that Comprise the Lakes Region 2004-2012



Based on American Community Survey estimates in 2010 inflation-adjusted dollars, the median household annual income for the Lakes Region is $55,970. This is considerably lower than estimated median area income for the state of New Hampshire of $65,249. Figure 3.18 shows the estimated percent of Lakes Region households by the of median area income earned. For example, 32 percent of Lakes Region homeowner households earn $44,776 or less annually (80 percent or less than the 2014 median household income for the Lakes Region). In comparison, 68 percent of Lakes Region renters earn $44,776 or less annually.

It is important to note that households include single wage earners. While an individual median wage could not be calculated for the Lakes Region in 2014, if the 2013 individual wage for Belknap County is an indication, this group is especially challenged for housing affordability in the Lakes Region.

Figure 3.18: 2014 Estimated Percent of Lakes Region Household Earnings as a Percent of Median Area Income (MAI)

		Homeowners	Renters
Percent of MAI	Income (less than or equal to)	Percent of Lakes Region Households	
30%	$16,791	7%	28%
50%	$27,985	16%	46%
60%	$33,582	21%	55%
80%	$44,776	32%	68%
100%	$55,970	42%	77%
120%	$67,164	52%	83%

Figure 3.19 indicates the estimated percentage of Lakes Region households by wage range and tenure in 2014. While the percentages cannot be added in Figure 3.18, the percentages add to 100 percent in Figure 3.19. For example, the estimated percent of Lakes Region renter households that earn less than $49,999 annually is 74 percent, the total of percentages for each wage range including and below $35,000 to $49,999.

Figure 3.19: Estimated 2014 Percent of Lakes Region Household Incomes by Wage Range and Tenure

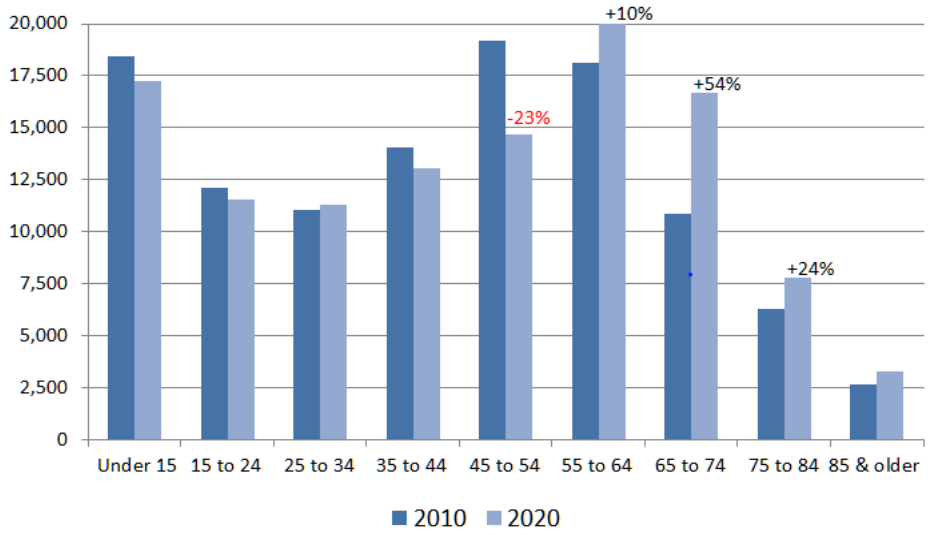
Owner occupied:	
Less than $5,000	2%
$5,000 to $9,999	1%
$10,000 to $14,999	3%
$15,000 to $19,999	3%
$20,000 to $24,999	4%
$25,000 to $34,999	10%
$35,000 to $49,999	14%
$50,000 to $74,999	24%
$75,000 to $99,999	16%
$100,000 to $149,99	15%
$150,000 or more	8%
Renter occupied:	
Less than $5,000	5%
$5,000 to $9,999	7%
$10,000 to $14,999	13%
$15,000 to $19,999	9%
$20,000 to $24,999	8%
$25,000 to $34,999	15%
$35,000 to $49,999	17%
$50,000 to $74,999	14%
$75,000 to $99,999	6%
$100,000 to $149,99	5%
$150,000 or more	1%

Source: American Community Survey 2006 -2010

Trends affecting housing needs in New Hampshire and Lakes Region:

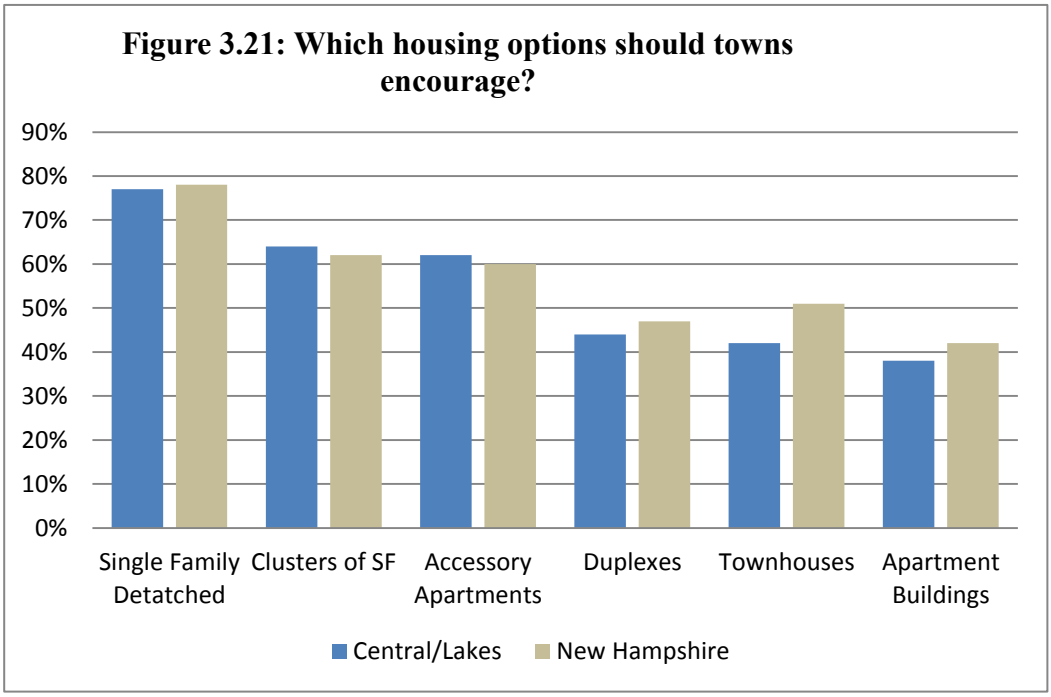
- An aging population equates to more people in the later years of working life and beginning years of retirement. As illustrated in Figure 3.20, household estimates for 2020 indicate the Lakes Region could experience a 54 percent increase in the number of households headed by a resident 65 to 74 years of age, an increase of nearly 6,000 heads of household in this age bracket. This group is more likely to own a home than rent compared to all other age groups. For example in 2010, 86 percent of Lakes Region heads of household between 65-74 years of age owned a home, compared to 80 percent of the 15-24 year old heads of household who rented housing.

Figure 3.20: Lakes Region Population by Age Group in 2010 and Projections for 2020



- In consideration of the aging population, there will be an increase in demand for nursing homes, assisted living facilities, and residential care facilities.
- Surveys indicated that 90 percent of persons over age 65 state they would like to stay in their existing place of residence as they age.[1] Otherwise known as "aging in place," the ability to do so is based on a number of factors including health, ability to make home modifications, and the availability and accessibility of services.
- Based on 2010 Census data, projected future housing needs in the Lakes Region indicate a total of 2,100 additional housing units will be needed by 2020 to accommodate a projected 2.4 percent increase in population or approximately 210 new housing units annually. As a means of comparison, a total of 621 residential permits were issued in the Lakes Region for the period between 2010-2012, or an annual of 207 units permitted each year. The housing permits issued were 86 percent single family, 10 percent multi-family, and approximately 4 percent manufactured.
- The rental vacancy rate in the spring of 2010 was 11.6 percent according to Census data. According to housing professionals, the vacancy is much lower than the 2010 figure today which occurred at a significant downturn in the housing market.
- A leading factor in rental housing demand may be related to job attraction in the region. Where the population is aging and home ownership is the norm for the fastest growing age groups, rental demand will hinge on home ownership opportunities for working age families, the affordability of rental housing in comparison to home purchase and the availability of jobs.
- A well-rounded housing stock consisting of a range of rental and housing pricing is best for economic prosperity. A UNH telephone survey of residents in the Lakes and Central NH areas indicates that respondents are favorable to communities providing opportunities for conventional single-family housing units (see Figure 3.21).

[1] http://assets.aarp.org/rgcenter/il/beyond_50_communities.pdf



- Local zoning ordinances and land use practices can significantly impact housing prices. This is especially true where land costs represent a significant portion of housing development costs. To the extent that greater density is practical, housing costs could be reduced.
- Opportunities for accessory apartments and alternative arrangements within single-family homes (in-law apartments, "granny flats" and others) may allow greater opportunity for aging in place.

Source: US Census - FMRs are gross rent estimates. They include the shelter rent plus the cost of all utilities, except telephones. HUD sets FMRs to assure that a sufficient supply of rental housing is available to program participants. To accomplish this objective, FMRs must be both high enough to permit a selection of units and neighborhoods and low enough to serve as many low-income families as possible. The level at which FMRs are set is expressed as a percentile point within the rent distribution of standard-quality rental housing units. The current definition used is the 40th percentile rent, the dollar amount below which 40 percent of the standard-quality rental housing units are rented. The 40th percentile rent is drawn from the distribution of rents of all units occupied by recent movers (renter households who moved to their present residence within the past 15 months). Public housing units and units less than two years old are excluded.

An important indicator of the strength of the housing market is the median purchase price. As shown on Table 3.6 the median purchase of a home in the Lakes Region significantly increased from 2001 to around the 2005-2006 period, where it peaked at $215,000 for all homes and $210,000 for existing homes and $276,000 for new homes. Since 2007, the median purchase price for all homes declined to $165,000 for 2012. However, for the first half of 2013, housing prices have increased and the median purchase price for all homes is $170,000 and $172,000 for single-family detached homes. According to the NH Housing Finance Authority, the number of foreclosures in 2013 has declined from 2012 and housing prices are increasing throughout the state.

Table 3.6: Housing Prices, Lakes Region

Year	All Homes		Existing Homes		New Homes		Single Family Detached		Condominiums	
	Median Purchase Price	Sample Size	Median Purchase Price	Sample Size	Median Purchase Price	Sample Size	Median Purchase Price	Sample Size	Median Purchase Price	Sample Size
Jan-Jul 2013	$170,000	547	$169,000	527	NA	20	$172,000	502	NA	45
2012	$165,000	944	$162,00	922	NA		$165,000	862	$137,000	82
2011	$165,000	786	$162,000	750	#N/A	36	$166,000	724	$137,000	62
2010	$170,000	873	$167,600	814	$201,000	59	$173,000	789	$160,000	84
2009	$167,000	873	$162,000	811	$229,900	62	$169,900	790	$141,000	83
2008	$209,000	693	$204,000	616	$240,000	77	$210,000	636	$180,000	57
2007	$215,000	959	$210,000	812	$246,025	147	$220,000	847	$175,000	112
2006	$215,000	1214	$210,000	1040	$269,500	174	$222,000	1093	$165,000	121
2005	$215,000	1441	$205,000	1201	$276,000	240	$218,000	1308	$185,000	133
2004	$190,000	1660	$184,900	1354	$237,000	306	$195,000	1465	$161,000	195
2003	$169,900	1552	$165,000	1317	$199,900	235	$170,000	1417	$150,000	135
2002	$143,000	1489	$139,900	1281	$165,000	208	$145,000	1370	$121,153	119
2001	$126,000	1560	$124,000	1369	$149,500	191	$128,000	1421	$112,000	139

Source: NH Housing Finance Authority, 2013; note: data on new homes and non-condominiums are not available (NA) due to a sample size of less than 50.

Figure 3.21

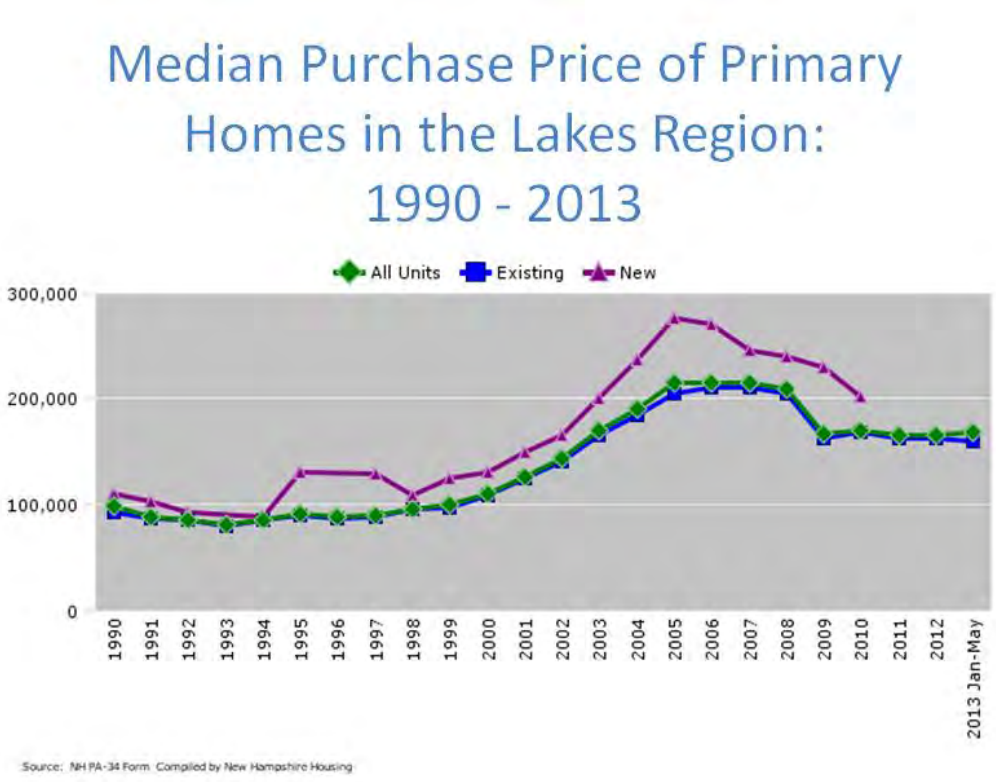


Table 3.7 includes information on gross housing rents in the Lakes Region from 2001 to mid-2013. Gross rent includes the contract rent plus the cost of utilities and fuel. For all housing units, in the last 13 years, the 2013 median gross rent of $920 increased $322 or 54 percent. For a three-bedroom unit at $1,212 per month, during that period, the increase was $446 or 58 percent. During this period of slow growth, more people are seeking rental opportunities. An affordable rental opportunity is an important factor in maintaining an adequate regional workforce. As a general rule, for an affordable housing unit, a renter should pay not more than 30 percent of his or her pre-tax income for rent. If three-bedroom units rent for $1,212 per month or $14,544 per year, the individual or family would need an income of approximately $48,480 per year for the unit to be considered affordable.

Table 3.7: Housing Rents, Lakes Region

	All Units		0-Bedroom Units		1-Bedroom Units		2-Bedroom Units		3-Bedroom Units		4+-Bedroom Units	
Year	Median Gross Rental Cost	Sample Size	Median Gross Rental Cost	Sample Size	Median Gross Rental Cost	Sample Size	Median Gross Rental Cost	Sample Size	Median Gross Rental Cost	Sample Size	Median Gross Rental Cost	Sample Size
2013	$920	956	$645	39	$753	285	$953	440	$1,212	155	$1,340	37
2012	$915	1,023	$585	64	$728	297	$945	461	$1,175	163	$1,407	38
2011	$915	929	$585	32	$746	281	$940	418	$1,170	162	$1,417	36
2010	$873	963	$585	58	$701	326	$925	390	$1,145	163	$1,336	26
2009	$867	936	$585	56	$722	316	$911	393	$1,105	147	$1,293	24
2008	$888	849	$590	49	$700	263	$914	371	$1,131	142	$1,395	24
2007	$823	811	$585	50	$674	260	$867	354	$1,027	123	$1,278	24
2006	$793	987	$575	62	$650	306	$857	437	$1,050	157	$1,276	25
2005	$731	856	$542	53	$604	296	$799	369	$957	122	#N/A	16
2004	$702	867	$480	39	$600	327	$786	357	$906	130	#N/A	14
2003	$668	940	$472	52	$561	367	$733	387	$866	118	#N/A	16
2002	$636	859	$440	49	$536	318	$694	369	$774	105	#N/A	18
2001	$598	894	$434	48	$509	325	$648	386	$766	115	$897	20

Source: NH Housing Finance Authority, 2013

IV. Housing Supply Projections

In early 2014, the NH Housing Finance Authority completed a statewide Housing Production and Needs Assessment Study. This study will inform stakeholders of the new housing needs for home ownership and rental housing by region.

The NH Center for Public Policy Studies prepared Table 3.8 below which shows the projected production of new ownership units and rental units necessary to meet employment growth. The information shows a statewide need for new ownership units in the range of 3,552 and 4,398 units and rental units in the range of 505 to 866. The Lakes Region population is 8.5 percent of the state's population. For a rough estimate, the range of new ownership and rental units in the Lakes Region would be:

Ownership Units: 302 to 374
Rental Units: 43 to 74

Table 3.8

NEW HAMPSHIRE - AVERAGE ANNUAL HOUSING PRODUCTION REQUIRED TO MEET GROWTH ASSUMPTIONS			
	1	2	3
Production Components by Tenure	**Employment Growth Model 1**	**Employment Population Average 2**	**Population Projection Based Model**
Ownership Units			
Household growth	5,418	4,581	3,744
Vacancy reserve (1)	-325	-334	-342
Replace units lost to demolition/disaster	150	150	150
Total production	5,243	4,398	3,552
% Of production for vacancy reserve	-6.2%	-7.6%	-9.6%
Rental Units			
Household growth	1,726	1,379	1,032
Vacancy reserve (1)	-630	-644	-659
Replace units lost to demolition/disaster	131	131	131
Total production	1,228	866	505
% Of production for vacancy reserve	-51.3%	-74.4%	-130.5%
Total Units for Year-Round Residents			
Household growth	7,144	5,960	4,776
Vacancy reserve (1)	-955	-978	-1,001
Replace units lost to demolition/disaster	281	281	281
Total production	6,471	5,264	4,057
% Of production for vacancy reserve	-14.8%	-18.6%	-24.7%

V. Affordable and Equitable Housing Opportunities and Barriers

A. Introduction

Fair housing is defined as the right of all individuals and families to have equal access to housing. Safe, accessible and healthy housing not only allows residents to live in decent conditions but provides the opportunity to access employment, education and services to engage as full, participating and equal members of their community.

The Fair Housing Act is Title VIII of the Civil Rights Act and became law in 1968. It prohibits discrimination in the sale, rental, and financing of dwellings based on race, color, religion, sex or national origin. Under the federal Fair Housing Act, the following are protected classes: Race, National Origin, Religion, Color, Gender, Familial Status and Disability. Under the New Hampshire Fair Housing Act, it includes all the federally protected classes and Marital Status, Sexual Orientation and Age. The U.S. Congress amended Title VIII and added protection against discrimination based on disability and familial status (presence of a child under the age of 18). The 1988 amendment also included an exemption from familial status discrimination for communities specifically designated for people 55 and older.

Along with prohibiting discrimination in the sale, rental, and financing of housing, the Fair Housing Act also makes illegal any advertisements or statements that indicate a limitation or preference based on the aforementioned protected classes. Further, any attempt to coerce, intimidate, or interfere with someone exercising a fair housing right is prohibited.

People with disabilities are afforded additional protections. A landlord may not:

- Refuse to allow a person with a disability to make reasonable modifications to a dwelling or common use area in order to make it accessible; and
- Refuse to make reasonable accommodations to rules, policies or practices in order to allow a person with a disability to use the housing.

This section will examine the impact of state, local, and regional policies, procedures, and practices on the availability of fair and affordable housing for all people in the county. It also analyzes the impact of private-sector policies and rules. The goal is to identify actions, decisions, policies or omissions that have the effect of restricting housing choice based on one's membership in a protected class as defined by the federal Fair Housing Act or New Hampshire state law.

B. Distribution of Workforce and Affordable Housing

The terms workforce housing (WFH) and affordable housing are oftentimes used interchangeably and can be confusing. Definitions are included in Section II.

Generally, *affordable housing* is a generic term that refers to housing with covenants, subsidies, or other mechanisms to ensure the availability of such housing for low and moderate-income households at a cost that leaves an adequate amount of household income for other needs. To be considered affordable, the total cost of housing, including principal, interest, taxes and utilities (ownership), or rent and utilities (rental), should be no more than roughly 30 percent of a person's or family's gross income.

As referenced in NH RSA 674:58, *workforce housing* includes a variety of housing types (single family, duplex, apartments, and multi-family) affordable to households with low or moderate-income. These individuals include teachers, municipal employees, retail employees, mechanics, young professionals and others with incomes at or below the area median family income of a region. In New Hampshire, WFH includes homeownership affordable to households with incomes up to 100 percent of the HUD area median family income (AMFI) and rental housing up to 60 percent of the AMFI for a household of three persons.

In the affordable housing field, the Laconia Housing Authority and Laconia Area Community Land Trust are the major players in the Lakes Region.

Laconia Housing Authority (LHA) provides subsidized housing opportunities utilizing federal government programs at properties owned and managed by LHA (Sunrise Towers, Blueberry Place, Orchard Hill II, and Northfield Village) and through partnerships (Tavern Inn/Stafford House and Normandin Square) and by the administration of Housing Choice Vouchers (formerly Section 8).

The Housing Choice Voucher (formerly Section 8 program) provides assistance for *low-income families* and *very low income families* in the private rental market through housing assistance payments. Voucher holders select a unit from the private rental market (local landlords). Program participants normally pay no more than 30 percent of monthly adjustment income towards rent and utilities. The housing assistance payment subsidizes the balance of the rent to the property owner/landlord.

Family Self Sufficiency (FSS) is a HUD program that encourages families who currently have a Housing Choice Voucher to work toward attaining economic independence and self-sufficiency. LHA connects families with agencies, schools and businesses to develop skills and work experience. The LHA manages the following.

The following is an inventory of housing developments sponsored by the LHA.

Table 3.9

Housing facility	Units	Base funding program
Blueberry Place, Laconia	35	Project Based Section 8
Normandin Apartments, Laconia	60	Low Income Housing Tax Credit
Northfield Village, Northfield	36	Project Based Section 8 / USDA Rural Development
Orchard Hill II, Belmont	32	USDA Rural Development
Tavern Inn/Stafford House, Laconia	50	Low Income Housing Tax Credit
Sunrise Towers	98	HUD Public Housing
Various areas in Laconia	407	Housing Choice Vouchers / Section 8
Total	**718 Units**	

*All of these properties either pay real estate taxes or payments in lieu of taxes.

The following is an inventory of housing developments located in Franklin.

Table 3.10

Housing facility	Units	Base funding program
Bow Glen Transitional Housing	10	Family; Belknap-Merrimack CAP
Cottage Hotel	6	Special Needs; Belknap-Merrimack CAP
Forest Hill	40	Family; Allgeyer Management Services
Franklin Knolls	48	Family; EastPoint Properties
Franklin Plantation	36	Family; THM, Inc.
Franklin Woods	36	Merrimack Heights, Inc.
New Franklin Apartment	36	Elderly; Portsmouth Place Apts. Apartments,
New Franklin Apartments	75	Elderly; Portsmouth Place Apts.
Riverside Housing for the Elderly	40	Elderly: Belknap-Merrimack CAP
Total	**327**	

The following are other assisted housing developments located in other communities.

Table 3.11

Housing facility	Units	Type and Contact information
Prospect View, Alton	26	Elderly; Belknap-Merrimack CAP
Belmont Housing for Elderly, Belmont	40	Elderly; Belknap-Merrimack CAP
Belmont Village Apts., Belmont	30	Family; Sterling Management Inc.
Maple Hill Acres, Belmont	32	Family; Realty Resource Management
Sandy Ledge Housing	11	Family; Belknap-Merrimack CAP
Bretton Woods, Gilford	36	Family; Allgeyer Management Services
Gilford Village Knolls, Gilford	22	Elderly; Stewart Property Mgmt. Co.
Gilford Village Knolls II, Gilford	24	Elderly; Stewart Property Mgmt. Co.
Deer Run Apartments, Meredith	25	Family; Hodges Companies
Hillside Apartments, Meredith	50	Elderly; Hodges Companies
Pinecrest Apartment, Meredith	32	Family; Hodges Companies
Red Gate Lane, Meredith	32	Family; Foxfire Management
Lochmere Meadows, Tilton	28	Family; Hodges Companies
Mill Knoll, Tilton	17	Family; Stewart Property Mgmt. Co.
New Franklin Apartments, Tilton	60	Elderly; Portsmouth Place, LLC
West Wynde Center, Moultonborough	12	Elderly; Stewart Property Mgmt.
Mountain View Apartments, Ossipee	24	Elderly; Stewart Property Mgmt.
Ossipee Village Apartments, Ossipee	24	Family; Stewart Property Mgmt.
Pine Grove Apartments, Ossipee	15	Family; George Zavias
Spokesfield Common, Sandwich	10	Elderly; Stewart Property Mgmt.
Chocorua Woods, Tamworth	15	Special needs; Sonata Housing
Remick Woods, Tamworth	24	Elderly; Stewart Property Mgmt.
Christian Ridge, Wolfeboro	32	Elderly; Hodges Companies
Harriman Hill, Wolfeboro	24	Family; Hodges Companies

Table 3.11		
Housing facility	**Units**	**Type and Contact information**
The Ledges, Wolfeboro	45	Elderly, Hodges Companies
Common Man Commons, Ashland	28	Elderly; Southern NH Services
Highland Apartments, Ashland	24	Elderly; Stewart Property Mgmt.
Ledgewood Estates, Ashland	40	Family; Hodges Companies
Bristol Town Square, Bristol	16	Elderly; Beno Mgmt. Company
Country Manor, Bristol	20	Elderly; Beno Mgmt. Company
Total	**788**	

C. Physical Infrastructure

Local Land Use Controls: Most municipalities in the region have a full complement of local land use regulations: Zoning Ordinance, Subdivision Regulations, and Site Plan Review Regulations. Local land use regulations require an approach that balances the need for growth while accommodating the growth in an orderly and planned fashion. In some cases, local land use regulations that are overly stringent increase the cost of housing. In particular, large lot zoning increase the development cost of affordable housing and workforce housing. As a general rule, if water and/or sewer service is available, the lot size requirement should normally be in the 20,000 – 30,000 SF range. When sewer and or water is not available, lot sizes could be in the one acre to one and a half acre size depending on soil conditions. When a lot size exceeds two acres or more, the community needs a valid reason for its justification. Some municipalities are considering a reduction in lot size for workforce housing. On a regular basis, communities should review and update their local land use regulations to make sure they accommodate local needs and are defensible.

On occasion, a Planning Board may make a reference to the "number of school age children" that may result from an approved subdivision and the potential impact on the Town's budget. The number of children has declined in the last 15 years to about 0.8 children per new residential unit. Many School Administrative Units (SAUs) report stable or declining school enrollments.

Transportation: Low income persons have housing needs due to the high cost of housing. Through the community outreach effort, participants identified public transit as a need. Public transit in the Lakes Region is limited.

Economic Development: New opportunities for job creation should be located in or close to the built up area of a community so they employees can walk, bike or have a short commute.

Housing and community development: Housing and community development are closely interrelated. A range of housing and employment opportunities provides for a balanced approach to community development.

D. Fair Housing Issues

Under the federal Fair Housing Act, the following are protected classes: Race, National Origin, Religion, Color, Gender, Familial Status and Disability. Under the State of New Hampshire's Fair Housing Act, the law includes all the federally protected classes and Marital Status, Sexual Orientation, and Age. In order to determine if there have been allegations, complaints and cases found to have Cause for discrimination regarding housing in the region, the LRPC contacted the following organizations for information:

- NH Commission on Human Rights;
- NH Legal Assistance; and
- U.S. Dept. of Housing & Urban Development, New England Office of Fair Housing and Equal Opportunity.

Contact with these three agencies provided sufficient information to determine the nature of issues regarding housing discrimination in the Lakes Region. All three agencies reviewed their files for the past five years to identify allegations and findings relative to housing discrimination. Please note the information contained in the agencies' files is confidential and can only be shared in a generic manner.

The NH Commission on Human Rights 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.

After a review of their files, the Commission reported that there were no Probable Cause findings in housing for the last five years in the Lakes Region.

New Hampshire Legal Assistance (NHLA) is a HUD-funded Fair Housing Initiatives Programs and provides private enforcement of the fair housing act through education and outreach and direct representation of persons facing housing discrimination. In addition, NHLA provides high quality legal services to vulnerable low-income people, ranging from simple legal information and advice to vigorous and thorough representation in all of New Hampshire's courts and before many of the local, state and federal agencies which play large roles in the lives of low-income people. NHLA receives complaints regarding housing discrimination.

The NHLA reviewed their files for the last five years and reported the following information. Thirteen of the sixteen complaints involved a disability complaint.

Table 3.12		
Location	**Number of Complaints**	**Protected Class**
Ashland	Two	Disability: 2
Franklin	Four	Disability: 4; Familial status:1
Freedom	One	Disability: 1
Laconia	Six	Disability: 4; Familial status: 1, Race: 1
Meredith	One	Disability: 1
Tuftonboro	One	Familial Status: 1
Wolfeboro	One	Disability: 1
Total	Sixteen	Disability: 13, Familial status: 2, Race: 1

For confidentially reasons, NHLA did not indicate if the complaint was against a municipality, an individual, a corporation, or an institution or how the particular complaint was resolved.

U. S. Dept. of Housing & Urban Development, New England Office of Fair Housing and Equal Opportunity

HUD's Office of Fair Housing and Equal Opportunity reviewed their files for the past five years and reported a total of six cases in four communities. HUD determined there was "No Cause" in four cases and two cases were "Conciliated."

Table 3.13		
Location	**Type of Case**	**Resolution**
Ashland	Familial Status: 1	No Cause: 1
Belmont	Disability: 1	Conciliated: 1
Franklin	Race: 1	No Cause: 1
Laconia	Disability: 2, Retaliation: 1	No Cause: 2, Conciliated: 1

HUD did not indicate if the complaint was against a municipality, an individual, a corporation, or an institution or how the particular complaint was resolved.

Based on the above information, discrimination in the Lakes Region is primarily limited to disability issues.

VI. Conclusions and Recommendations

Conclusions

Housing, economic opportunity, and population characteristics are closely interrelated.

- The region will continue to experience slow growth. In 2010, the US Census reported a total of 112,735 residents in the Lakes Region and recent state population projections estimated an increase of 277 persons by 2015 for a total of 113,012. This projection is in sharp contrast to the history of last 40 years when the population increased by 86 percent from 60,461 in 1970 to 112,735 in 2010. The "baby boom" generation, the in-migration from southern New England states, the favorable New Hampshire tax climate, and the overall attractive lifestyle in the Lakes Region contributed to this high level of growth. The expectation for slow population growth will have implications for many aspects of life in the Lakes Region such as housing, the local tax base, available labor force, school enrollments and others.

- The demographics of the Lakes Region, with an increase in the number of individuals and household over 65 and decline in the number of households 35 to 55, will have a significant effect on the region's housing supply.

- In the year ending June 30, 2013, population change for Belknap County was negative for both natural increase (births minus deaths) and net migration. Some of the drop in the labor force is likely associated with residents leaving but the majority of the drop in both labor force and employment is due to retirement. As the area's residents ages, many of them retire and are therefore not included in neither the employment count nor the labor force.

- Overall, a decline in jobs (covered employment declined by 2,790 jobs between 2006 and 2012), labor force, and population are all negative economic trends in terms of future demand. But as the area south of the region starts to expand, there could be an increase in demand due to additional second home owners spending more time in the region.

Recent shifts in the New Hampshire's demographic and economic trends are impacting the current housing infrastructure and could become a drag on future economic growth and stability. The reasons are multiple: an aging population, shifts in housing preferences among younger generations, a misalignment between housing supply and future demand, and changes in traditional financing paths for homeownership. Major housing trends in the state and region include:

- Overall homeownership demand in New Hampshire is declining;

- New Hampshire's current housing supply is poorly aligned with evolving preferences among different age groups: older people want smaller houses with first floor options;

- Affordability and the New Hampshire advantage — it is not what is was in the past;

- Seniors will occupy a growing proportion of the state's housing units — they have different needs — an increase in demand for nursing homes, assisted living facilities, and residential care facilities; and

- New construction will likely be limited in a projected era of slower population growth — more emphasis on rehabilitation and modification of existing units to accommodate two or more families, an accessory apartment, et cetera.

Affordability is a continuing challenge in the Lakes Region. About 32 percent of homeowner households in the Lakes Region earn less than 50 percent of the 2014 median household income for the Lakes Region ($44,776), compared to 68 percent of renters.

The need for affordable housing and workforce housing is not fully understood.

Balance between owner-occupied housing and rental housing. A key factor in rental housing demand is the number of employment opportunities. Where the population is aging and home ownership is the norm for the fastest growing age groups, rental demand will hinge on home ownership opportunities for working age families, the affordability of rental housing in comparison to home purchase and the availability of jobs.

Projected future housing needs in the Lakes Region indicate a total of 2,100 additional housing units will be needed by 2020 to accommodate a projected 2.4 percent increase in population or approximately 210 new housing units annually. At present, it appears that need is being met. During the three years (2010 to 2012), on average 207 units were permitted each year. The housing permits issued were 86 percent single family, 10 percent multi-family, and approximately 4 percent manufactured housing.

Where there appears to be little racially or ethnically segregated areas in the Lakes Region, there are communities with economic distress characteristics.

There are very few cases of discrimination in the Lakes Region and those identified are primarily disability issues.

Recommendations

The LRPC should assist with the following:

- Identify regional housing needs every five years and inform municipalities of those needs;
- Assist decision makers in understanding current and projected demographic and economic conditions;
- Assist local government in addressing local workforce housing needs.

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APPENDIX A

Overview of Lakes Region Housing, 2004 and 2010

The Lakes Region Planning Commission completed Housing Needs Assessments in 2004 and 2010. The following is the **Executive Summary** for the *Lakes Region Housing Needs Assessment 2010*

The production and preservation of affordable and workforce housing depends on public-private partnerships. These partnerships arise from a shared understanding of housing affordability issues and the relationship between housing and economic development. The purpose of the Lakes Region Housing Needs Assessment is to describe the affordable and workforce housing needs of the area in the context of regional market trends, and to help member communities examine their role in meeting regional housing needs.

Changing Data Resources

There has been a significant change in the way income and housing data is collected, which now limits the availability of detailed housing need information by municipality.

- The American Community Survey (ACS) has become the principal source of information on household income and housing cost ratios.

- Relevant statistical data on income and housing cost burden is no longer available from the decennial Census by municipality; ACS data reflects sampling of counties and selected statistical areas. This assessment recognizes a need for transition to those sources.

New Workforce Housing Requirements

In 2009, New Hampshire passed legislation that defines "workforce housing" and which may require municipal action for compliance.

- New Hampshire RSA 674:58 to 61 requires each municipality to enable reasonable opportunities to create housing affordable to the workforce.

- Municipalities must also make specific provisions that enable multifamily housing in structures of five or more units.

- This needs assessment presents information for municipalities seeking guidance on how to meet these requirements and provide for a portion of Lakes Region workforce needs.

Rental Affordability Gap

Based on ACS data on housing cost and income, the affordability gap in 2008 was far greater than indicated by Census data for the Lakes Region in 1990 or 2000.

- The Census years showed 36 percent (1990) and 31 percent (2000) of renters had gross rental cost of 30 percent or more of their income.

- The ACS sample data suggests that the ratio has become substantially higher (about 43 percent) in 2008. Approximately 5,000 Lakes Region renter households are estimated to have a high housing cost burden as of 2008. Since the ACS has a relatively high margin for error, comparison to historic Census data may be faulty.

- About 80 percent of the renters with these high costs are non-elderly households and 20 percent are 65 or older.

Ownership Affordability Gap

Estimates for the Lakes Region using ACS data for 2008 indicate that about 36 percent of its homeowners have gross housing costs that consume 30 percent or more of household income. This data is not comparable to past Census samples, which represented only a portion of ownership units.

- The 2008 estimates indicate that a high housing cost burden affects about 13,000 Lakes Region homeowners.

- About 76 percent of the homeowners with a high housing cost burden are under age 65 and 24 percent are 65 or older.

- Market data on home price shows that the median purchase price of Lakes Region primary homes increased by over $100,000 (by about 19 percent per year) during the period 1999 to 2005.

- Since wages during the same period increased by only about 4 percent per year, the affordability gap for homeowners widened. For most occupations, a single wage household is unable to afford the median priced home, and two incomes are generally needed to afford homeownership.

Housing Cost Trends

Home prices increased much faster than wages or income, while changes in rental costs were more gradual. Both prices and rents have increased faster than average wages.

- The median price of a Lakes Region home doubled between 1999 and 2005, then remained relatively stable until 2008. The median sales price then declined by about 20 percent between 2008 and 2009.

- Rental costs have risen steadily but less steeply than home prices since 2000. Lakes Region rental vacancy rates have remained at or below 2 percent from 2008 to 2010.

- While rents have climbed faster than average wages, it is still possible for the average wage worker in the Lakes Region to afford the median rent on a single income. Homeownership will typically require two working household members.

- The cost of homes is driven significantly by the increasing size of single family houses. Average new home size in the U. S. is now over 1,000 square feet larger than the average home constructed in the early 1970s.

Affordability to Workforce

In the Lakes Region, about 52 percent of homeowners and 55 percent of renters are estimated to have incomes at or below the statutory workforce income guidelines for each tenure group. Based on housing costs in 2009, the proportion of homes sold and the percentage of rental units that are affordable to the workforce is reasonably balanced at the regional level, though there are differences by labor market area.

- In 2008 and 2009, homes priced at or below about $210,000 in the Lakes Region would be affordable to the workforce using the income benchmarks for those years. In 2009, 71 percent of the primary homes sold in the Lakes Region were sold at or below this price. Sales data for the prior year 2008 indicated that about 51 percent of sales were at or below the affordable workforce price.

- Data for newly constructed homes showed that 47 percent of new units were sold at workforce price levels in 2009 compared to 35 percent in 2008. Homeowners who purchased during a period of price escalation may continue to have high housing cost ratios, but the recent decline in prices has opened up a greater share of the ownership inventory to the workforce.

- Rental data for 2009 indicates that about 57 percent of market rate rental units were affordable to workforce renter households (rented for under $900 per month gross rent).

- In 2010, the median gross rent (market rate) in the Lakes Region was $879 per month, requiring an annual household income of about $35,000. This rent is affordable to the average wage worker, but is above the level affordable to entry level employees in the Lakes Region, who earn about $20,000 per year.

- Both the median home price and the median gross rent in the Lakes Region are affordable at the statutory workforce income benchmark. However, market costs are not necessarily affordable to working households with incomes well below the benchmark.

- The housing affordability gap across the Lakes Region may be measured in thousands of homeowner and renter households. Statistical indicators suggest that the proportion of households with a high housing cost burden

increased significantly between 2000 and 2008. Renter households are likely to continue to strive for homeownership even if it results in a high housing cost burden.

- The absence of rent subsidies to bridge the affordability gap for the lowest income renters means that a significant portion of renters will continue to have a very high housing cost burden.

Housing Production

Housing demand modeling and building permit data indicate that the Lakes Region is not producing enough multifamily or rental housing stock, especially in consideration of an aging population.

- The age groups most heavily dependent on rental and multifamily housing are young workers and the elderly.

- Long term demographic projections indicate that about 25 percent of Lakes Region households are headed by a person age 65 or older, and that this proportion could increase to 49 percent of all households by the year 2030. During this period, the number of households under age 65 will begin to decline in both number and as a percent of total households.

- Housing need projections indicate that in the Lakes Region, about 20 percent of housing construction should be for rental or multifamily housing development. During the 1980s and 1990s, about 23 percent of Lakes Region housing production was in multifamily or attached housing development; from 1990 through 2008 it has represented about 7 percent of the total.

- The high dependency of the region on single family homes may not provide the diversity of housing options needed to support young workers for the Lakes Region service economy or for an aging population with increasing levels of disability.

- An estimated 43 percent of all rental housing occupied by the elderly in the Lakes Region was constructed under an assisted housing program, much of it at a time when there were extensive rent subsidies available. Today, there are fewer production programs or subsidies to support the transition of seniors from ownership to rental housing.

The Municipal Response to Regional Needs

The local response to regional needs can help to reduce the housing affordability gap. Most communities should review their development regulations and consider whether changes are needed to address the new workforce legislation. Some communities will go beyond basic statutory compliance to provide incentives or actively participate in affordable housing creation. A few communities may find that their current housing stock and development

standards already enable them to support a fair share of the region's workforce housing needs. Municipal officials working on housing issues might start their analysis by asking a few central questions:

- If you were new to the workforce and earned an entry level wage in the Lakes Region, where could you afford to live, and what options are there in your community?

- How far would you need to commute to find a house or apartment you could afford along with your other household and transportation costs?

- How can we build our jobs and economic base if we don't have enough affordable housing to attract a workforce?

- Where will your aging parents live when they can no longer handle the physical demands and costs of running a single family house?

Meeting Basic Statutory Workforce Requirements

Under NH RSA 58 to 61, each municipality should examine whether land use regulations need to be modified to enable workforce housing creation. Small changes that produce even modest gains in workforce housing can help address regional supply and affordability needs:

- Enable accessory apartments and duplexes within single family zoning districts.

- Allow multifamily housing units within commercial mixed use sites, or within the upper stories of commercial buildings.

- Reexamine zoning limits on street frontage per unit, the maximum number of housing units per structure and maximum structures per lot to create more flexibility to accommodate development other than single-family detached homes.

- Provide opportunities for multifamily or attached housing units in structures with five units or more.

- If the potential to create affordable workforce housing under current regulations is in doubt, a workforce housing overlay district is an option. Such provisions might allow density to be defined using site specific soil-based development capacity measures subject to performance in creating and preserving affordable housing units.

Developing Incentives and Linkages

To go beyond basic compliance with the workforce statute and encourage permanent affordable housing will require more sophisticated approaches that create and preserve affordable housing.

- The best efforts to increase density to leverage affordable housing can be overwhelmed by market pressure to pursue more profitable development, especially near the waterfront.

- Market prices and rents will rise to whatever level the market will bear. Therefore, home prices or rent levels of affordable housing units in a development must be limited by the conditions of financing programs or by specific affordability covenants attached to the property deed.

- Recent declines in home prices may present an opportunity to acquire homes at a low cost and preserve them as affordable units.

- Affordability covenants used in association with new inclusionary housing developments may also be applied to less expensive housing purchased from the existing stock.

- Lasting affordability could be created within an inventory of protected affordable homes in scattered locations. A non-profit organization could acquire and improve selected properties and attach affordability covenants prior to resale to workforce buyers.

- In some states, *mandatory* inclusionary housing provisions may be applied to new residential development, or linkage ordinances require commercial developments to provide or contribute to the workforce housing demand it generates. This approach has worked in resort-oriented communities, but its success is owed to a mandated process.

- In New Hampshire, inclusionary housing provisions must provide voluntary incentives. There is no specific legislation allowing mandatory inclusion or linkage approaches, but voluntary incentives based on similar principles could be explored.

Economic Opportunity, Environmental Quality

Lakes Region Plan 2015-2020

Transportation

LAKES REGION PLANNING COMMISSION
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Table of Contents

Transportation

1. INTRODUCTION

Chapter Design and Outcomes

A balanced and well-functioning transportation system is a key ingredient for successful regional planning and economic development. The regional transportation planning process in the Lakes Region is driven by bottom-up community participation through the Lakes Region Transportation Technical Advisory Committee (TAC) and supported by LRPC and NHDOT staffing. Transportation planning related recommendations are made by the TAC for consideration by the LRPC Commissioners, who approve the regional transportation policies. The TAC membership consists of representatives from LRPC communities who act as a liaison to local City Councils and Boards of Selectmen.

Key elements to the regional transportation planning process are the revised LR Transportation Mission Statement and the vision articulated in the regional bicycle and pedestrian plan as follows:

> To provide an integrated, all-mode transportation system in the Lakes Region which offers efficient, effective and safe movement of people and goods, and provides mode choice wherever possible while enhancing and preserving the character and livability of the neighborhoods, 'quality of water in our lakes and streams as well as' (added) the natural, socio/economic, and historical environments where transportation facilities are located.[1]
>
> "To provide a purposefully connected network of trails, sidewalks, road shoulders, and pavement markings promoting safe and enjoyable bicycle and pedestrian mobility. To provide design and maintenance of livable, complete streets that support transportation, recreation, health, and economic interests throughout the Lakes Region."[2] 'Complete Streets' are those where bicycle and pedestrian travel ways are accommodated in the planning, development, and construction of transportation facilities and incorporated into transportation plans and programs.

Several methods were used to capture public input during the development of this chapter including a statewide survey, comment cards at prominent locations in each community and through workshops and listening sessions. Common themes expressed fall into three general categories with specific areas of concern within each category as follows:

Transportation Costs	Transportation Options	Infrastructure
Personal	Walking/Biking	Condition
Environmental	Public Transportation	Connectivity
	Commuter Rail	

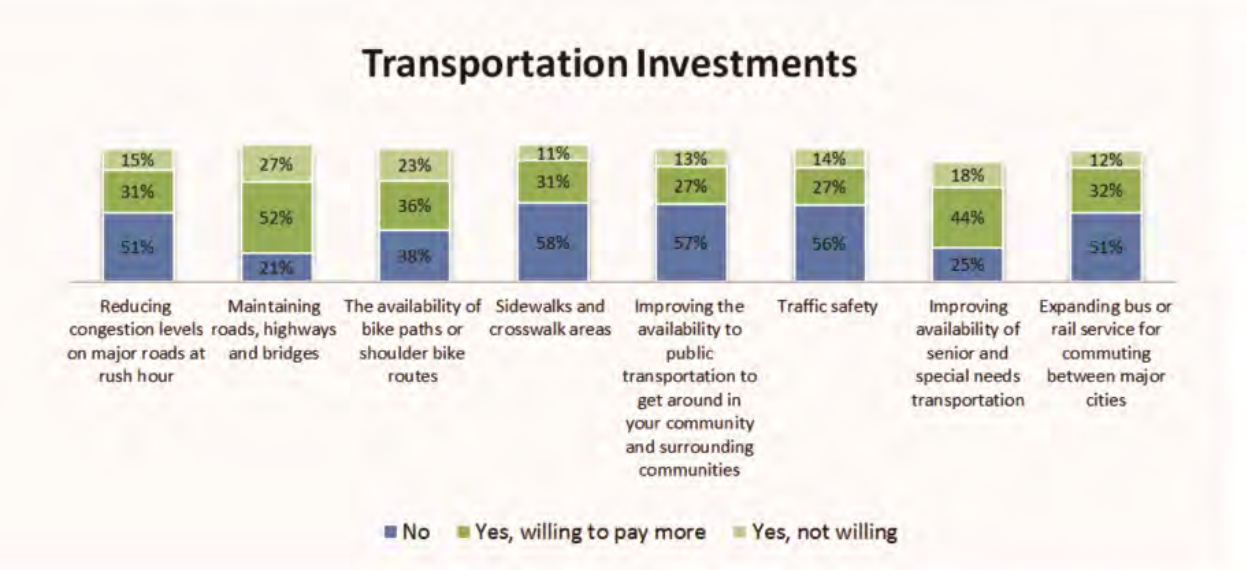
[1] LRPC, *Lakes Region Transportation Plan*, January 28, 2008

[2] LRPC, *Bicycling and Walking: Transportation Choices for New Hampshire's Lakes Region*, March 26, 2012

While these concerns were expressed, perhaps the strongest indication of transportation needs and willingness to contribute came from a statewide survey that was conducted by the Survey Center at the University of New Hampshire. As illustrated in Figure 1, more than 50 percent of respondents statewide indicated they would be willing pay more in taxes for maintaining roads, highways, and bridges with an additional 27 percent indicating that this should be a focus for transportation investment, but they are not willing to pay more in taxes. The statewide transportation results mirrored the combined results for the Central and Lakes regions.

The purpose of this chapter is to summarize and integrate information about the transportation planning structure, existing conditions, and public comments within the context of the regional mission and vision statements that lead to the development of recommendations and implementation strategies. A goal of the chapter is to provide information and insight useful for Lakes Region communities in the development of transportation improvement projects and local master plans.

Figure 1: NH Resident's Willingness to Pay for Transportation



Source: UNH Survey Center, Statewide Survey, 2013

2. MAJOR PROGRAMS AND LEGISLATION

Federal Transportation Funding

Established more than 50 years ago the Highway Trust Fund was created to finance the construction of the Interstate Highway System, which was built in partnership with state and local governments. Since its completion in the early 1980s this system is central to surface transportation in the United States. During the post-construction years surface transportation programs expanded broadening the federal role and mission. Today, while most federal surface transportation funds are used for highway infrastructure, a portion of the funding now serves additional transportation, environmental,

and societal purposes. For example, the 2005 federal transportation authorization called the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) authorized funds for programs beyond the construction and maintenance of highways and bridges. These programs included funding for highway safety, metropolitan and statewide transportation planning, transit, and transportation system enhancements such as pedestrian and bicycle facilities and mitigation of highway impacts to wetlands and wildlife.

Unlike other federal programs which are funded by general revenues such as education, national defense, and homeland security, surface transportation programs are primarily funded with Highway Trust Fund revenues. The revenues are predominately generated by federal motor fuel taxes (also known as the gas tax) and to a lesser extent sales taxes on tires, heavy trucks and trailers. A similar fund, the Airport and Airway Trust Fund (Trust Fund or AATF), was created in 1970 to fund aviation programs. Administered by the Federal Aviation Administration (FAA), this fund receives revenues from a series of excise taxes paid by users of the national airspace system. The purpose was to establish funding that would increase concurrently with the use of the system. It was designed to finance investments in the airport and airway system and to cover operating costs of the airway system to the extent funds were available. Since the creation of the Trust Fund revenues have generally exceeded spending leaving a surplus referred to as the Trust Fund's "uncommitted balance."

In comparison, the Highway Trust Fund has not fared as well as the Aviation Trust Fund. Where in Fiscal Year 2010 the Airport and Airway Trust Fund had an uncommitted balance of $770 million, Congress authorized the transfer of $35 billion from the General Fund of the US Treasury to keep the Highway Trust Fund solvent from 2008-2010. In 2008, for the first time, the Highway Trust Fund had insufficient revenues and cash balances to meet its obligations. As a result, Congress authorized an $8 billion cash infusion from the General Fund of the US Treasury into the Highway Trust Fund. By the end of 2014, a total of $54 billion will have been transferred from the General Fund into the Highway Trust Fund to maintain its solvency. This includes an $18.8 billion transfer authorized by Congress last year in MAP-21. Several key factors are associated with the recent and projected shortfalls including:

- Rising fuel efficiency standards, leading to more miles traveled on less fuel tax revenues;
- Exponential increases in highway construction and paving costs;
- Inflation eroding the value of the current fuel tax (gasoline $.184 per gallon, diesel $.243 per gallon) last increased by President Bill Clinton in 1993;
- Political environment highly critical of deficit spending;
- An aging transportation infrastructure reaching the end of life expectancy.

In part, the transportation funding debate in congress in 2012 that led to the presidential reauthorization of SAFETEA-LU, focused on 'alternative transportation' programs such as Transportation Enhancements, Transit – including light rail, trolleys, and buses, Safe Routes to School, the Scenic Byways Program, and others as diversions from the funding needed for motor vehicle infrastructure improvements and improved transportation safety. In 2013, the US Chamber of Commerce supported raising the federal gasoline tax to keep the fund solvent.

The Moving Ahead for Progress in the 21st Century Act (MAP-21) was signed into law by President

Obama on July 6, 2012 and will expire on October 1, 2014. MAP-21 reduces the number of discrete funding programs by two-thirds to roughly 30 programs. Most of this reduction is accomplished by absorbing formerly separate activities and eligibilities into the new core programs discussed below. The core programs also have many areas of overlapping eligibility. Under MAP-21, the five core programs plus metropolitan transportation planning are authorized at $37.5 billion for Fiscal Year 2013 and $37.8 billion for Fiscal Year 2014.

- **National Highway Performance Program (NHPP)**

  The NHPP has become the largest of the restructured federal-aid highway programs, with authorizations of $21.8 billion for Fiscal Year 2013 and $21.9 billion for Fiscal Year 2014. The program supports improvement of the condition and performance of the National Highway System (NHS), combining the former Interstate Maintenance Program (IMP), the NHS Program, and the Highway Bridge Program's on-system component. The NHPP includes projects to achieve national performance goals for improving infrastructure condition, safety, mobility, or freight movement, consistent with state or metropolitan planning; construction, reconstruction, or operational improvement of highway segments; construction, replacement, rehabilitation, and preservation of bridges, tunnels, and ferry boats and ferry facilities; inspection costs and the training of inspection personnel for bridges and tunnels; bicycle transportation infrastructure and pedestrian walkways; intelligent transportation systems; and environmental restoration, as well as natural habitat and wetlands mitigation within NHS corridors. If Interstate System and NHS bridge conditions in a state fall below the minimum conditions established by the Secretary of Transportation, certain amounts of funds would be transferred from other specified programs in the state.

- **Surface Transportation Program (STP)**

  The STP remains the federal-aid highway program with the broadest eligibility criteria. Funds can be used on any federal-aid highway, on bridge projects on any public road, on transit capital projects, on non-motorized paths, and on bridge and tunnel inspection and inspector training. MAP-21 authorized $10 billion for Fiscal Year 2013 and $10.1 billion for Fiscal Year 2014. Although Transportation Enhancements are funded under the new Transportation Alternatives program, these types of projects can also be funded under STP if a state wishes. Half of each state's STP funds are to be distributed within the state based on population. The remainder may be spent anywhere in the state. MAP-21 included a special rule allowing some STP funds reserved for rural areas to be used on minor collector roads.

- **Highway Safety Improvement Program (HSIP)**

  HSIP remains largely as it was under SAFETEA-LU, supporting projects that improve the safety of road infrastructure by correcting hazardous road locations, such as dangerous intersections, or making road improvements such as adding rumble strips. HSIP is funded at $2.39 billion for Fiscal Year 2013 and at $2.41 billion for Fiscal Year 2014. The Rail-Highway Grade Crossing Program was continued through a $220 million annual set aside.

- **Congestion Mitigation and Air Quality Improvement Program (CMAQ)**

Under Map-21, CMAQ is authorized at roughly $2.209 billion for Fiscal Year 2013 and $2.411 billion for Fiscal Year 2014. Eligibility was expanded to include demand-shifting projects such as telecommuting, ridesharing, and road pricing.

- **Transportation Alternatives Program: Transportation Enhancements/Non-Motorized Transportation Alternatives (TA)**

  In MAP-21, Congress changed the Transportation Enhancements program and other non-motorized transportation programs, compromising between the positions of groups that wanted more funding for these programs and groups that wanted to eliminate these programs entirely. The compromise eliminated certain types of activities from the list of eligible transportation enhancements, renamed the transportation enhancements group of activities "transportation alternatives," and combined this group of activities with the former Recreational Trails and Safe Routes to School programs under one umbrella program called Transportation Alternatives (TA). TA funds may also be used for "planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways." TA is a set-aside from each state's NHPP, STP, HSIP, CMAQ, and Metropolitan Planning apportionments amounting to roughly 2 percent of total highway funding. The amount available to each state is equal to the amount the state was required to set aside for Transportation Enhancements in Fiscal Year 2009. MAP-21 reduced the total amount set aside for these programs, from $1.2 billion in Fiscal Year 2011 to $809 million in Fiscal Year 2013 and $820 million in Fiscal Year 2014. There is no specific funding level for any of the programs within this group. States are required to allocate 50 percent of the funds to local entities for obligation. If states do not obligate the remaining 50 percent of funding, they then may use these funds for any TA- or CMAQ-eligible projects once the unobligated amount accumulates to 100 percent of the state's annual TA set-aside. MAP-21 also makes bicycle facilities and pedestrian walkways eligible expenses under the National Highway Performance Program, the Surface Transportation Program; and the Highway Safety Improvement Program.

MAP-21 permits states to transfer up to 50 percent of any apportionment to any other apportionment program. However, no transfers are permitted of funds that are sub-allocated to areas by population (such as STP) or of Metropolitan Planning funds.[3]

State of New Hampshire Transportation Funding

The Ten Year Plan (TYP) is arguably the most influential transportation document in the State. The TYP identifies and prioritizes the critical transportation projects in New Hampshire in an ongoing effort to address transportation needs at the local, regional and statewide levels. The TYP is updated every two years – allowing transportation priorities to be revisited, existing projects to be removed as appropriate and allowing new projects to be added. With the previous TYP as a starting point, the TYP process includes input from individual communities, development of Transportation Improvement Plans (TIPs) by the Regional Planning Commissions (RPCs), numerous public

[3] Congressional Research Service, *Surface Transportation Funding and Programs Under MAP-21: Moving Ahead for Progress in the 21st Century Act (P.L. 112-141),* September 27, 2012.

hearings by the Governor's Advisory Commission on Intermodal Transportation (GACIT) and review and approval by the Governor and Legislature. Performance measures and conditions such as pavement condition, bridge ratings, congestion levels, crash rates, user surveys and available funding levels are considered in determining project need and prioritizing project implementation.

Once the NH Legislature adopts the TYP, it is considered the final plan until subsequently reviewed and modified in the next cycle. Projects contained in the first four years of the TYP form the basis for New Hampshire's Statewide Transportation Improvement Program (STIP), as required by federal law. Current federal regulations require that the STIP include all projects contained in the Metropolitan Planning Organization (MPO) TIPs, as approved by the Governor. For non-MPO areas such as the Lakes Region, the NHDOT uses the RPC TIPs as guidance, although project-by-project inclusion is not required. The TIP represents a strategy developed at the regional level to meet current and future transportation needs. The STIP development process within the TYP is a two-year cycle. The GACIT plays a key role in the development process by reviewing the plan and providing recommendations to the plan and providing them to the governor.[4]

Efforts have been made in recent TYP updates to manage the amount of projects it contains to a level that more accurately matches with projected revenues. This refinement process began in 2006 when the NHDOT announced because the TYP was over-prescribed; no new projects would be considered for inclusion in the plan. In subsequent updates, the planning commissions were asked to re-evaluate regional priorities and break large projects out into less costly smaller projects that would address key concerns and could be constructed within budgetary constraints. During this same timeframe NHDOT provided compelling information to the Legislature, Governor, and GACIT about the identified transportation needs statewide outpacing available funding. Ultimately, in the absence of additional revenue to meet the needs, the TYP was reduced from approximately $4 billion in requests for funding to under $2 billion statewide.

[4] NH Department of Transportation, *NH Long Range Transportation Plan 2010 – 2030*, July 2010

As illustrated in Figure 2, the effect on the Lakes Region was the removal and reduction of approximately $88.5 million (construction cost) worth of non-programmatic projects from the TYP over the course of several updates. In addition to non-programmatic or discretionary projects the TYP also contains programmatic projects where funding is specified according to program goals and objectives. For example, the State Aid Bridge (SAB) program has a specific amount of funding, requires a 20 percent local match, etc. The most recent TYP update, which began in 2012, was the first update since 2006 when additional projects were added.

Figure 2: Lakes Region Projects Ten Year Plan Comparison – Lakes Region Projects 2007 - 2016 TYP through 2011 - 2020 TYP

		TYP 2007-2016	TYP 2009-2018	TYP 2011-2020
PROJECT NAME	PROJECT #	Proposed Construction Cost ($M)	Proposed Construction Cost ($M)	Proposed Construction Cost ($M)
BARNSTEAD - ALTON Rte. 28 Reconstruction	14121	9.600	5.000	4.125
BELMONT - LACONIA Improve 106/107 Access	2787	11.000	1.500	1.500
MEREDITH Reconstruct Rt 25	10430	12.500	5.000	5.000
OSSIPEE Rte. 28 Recon. 3.36 miles	10431	6.750	3.000	3.000
OSSIPEE 16/25/41 Intersection	13910	1.590	1.590	1.590
OSSIPEE Bridges Reconstruction	14749	9.000	5.000	9.000
ALTON - GILFORD Rte. 11 Bypass	10606	6.350	-	-
ANDOVER NH Rte. 11 Reconstruction	14172	1.235	-	-
ANDOVER US Rte. 4 Flooding	2754	3.500	-	-
BELMONT 140 Safety Improvements	12792	7.000	-	-
DANBURY Rt 4/104 Intersection	3268	3.000	-	-
FRANKLIN - NORTHFIELD Connector Study	1813	1.061	-	-
LACONIA - MEREDITH US 3 Meredith to Weirs	2768	4.500	-	-
MEREDITH Reconstruct Rt 106	3527	3.500	-	-
MOULTONBOROUGH 25 and 25/109 Intersection	2737	6.000	-	-
NEW HAMPTON - MEREDITH NH Rte. 104	3267	8.500	-	-
NORTHFIELD Full Interchange Exit 19	13596	7.500	-	-
WOLFEBORO Rt28 Intersection/drainage	13954	7.000	-	-
TOTAL CONSTRUCTION COSTS ($M)		**109.59**	**21.09**	**24.22**
Change from Previous TIP ($MM)			-88.50	3.13

Accompanying the financial shortfalls to make needed transportation improvements was the re-evaluation and prioritization of focus areas of greatest concern. The NHDOT has stated that maintaining existing infrastructure (in favor of building new roads or expanding capacity) and improved safety are the primary areas of focus. The maintenance of existing infrastructure is further prioritized as:

- Highest Priority – National Highway System; needed for healthy economy and mobility.
- Second Priority – Remaining US routes and State numbered routes; maintained at a less than desirable level.
- Last Priority – State unnumbered routes; not being properly maintained due to lack of funding.[5]

Map 1 illustrates the hierarchy of state route maintenance priorities in the Lakes Region as they relate to regional corridors of importance and recent annual average daily traffic. It is estimated that the current backlog to repair all state maintained highways and bridges that are in poor condition is $1.3 billion.[6] Snow removal and ice control represent approximately 40 percent of the annual state

[5] NHDOT, *The Road to New Hampshire's Future,* Presented at Lakes Region Transportation Workshop, November 12, 2013

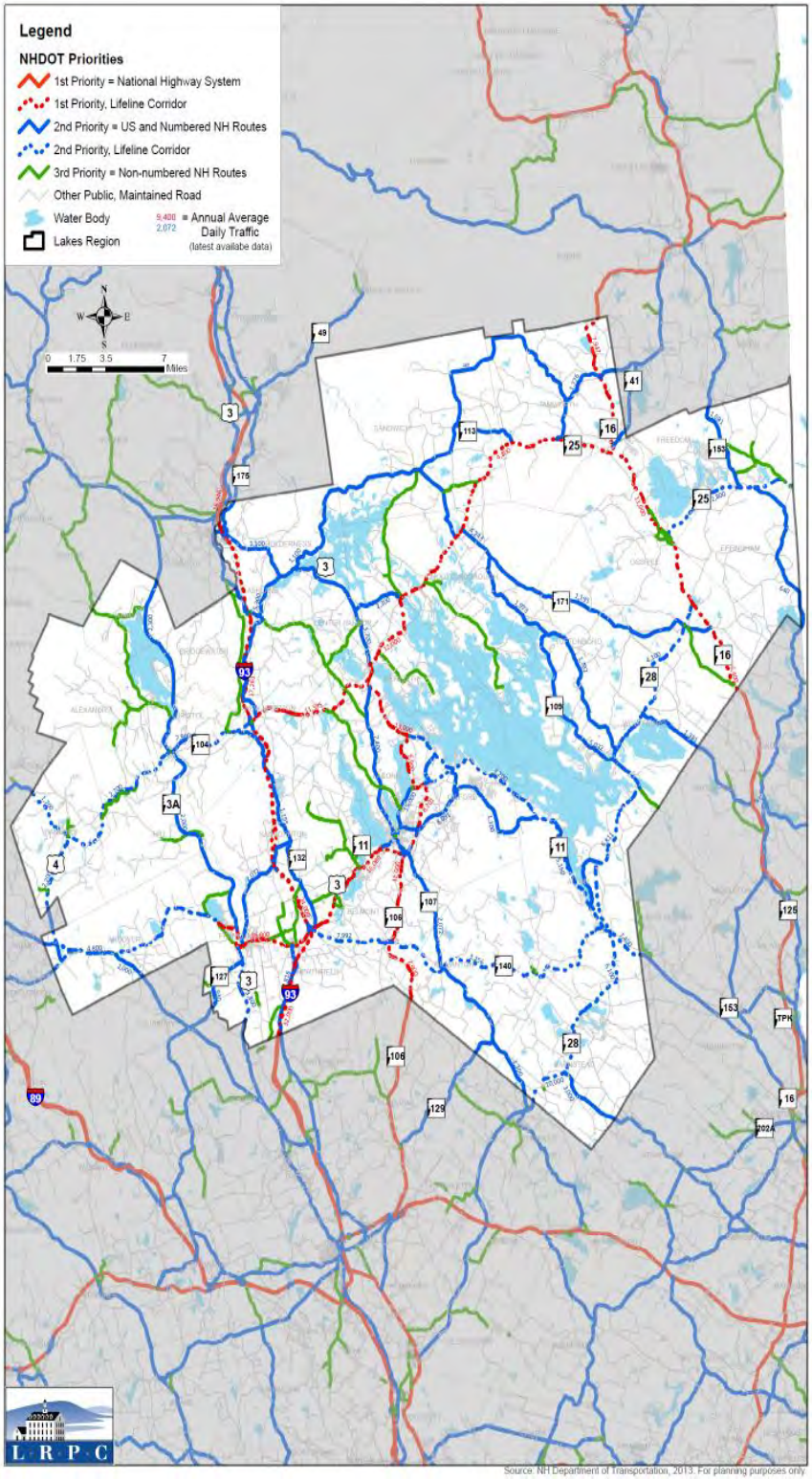
[6] TRIP, *New Hampshire Transportation by the Numbers: Meeting the State's Need for Safe and Efficient Mobility,* February 2013.

highway maintenance budget ($32 million in Fiscal Year 2012). Figure 3 outlines the miles of highway in each Lakes Region community by local and state ownership and according to the NHDOT maintenance priority categories for state highways.

Figure 3: Miles of Highway in Lakes Region Communities by NHDOT Maintenance Categories

Municipality	State Highway Miles	Highest Priority - National Highway System	Second Priority - Remaining US Routes and State Numbered Routes	Last Priority - State Unnumbered Routes	Municipally Maintained (Class V) Road Miles	Total Road Miles (State and Cls V)
Alexandria	12.4	0.0	4.4	8.0	43.1	55.5
Alton	38.6	0.0	38.5	0.1	82.2	120.8
Andover	16.3	0.0	16.1	0.2	47.4	63.7
Ashland	17.0	9.0	6.3	1.7	20.3	37.3
Barnstead	13.6	0.0	13.4	0.2	80.5	94.0
Belmont	17.9	8.6	9.1	0.2	67.0	85.0
Bridgewater	10.5	0.0	4.0	6.5	26.3	36.7
Bristol	17.0	0.0	11.1	5.9	36.6	53.6
Center Harbor	11.4	1.6	5.5	4.4	17.5	28.9
Danbury	13.6	0.0	11.4	2.3	49.9	63.5
Effingham	10.8	0.0	10.8	0.0	42.1	52.9
Franklin	27.2	4.2	18.0	4.9	57.2	84.3
Freedom	14.1	0.0	7.0	7.1	43.1	57.2
Gilford	27.4	4.2	23.0	0.2	90.1	117.5
Gilmanton	22.6	1.8	20.4	0.5	71.9	94.5
Hebron	10.2	0.0	3.7	6.5	13.6	23.8
Hill	8.2	0.0	4.7	3.5	25.8	34.0
Holderness	21.7	2.5	19.2	0.0	30.5	52.2
Laconia	30.9	7.7	17.3	6.0	75.3	106.3
Meredith	30.1	14.3	4.9	10.8	89.0	119.0
Moultonborough	31.9	6.7	11.3	13.9	64.8	96.7
New Hampton	31.3	16.5	9.9	5.0	51.0	82.3
Northfield	21.9	11.8	7.2	3.0	42.6	64.5
Ossipee	36.9	16.6	13.0	7.3	83.2	120.1
Sanbornton	35.8	14.9	12.2	8.8	55.8	91.7
Sandwich	30.2	4.1	20.2	5.9	65.1	95.3
Tamworth	30.3	13.9	16.3	0.2	62.6	93.0
Tilton	27.0	12.1	4.3	10.6	11.2	38.2
Tuftonboro	19.0	0.0	19.0	0.0	35.6	54.6
Wolfeboro	25.5	0.0	22.0	3.5	64.0	89.4
Lakes Region Total	**661.4**	**150.3**	**384.1**	**126.9**	**1,545.3**	**2,206.6**

Map. 1 NHDOT Maintenance Priorities in the Lakes Region



Regional Transportation Priorities

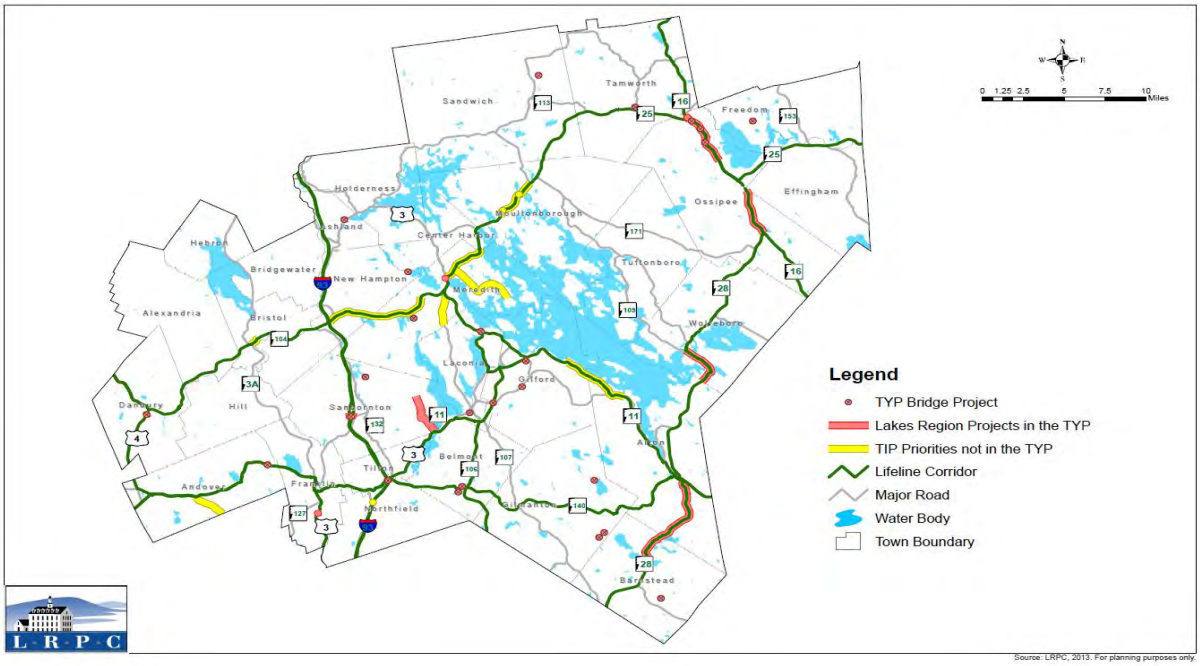
The process to prepare the Lakes Region Transportation Improvement Plan (TIP) usually begins with the LRPC soliciting project requests from local communities, followed by an evaluation process by the Lakes Region Transportation Technical Advisory Committee (TAC) where new and existing projects are prioritized. The prioritized projects are presented to the LRPC Commissioners for adoption. After LRPC approval, they are submitted to NHDOT for consideration in the statewide TYP. Following a series of public hearings held by the Governor's Advisory Commission on Intermodal Transportation (GACIT), and potential modifications of the plan by GACIT and the Governor, the Ten Year Plan is submitted to the Legislature where it may be again amended before adoption. Figure 4 shows ranked primary and secondary TIP projects for the Lakes Region.

Figure 4: Lakes Region TIP 2013: Ranked Priority and Secondary Priority Projects

Priority Status	Construction Cost (millions)	Rank	Project Location	Project Type
Regional Priorities: Existing Ten-Year Plan Projects	$4.63	1	Meredith US3	Roadway and intersection improvements.
	$9.00	2	Ossipee NH16/NH25	Replace three Red List bridges and resurfacing.
	$1.59	3	Ossipee NH16, NH25, NH41	Intersection improvements.
	$3.00	4	Ossipee NH16 at NH28	Pavement rehabilitation and intersection improvements.
	$1.38	5	NH Route 28 (Alton Traffic Circle 7 miles south)	Intersection improvement (recommend North/North Barnstead Roads at NH28).
Prioritized projects for inclusion in Ten-Year Plan as funding becomes available	$7.44	1	Wolfeboro NH28	Base and pavement, drainage, traffic flow, sight distance.
	$5.72	2	Meredith - Pleasant Street to Center Harbor town line	Safety improvements - priority intersections.
	$6.35	3	Alton/Gilford NH11	Roadway reconstruction and shoulders.
	$1.48	4	Bristol NH104	Roadway reconstruction and alignment.
	$6.00	5	Moultonborough NH25 - Moultonborough Neck to NH109S	Roadway reconstruction.
	$1.93	6	Meredith NH104	Intersection safety improvements.
	TBD	7	New Hampton/Meredith NH104	Roadway reconstruction.
	$4.13	8	Meredith NH106	Intersection safety and sight distance improvements.
	$3.50	9	Andover US4	Resolve potential flooding.
	$0.15	10	Moultonborough NH25 at Sheridan Road	Intersection safety.
	$2.68	11	Meredith - Barnard Ridge & Meredith Neck	Full reconstruction.
	$7.50	12	Northfield - Completion of I-93	Construct full interchange.
	$0.08	13	Moultonborough NH25 at Saw Mill Road	Intersection safety.

While the state transportation funding debate continues, additional projects have been identified by Lakes Region communities for consideration in the regional Transportation Improvement Plan. Secondary regional transportation priorities include projects previously removed from the TYP and new projects for consideration in the regional TIP. Map 2 illustrates the TIP priorities in relationship to regional "lifeline corridors" or a primary corridor of critical importance to the region. Noteworthy, is that both non-programmatic and programmatic projects are included. The programmatic projects consist mainly of bridge projects, many of which are Red List bridges, which are either functionally or structurally deficient. An exception is Upper Bay Road in Sanbornton which is in the category of preservation and maintenance and required a 33 percent local match for the project to be funded. The lifeline corridors serve the majority of the traffic flow through and within the region, many of which also provide vital connectivity to other regions.

Map 2: Lakes Region Lifeline Corridors, Ten Year Plan and TIP Projects



Structurally Deficient means a highway bridge is classified as structurally deficient if the deck, superstructure, substructure, or culvert is rated in "poor" condition. A bridge can also be classified as structurally deficient if its load carrying capacity is significantly below current design standards or if a waterway below frequently overtops the bridge during floods. Functionally Obsolete means the highway bridge design is outdated -which may have lower load carrying capacity, narrower shoulders or less clearance underneath than bridges built to the current standard.

In preparation for the 2012 TIP update, the LRPC hosted a TAC subcommittee workshop to assess regional focus areas of concern. The process was aided by Decision Lens software which facilitated evaluating a host of factors to determine which are of highest priority. The results for the Lakes Region mirrored the priorities identified by NHDOT. The maintenance and rehabilitation of roadways to reduce long-term costs and safety ranked as the first and third priority focus areas (the leading priorities for NHDOT). In addition, the expansion of other modes of transportation (i.e. transit, pedestrian, and bicycle) was the second highest priority for the region.

3. LAKES REGION TRANSPORTATION SYSTEM

Highway Infrastructure

The highway system in the Lakes Region is comprised of 2,978 road miles: 661.4 miles of state highway, 1,545.3 municipally maintained roads, and 771.2 miles of private roads. There are a total of 271 state bridges, 256 municipal bridges. The road network allows nearly 125,000 residents of Belknap, Carroll, Grafton, and Merrimack Counties to commute each day to work within their county of residence and more than 6,500 people to commute to work in Belknap County from Carroll, Grafton, Merrimack and Strafford Counties. The road network also hosts a significant influx of tourist traveling during the summer and shoulder seasons. Annual Average Daily Traffic (AADT) on the busiest Lakes Region highways ranges from 15,000 vehicles per day on NH Route 25 in Meredith to 25,000 vehicles per day on US Route 3 near the northbound Interstate 93 off ramp at Exit 20.

Most of the "lifeline" corridors have been the focus of recent studies as displayed in Figure 5. While the studies vary in focus, based on local input about the challenges faced, they are generally beneficial to the NHDOT and affected communities for an understanding of: 1) priority road segment and intersection improvements; 2) potential access management concerns; and 3) local land use practices as they relate to future development potential and traveler safety.

2012 photos of state secondary routes in Holderness and Tamworth

Figure 5: Lakes Region Lifeline Corridors

Route	Length (miles)	Year	Study Type	Section	Organization
I-93	59.2				
NH 104	23.6	2007	Access Management Study	New Hampton to Meredith	LRPC
NH 106	9.8	2012	Traffic Impact Study	Concord to Belmont	McFarland Johnson, NHDOT
NH 11/11B	59.2				
NH 140	27.9	2013	Corridor Study	Tilton to Alton	LRPC
NH 16	23.6	2014	Corridor Safety Assessment	Ossipee to Conway	LRPC, NCC
NH 25	37.2	2008	Corridor Study	Center Harbor and Moultonborough	LRPC
NH 28	33.9	2009	Corridor Safety Assessment	Alton to Epsom	LRPC, CNHRPC
US 3	31.4	2013	Demand Management Study	Laconia to Franklin	LRPC
		2009	Context Sensitive Solutions - Study Phase 1	Meredith NH106 to Center Harbor	McFarland Johnson, NHDOT
		2004	Corridor Study	Franklin to Boscawen	LRPC, CNHRPC
US 4	19.7				
Total	**325.5**				

Highway Infrastructure Challenges

- A leading challenge for the region is the poor state of repair of secondary and unnumbered state routes. At a time when there is a focus on keeping good roads in good condition, which saves maintenance and potential reconstruction costs in the long-run, many examples exist of the potential need for reconstruction today including sections of NH 25B, NH109, NH 113, NH171, NH 175, and the three state routes leading to Freedom village center: Moulton Road, Old Portland Road and Cushing Corner Road.

- Highway improvements in New Hampshire are based on AADT counts. The seasonal influx of traffic in the region can out pace highway capacity. Examples of this include: US Route 3 in Meredith where ten or more week-ends each summer create traffic backed up for several miles, US Route 3 in Tilton where significant traffic delays occur in the summer months, and I93 at Exit 23 where traffic entering NH Route 104 can back-up onto the interstate. While improving highways to accommodate the peak seasonal conditions may not be practical, alternatives are needed for these special conditions such as updated traffic signal timing and optimization for seasonal conditions, improved pedestrian signals, advanced traffic information, etc.

- The integration of pedestrian and bicycle access should be carefully considered for all highway improvement projects. In a rural area where commuting to work by biking or walking is limited due to seasonal conditions, distance from home to employment centers, and safety concerns, there are many opportunities for improvement in the village cores and potentially the routes between village centers where practical.

- Highway drainage and the impacts on water quality is a concern in the region. With few exceptions, highway stormwater is not treated prior to entering surface waters. While drainage swales, stormwater detention ponds, catch basins, etc. can allow for pollutants to settle out from stormwater before entering surface waters these systems can be overwhelmed in storm events and become ineffective. More needs to be done to understand the long-term

impacts on water quality and best management practices to minimize highway stormwater pollution.

- Highway safety is assessed across the state resulting in a priority list of intersections and highway segments based on fatalities and property damage from accident history reports. A challenge is to get funding for safety related improvements at intersections with comparatively few recorded incidents that fall into the category of "accidents waiting to happen." There are several intersections and highway segments that fall into this category. Communities have the ability to request Road Safety Audits for areas of concern. These assessments are coordinated with the planning commission and NHDOT and can be useful in the identification of low cost solutions for safety improvements.

Public Transit

Currently, there are two pubic bus systems operating in the Lakes Region; the Blue Loon and Winnipesaukee Transit System. These services provide buses that travel on designated routes according to an established schedule during the day and provide the added benefit to riders of deviating to serve passengers within a quarter mile of the route. Customers can call in advance to schedule a pick-up or drop-off within one-quarter of a mile of the designated route. Like most rural transit systems, the operation of daily buses requires funding support both from the communities where the service is provided and in many cases federal funding is utilized often requiring 20 percent matching funds. State funding for local transit does not currently exist, which creates the need to generate the matching funds often through requests from the municipalities where the services are provided. In 2009, local assistance to match federal funds for local transit was provided by the state in the amount of $188,000 annually. The Governor's Advisory Committee on Intermodal Transportation (GACIT) recently recommended reinstating state funding at the 2009 level.

The Carroll County Transit "Blue Loon" public route began operating in January of 2012. Service is provided by 16-passenger wheelchair accessible buses. The Carroll County Transit system includes an all-day flex-route connector service that originates in Wolfeboro running north along Route 28 to ~~West~~ Ossipee and continues north along Route 16, traveling to Conway, and medical facilities in North Conway including Memorial Hospital. The service is provided using two buses running in opposite directions. The public flex route service, which operates 5 days per week, is complemented by a Door-to-Door service that began in December, 2010. The public route, used in conjunction with the Door-to-Door service, enables people to get to places outside of the Door-to-Door service areas within Carroll County.

Additionally, a fixed-route connector operates twice a day between Ossipee and Laconia with connection to the Winnipesaukee Transit System. Transfer between the Carroll County Transit bus routes takes place in Ossipee. The services being provided are new to Carroll County and require

education and marketing. A sense of trust needs to be built between the riders and the service so that riders know it is a dependable means of transportation for medical appointments, shopping, employment and other activities.

The majority of the ridership consists of the seniors, people with disabilities, and low-income persons. The Advisory Committee for this project is promoting to others who would not normally utilize public transportation by encouraging them to help protect the environment by reducing their carbon footprint. Adequate funding is a challenge in Carroll County.

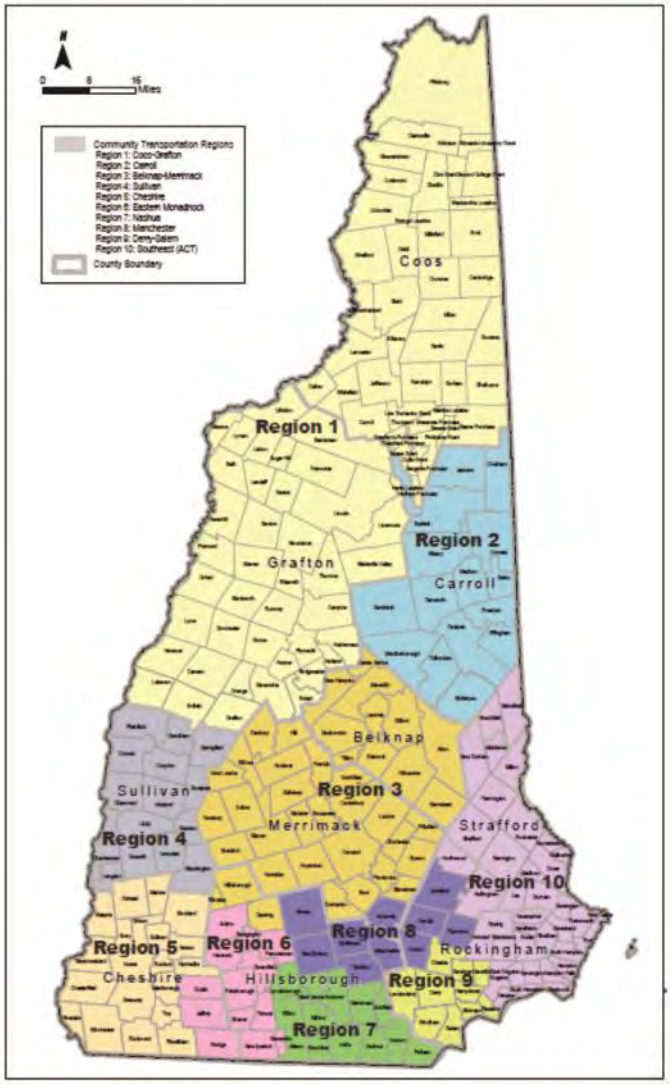
Community Action Program Belknap-Merrimack Counties, Inc. (CAPBMCI) manages the Winnipesaukee Transit System (WTS). At present, the WTS serves most of the city of Laconia and the US Route 3 corridor through Belmont, the shopping district in Gilford and the business districts of Tilton and Franklin. The WTS honors transfers for customers from the Blue Loon bus. The entire route consists of 11 bus stops with scheduled times and customers can call for a ride from any location to another location (their house, a business, a social services organization, etc.) as long as it is within a quarter mile of the travel corridor. To date, WTS has not refused any deviated trip due to too many requests.

WTS ridership for Fiscal Year 2011 was 3,370 vehicle hours of service, 40,794 vehicle miles recorded serving 7,310 customer trips. Seniors consist of 27 percent of the ridership. Customers report that WTS is their only reliable, affordable transportation option. Since WTS is ADA accessible, it is also one of the only transportation options available in the region for low-income passengers and riders using mobility equipment like wheelchairs, scooters, or walkers. The WTS received funding support from the city of Laconia and the town of Tilton along with private assistance from Franklin Savings Bank in Gilford to support the expansion of service back out to the Gilford shopping district.

C&J Bus Lines provides service to Boston from three New Hampshire locations: Dover, the University of NH in Durham, and Portsmouth. The Portsmouth location also provides connectivity to New York City. There is limited service provided by Concord Trailways with stops in Meredith and Tilton. Unfortunately, the stop times make it difficult to connect with WTS during regular hours of operation. Customers report that they need to travel to Concord for medical appointments, and to make connections to transit services for more southern destinations. The Lakes Region Chamber of Commerce has received several inquiries from tourists needing to travel from Logan Airport to local destinations. WTS will explore the possibility of providing a connector/feeder service for customers needing access to services in Concord.

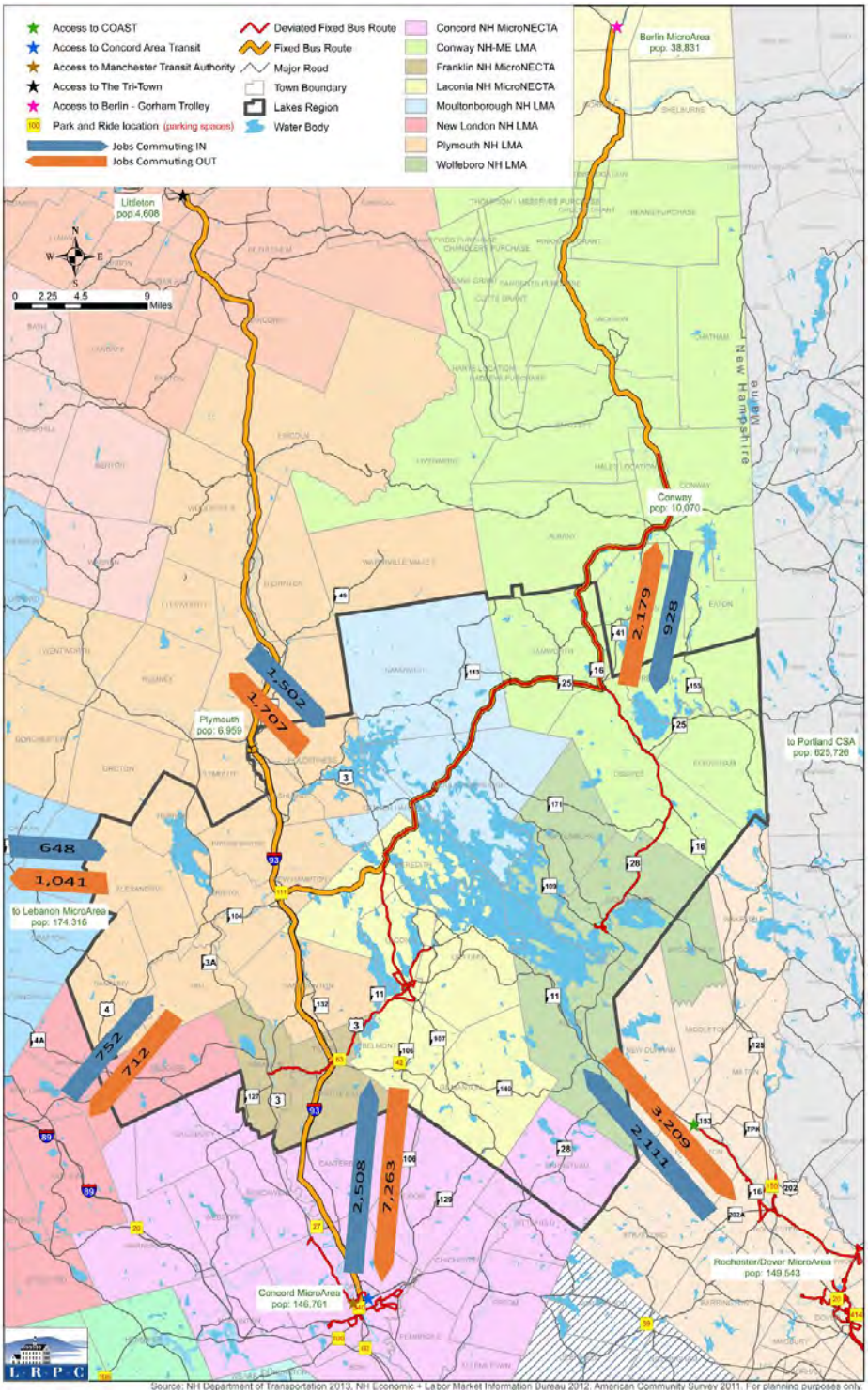
As shown in Map 3 there are ten Regional Coordination Councils (RCCs) in New Hampshire. Formed between 2010 and 2012, the RCCs are comprised of local transportation providers, human service agencies, funding agencies and organizations, consumers, and regional planning commission staff. The RCCs work to develop information that is helpful to transportation service users and identify opportunities for coordination between service providers. The Lakes Region is part of three RCC regions: Region 1 Grafton/Coos; Region 2 Carroll County; and Region 3 Mid State. Each RCC maintains a work plan with stated activities they will be engaged in over the course of several years. Each of the three RCCs that the Lakes Region participates in has developed a community transportation resource guide. The guides represent a comprehensive listing of current transit providers from community organizations to volunteer driver programs to taxi companies. An example of the goals associated with RCCs follows from the Carroll County Regional Coordination Council:

Map 3: NH Community Transportation Regions



- Transportation accessible to all; inviting to all ages and all walks of life;
- Collaboration among human service agencies, municipalities, businesses, and citizens;
- Expanded public transportation services and options, including volunteers, carpooling, taxi services, and rail, bicycle and pedestrian paths;
- Transportation within the counties and connections with other regions.

Map 4 illustrates the public transit and park and ride locations in and around the Lakes Region and commuting patterns for 1) Lakes Region residents to adjacent labor markets outside the region and 2) residents of adjacent labor markets commuting into the Lakes Region.



Source: NH Department of Transportation 2013, NH Economic + Labor Market Information Bureau 2012, American Community Survey 2011. For planning purposes only.

Aeronautics

The state of New Hampshire has 12 airports that are included in the National Plan of Integrated Airport Systems (NPIAS) and eligible for Federal Aviation Administration (FAA) Airport Improvement Program (AIP) funding for capital improvements. NHDOT provides a state match when federal funding is available.

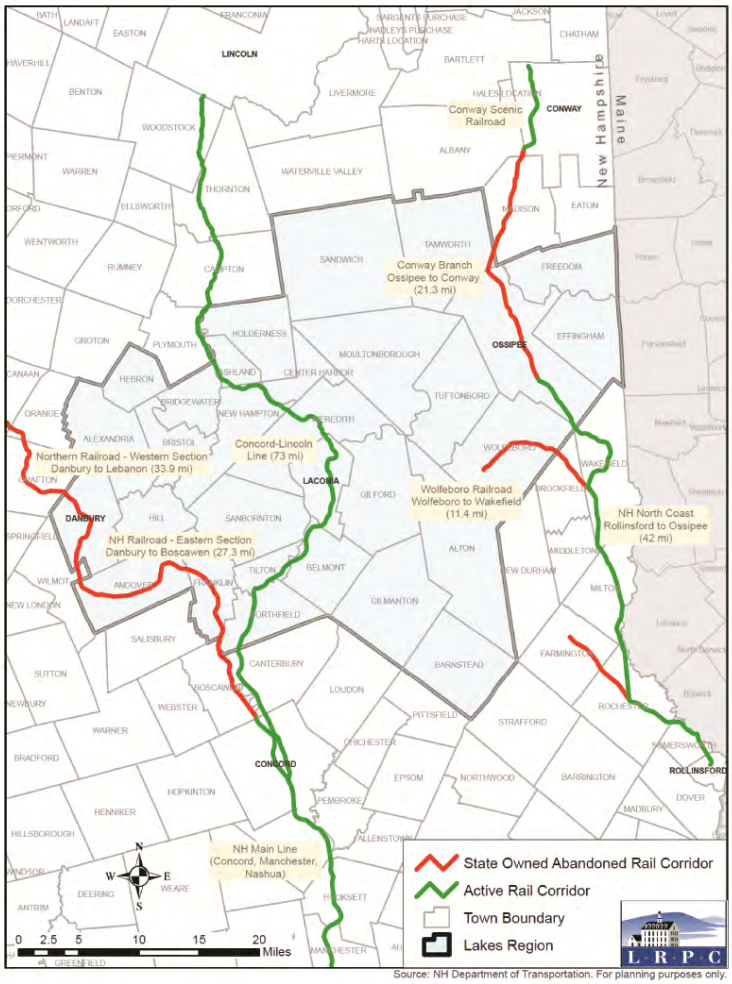
In the Lakes Region, the Laconia Municipal Airport, located in Gilford, is the only NPIAS airport and the only airport eligible for FAA funding. The Laconia Municipal Airport is categorized as a Regional General Aviation Airport by FAA, serving regional and national markets with high levels of activity. General aviation airports provide connections to the larger aviation system while providing access to their respective communities, focusing mainly on specialized services that scheduled airline service cannot provide. At the Laconia Airport these services include emergency medical services, aerial law enforcement and border control, agricultural functions, military training exercises, flight training, aviation and aerospace education, time-sensitive air cargo services, and executive business and personal travel. In 2013, more than 200 aircraft (including several business jets) were based at the Laconia Airport and there were an estimated 43,725 operations including itinerant (non-local) aircraft. A 2007 Economic Impact Study showed that the Laconia Municipal Airport has a $55 million annual total economic impact to the region; yet it is operationally self-sufficient and not supported by taxpayer funds.

There are another 12 airports in the state that are open to the public. Although they do not qualify for FAA funding, they do qualify for NHDOT funding based on an 80 percent state and 20 percent local split. Due to state budget reductions, there has been no funding for this activity for the past two bienniums. In the Lakes Region, there are three airports in this category: Alton Bay Seaplane Base (Ice Runway), Moultonborough Airport and the Newfound Valley Airport in Bristol. More than 100 privately owned airports, heliports and seaplanes are available for private use in New Hampshire. They are not required to be registered with the State or with FAA. A website, maintained for FAA, is an excellent source of information: www.gcr1.com/5010web/ In the Lakes Region, the following "private" airports are registered with the FAA:

Alton	**Meredith**	**Sanbornton**
Longview Heliport	Bossey's Seaplane Base	Ward Field
Barnstead	Morrison Heliport	Gile Pond Airport
Locke Lake Airport	Flying Ridge Heliport	**Tuftonboro**
Franklin	Smiling Jack Heliport	Loons Nest Seaplane Base
D.W. Heliport	**Ossipee**	**Wolfeboro**
Franklin Regional Hospital Heliport	Chickville Airport	Winter Harbor Seaplane Base
	Meader's Heliport	Huggins Hospital Heliport
	Windsock Village Airport	Mountain View Field

Rail

Map 5: Active Rail and State Owned Abandoned Rail Corridors in the Lakes Region



The Lakes Region has limited rail service as illustrated in Map 5. At present there are two operational rail lines serving the Lakes Region: the Concord/Lincoln line extending 73 miles from Concord north to Lincoln; and New Hampshire Northcoast extending 42 miles from Rollinsford, NH north to Ossipee. These active rail lines are used by three operators. New England Central Railroad brings a limited amount of freight to the Laconia area. New Hampshire Northcoast, owned by Boston Sand & Gravel, operates five days a week hauling aggregate material from Ossipee to Rochester for transfer to another railroad for downtown Boston. Aggregate material from the Ossipee pit was used for much of the construction of the I-93 "big dig" tunnel through downtown Boston. The Plymouth and Lincoln Railroad (also known as the Hobo and Winnipesaukee Railroad) serves primarily as a tourist railroad during the summer season with limited service in the fall. It provides limited freight service.

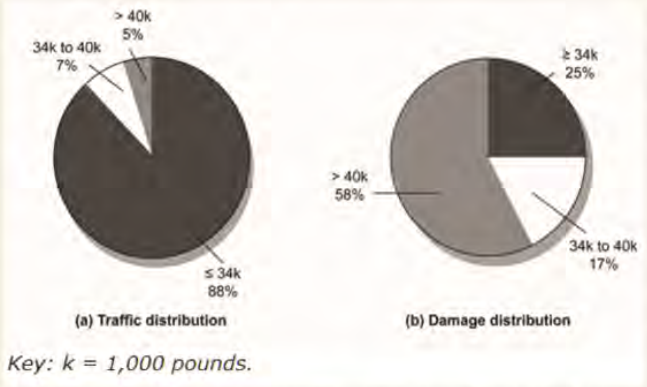
The state of NH has debated the future of rail both for passenger and freight service and, at present, there is no clear policy direction as how to proceed. For further information on rail, see the NH State Rail Plan, 2012.[7] The future of rail in NH will in part be guided by the *NH Capitol Corridor Alternatives Analysis and Service Development Plan* which is being developed and may provide future links to the Lakes Region. The analysis in this plan, which is currently being developed, will include an assessment of freight and the impacts on the Lakes Region.

New Hampshire has recently been awarded a $1.4 million TIGER (Transportation Investment Generating Economy Recovery) grant to upgrade a section of freight rail line from Rochester to Ossipee. This section of rail is owned by the New Hampshire Northcoast Corp., a subsidiary of Boston, Sand and Gravel. Companies currently ship gravel and propane on the rail line parallel to Route 16. The railway will also put in $450,000 to improve the line, complemented by state funding

[7] http://www.nh.gov/dot/org/aerorailtransit/railandtransit/documents/FinalStateRailPlan.pdf.

of $150,000. The upgrade will enable the tracks to carry more cars and freight; potentially aiding economic development opportunities in Ossipee and reducing the amount of truck traffic on NH Route 16, leading to less congestion and road wear.

Traffic distribution by tandem axle weight groups and corresponding damage distribution



Key: k = 1,000 pounds.

Source: Maine and Vermont Interstate Highway Heavy Truck Pilot Program

For pavements, it is more important to control axle-load limits than gross vehicle weight because pavement performance is very sensitive to axle-loads. The figure to left shows damage distribution by axle-weight groups. Both the effects of load intensity and frequency are included. As shown in the graph, 88 percent of tandem axles are at or below the current tandem-axle load limit of 34,000 pounds while 5 percent are heavier than 40,000 pounds. However, the 5 percent of heavy tandems cause 58 percent of the damage.

4. NOTEWORTHY TRENDS

Automobile Dependence

> "*The burden of owning and operating vehicles is increasing for the lowest-income families.* Transportation was the third-highest household expense in the 1970s; today it is the second highest. For affluent households, this change reflects personal preferences. For families with lower incomes, however, particularly those living in automobile-dominated metropolitan areas, costs for transportation compete in magnitude with those for housing. In many low-income households in low-density suburbs, 25 percent of household income is spent on transportation."[8]

Automobile dependency refers to a condition where it is challenging to access services and activities without using an automobile. Automobile dependency can be the result of land use practices that focus attention on the automobile as a predominant or sole focus for access and as a result of location. Consider a shopping mall on a major highway that makes access by automobile the only practical means. Or, the example of a regional school built on the outskirts of town. The school may be centrally located for those communities that share the resource, but the location may not be accessible by foot or bike. This could be due to lack of sidewalks or road shoulders or perhaps the street carries a relatively high volume of traffic and high speeds make getting there by foot or bike uninviting or unsafe. Automobile dependency is also a reflection of our society. There are many examples of schools within walking distance (generally considered one mile or less) that struggle with traffic management at arrival and departure times because of a preference to be transported by

[8] *Critical Issues in Transportation 2002*, Transportation Research Board, 2002

automobile. The number of children that bike or walk to school fell 75 percent between 1966 and 2009 while during the same period the percentage of obese children rose 276 percent.[9]

While as a society we are highly dependent on the independence automobiles provide, there is a growing body of compelling information about the personal health and community social, environmental and economic benefits associated with systems that provide multi-modal opportunities. This allows people to use the best mode for each trip: walking and cycling to reach local destinations, public transport for travel on major travel corridors, and automobile when it is truly optimal. There are many programs, advocacy groups, and public policies that support and promote biking and walking such as: Healthy Eating Active Living NH (HEAL), Safe Routes to School, Bike-Walk Alliance of NH, Newfound Pathways, WOW Trail, Complete Streets, Smart Growth Principles, and Transportation Demand Management. Each provides an opportunity to integrate multi-faceted transportation options that may diminish automobile dependence and at the same time improve air quality and better individual and community quality of life. These policies and programs may be having an impact. A recent study by the Alliance for Biking and Walking indicates that from 2000 to 2009, the number of commuters who bicycle to work increased by 57 percent. At the same time more than one quarter of all trips (27 percent) are shorter than one mile and 62 percent of these trips are made by car.[10]

Experiencing Automobile Dependency
If you are a typical motorist, try this experiment: Give up driving for two typical weeks. This period should require normal travel for work, shopping, socializing and family obligations. You'll discover that non-drivers face many obstacles, including limited travel options, high financial and time costs, and poor service. As a result you may travel less, foregoing some trips and choosing more convenient destinations for others. You may experience embarrassment when asking for a ride or when you use stigmatized modes such as transit, bicycling and walking.

The problems you experience as a non-driver depend on where you live. If your community is highly automobile dependent you will experience significant difficulties. You may have trouble getting to a store or even crossing busy streets. If your community is multi-modal, with good transit service, bicycle and pedestrian facilities, you may experience few problems.

After two weeks you may be glad to drive again. You may also have experienced some benefits during the period of abstinence. You may discover unexpected joys from walking and bicycling, reduced stress, increased exercise, and friendship with fellow car pool or transit passengers. You may have appreciated being more home-centered and community oriented. You may take pride in reducing pollution, and saving energy.

Source: http://www.vtpi.org/tdm/tdm100.htm

The Lakes Region contains a mix of opportunities for enhancements to a transportation system that is comprised of a mixed level of automobile dependency from one municipality to the next. The National Conference of State Legislatures (NCSL) collected and analyzed information about state policies and state statutes that promote walking and biking for physical activity. The result of the data collection was a total of 18 policies, that when analyzed, were refined to a list of five policies having the greatest potential to increase walking and biking:

[9] Alliance for Biking and Walking, *Bicycling and Walking in the United States: 2012 Benchmark Report*, Facts Sheet

[10] www.PeoplePoweredMovement.org/benchmarking

Incorporating sidewalks and bike lanes into community design

Providing funding for biking and walking in highway projects

Establishing safe routes to schools

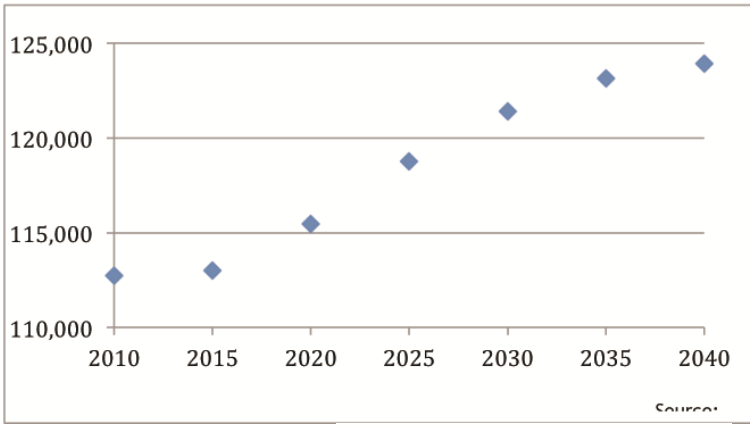
Fostering traffic calming measures

Creating incentives for mixed-use development

In a recent Lakes Region workshop (2011) hosted by NHDOT to assess customer satisfaction, municipal officials rated the 'accessibility to alternative modes of transportation'; among several other performance measures. The results indicate 66 percent of the participants are dissatisfied or very dissatisfied with the level of alternative modes accessibility, while 16 percent were satisfied or very satisfied. The perceived need for improvement is supported by the federal transportation legislation – Moving Ahead for Progress in the 21st Century (MAP-21) and the Partnership for Sustainable Communities, a collaborative between the departments of Housing and Urban Development, US Department of Transportation, and the Environmental Protection Agency. MAP-21 contains eight Planning Emphasis Areas, three of which may be linked to the promotion of a multi-modal transportation system, these include focus on: increase access and mobility, promoting efficient management and operation, and protecting the environment, energy conservation, increasing quality of life, consistency with state and local plans. The Partnership for Sustainable Communities maintains the more clearly related mobility goals to: "provide more transportation choices" and "develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health."

Demographics

Figure 6: Lakes Region Population Projections 2010-2040



Population projections prepared by the NH Office of Energy and Planning indicate an upward growth trend from 2010 to 2040. The projected percent population increase will be significantly less than that experienced in recent decades. Figure 6 displays the population projections for the Lakes Region which reflect a 0.3 percent annual increase.

Within the total population projections are interesting characteristics that will play a significant role in future transportation planning efforts. Figure 7 indicates population projections by age group for the four counties within the Lakes Region. While the over-all trend is for a slow population increase; the rate of growth for those 65 years of age and older is the leading age group that will experience growth. In fact, the projections suggest this is the only age group that will experience growth in the next 27 years.

Figure 7: Population Projections 2010-2040 by County and Age Group

Belknap County

Age Group	Percent of Population 2010	Percent of Population 2040	Percent Change 2010-2040
0-19	23%	19%	-7%
20-44	28%	23%	-5%
45-64	33%	26%	-12%
65+	17%	32%	113%
Total	**100%**	**100%**	**12%**

Carroll County

Age Group	Percent of Population 2010	Percent of Population 2040	Percent Change 2010-2040
0-19	20%	15%	-17%
20-44	24%	18%	-13%
45-64	35%	25%	-19%
65+	21%	42%	137%
Total	**100%**	**100%**	**15%**

Grafton County

Age Group	Percent of Population 2010	Percent of Population 2040	Percent Change 2010-2040
0-19	23%	19%	-10%
20-44	32%	26%	-12%
45-64	30%	22%	-21%
65+	15%	33%	126%
Total	**100%**	**100%**	**7%**

Merimack County

Age Group	Percent of Population 2010	Percent of Population 2040	Percent Change 2010-2040
0-19	25%	19%	-16%
20-44	31%	26%	-7%
45-64	31%	25%	-13%
65+	14%	30%	143%
Total	**100%**	**100%**	**9%**

Source: NHOEP

Research indicates that the travel patterns of those 65-75 years of age often do not differ from other adults; though reduced mobility due to driving cessation is widespread nationally and will continue to increase dramatically as baby boomers (born 1946-1964) age. While mobility challenges will not affect all older adults (65 years of age or older) equally, the Lakes Region is an area with few transportation alternatives with an aging population. Four broad segments of the elderly population may develop:

1) Those that depend primarily on non-auto modes of transportation like walking and transit;
2) Those that continue driving, muddling through by self-regulation;
3) Those that forge informal transportation supports, securing rides from family and friends; and
4) Those that are left with minimal to no formal alternatives and few community connections.[11]
5)

[11] *Transportation Planning Options for the Elderly,* Holly Chase, MIT City Planning Masters Candidate, May 2011.

Automobile Costs

Over 60 percent of New Hampshire's major rural roads are in poor to mediocre condition. Nearly one third of New Hampshire's rural bridges are structurally deficient or functionally obsolete. Driving on poor roads costs New Hampshire's motorists an extra $259 per driver ($267 billion annually).[12] Each year Bankrate estimates the annual cost of car ownership for each state. Figure 8 provides a means of comparing NH with other New England states and the three states with the highest costs. In 2012, New Hampshire ranked 40 in the US for the highest cost of automobile ownership. The most significant cost difference was the taxes/fees category which in comparison to Georgia was 61.5 percent less or a savings of $1,200 annually. New Hampshire will consider a bill in 2014 to tie the gas tax to inflation, increasing it by about four cents next year should it pass.[13]

It is interesting to note that while our national economy is highly petroleum dependent, the sale of gasoline and diesel does little to enhance local economies. Unlike other commodities and services, petroleum and other energy sources are generally produced elsewhere. As a result, when fuel is purchased at the local gas station, the majority of the purchase price leaves the local economy. A portion of the remaining cost is represented by the fuel tax or "road toll' as it is sometimes referred.

New Hampshire's motor vehicle registration fees were raised in 2010 and 2011 as a short-term solution to the budget shortfall of $124 million in the state's Highway Fund. The $30 surcharge increased average registration fees, depending on vehicle class and weight, from $30 to $42 per vehicle per year and up to $57 for SUVs and trucks, and raised nearly $86 million over the biennium. Although all surcharge revenues went into the state's Highway Fund, cities and towns benefitted by an overall municipal distribution of $5 million by the 12 percent share of these total funds.

Figure 8: Annual Cost of Automobile Ownership

Rank	State	Repairs	Taxes/fees	Gasoline	Insurance	Total
1	Georgia	$385	$1,952	$1,129	$767	$4,233
2	California	$390	$1,809	$980	$786	$3,966
3	Wyoming	$324	$1,341	$1,643	$630	$3,938
4	Rhode Island	$371	$1,717	$826	$999	$3,913
8	Massachusetts	$358	$1,475	$856	$936	$3,625
13	Maine	$328	$1,425	$1,144	$605	$3,502
14	Connecticut	$385	$1,177	$960	$963	$3,485
35	Vermont	$270	$814	$1,215	$656	$2,954
40	New Hampshire	$328	$751	$1,008	$739	$2,826

Source: Bankrate.com

[12] Building America's Future, *New Hampshire Quick Facts*, www.BAFuture.org/NH

[13] http://www.planetizen.com/node/66397, December 9, 2013

Commute Times

The mean (average) travel time for commuters traveling from home to work has been increasing in the state of New Hampshire. A comparison of data from the American Community Survey suggests that the amount of time an average person living in New Hampshire spends commuting to work increased 5.6 percent between the years 2000 and 2012. Since 2006, the mean commuting time has increased by over one percent every year. A result of increased commute times is increased vehicle expenses, congestion, greenhouse gas emissions, and deterioration of infrastructure.

Vehicle Miles Traveled

Vehicle travel on New Hampshire's major highways increased 32 percent between 1990 and 2008, rising from 9.8 billion vehicle miles traveled (VMT) in 1990 to 13 billion vehicle miles traveled in 2008. The amount of VMT has a strong relationship to the state of the economy. As illustrated in Figure 9, from 2001 to 2011 the peak year VMT total was in 2006 the year that is generally associated with the height of the economy in NH followed by an economic down-turn and on-going period of recovery. Figure 9 also indicates that annual fuel consumption per registered vehicle has not returned to pre-2006 consumption levels. This could be associated with fuel economy improvements, conservation due to higher gas prices, and a recovering economy. In part, this trend illustrates decreasing gas tax revenues - a limiting factor for highway maintenance funds.

Figure 9: Vehicle Miles Traveled, Autos per Driver, Fuel Usage 2012

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
NH Vehicle Miles Traveled (billions)	12.315	12.578	12.953	13.543	13.429	13.614	13.459	13.040	12.975	13.065	12.720
Automobiles per Licensed Drivers	0.73	0.71	0.68	0.68	0.65	0.57	0.63	0.63	0.62	0.6	0.56
Fuel Use per Registered Vehicle (gallons)	707.3	707.42	711.86	703.15	691.07	763.67	696.21	665.62	661.02	667.21	616.81

Source: Office of Highway Policy Information, FHWA, 2013

Coordinated Trip Reduction Programs

Until recently, carpooling and ride sharing have been organized by the NHDOT through the Rideshare program. A recently formed group known as Commute Green New Hampshire (CGNH) has worked to organize statewide events to promote opportunities for NH residents to reduce fuel consumption by carpooling, biking, and walking to work. CGNH is a partnership of businesses, schools, transit agencies, regional planning commissions and other volunteers dedicated to encouraging people to choose transportation options other than driving alone. CGNH provides easy ways for people to try green commuting for the first time and to celebrate their efforts and those of people who already green commute.[14] One such campaign is "Don't Drive One-in-Five" which encourages NH residents to pledge not to drive one in five work days during specified time periods. For such programs to have a meaningful impact on emissions and reductions in VMT, requires complementary employer policies and effective tools for drivers to match commutes in order to share rides. As a result of funding cuts, NHDOT has recently stopped managing the statewide Rideshare program. Currently, the regional planning commissions

[14] http://www.commutegreennh.org

and CGNH are working cooperatively with NHDOT to explore the possibility of managing and expanding the Rideshare program. Envisioned is outreach to regional business leaders to explore their role and possible contributions to an effective program. Stay tuned for more information!

5. TRANSPORTATION AND THE ENVIRONMENT

It is important to understand the link between transportation and the environment. The effects of transportation infrastructure can impact stormwater drainage, air quality, and the introduction of chemicals and other materials that can be harmful to the environment. Also of importance is an understanding of the effects that the environment can have on transportation.

Salt Application

Winter road maintenance in the Lakes Region typically includes the application of road salt (sodium chloride). Applying road salt to pavement reduces the adherence of snow and ice and promotes public safety. Road salt is a popular choice for many Lakes Region communities because it is inexpensive and easy to handle, store and apply. However, road salt application can have adverse effects on the environment and on infrastructure. Chloride is toxic to aquatic life. The sodium in road salt can alter soil chemistry and release calcium, magnesium and potassium into groundwater and surface water.[15] In addition to these, many road salts include additives such as ferro cyanide which is listed as a toxic pollutant under section 307(a) of the Clean Water Act.

Chloride ions increase the conductivity of water and accelerate corrosion. Chloride can penetrate and deteriorate concrete on bridge decking and parking garage structures, and damage reinforcing rods, compromising structural integrity. It damages vehicle parts such as brake linings, frames, bumpers, and other areas of body corrosion. It impacts railroad crossing warning equipment and power line utilities by conducting electrical current leaks across the insulator that may lead to loss of current, shorting of transmission lines, and wooden pole fires.[16] The cost of corrosion damage and corrosion protection practices for highways and the automobile industry have been reported to cost a staggering $16-19 billion a year.[17]

At this time, the only way to prevent chloride from reaching surface and ground water without compromising safety is to reduce the amount applied to our roadways and parking lots. The Bureau of Highway Maintenance indicates a reasonable reduction would be two percent yearly with a total maximum reduction of 20 percent over the long term.[18] NHDOT recommends road salt application rates specific to parking lots and roads per lane mile. Reference guides have been published by NHDOT in cooperation with the Technology Transfer Center at UNH to help instruct and educate applicators on best management practices for winter road maintenance. The New Hampshire Green SnowPro Certification program offered by UNH provides courses focused on efficient and environmentally friendly winter maintenance practices including salt reduction.

[15] Road Salt and Water Quality, NHDES, 2011

[16] des.nh.gov/organization/divisions/water/wmb/was/, accessed November 21, 2013

[17] City of Madison Wisconsin, Report to Salt Use Subcommittee, Commission on the Environment, 2006

[18] Balanced Scorecard, NHDOT, 2011

Storm Water, Catch Basins, Treatment

Managing stormwater is an important consideration for any type of development and especially for transportation systems. Impervious surfaces such as roads and parking lots can prevent rain and snowmelt from soaking into the ground as they do in a natural environment. Without adequate drainage mechanisms in place, the damage to infrastructure can be costly and severe. The condition of drainage and stormwater protection should be monitored regularly and closely and upgraded whenever the opportunity arises. Improper stormwater management can also adversely affect public health and the natural environment. As stormwater drains from impervious surfaces it can become polluted by dirt, oil, fertilizers and other contaminants. If left untreated, these pollutants enter rivers, lakes and coastal waters impairing water quality.

In 2008, municipalities in New Hampshire were given legal authority to form stormwater utilities under RSA 149-I. Under the statute, stormwater utilities must address flood and erosion control, water quality management, ecological preservation, and annual pollutant loads contained in stormwater discharges. Utilizing catch basins can be an effective method of dissipating the energy of incoming runoff and provides an opportunity for coarse sediments to settle. Vegetated buffers are areas of natural or established vegetation allowed to grow with minimal to no maintenance. Buffers reduce the velocity of runoff as it flows through the vegetation. Buffers also provide a permeable area where runoff can infiltrate the soil. They promote groundwater recharge, filter out sediments, and create shade to maintain water temperatures. They can also provide wildlife habitat and connect habitat corridors.[19]

CO_2 Emissions

It is estimated nationally that transportation is responsible for 24 percent of these emissions.[20] The Environmental Protection Agency has identified greenhouse gases as responsible in part for changing climatic conditions. Strategies to slow or stabilize climate change might include reducing the number of vehicle miles travelled (VMT) which totaled over 13 billion miles statewide in 2010 and has increased by nearly nine percent per-capita since 1990.[21] This reduction can be accomplished through the promotion of existing programs such as NH Rideshare, which matches travelers for regular commutes as well as one time trips, and utilization of public transportation systems such as Winnipesaukee Transit System and Carroll County Transit, both of which offer regular flexible service in the Lakes Region.

NHDES has identified idling automobiles as a significant contributor to air pollution in New Hampshire. According to an estimate of the Federal Highway Administration motor fuel usage in the state totaled over 812 million gallons in 2010. Additionally, the number of registered vehicles in New Hampshire increased 20.6 percent between the years 2006 and 2011.[22] With such a drastic influx of

[19] New Hampshire Stormwater Manual, NHDES, 2008

[20] National Greenhouse Gas Emissions Data, US EPA, April 2013

[21] United States Department of Highway Statistics, 2011

[22] Office of Highway Policy Information, FHWA, 2013

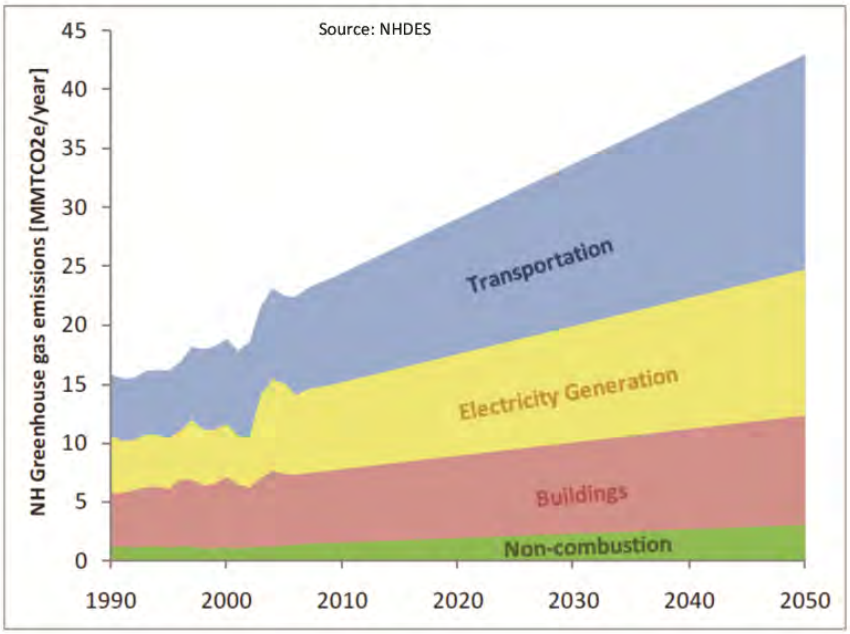
vehicles, maintaining reasonable levels of service on Lakes Region roadways becomes increasingly challenging. Congestion and capacity issues are a concern along certain transportation corridors in the Lakes Region. Travel demand management practices such as access controls and keeping capacity in harmony with development can help to reduce congestion and minimize CO_2 emissions. It has been a long time goal of the NH Department of Environmental Services (NHDES) to reduce pollution emissions to always meet air quality standards. In the summer of 2013, there were three days in New Hampshire when air quality exceeded ozone standards. Ozone is the principal ingredient of smog, is typically a warm weather air pollutant that forms when nitrogen and volatile organic compounds mix in the presence of strong sunlight and warm weather. It can have pronounced effects on healthy individuals and can aggravate respiratory conditions such as allergies, asthma, and emphysema.[23]

The US Environmental Protection Agency (EPA) estimates nearly 7.5 billion metric tons of greenhouse gases were emitted from fossil fuel combustion in 2011. This represents a downward trend since 2007 when 8.2 billion metric tons of greenhouse gases were emitted. The NH Department of Environmental Services (NHDES) indicates the transportation sector is the most significant single source of greenhouse gas emissions in New Hampshire, and its relative contribution is projected to increase further based on current trends (see Figure 10).

NH participates in The Greenhouse Gas Emissions Reduction Fund (GHGERF) as a partner with ten Northeast and Mid-Atlantic States. The program is aimed at reducing carbon dioxide emissions in the electric power sector. While a comparable program does not currently exist for the transportation sector, the NH Climate Action Plan (2009) contains several transportation recommendations including:

- Encourage appropriate land use patterns that enable fewer vehicle-miles traveled.
- Reduce vehicle-miles traveled through an integrated multimodal transportation system.

Figure 10: Greenhouse Gas by Sector 1990-2050



[23] NH Department of Environmental Services , *Environmental News*, November-December, 2013

- Reduce vehicle miles traveled through state actions such as those recommended by the NH Climate Action Plan Taskforce, including: adopting California Low Emission Vehicle (CALEV) standards; creating a Point-of-Sale Financial Incentive for Higher-Efficiency Vehicles; installing retrofits to address Black Carbon Emissions; and implementing Commuter Trip Reduction Initiative.

Climate Change – Infrastructure Vulnerability

New Hampshire has experienced a number of changes in recent years as a result of changing climate patterns. In October 2012 Hurricane Sandy drove a catastrophic storm surge into the northeastern states resulting in 147 direct deaths and causing nearly $50 billion in damage.[24] Besides more frequent and severe storm events, other locally observed changes include precipitation patterns and intensity, increased average temperature, changing seasonality, rising sea-level, summer drought, and micro bursts.[25] These changes create challenges for maintaining safe and efficient transportation systems and infrastructure.

Efforts to mitigate damage to infrastructure caused by a changing climate require a level of adaptation and might include using alternative construction techniques and materials. Adaptation might mean augmenting and reinforcing bridges and drainage structures before a damaging weather event strikes. It has been estimated that the costs of reactionary adaptation outweigh those of anticipatory adaptation by a factor of four to one.[26]

Wildlife Fragmentation

Fragmentation of habitat by highways occurs when animals avoid the area of the road, are unable to cross the road, or are killed on the road. Transportation infrastructure can result in habitat loss which limits the natural movement of wildlife to support their life-cycle requirements. Fragmentation can cause animals in a given area to experience physical isolation and eventual extirpation. The fragmentation of wildlife habitat may also be a safety concern as vehicle collisions with wildlife become more likely.

The following safety recommendations to minimize wildlife–vehicle interactions were compiled from a variety of sources:

[24] Blake, Eric S., et al., Tropical Cyclone Report: Hurricane Sandy, National Hurricane Center, February 2013

[25] The New Hampshire Climate Action Plan, NHDES, March 2009

[26] Tools for Mainstreaming Disaster Risk Reduction: Benson, Twigg, Rossetto, 2007

- Right-of-way clearing can reduce animals' desire to graze roadside and increase motorist visibility as they approach the area of concern. Special care should be taken when removing vegetation in order to minimize impact on the environment.

- Conserve highest ranking habitat lands (as ranked by New Hampshire Fish and Game) surrounding the area of concern. Habitat loss, reduction, and fragmentation changes could increase the likelihood that wildlife must cross road to find new habitat and foraging grounds.

- Improvements to infrastructure or structures should not restrict, degrade, or negatively impact habitat or impede wildlife movement.

- Maintain an inventory of vehicle collisions with wildlife as well as reported wildlife sightings to aid in the identification of high priority wildlife corridors.

6. OTHER ASPECTS of the TRANSPORTATION SYSTEM — HISTORICAL AND CULTURAL

Covered Bridges

At one time there were over 10,000 covered bridges in the United States, and today 54 of the remaining 750 are located in New Hampshire. Located throughout the state, each bridge is unique to its town and design. Because of their beauty and the history behind them, covered bridges became the first type of historic structures specifically protected by state law in New Hampshire.[27] A "historic" bridge is any bridge that is listed or determined eligible for listing on the National Register of Historic Places. Created by the National Historic Preservation Act of 1966 and administered by the National Park Service under the Secretary of the Interior, the National Register is this country's basic inventory of historical resources.

Covered bridges in the Lakes Region on the National Register of Historic Place include: Cilleyville (#16) and Keniston (#15) Bridges in Andover, Sulphite Railroad Bridge (#62) in Franklin, Whittier Bridge (#46) in Ossipee, Durgin Bridge in Sandwich (#45), and Tilton Island Park pedestrian bridge in Tilton (uncovered). The Whittier Bridge is currently the subject of a restoration project funded by a $100,000 grant from the New Hampshire Land and Community Heritage Investment Program, and by appropriations from NHDOT and the town of Ossipee.

[27] www.visitnh.gov/what-to-do/covered-bridges.aspx, accessed November 12, 2013

Transportation Museums

Historic preservation not only protects the irreplaceable physical resources in our built environment, but also protects the vitality, quality of life, and sense of place in our communities. The creation and perpetuation of transportation museums is a great way to connect to the past. The Presby Transportation Museum in Whitefield, NH showcases a collection of antique tractors and other agricultural equipment that are a part of the history of the area. Within the Lakes Region, the American Police Motorcycle Museum in Meredith showcases historic police motorcycles, parts and literature.

Rail Stations/Architecture

Railroads played an important role in the history of industry in the Lakes Region. Evidence of this is still prevalent in many communities where repurposed or abandoned rail stations stand as a reminder of this importation time in the region's growth and development. The Ashland Railroad Station, Laconia Passenger Station, and Alton Bay Railroad Station, among many others are preserved as part of the National Register of Historic Places and serve as monuments to the history and culture for us as well as future generations. The train depot on Main Street in Center Ossipee is currently a restaurant.

Scenic Byways – Recreation

There are many roadways in the Lakes Region that present travelers with scenic vistas. In fact, that is what draws many visitors to the area. Many communities have designated 'scenic roads', resulting in an extra layer of protection for trees and stonewalls along these roads.

The Lakes Region Tour Scenic Byway is a 97-mile State Scenic Byway, designated under RSA 238:19 "… to provide the opportunity for residents and visitors to travel a system of byways which feature the scenic and cultural qualities of the state within the existing highway system, promote retention of rural and urban scenic byways, support the cultural, recreational and historic attributes along these byways and expose the unique elements of the state's beauty, culture and history."

The Lakes Region Tour circumnavigates Lake Winnipesaukee and includes portions of US3, NH11, NH25, NH25B, NH106, NH109, and NH175, as well as Lakeside Avenue, Scenic Drive, Watson Road, and Roller Coaster Road in Laconia. The byway travels through the communities of Alton, Ashland, Center Harbor, Gilford, Holderness, Laconia, Meredith, Moultonborough, Ossipee, Sandwich, Tamworth, Tuftonboro, and Wolfeboro. The Lakes Region Tour joins the River Heritage Tour Scenic Byway in Plymouth and provides access to both the Kancamagus and White Mountain National Scenic Byways via Conway.

Through this designation, these roadways are eligible to seek federal funds for interpretive centers, scenic overlooks, safety improvements, and marketing materials. Because the region's economy relies so heavily upon tourism, it is essential that travel throughout the region be an enjoyable experience; infrastructure and capacity must be maintained.

Commercial Boat Operations

Lake Winnipesaukee has a rich history of commercial boat operations. The earliest commercial boats served industrial purposes delivering goods to be exported on the railroads. Man- and horse-powered paddle wheel boats were eventually replaced with steam technology. The first steamboat on Winnipesaukee, named the Belknap, was 96 feet long and was launched at Lakeport in 1833. Others followed to complement the growing railroad business around Lake Winnipesaukee.

Today, most commercial boat operations are centered on tourism. Commercial boat operations are a popular way to see and experience what the Lakes Region offers. Cruise boats such as the Mount Washington, M/V Doris E., and others provide a unique glimpse of the local culture. The US Mail Boat, Sophie C. is the oldest floating post office in the United States and provides seasonal mail service on Lake Winnipesaukee, a tradition dating back to 1892.[28]

[28] www.cruisenh.com/sophie.php, Accessed November 22, 2013

7. LOCAL TRANSPORTATION PLANNING AND LAND USE

The components of transportation — roads, sidewalks, intersections, paths, rails, stations, stops, travel time — affect your commute, your recreational opportunities, your shopping trips, your child's trip to school, the character and size of your town, the beauty of the countryside, and you and your family's safety. A key to success in doing more with the existing road network is careful land use planning that optimizes traffic efficiency and minimizes potential conflicts. Access management involves the planning and coordination of the location, number, spacing and design of access points from a roadway to adjacent land. On state highways, which also serve as Main Street for many Lakes communities, access is permitted by NHDOT through the use of driveway permits. Where communities have specific access management plans in place, coordination with NHDOT is required to consider and achieve local goals in the permitting process (see Figure 11).

Figure 11: Coordinated Access Management on State Highways

Access management features concentrated nodes of development along transportation corridors where open space is preserved between nodes and integrated pedestrian walkways and bicycle pathways that provide a means of reaching work, shopping and leisure destinations within nodes. Successful access management can facilitate reduced vehicle trips, traffic delays and congestion and improve air quality, roadway capacity, and compact development patterns.

The implementation of the regional vision:

> "To provide an integrated, all-mode transportation system in the Lakes Region which offers efficient, effective and safe movement of people and goods, and provides mode choice wherever possible while enhancing and preserving the character and livability of the neighborhoods, quality of water in our lakes and streams as well as the natural, socio/economic, and historical environments where transportation facilities are located." – cannot be achieved unless supported locally through complementary land use practices and absent "local champions to move concepts to reality. The region is fortunate to have many such examples contributing to the regional vision. A few of the examples include:

Belmont and Bristol Downtown Improvements — Both the towns of Belmont and Bristol have made recent roadway, parking, pocket park, and pedestrian accessibility improvements in their downtowns. The foundation for improvements in Bristol Square was articulated in the community master plan, the focus of a planning charrette, and provides pedestrian connectivity through the Square to the adjacent river and nearby lake. Both improvements include water and sewer upgrades during the roadway reconstruction efforts.

The WOW Trail — The Winnipesaukee-Opechee-Winnisquam (WOW) Trail is a multi-use, non-motorized recreational pathway in the City of Laconia. The proposed pathway is just over nine miles long, stretching the length of the City to the Meredith and Belmont town lines. The WOW Trail has recently hired a Director and has produced many successful local fund raisers to advance the project including WOW Fest. The WOW trail represents a portion of a larger regional vision for a connector trail from Andover to Meredith with a water connection to the Cotton Valley Trail in Wolfeboro. Several sections of the trail are currently built and several are scheduled for construction. The WOW trail is unique in that portions of the trail share an active rail bed. The result is an added significant cost of fencing required by the state to segregate the shared uses.

Northfield and Moultonborough Safe Routes to School — Both Moultonborough and Northfield worked with the LRPC to develop a Travel Plans identifying ways to improve the walking and bicycling environment for kindergarten through eighth grade students to travel safely from home to school. Each plan contains recommendations for sidewalk improvements in the downtown centers.

Newfound Lake Pathways — has a stated mission to create a 17-mile pathway around Newfound Lake to encourage walking, running, and cycling as a safe, healthy, and environmentally sound means of recreation and travel. The group received status as a non-profit corporation in November 2012.

Northern Rail Trail — has worked on promoting economic development. The inn to inn bike tours offer an enjoyable experience for the bicycle enthusiast, a casual biker, a locavore, nature lover, and history buff. New Hampshire is a cyclist's paradise, and the bike tours combine biking on the Northern Rail Trail with the luxury and convenience of being able to relax nightly in gracious inns, followed in the mornings by a gourmet breakfast before you hit the rail trail again. Seven historic inns throughout the Lakes and Dartmouth-Lake Sunapee regions of New Hampshire are connected by the Northern Rail Trail and are offering inn-to-inn packages.

Meredith Planning Board — work with developer towards the installation of a HAWK beacon (**H**igh-Intensity **A**ctivated cross**W**al**K**) on NH 25 in Meredith. A HAWK beacon is a traffic signal used to stop road traffic and allow pedestrians to cross safely. It is officially known as a "pedestrian hybrid beacon." The purpose of a HAWK beacon is to allow protected pedestrian crossings, stopping road traffic only as needed. Research has shown motorists' compliance with the HAWK

beacon at up to 97 percent, higher than with traditional un-signaled crossings. This may be the first example of a HAWK beacon installed in New Hampshire.

Scenic Byway Corridor Management Plan — Alton, Gilford, Laconia, Meredith, and Wolfeboro have dedicated professional planning assistance to work with the LRPC towards the development of a scenic byway management plan that will explore vehicle, pedestrian, and bicycle safety around Lake Winnipesaukee and local characteristics of the byway that make it a special place to visit.

Center Harbor and Sanbornton Road Standards — The town of Center Harbor recently identified an update to the town road standards as a recommendation in their 2012 Master Plan. The project was completed later that year as an update to the town Subdivision Regulations by LRPC, the Road Agent, and Planning Board. The revised standards provide additional road construction over-sight for all roads created in town helping to ensure roads are built to a standard the town can maintain should maintenance become a town responsibility. Additionally, both communities have variable pavement width requirements based on estimated volume of traffic served. For Sanbornton the revised road standards are being developed in consideration of housing development costs. Housing prices are dictated in part by land development costs, of which road construction can represent a significant portion. Graduated road construction standards based on volumes of traffic served and conservation subdivisions may contribute to lower housing prices.

Workforce Housing — Several communities have recently worked to improve the stock of workforce housing including Laconia, Meredith, and Wolfeboro. Like the Harriman Hill project in Wolfeboro, recent Laconia and Meredith projects boast an 'in village' location that serves the purposes of access to public utilities and close proximity to services and employment.

Context Sensitive Solutions — Meredith and Wolfeboro are reviewing US Route 3/NH Route 25 and NH Route 28 potential highway improvements within the context of how the highway fits in a rural village center. The Meredith project is one of several pilot projects sponsored by the NHDOT; the Wolfeboro project is municipally funded. A stated goal for both seasonally congested highways and municipal main streets is the slow, steady, safe movement of traffic while providing access to village destinations and opportunities for people to feel comfortable walking or cycling. Both state highways are major collectors providing vital regional linkages which currently exceed capacity especially in the peak summer season.

Road Safety Audits (RSA) — Ashland, Center Harbor, Gilford, Meredith, and Ossipee, and Tilton have participated in formal safety assessments at challenging intersections and road segments. Applications for RSAs are supported by data collected by the regional planning commission including turning movement counts, crash diagrams supported by local accident records, and aerial photos. The RSAs are conducted by a multi-disciplinary team and result in recommendations for safety improvements supported by cost/benefit analysis.

Road Surface Management Systems (RSMS) – Barnstead, Moultonborough, Ossipee have participated in recent RSMS inventories which aid the community in prioritizing road improvements and costs. It is estimated that each dollar spent on road maintenance eliminates spending $6-$14 on roadway reconstruction. Minor pavement maintenance before the road's 15th year will generally restore pavement to condition for about five years. However, if treatment is delayed for another three years it will cost four to five times more

than a minor treatment.[29] A RSMS inventory conducted by LRPC provides communities simple pavement condition assessments leading to a prioritized list of recommended maintenance. The RSMS process can be integrated with the local Capital Improvements Program and provides a quantitative assessment of needed improvements and costs. This tool is based on maintenance for good roads before they deteriorate beyond maintenance and into much more costly reconstruction. Transportation infrastructure costs for municipalities are a significant investment and in many communities these cost are second only to the cost of providing schools. Deferred maintenance even for short periods of time can present significant future funding challenges.

Elected officials and agency staff have a responsibility to make transparent decisions regarding bicycles and pedestrians. Too often, this is not the case. Funding choices are based on criteria set without public input or scrutiny; streets are repaved without a thought of adding bicycle lanes; and school properties are bought far away from walkable and bikeable neighborhoods.[30] Worthwhile considerations are the creation of a local pathways committee or Bicycle and Pedestrian Advisory Committee (BPAC) and the development of a community pathways master plan. BPACs can provide a strong mechanism to provide the needed accountability and many other benefits for residents. A community pathways master plan describes, illustrates, and promotes walking connectivity between business and municipal services, civic organizations, and recreational opportunities. A community pathways master plan is similar in function to a Travel Plan developed through the Safe Routes to School program which evaluates travel needs and safe walking and biking routes between residential neighborhoods and school. Such plans help to identify, enhance, and prioritize needed infrastructure and safety improvements to link essential community elements.

In addition, land use practices and policies can influence the implementation of the regional vision to promote an integrated system for all modes of transportation. Following are considerations for local land use regulations and ordinances:

Zoning:

- Provide mixed use and higher intensity residential zones when appropriate.
- Require streets, sidewalks, and walkways to connect to adjacent properties, including properties not yet developed.
- Require sidewalks on both sides of the street in new developments.
- Require bicycle parking facilities within 50 feet of primary and well-used entrances for all office, multifamily, and freestanding commercial uses in appropriate zones.

Subdivision Regulations:

- Define appropriate zones where new subdivision roads would be accommodated with sidewalks and crosswalks where appropriate

[29] Associated General Contractors of New Hampshire, *Rebuilding Our Neglected Roads: Sooner is Much Cheaper than Later!,* December 2006.

[30] Advocacy Advance, *Making Bicycling and Walking a Norm for Transportation Agencies: Best Practices for Bicycle and Pedestrian Advisory Committees*

- In rural areas where sidewalks are not required, ensure adequate right-of-way widths to accommodate future sidewalks as needed

- Require new subdivision developments that have sidewalks also connect with existing sidewalk facilities

- Within new subdivision projects require a road design and driveway locations that minimize the number of conflict points and hazards between automobiles and bicycles/pedestrians

Site Plan Review:

- Ensure pedestrian walkways are clearly visible and delineated to assure the selection of effective walking routes to and within a site

- Ensure pedestrian facilities are designed for ease of maintenance

- Require appropriate amenities (e.g. landscaping, trees, benches) to enhance the walking experience

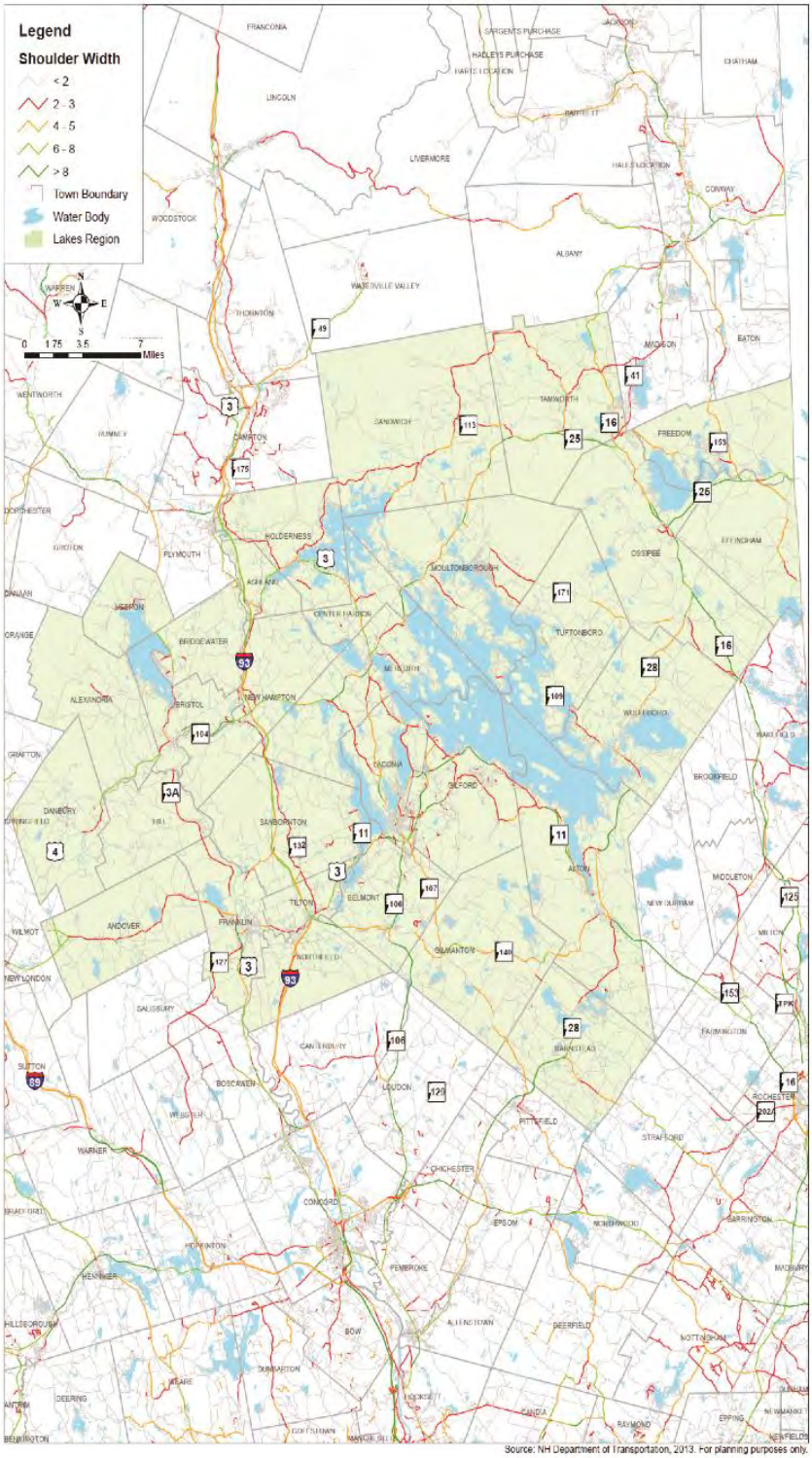
- Require street lighting and clear sightlines to maximize pedestrian safety

- Require that special needs (ADA, children, the elderly) are considered in pedestrian facility designs

- Require bicycle parking for appropriate land uses based on established standards

On state routes, municipalities are encouraged to consider opportunities for coordination with NHDOT to provide local walking and biking connections. In many instances this may be accomplished within existing paved areas. For example, NHDOT has indicated the potential to re-stripe highways with reduced lane widths when repaving projects take place, if requested by a municipality. Reducing lane widths from 12 feet to 11 feet where practical can provide an additional two feet of shoulder space and increase bicycle and pedestrian safety. Map 6 shows the shoulder widths for state routes in the Lakes Region. A focus point for the map is areas with existing 2-3 foot shoulders where adding an additional foot of shoulder on each side of the road by re-striping would provide 3-4 feet, generally the minimum amount needed for safety.

Map 6: Shoulder Widths on State Routes in the Lakes Region



8. IMPLEMENTATION PLAN

Transportation Recommendations and Performance Measures

Safety

Performance Measures

- The number, frequency, and severity of accidents in the crash data updated by NHDOT as a general indicator of safety.
- Number of safety improvement projects initiated in the region.
- The number of state and municipal 'red list' bridges in the Lakes Region and their status.

Recommendations

- Improve safety and resilience by promoting adaptation of vulnerable infrastructure in anticipation of increasingly frequent and severe weather events.
- Improve safety for all modes of travel starting with the creation of a comprehensive list of safety projects.

Project Development

Performance Measure

- Average length of time a project exists on the Lakes Region Transportation Improvements Program (TIP) before funding is secured.

Recommendation

- Continue to evaluate and provide supporting documentation for identified projects in the Lakes Region TIP towards advancing the improvements with appropriate funding sources.

Demand Management

Performance Measures

- Travel time and travel delay information.
- American Community Survey "Means of Transportation" data.

Recommendations

- Continue to work with NHDOT and other regional planning commissions to promote Commute Green NH and associated transportation demand management goals designed to encourage alternatives to single occupancy vehicle use.

- Promote the use of transportation demand management through collaboration with human service agencies, municipalities, businesses and citizens.

Public Transit

Performance Measures

- Public transportation ridership and expansion of service.

- Number of RCC meetings and advancement of RCC work plan strategies.

Recommendation

- Promote the use and expansion of public transit services through collaboration with human service agencies, municipalities, businesses, and citizens.

Advocacy

Performance Measure

- Local, agency, and organization participation as members of the Lakes Region Transportation Technical Advisory Committee.

- Number of communities that participate in Road Surface Management Systems.

Recommendations

- Continue advocacy for increased transportation funding to meet regional and local needs through the NH Association of Regional Planning Commissions.

- Support a transportation strategy that conserves and maximizes the existing transportation network through infrastructure maintenance, enhancements, and management.

Walking and Biking

Performance Measures

- Successful Transportation Alternatives applications from the region.

- Miles and condition of sidewalks.

Recommendation

- Improve accessibility to alternative modes of transportation by increasing the safety and connectivity of bicycle and pedestrian infrastructure and promoting the expansion of public transportation where appropriate.

Planning

Performance Measures

- Travel-time and delay measurements as indicators of the effectiveness of transportation demand management efforts.

- Number of recommendations implemented in the Scenic Byway Corridor Management Plan.

- Communities participating in UNH Technology Transfer training on salt application and stormwater mitigation.

Recommendations

- Encourage independence from automobiles by supporting nodal development patterns near services. Consider local opportunities to apply innovative land use practices such as: Transit Oriented Development, Pedestrian Oriented Development, and Access Management, which are outlined in the *Innovative Land Use Planning Techniques: A Handbook for Sustainable Development, October 2008*.

- Local consideration for dedicating a portion of motor vehicle registration fees to transportation projects in accordance with NH RSA 261:153 Fees for Registration Permits.

- Increase service life of transportation infrastructure while reducing the introduction of harmful chemicals into the environment by encouraging municipalities to adopt the best management practices for winter road maintenance published by NHDOT in cooperation with the Technology Transfer Center at UNH.

- Market the Lakes Region Tour Scenic Byway through a standing committee of regional and local stakeholders.

- Improve local awareness, understanding, and participation in transportation issues through education and public involvement within and between communities, the region, state, federal government and related organizations.

Economic Opportunity, Environmental Quality

LAKES REGION PLANNING COMMISSION
103 Main Street • Humiston Building
Meredith, NH 03253
603-279-8171 • www.lakesrpc.org

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Table of Contents

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Environment

PLAN OVERVIEW

Purpose

The Lakes Region Environmental Chapter includes a review of the significant issues and challenges facing the management, use and conservation, condition and supply of natural resources in the Lakes Region of New Hampshire. It is not intended to serve as a comprehensive inventory of or management plan for the Region's natural resources. Nor is it intended to establish regional policy or regulation. This Plan proposes recommendations and strategies for communities, organizations, and others to consider in addressing natural resource and water infrastructure issues at the regional and local level. It highlights existing and potential opportunities for regional coordination and action around these identified issues and outlines resources municipalities and others can use to advance certain objectives. It is an opportunity to educate and inform community leaders about current natural resource conditions, issues and management options.

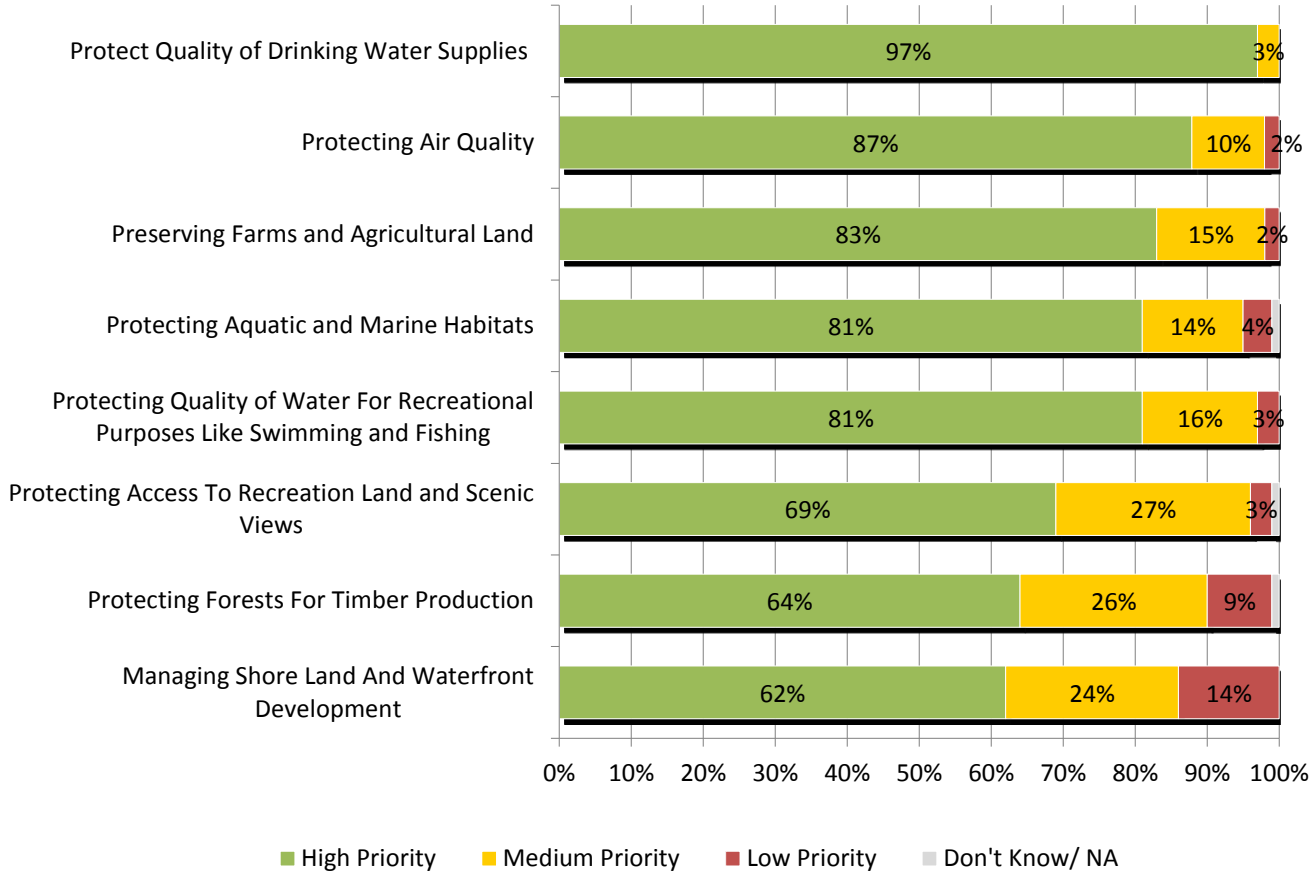
Methodology

Much of the content of this document incorporates or builds on existing statewide and regional plans, reports and guidance documents prepared by state or local agencies or organizations. However, to better understand the current conditions, issues and needs related to the topics covered in this Plan, the Lakes Region Planning Commission conducted a series of outreach activities including an Open House, regional meeting, a regional survey, and an Environmental workshop (January 2014). This chapter builds upon the information contained in local Master Plans and major regional planning documents. Staff also utilized information collected and gathered through the Granite State Future program, a statewide initiative of the nine regional planning commissions and multiple state agencies and partners to develop regional plans. Much of the environmental data incorporated in this document was provided by the NH Department of Environmental Services for regional planning purposes, especially the estimates contained in Attachments I and II. The process also involved Technical Advisory Subcommittees (TASC) who shares data and information on topics such as climate change, energy efficiency, water infrastructure, and natural resources. Throughout the process of preparing this document, the LRPC staff relied on the expertise its Lakes Region Plan Advisory Committee (LRPAC) to provide guidance and input into the development of plan's content, goals, objectives and proposed strategies.

An important planning document was the statewide and regional survey completed in mid-2013 by the UNH Survey Center. The Survey Center interviewed 2,935 New Hampshire adults by telephone during May, June and July of 2013. The response rate was 33 percent and the margin of sampling error for the survey is +/- 2.2 percent. In addition to the statewide survey, extra surveys were conducted in the Lakes-Central region in mid-summer. The following are the results for the Lakes Central regions.

"Nearly all residents (97%) view protecting water quality for drinking as a high priority for their community, followed by protecting air quality (87%), preserving farms and agricultural land (83%), protecting aquatic and marine habitats (81%), protecting water quality for recreational purposes like swimming and fishing (81%), protecting access to recreation land and scenic views (69%), protecting forests for timber production (64%), and managing shore land and waterfront development (62%)."

Figure 1 Priority Placed on These Environmental Issues



Structure

The Plan is divided into the following two sections:

1. The first section describes the Region's predominant natural resources (water, forest lands, air, wildlife, agriculture, open space) and highlights the most pressing challenges currently facing these resources.

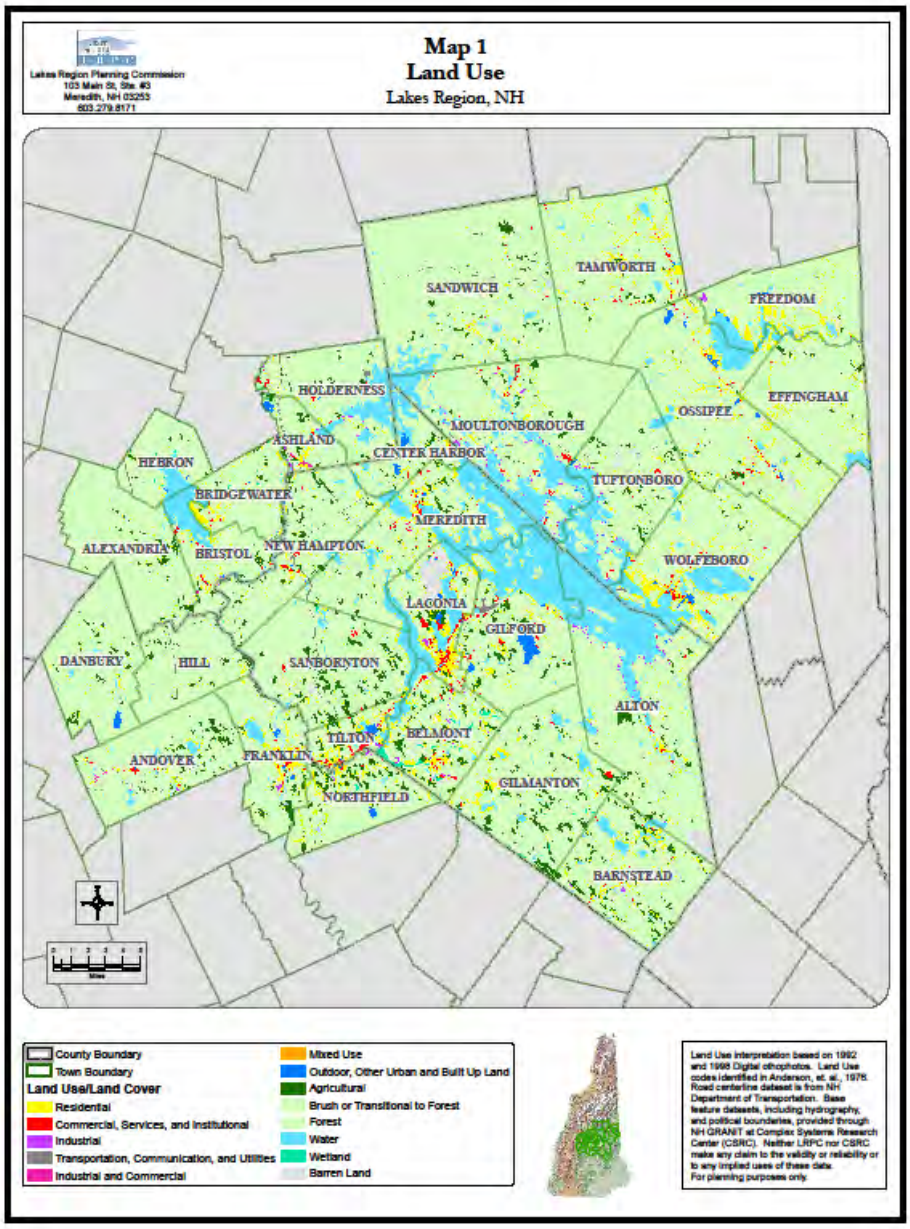
2. The second section addresses the Region's water infrastructure, including drinking water, waste water, and storm water.

The appendix contains two Attachments which are preliminary estimates of clean water needs prepared by the NH Department of Environmental Services. (DES), which offer the reader supporting information to the material included in the plan body.

SECTION I - NATURAL RESOURCES

Introduction

The region's abundant mountains, lakes, and pastoral settings provide residents and visitors with beautiful views and vast recreational opportunities. The region is composed of a system of inter-connected waterways. Of the total 818,000 acres composing the Lakes Region, 15 percent of the region is covered by surface waters and wetlands (LRPC, 2012). Map 1 illustrates the land use for the Lakes Region. These waterways, natural resources, and corresponding quality of life have been identified as the most important benefit to regional businesses.



Water Resources

Water bodies: Lake Winnipesaukee, New Hampshire's largest lake, has a total surface area of 44,600 acres. Maximum and mean depths are 180 and 43 feet, respectively. The lake is natural, but is raised by damming to an elevation of 504 feet. Eighty-three relatively small tributaries draining a watershed of 215,133 acres provide the main water source for the lake.

There are 240 miles of shoreline (this includes the shoreline length of islands over five acres in area) and about 250 islands (the total number of islands is frequently debated, depending on definition of "island"). The shores and many of the islands are well developed with numerous dwellings, from cottages to mansions, but some areas between the developments remain forested.

The table below list key features of other large water bodies in the region:

Table 1.1 Major Lakes of the Lakes Region

Lake	Area (acres)	Maximum Depth (feet)	Communities
Lake Winnipesaukee	44,600	180	Alton, Center Harbor, Gilford, Laconia, Meredith, Moultonborough, Tuftonboro, Wolfeboro
Squam Lake	6,700	99	Holderness, Sandwich, Center Harbor
Lake Winnisquam	4,300	150	Belmont, Laconia, Meredith, Sanbornton, Tilton
Newfound Lake	4,100	182	Alexandria, Bridgewater, Bristol, Hebron
Ossipee Lake	3,100	50	Freedom, Ossipee
Lake Wentworth	3,000	82	Wolfeboro
Lake Waukewan	900	70	Meredith, New Hampton

Lake Winnipesaukee Watershed Management Plan

Preparing a watershed management plan for Lake Winnipesaukee has challenged planners and decision makers for some time. In addition to being the state's largest water body and a significant economic force, its physical structure and shape represents a system of interconnected bays rather than a single cohesive body of water. Each embayment has differing characteristics and land-based influences and in-lake responses to nutrient inputs. Management plans are being prepared for each embayment.

More than 15 years ago, focus groups held throughout the Lake Winnipesaukee Watershed developed a vision describing a public/private partnership that would bring all interests together to speak with one voice. A concern for the future of the watershed and the need to balance recreational uses, development, and the economy with protection of water quality and healthy ecosystems was the consensus of the groups.

In December 2010, the **Winnipesauke Gateway** website (www.winnipesaukeegateway.org), a "one-stop shopping" source for maps, environmental plans, water quality data, recreational opportunities, was created. The website includes a significant amount of information concerning the Lake Winnipesaukee River Watershed, Watershed Management Plans for Meredith, Paugus and Saunders bays et cetera. Prepared by the Lakes Region Planning

Commission and a group of nine other partner agencies and organizations, this Watershed Management Plan will be followed by others. At present, plans are being prepared for the Center Harbor Bay watershed and a Moultonborough Bay Management Plan. The Winnipesaukee Gateway website is a unique approach to planning as the documents will remain online and easily accessible to all.

The Winnipesaukee Gateway website is now developing interactive water quality data and plans to coordinate with the NH DES environmental monitoring database.

Newfound Lake Watershed Management Plan
http://www.newfoundlake.org/watershedmasterplan.html)

In 2009, several partners, including the Newfound Lake Region Association, released *Every Acre Counts*, a Management Plan representing the results of a 30-month, $350,000+ regional environmental planning effort to protect the water resources of the 63,150-acre Newfound Watershed.

The Plan identifies threats to the shared natural resources and enumerates specific implementation actions designed to protect them. It helps to promote an understanding of the shared resources in the region, and is a key component in managing those resources on a watershed scale, a scale that goes well beyond individual town boundaries. This plan provides a comprehensive analysis of the Newfound Watershed and creates a "toolkit" of implementation actions and methods to maintain and improve the environmental quality of the watershed into the future.

Wetlands: Wetlands play a valuable functions as they are needed for slowing and storing floodwaters, promoting infiltration, removing excess nutrients and sediment from the water, and providing habitat for a variety of vegetation and animal life. Wetlands vary widely because of regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation, and other factors, including human disturbance.

The federal Clean Water Act, Environmental Protection Agency (EPA) and NHDES have defined wetlands to mean "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Wetlands include swamps, marshes, bogs and similar areas.

Concerns and Issues:

- Need for continued education and outreach on water quality issues;
- Regional cooperation on a watershed basis; review and update watershed management plans;
- Consideration of local land use regulations and Best Management Practices; and,
- Successes of the Waukewan Watershed Management Plan are valuable learning tools.

The Waukewan Watershed Management Plan – a success story

"It started with a recommendation in the 2002 Meredith Master Plan," stated John Edgar, AICP, Community Development Director for the Town of Meredith when referring to the Waukewan Watershed Management Plan and its story. The recommendation lead to the Waukewan Watershed Management Plan in 2005 prepared by the NH Rural Water Association, with guidance from the Waukewan Watershed Advisory Committee (to the Town of Meredith). The watershed includes the Towns of Ashland, Center Harbor, Holderness, New Hampton, and Meredith. Town officials and townspeople from the five-town area embraced a shared vision for lake protection early on by recognizing the adverse impact of phosphorus and cyanobacteria was having on the lake. The lake serves as the water supply for the Town of Meredith.

The plan identifies potential pollution sources and recommends mitigation strategies. "The plan put the spotlight on Waukewan," stated Edgar and enabled much progress to occur since 2005. Educational efforts included the "Dos and Don'ts" of the lake, the "Don't Pee *(meaning phosphorus and pesticides)* in the Lake," low impact development (LID), demonstration projects, cyanobacteria and septic system workshops among others. Town conservation commissions played a critical role in acquiring key conservation parcels such as lands along the Snake River, an important tributary into the lake. The Town of Meredith adopted a septic system health regulation and a Waukewan Overlay Zoning District. Taken together, the cumulative result of these efforts, or "implementation steps" in planner jargon, have improved water quality in the lake.

According to Edgar, the take away message is that the planning process is "never done, needs to be sustained, and education of the community and landowners is ongoing." The Waukewan Watershed Advisory Committee is beginning to expand and update the 2005 watershed plan. The 2005 plan can be found at http://meredithnh.org/Joomla/pdfdocs/WWAC%20Management%20Plan.pdf

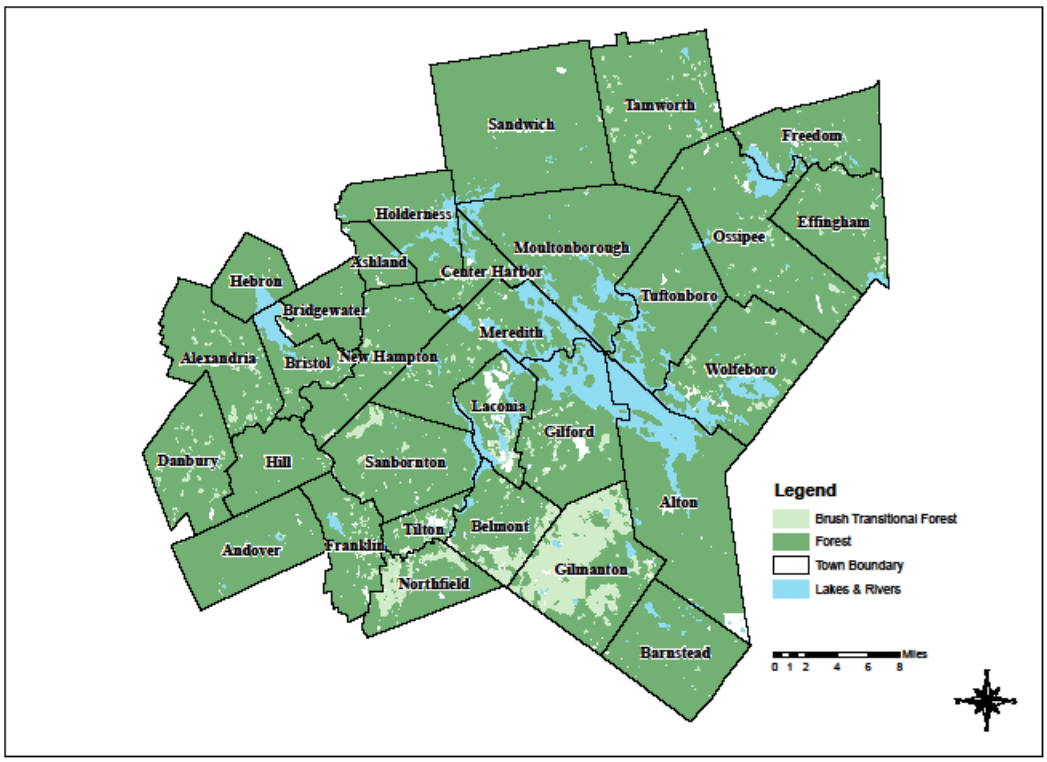
Forest Resources

Forests of the region provide many functions. New Hampshire is the second most forested state in the nation on a percentage basis, after Maine. Forests improve the ability of the landscape to absorb rainwater, slow down the rate of runoff (from precipitation and snow melt), absorb and assimilate fertilizing compounds into new tree growth, increase ground water infiltration, and buffer surface waters from sedimentation and contamination. In addition, trees take carbon from the atmosphere and store it as wood fiber.

Forests also provide valuable habitat for plant, animal, insect, and microorganism populations and are appreciated by residents and visitors who enjoy scenic recreational trails and hunting grounds. In addition, well-managed forests provide a variety of products including saw logs, firewood, and biomass harvested for energy production that provide a livelihood for forest landowners, foresters, loggers, truckers, processing and energy generation facilities. Forests are a major contributor to the Lakes Region economy and continue to be an important part of the manufacturing sector in the Lakes Region, as well as being a source of periodic income for the landowners who have chosen to maintain their woodlots as open space.

Map 2 shows that 693,075.7 acres (84.6 percent, which is almost identical to the State average) of land are currently classified as forests within the Lakes Region. This category also includes lands classified as "brush" or "transitional forests" of which 8 percent of the forested land in the region falls into this group. Diverse hardwoods dominate most of the Lakes Region. The largest tracts of brush and transitional forests are currently found in Gilmanton.

Map 2 Forest Land



The forest products industry in the Lakes Region plays a significant role in the regional employment picture, especially in the more rural parts of the region. Statewide, there are an estimated 1,200 loggers in the industry plus an additional 1,200-1,400 employed as truckers and foresters. The forest products industry statewide was a $1.4 billion dollar industry in 2012, representing the third largest manufacturing sector of the New Hampshire economy. Much of the land identified as forest has been subdivided into residential lots that have yet to be built upon.

The professional workforce in the forest products industry allows landowners and land managers opportunities to achieve a wide range of goals and objectives, from wildlife habitat improvement to periodic income production. In the Lakes Region counties of Belknap, Carroll, and Merrimack, direct payments to landowners in 2012 is estimated at $7 million dollars. It is important to note that these payments also provided an estimated $700,000 in Timber Tax revenue to local municipalities.

Trends in the industry are toward more mechanization in both the harvesting and lumber making processes. This trend is resulting in both a safer industry and a higher production on a per-person hourly basis. This demands a higher skilled and paid work force. While New Hampshire benefits from strong markets for most of its forest products, especially the high quality pine and hardwood lumber, there are noteworthy market trends. In the next 10 to 15 years, experts predict a continued decline in demand for smaller or low-grade logs used in the pulp and paper making process. This material already moves over long distances to be utilized. The Lakes Region would be wise to develop value adding process facilities to maximize the value of locally harvested timber. Fortunately, there are some emerging

markets to compensate for the potential declining demand from the pulp industry. One emerging market is in the wood-to-energy sector, where institutions, commercial buildings, multi-family residential housing, and community facilities are converting fossil fuel heating plants to wood fueled heating and combined heat and power systems using wood chips and pellets. The newly formed New Hampshire Wood Energy Council is actively promoting the use of local wood as fuel to meet the heating and renewable electricity needs of the Lakes Region.

Because of the length of time needed to grow forest crops and the low return on long-term investments, many forest management decisions are short sighted and focus on short-term financial returns. This affects the sustainability of growth and yield for future harvest. In addition, the relatively low price offered for forest stumpage and the cost of harvesting, transportation, and manufacturing encourages forest land owners to look for higher profits offered by development.

New Hampshire forests are currently threatened by imported insects, fungus, and plants that have no natural controls. Imported Chestnut blight, Butternut Canker, and Dutch Elm disease have already eliminated three tree species from our forests. Imported White Pine Blister Rust, Beech Scale, Gypsy Moth, and Hemlock Woolley Adelgid can kill or seriously degrade its host tree. Introduced plants like Garlic Mustard, Oriental Bittersweet, Glossy Buckthorn, and European Bittersweet can climb and kill native trees or completely take over the ground area preventing new trees from getting established. In addition, newly imported insects like the Emerald Ash Borer, Asian Long Horned Beatle, Red Pine Scale, and the Sirex Wood Wasp are close or already in our state. These and other potential foreign insects, plants and diseases are expensive to combat and can seriously affect the health and productivity of our forests.

Issues and Concerns:

- Need for continued education and outreach on best forestry management practices;
- Need to maintain and improve current incentives (i.e. current use tax policy) in order to retain land in forest production;
- Need to retain large unfragmented blocks of land through land conservation;
- Forest landowners should prepare forest management plans with assistance of a forester;
- Need to monitor invasive insects which threaten our current species composition; and
- Information on the effects of climate change on forests.

Wildlife Resources

Residents of the Lakes Region value native wildlife species for a number of reasons. Some merely enjoy their presence, some rely on wildlife for sport, food, or income and others have general interests in wild creatures. The region's most critical wildlife species are generally thought of as those which yield significant economic return, provide for sport and subsistence hunting, are symbolic of wilderness values, or face the threat of extirpation or extinction. A viable habitat is the single most important survival need for most of these species.

Wildlife species are also affected by foreign and imported diseases as well as environmental issues. Bats that hibernate in caves are nearly extinct due to Smutty Nose Syndrome, a fungus imported from Europe. White Tail Deer are threatened by deer wasting disease, and moose are on the decline from the winter tick. This is thought to be an effect of climate change. Loons struggle with lead poisoning due to ingesting fishing tackle, and fish are contaminated with mercury.

The 2007 New Hampshire Wildlife Action Plan (WAP) identified 19 different habitat types of conservation concern. The New Hampshire Ecological Reserve System Project (renamed to the Living Legacy Project) used expert panels to assess population conditions and vulnerability of species in New Hampshire. A list of critical wildlife habitats was developed based on the habitat requirements of associated wildlife species of concern in the state. Of the 19 different habitat types that were identified by the WAP, 12 of them are located in the Lakes Region. These habitats include:

- Caves and mines
- Cliffs
- Floodplain forests
- Grasslands
- Hemlock-hardwood-pine forests
- High-elevation spruce-fir forests
- Lowland spruce-fir forests
- Marsh and shrub wetlands
- Northern hardwood conifer forests
- Peatlands
- Talus Slopes and Rocky Ridges
- Vernal Pools

According to the NH Wildlife Action Plan (WAP), the loss of habitat occurs due to the conversion of land to other uses, such as commercial and residential development. The New Hampshire Natural Heritage Bureau tracks exemplary natural communities and rare animal species. Their survey includes plants, animals and natural communities in each municipality. According to the NH Natural Heritage Bureau, most of the New Hampshire landscape is covered by relatively common natural community types.

Seventeen natural communities in the Lakes Region were flagged at the extremely high importance and highest importance levels. The New Hampshire Natural Heritage Bureau describes natural communities as an assemblage of plants and animals that recur in predictable patterns across the landscape under similar physical conditions. To be considered an exemplary natural community, the community must be of rare type or must be an undistributed occurrence of a community in good condition. Below are the natural communities found in the Lakes Region:

- Alder
- Highbush blueberry
- Mixed Pine
- Leatherleaf
- Low-gradient silty-sandy riverbank system
- Medium level fen/bog system
- Poor level fen/god system
- Short graminoid
- Tall graminoid meadow march
- Temperate minor river floodplain system
- Pitch pine
- Red maple floodplain forest
- Red oak
- Rich red oak rocky woods
- Herbaceous riverbank/floodplain
- High-elevation spruce-fir forest system
- Kettle hole bog system

Each listed type represents one of the best examples of biodiversity. According to the New Hampshire Natural Heritage Bureau, biodiversity is the variety and variability of all living organisms. If exemplary natural communities are protected, a majority of New Hampshire's species will also be protected.

There is a need to control invasive species. According to the University of New Hampshire Cooperative Extension, non-native species are capable of moving aggressively into an area, monopolizing light, nutrients, water, and space to the detriment of native species. The loss of wildlife habitat is a concern throughout the state. According to the NH Wildlife Action Plan, only 5.8 percent of top tier wildlife habitat is held in conservation. The loss of these areas is primarily due to the conversion of land uses such as commercial and residential development and farming. With the loss of adequate habitat, there is an even greater concern for the federally and state listed endangered species.

As development continues, wildlife faces challenges for survival and safe corridors to travel forcing them into more densely populated areas and roadways. An additional threat comes from non-native plant species moving aggressively into the area monopolizing light, nutrients, water and space to the detriment of the native plants. This change in the ecosystem can affect the food and nesting sources of many wildlife species.

Issues and Concerns:

- Loss of habitat due to the conversion of land to other uses, such as commercial, and residential development;
- Some habitats require maintenance to maintain biodiversity;
- Nuisance wildlife, vehicle collisions, predation, disease like West Nile Virus, as a result of human interaction with wildlife and/or habitat; and
- A need to detect and control invasive species.

Air Resources

In the area of air quality and climate issues, federal and state law preempts local control. In New Hampshire, the Air Resources Division (ARD), one of three divisions of the NH Department of Environmental Services, is responsible for achieving and maintaining air quality in the state that is protective of public health and our natural environment. The Division promotes cost-effective, sensible strategies and control measures to address the many complex and inter-related air quality issues facing the state. These issues include, but are not limited to, ground-level ozone, small particle pollution, regional haze (visibility), mercury contamination, climate change, acid deposition, and air toxics. The components of New Hampshire's Air Quality Program are designed to respond to the many complex air quality issues through such tools as local, regional and national collaborations, data gathering, analysis, and control efforts.

There are fourteen air quality monitoring stations positioned throughout the state with one located in the Lakes Region at Green Street in Laconia.

There are thousands of different air pollutants, defined as any gas or particle found in concentrations in excess of what is of natural origin. While some are relatively benign, others may be found in concentrations high enough to cause health or environmental impacts. Almost any gas or particle in high enough concentrations will cause some type of health response. Generally, air pollutants of most concern fall into three categories: the criteria pollutants, regulated toxic air pollutants, and greenhouse gases.

For additional information, visit the DES website on air quality at
http://des.nh.gov/organization/divisions/air/

Current conditions and recent trends: The NH DES website has considerable information regarding air quality. The ARD provides information on air quality via its air monitoring stations and website. DES also issues Air Quality Action Days which occur when ozone and/or fine particle pollution is forecast to reach unhealthy levels. During an Air Quality Action Day, people are encouraged to take precautionary measures to protect their health.

Fortunately, in the Lakes Region, air quality has remained good and it has not exceeded the ozone standard since 2010. During that summer there was only one exceedance. Looking back over the past 10 years, the ozone concentrations in the Lakes Region have been on a downward trend with less exceedances each year. The Lakes Region rarely experiences unhealthy air quality and has not had an Air Quality Action Day in a number of years.

The Lakes Region is in attainment and meets current state and federal air quality standards. Because of its attainment status, the region is not mandated to consider air quality in our transportation planning. The Commission promotes the reduction in vehicle miles traveled through the encouragement of public transportation, carpooling, and ride sharing programs.

Issues and Concerns:

- Additional information on air quality issues in the Lakes Region;
- Better understand the relationship between air quality, land use, and transportation;
- Wood smoke from low combustible outdoor wood furnaces;
- Continued state efforts to improve air quality; and
- Guidance from the NH Climate Action Plan.

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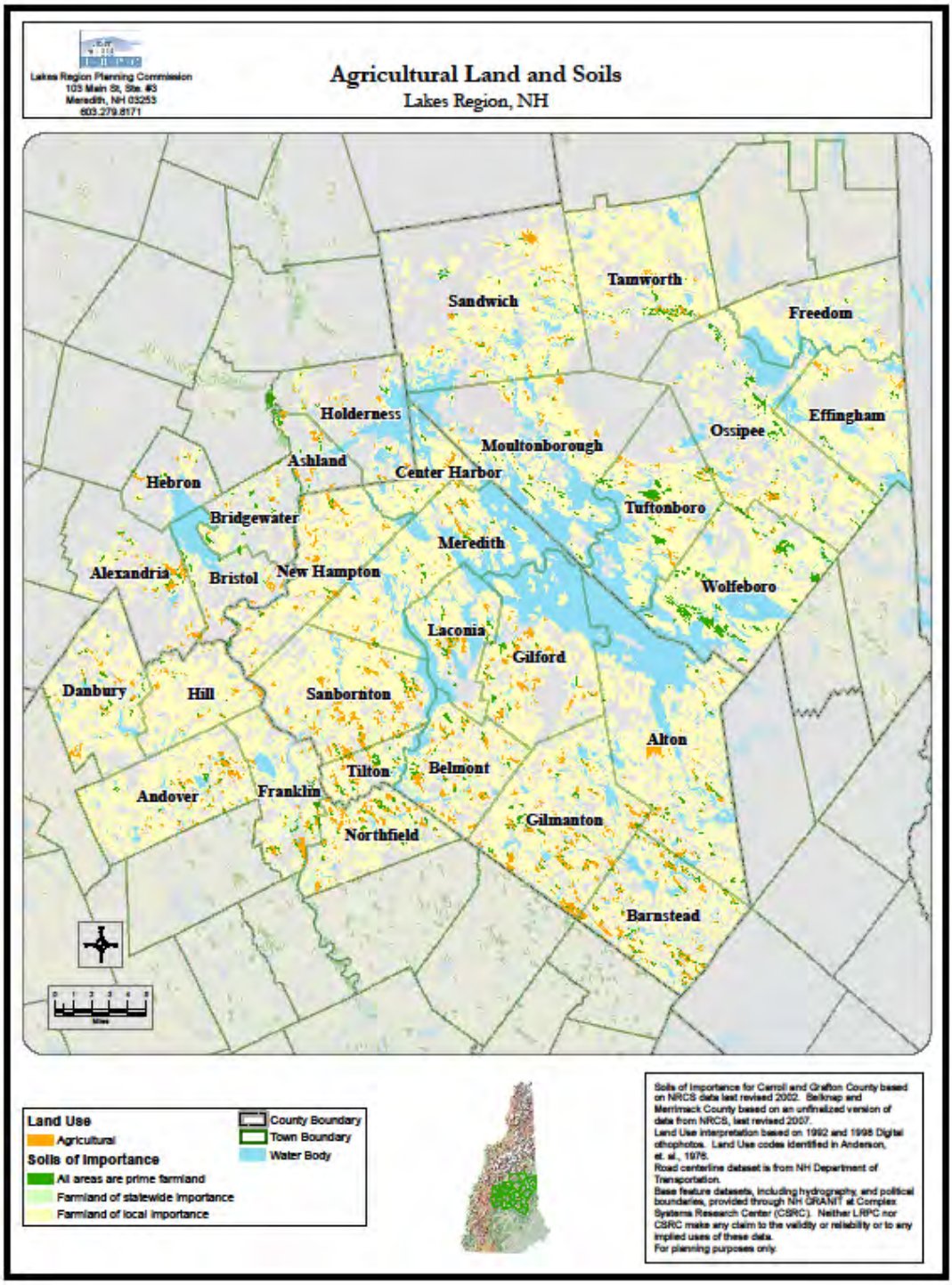
Agricultural Resources

The definition of agriculture under New Hampshire RSA 21:34-a is very broad and includes:

- All breeding, raising, and selling of livestock;
- Siliviculture, honey and maple syrup production;
- Crops ranging from vegetables and fruit to hay and seeds; and
- The processing, storage, and transportation of agricultural products.

In the past, agriculture was widespread throughout the Lakes Region. Most New Hampshire soils were not capable of sustaining agricultural crop production and farming, and as the industrial revolution evolved, farming declined. Eventually most farms were developed or returned to forest lands. While small farming ventures are increasing, they are using existing farmland and creating new land for farming. Today, approximately 3.73 percent of the region's land is used as agricultural land (LRPC, 2012). There are efforts to conserve these fields, meadows and woods with various land trust tools such as land acquisition, conservation easements or purchase of development rights, thereby protecting the agricultural lifestyle and beautiful landscapes unique to the Lakes Region.

Although soils are not consistently fertile (only two percent of New Hampshire soils are classified as prime agricultural soils), certain areas are very productive for agriculture or forestry (see Agricultural Land and Soils Map below). The region has a wide range of agricultural businesses, both retail and wholesale. Businesses include everything from large-scale farm product operations, farmers markets, pick-your-own fruits, dairies, Christmas trees, maple syrup, livestock operations, and horticultural growers to niche markets, agricultural tourism, and retail. There are also community gardens where people grow their own food and surplus is given to food pantries.



Farming opportunities in the Lakes Region are diverse and expanding due to the farmers' resourcefulness and adaptability to new opportunities. Farms in niche markets, such as organic foods, are gaining in popularity. There are currently farmers markets and farm stands in nearly every town in the region, whereas in the 1990s there were about 12 in the entire state. Some communities hold indoor markets in the winter as a way of providing

year-round opportunities for local farmers to market to their neighbors. Several larger farms in the region are now pre-selling their produce to customers who pick them up each week. The practice is referred to as Community Sustainable Agriculture (CSA). The New Hampshire Department of Agriculture believes this may be due, in part, to consumers looking for more local food sources amid fuel increases, national food recalls, and a focus on more sustainable living.

Trends include small farms, owned and operated by women, diversified inventory and seasonal extensions, marketing, the "buy local and eat local" movement, networking and science based operational methods and the desire to remain connected with the land through agriculture. Large supermarkets and restaurants are promoting the buy local and eat local approach. Examples of small farms that are growing commercial operations with a specialty include:

- Fox Farm, Gilmanton — vegetables, berries and organic free-range eggs;
- Twillingate Farm, Gilmanton — raw and aged goat milk, cheese, vegetables, herbs;
- Meredith Center Dairy, Meredith — raw milk, honey, maple syrup, jams;
- Minglewood Farm, Laconia — vegetables, small fruits, herbs, worms;
- Three J Farm, Danbury — organic beef, vegetables.

The complexities of federal, state, and local policies placed upon those engaging in agriculture for financial gain, whether a very small homestead operation or larger business venture, has led the agricultural community to form grassroots organizations and/or networks to share information, equipment, and other resources. In the Lakes Region there are a number of these groups inviting new membership such as the Lakes Region Food Network, the Barnstead Farmers and Gardeners Network, and Local Foods Plymouth. Statewide, there are groups such as the Northeast Organic Farmers' Association and the Small and Beginner Farmers of New Hampshire.

<u>Issues and Concerns:</u>

- Additional information on agricultural opportunities in the Lakes Region;
- Be aware and supportive of agricultural trends — small farms, diversified inventory, marketing, "Buy Local & Eat Local," network and science based operations methods; and
- Understand the challenges regulation, rising costs, unfriendly local ordinances, loss of farmland, food safety, food security, aging farmers and financing of young farmers.

Land Conservation

According to the Society for the Protection of NH Forests (SPNHF), in 2003, approximately 97,330 acres (11.8 %) in the region were conservation or public lands. As of 2014, there are 128,428 acres of conservation or public lands, comprising 15.7 percent of the total land area in the region. Land trusts throughout the region have assisted landowners, towns, and organizations accomplish this increase. One such example is the Lakes Region Conservation Trust. Since 1979, the Trust has worked with landowners in nearly every town in the region to protect more than 21,700 acres of land with ecological, scenic, recreational, or historical value, including 32 miles of shoreline on Lake Winnipesaukee, Squam Lake, and other lakes, ponds, rivers, and streams throughout the Lakes Region, 19 summits, and 85 miles of hiking trails. Table 1.2 shows the total amount of conservation and public lands in each town in the region.

Table 1.2 Acres of Conservation and Public Lands in the Lakes Region by Town

Municipality	Acres of Conservation and Public Lands*	Percent of Total Municipal Area (land and water)	Percent of Total Lakes Region Conservation and Public Lands
Alexandria	3,446	12.3%	2.7%
Alton	3,795	7.1%	3.0%
Andover	6,020	22.9%	4.7%
Ashland	968	13.1%	0.8%
Barnstead	1,221	4.3%	1.0%
Belmont	403	2.0%	0.3%
Bridgewater	161	1.2%	0.1%
Bristol	908	6.5%	0.7%
Center Harbor	574	5.5%	0.4%
Danbury	2,317	9.5%	1.8%
Effingham	6,252	24.5%	4.9%
Franklin	2,947	15.8%	2.3%
Freedom	4,609	19.0%	3.6%
Gilford	6,357	18.6%	4.9%
Gilmanton	6,058	15.9%	4.7%
Hebron	707	5.9%	0.6%
Hill	4,144	24.2%	3.2%
Holderness	1,661	7.2%	1.3%
Laconia	952	5.7%	0.7%
Meredith	2,455	7.0%	1.9%
Moultonborough	13,328	27.7%	10.4%
New Hampton	2,834	11.5%	2.2%
Northfield	197	1.1%	0.2%
Ossipee	8,739	18.1%	6.8%
Sanbornton	4,143	13.0%	3.2%
Sandwich	23,070	38.3%	18.0%
Tamworth	13,569	35.0%	10.6%
Tilton	99	1.3%	0.1%
Tuftonboro	4,165	13.1%	3.2%
Wolfeboro	2,329	6.2%	1.8%
Total	**128,428**	**15.7%**	**100%**

Society for the Protection of NH Forests 2012

The Society for the Protection of NH Forests (SPNHF) and its partners, including the LRPC, studied an area larger than the jurisdiction of the Lakes Region Planning Commission. The SPNHF study area encompasses 41 communities (mostly in Belknap and Carroll Counties) and comprises a little more than one million acres (1,660 square miles). This area represents about 20 percent of New Hampshire's total area and contains six of the ten largest lakes in New Hampshire — Winnipesaukee, Squam, Newfound, Ossipee, Winnisquam and Wentworth — and is dotted with a total of 224 lakes and "great ponds." Great ponds are defined as water bodies with 10 acres or more in size. The area's almost 93,000 acres of lakes and ponds represent 50 percent of all the surface water in the state.

The quality and quantity of water flowing into these lakes and ponds is directly correlated to the extent and condition of the region's forests. The natural forest cover "produces" clean water by capturing, collecting, and naturally filtering rainwater that then feeds surface and groundwater systems. A 2009 U.S. Forest Service report identified threats to the nation's private forests and stated that "watersheds with more forest cover have been shown to have higher groundwater recharge, lower stormwater runoff, and lower levels of nutrients and sediment in streams than do areas dominated by urban or agricultural uses."[1] Conversely, the report goes on, "water quality and quantity can be altered when forest vegetation is replaced by housing and associated roads, parking lots, driveways, and rooftops."[2]

Table 1.3 Land in Conservation by Ownership

Protection Agency	Number of Tracts	Total Acres	Percent of All Protected Lands
Municipal	482	26,110	14.8%
Federal	25	35,097	19.9%
State	187	43,230	24.5%
Quasi-Public	10	226	0.1%
Private	664	71,912	40.7%
Totals	**1,368**	**176,575**	

At present, 176,575 acres of land is in permanent conservation in the SPNHF study area. This includes land owned outright ("in fee") by public agencies or private organizations, conservation easements (CEs), and in a few cases deed restrictions. This base of conservation land represents 18.8 percent of the total land area of the 41-town region studied by the Forest Society and its partners. The current statewide number for conserved land is 30.6 percent. The SPNHF recommends that about 25 percent of a municipality's land area be conserved as open space or conservation land. The chart above indicates the major conservation categories.

The U. S. government holds about 20 percent of the conservation land in the Lakes Region, with most of this comprising 32,000 acres that form the southern edge of White Mountain

[1] Private Forests, Public Benefits—Increased Housing Density and other Pressures on Private Forest Contributions*, USDA Forest Service, 2009, p. 16*

[2] *Ibid., p. 19*

National Forest. The U.S. Army Corps of Engineers also owns about 3,200 along the Pemigewasset River above the Franklin Falls dam.

The State of New Hampshire holds more than 43,000 acres of conservation land and conservation easements in the Lakes Region, or roughly a quarter of the regional total.
Source: SPNHF, 2011

The bulk of this is protected by two agencies, the NH Department of Resources and Economic Development (DRED), which holds about 32,500 acres, and the NH Department of Fish and Game (NHFG), which holds another 9,200 acres. Notable DRED lands in the western Lakes Region include Cardigan Mountain State Forest, Wade State Forest, and William H. Thomas State Forest. DRED manages Belknap Mountain State Forest in Gilford and has a number of large holdings in the Ossipee Lake watershed, including Pine River State Forest, the Ossipee Pine Barrens and Freedom Town Forest conservation easements (both purchased using federal Forest Legacy funds), the Ossipee Lake and Heath Pond Bog Natural Areas, Hemingway State Forest and White Lake State Park. Larger N.H. Fish and Game holdings in the region include the Kona Wildlife Management area on the north shore of Winnipesaukee, Jones Brook Wildlife Management Area in the Moose Mountains, and the Hidden Valley easement in the Belknaps.

Municipalities hold another 26,000 acres of conservation land in the Lakes Region, or about 15 percent of the total. These lands are typically small, comprising 482 separate tracts scattered across the 41 towns of the region.

A notable accomplishment in the Lakes Region is the amount of private conservation land. Private lands account for almost 72,000 acres, or 41 percent of all the conservation land in the area; the statewide average is 19 percent.

The SPNHF is the largest private holder of conservation land and conservation easements in the Lakes Region, holding interests on more than 28,000 acres across almost 300 properties. Significant SPNHF holdings include conservation deed restrictions on a 5,600-acre portion of the Chocorua Forest Lands in the Ossipee Mountains, the 2,170-acre High Watch Preserve in Effingham, the 2,325-acre Moose Mountains Reservation, 1,800 acres of fee ownerships and conservation easements in the Belknaps, and the 1,001-acre Cockermouth Reservation near Newfound Lake.

The Lakes Region Conservation Trust (LRCT) is the next largest private conservation landowner in the region, holding interests on nearly 150 properties encompassing 16,000 acres. Most of the Trust's acreage is concentrated in three large holdings: the 5,245-acre Castle in the Clouds property on the southwestern slopes of the Ossipees, 2,748 acres of fee lands and easements on Red Hill in Moultonborough, and 2,875 acres on the northeast slopes of the Ossipees in Tamworth.

The New England Forestry Foundation holds about 6,000 acres in the Lakes Region, including a large concentration of land totaling 3,100 acres on Hersey Mountain in New Hampton and Sanbornton. The Nature Conservancy is holds interests in about 4,500 acres in the Lakes Region, including 2,800 acres in the Ossipee Pine Barrens. Several other private groups hold significant acreage in the region, including the Squam Lake Conservation

Society (3,200 acres), Squam Lakes Association (2,600 acres), Chocorua Lake Conservation Foundation (3,000 acres), and the Green Mountain Conservation Group (1,000 acres).

Much of this conserved area is high elevation, steep slopes or wetlands that are not suitable for development. Very little lake, river or stream shorefront is protected from development. The conservation of these and other lands suitable for development are rare and usually isolated. It would be desirable to increase the size of these types of holdings and to connect them with other large conservation areas to allow the free flow of wildlife species.

Concerns and Issues:

- Educate the public on the water quality and land conservation connection and link;
- Education on the green infrastructure and the value it adds through connectivity;
- Continued interest and support for land conservation; and
- Education on benefits of key parcels to be acquired.

The following is story of the actions of a private conservation minded landowner.

In 2011 the Town of Tuftonboro voted to place a conservation easement on Town owned land known as the Great Meadow. The Great Meadow consists of 176 acres of a 512.8 acre wetland complex which is ranked the highest for ecological integrity in the region, provides recharge for the area aquifers and includes 22 different natural communities, some rare in the State. Located at the headwaters of the Melvin River, the Great Meadow helps protect Melvin Bay and the upper part of Lake Winnipesaukee by intercepting floodwaters and capturing sediments and nutrients from upstream sources prior to reaching the lake. The Commission continues its effort to ensure permanent protection of this wetland complex. Lakes Region Conservation Trust has agreed to be the easement holder and the Commission continues to work through the process of securing this conservation easement.

Through the generosity of Catherine Nesbit, a conservation easement was gifted to the Town of Tuftonboro Conservation Commission and executed on July 22, 2013. The 32.27 acre parcel, located on Tuftonboro Neck Road, boasts 31 acres of undeveloped forest land consisting mostly of stands of white pine. The property provides a woodland habitat and includes features of historic interest, trails, streams, wetlands, and abuts other open space. As a result of Ms. Nesbit's generous gift, another parcel of land will be preserved and protected.

The Forest Society has an ambitious program to encourage the voluntary conservation of high resource value land in the Lakes Region. For additional information, visit the following their website at http://www.forestsociety.org/landconservation/lakes-region.asp

Recommendations

Natural resource planning provides the foundation for a comprehensive approach to land development. The following are recommendations for consideration when formulating a management approach for the protection of natural resources. The LRPC is available to collaborate and/or provide the following services to local communities: collect data and information; convene educational workshops; facilitate and coordinate programs; provide model ordinances; develop specific natural resource based ordinances; provide technical assistance; and assist with grant writing.

Natural resources normally involve two or more municipalities. When the management of the region's natural resources occurs on a collaborative and sub-regional approach, it can be more effective when neighboring towns recognize the interdependence of natural resources and the need to partner with neighboring communities. Planning on a watershed basis becomes more effective when it employs partnerships and multi-tools: inter-governmental partnerships (municipal, regional, and state); inter-municipal partnerships; partnerships with conservation commissions; partnerships with state funding agencies; coordination with private institutions; education and public outreach; and use of local planning regulations and local enforcement mechanisms. In many communities across the county, this approach is known as "collaborative planning" and is generally used for integrating natural resource and watershed management strategies based on environmental, economic, and social considerations. Collaborative planning when it includes public participation can be an effective education tool as participants learn about the issues, challenges and resources involved with the plan.

An integrated ecosystem and watershed management approach should ensure that natural resources are managed to yield the greatest sustainable development approach. LRPC will pursue the following strategies.

- Consider Smart Growth principles along with sustainable development and natural resource principles;
- Encourage municipalities to review the Natural Resource Chapter of the Master Plan for opportunities to incorporate new information and planning approaches;
- Determine if any additional natural resource regulations are needed;
- Coordinate with neighboring communities for watershed management planning;
- Educate the public and municipalities on the Lakes Region Conservation Plan prepared by the SPNHF;
- Monitor trends in land protection, open space acquisition and farmland preservation;
- Encourage communities to be aware of important and key properties in their community and in the Lakes Region and to establish priorities to maximize the benefits of what land can be preserved; and

- Encourage communities to understand land use and natural resource issues in neighboring communities so that planning among communities can be better coordinated.

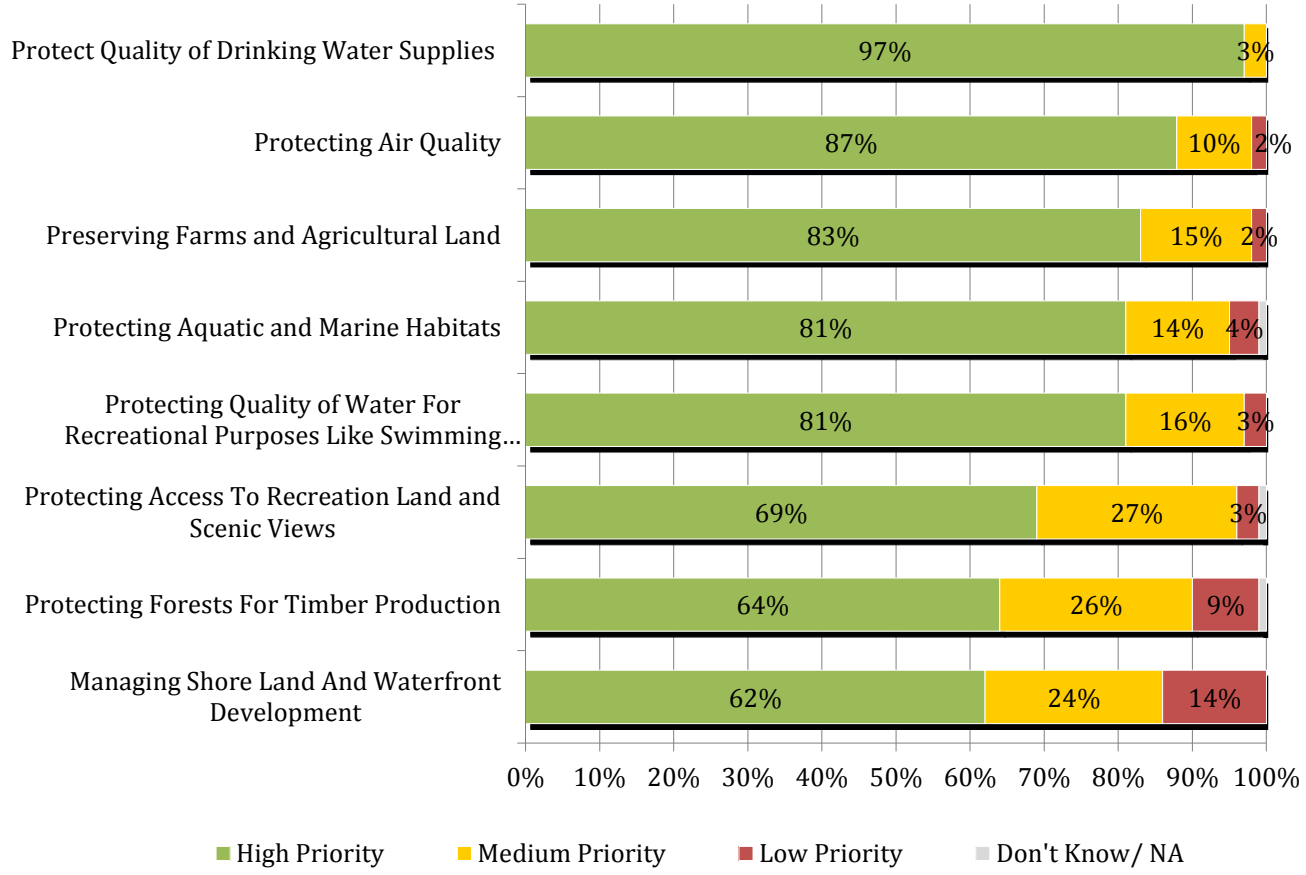
SECTION II - WATER INFRASTRUCTURE

Introduction

The water quality management process set forth in the federal Clean Water Act involves many steps: goals and water quality standards must be set, monitoring conducted, water quality assessed, attainment decisions made, and adaptive management strategies must be developed and implemented. These steps apply to many different waterbody types, including lakes, ponds, rivers, streams, wetlands, and estuarine systems. Since water quality issues extend beyond municipal boundaries, it is important to consider these issues at a watershed, regional, state or multi-state level. The NH Department of Environmental Services (DES) plays a very important role both as regulator of federal and state environmental laws and as a source of education, information, and technical assistance. Water quality is a complex and interrelated system. The direct discharge of industrial and community sewage to rivers and lakes has been eliminated. Today water pollution comes mainly in the form of fertilizing compounds that encourage algal and bacterial growth in our streams and lakes. Some arrives from the air, from industrial sources, and is transported in the rain and by stormwater runoff. Additional amounts originate from septic systems or affluent released from sewage treatment plants. Other amounts are washed in from fertilized lawns and poorly designed landscaping.

Water Infrastructure includes a discussion of wastewater treatment plants, septic systems, water supply systems and stormwater management. As noted, the UNH regional survey identified the protection of water quality as the highest priority in the Lakes Region. Water quality is also recognized as the Lakes Region's most important resource, and a high level of water quality is directly related to business and economic success, employment opportunities, and the region's overall economic viability.

Figure 1 – Priority of Community Issues



Source: 2013 Statewide Survey – Central & Lakes Region, UNH Survey Center, 2013

Wastewater Treatment Systems

Modern and up-to-date wastewater treatment facilities and septic systems ensure that the water quality in the region will be maintained. Within the region, there are eight relatively small wastewater treatment facilities, with a large regional facility known as the Winnipesaukee River Basin Project (WRBP), operated by the NH DES and located in Franklin, NH. Table 2.1 lists the facility, its capacity, average daily flow, and treatment process. The Water & Sewer Services Map below shows the areas serviced by public sewer and public water. While some facilities have expansion plans, due to the region's current slow growth environment, no expansion projects are anticipated in the next three years. While wastewater treatment has become safer and more efficient, issues remain such as becoming more energy efficient, addressing climate change issues and meeting or exceeding environmental regulations. It is now understood that fertilizing compounds like phosphorous and nitrates need to be removed from wastewater in order to prevent pollution of downstream waters.

Table 2.1: Waste Water Treatment Facilities in the Lakes Region				
Facility	**Area Services**	**Design Flow* (MGD**)**	**Daily Flow /Percent of capacity Used**	**Process**
Ashland Wastewater	Ashland	1.6	0.97 / 60.6% Used	AL/CwDC
Bristol Wastewater	Bristol	0.5	0.205 / 41%	OD/CwDC
Center Harbor Wastewater	Center Harbor, Moultonborough	0.2		PS/FL
Franklin Wastewater - Winnipesaukee River Basin Project	Franklin, Laconia, Gilford, Belmont, Northfield, Tilton, Meredith, Sanbornton	11.51	5.90 / 51.3%	AS/UV/w C backup
New Hampton Village Precinct	New Hampton	0.08	Unknown	AL
Ossipee Wastewater	Ossipee	0.11	0.0605/ 55%	ST/SD
Plymouth Village Water & Sewer District	Holderness	0.7	0.430 / 61.4%	RBC/CW DC
Sandwich Wastewater	Sandwich	0.02	Unknown	ST/SF/SD
Wolfeboro Wastewater	Wolfeboro	0.6	0.380 / 63.3%	EA/SI

Source: NH DES Wastewater Engineering Bureau

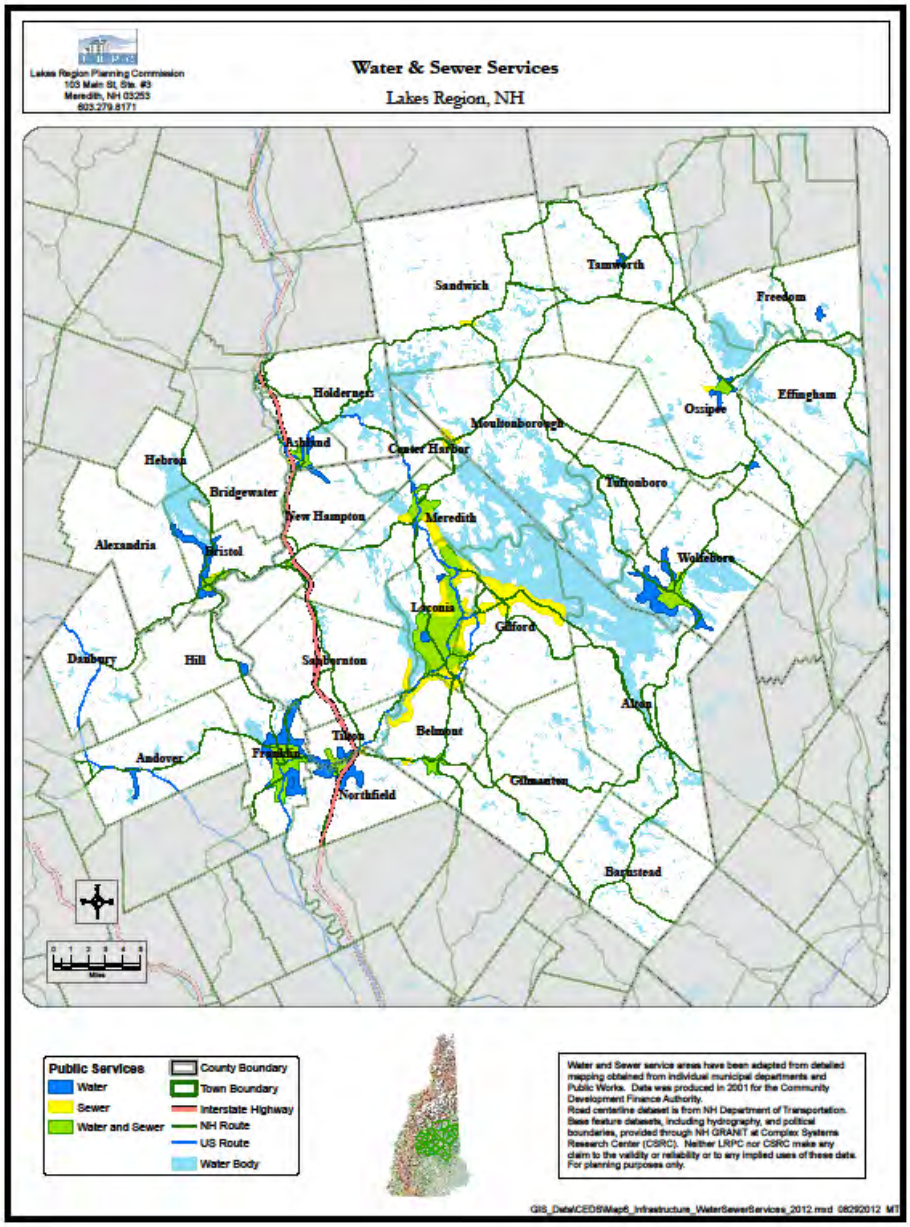
**The flow amount is what the WWTF is designed to treat - not what is being used.*
***MGD - Millions of Gallons per Day*

Wastewater Treatment Process and Disinfection Method Key		**Solids Disposal Key**
AL - Aerated Lagoon	RBC - Rotating Biological Contractor	LA - Land Application
AS - Activated Sludge	SD - Subsurface Disposal	LF – Landfill
CU/DC - Chlorination with dechlorination	SF - Sand Filter	CO – Composting
EA - Extended Air	SI - Spray Irrigation	TR - Transferred to another facility
	ST - Septic Tank	
OD - Oxidation Ditch	UV - Ultraviolet Disinfection	
OF - Overland Flor		
PS - Pump Station		

Source: NH Department of Environmental Services, 2012

As part of developing a complete asset management program, the operators and managers of wastewater treatment facilities should consider factors addressing risk. Areas of concern include potential for flooding, the impacts of climate change, criticality for each piece of equipment, and the capacity of individuals systems to handle economic growth. Asset

management programs and energy efficiency programs are both critical for managing water and wastewater infrastructure in a sustainable way.



Regional highlights:

The NH Department of Environmental Services (DES) on behalf of several Lakes Region municipalities administers and manages the Winnipesaukee River Basin Project (WRBP) based in Franklin, NH, at the Franklin Wastewater Treatment facility. The WRBP facility treats wastewater from 10 surrounding communities with a capacity of 11.51 million of gallons per day (MGD) and a daily average usage of about 6.0 MGD. The system serves

portions of the cities of Laconia and Franklin, towns of Belmont, Center Harbor, Gilford, Meredith, Moultonborough, Northfield, Tilton and Franklin. The system also receives the partially treated discharge from the Bay District, which serves portions of Center Harbor and Moultonborough. Since many of these communities provide seasonal recreational opportunities, there is a significant increase in population served by the WRBP in the summer months. The WRBP serves approximately 38,000 sewer users year round and an estimated 68,000 during the summer. Potential users can connect to the system by following current DES, WRBP and each community's procedures. The WRBP is a significant regional asset that allows for continued economic development while preserving the Lakes Region's water quality. The WRBP has completed a facility-wide retrofit including an innovative aeration blower technology that reduces energy consumption by 20 percent, a new "green roof" that minimizes storm water runoff and reduces building heating and cooling costs, and a new Ultraviolent (UV) disinfection system designed to treat both normal and peak flows while reducing energy consumption by as much as 65 percent. The WRBP does not have any significant interceptor projects planned and is not expanding its collection system. All current WRBP capital improvements are included in the WWTP Capital Improvement Plan and do not result in an increase in the design capacity. The WRBP webpage includes its 10-year Capital Improvements Plan.

http://des.nh.gov/organization/divisions/water/wrbb/index.htm

- Ashland — the town operates a WWTF with series of aerated lagoons with a chlorination with dechlorination process and has a surface water discharge permit into the Squam River. Over the last 19 years, the facility experienced flooding three times. No expansion plans at present.

- Bristol — the town operates a WWTF with an active sludge - external aeration - oxidation ditch series with a chlorination with dechlorination process and has a surface water discharge permit into the Pemigewasset River. No expansion plans at present.

- Center Harbor-Moultonborough — The Bay District Sewer Commission operates facultative lagoons which pre-treat wastewater from portions of the towns of Center Harbor and Moultonborough and discharges the partially treated wastewater to the WRBP.

- New Hampton — the town operates two large facultative lagoons supporting the common and school areas. Lagoons use is alternated yearly. The facility has a groundwater discharge permit. There are no outstanding compliance issues and no expansion plans.

- Ossipee — operates a large subsurface disposal system (26 leach fields) and received primary treated wastewater pumped up from the village. It also has septage receiving capacity. The facility has permits for both activities. No proposed expansion plans.

- Sandwich — the municipal wastewater disposal site is a large septic system and existing flows do not make it eligible for a groundwater discharge permit. The system is operating as designed.

- Wolfeboro — operates a 600,000 gal/day WWTF, which includes a 90 million gallon treated effluent storage pond. The stored treated water is discharged to either the spray irrigation site (May thru October) or to a remote rapid infiltration basin (RIB) disposal site. The groundwater permit for the effluent storage pond/spray irrigation site was renewed and is in effect until April 2016. The RIB site has experienced "unexpected issues" since it began operating in 2009. The groundwater permit for the RIB site was renewed at a reduced flow rate and is effect until September 2017. The "unexpected issues" are very serious, and the Town is working with NHDES and its new consultant, Underwood Engineers, to evaluate long-term sustainable solutions to its effluent disposal problems, including a possible connection to the WRBP.

EPA's Clean Watershed Needs Survey: The EPA's Clean Watersheds Needs Survey quadrennial data collection is required by Congress to show needs and costs to meet the goals of the Clean Water Act. Every state must report every four years on wastewater and stormwater capital needs (a description of the project/activity) and costs (money needed to carry out the need). States work to gather the available documented data and tally them in an online database. EPA compiles the survey data and presents the data in a report to Congress. The information is used to allocate federal funds to the Clean Water State Revolving Fund program and to inform national, state, and local decision makers about the financial challenges communities face.

Attachment II entitled 2012 Clean Watershed Needs Survey by Town and Wastewater Category for the Lakes Region identified a total wastewater treatment and sewer rehabilitation/replacement cost of $78.7 for the Lakes Region. Of that amount, 70 percent or $54.6 M is for the WRBP. The NH DES provided the information in the Attachments and is a preliminary estimate intended for planning purposes only. DES gathered the information through a review of engineering reports, submitted documents and projected estimates.

The purpose of the effort is to estimate the amount of money needed to correct water quality impacts either through new wastewater infrastructure construction or from correcting deficiencies in exiting wastewater infrastructure. The U.S. Congress uses the estimated needs to determine how much money to put into wastewater infrastructure projects. The information is a planning tool that if combined with an asset management program, can be used to help make long term financial decisions relative to the maintenance of a community's wastewater infrastructure. Regarding implementation, unless there are discharge permit limit violations or sewer overflows or other water quality violations, there is not a requirement that local governments will need to implement the proposed improvements. The proposed improvements are the anticipated needs of a community and there is no requirement that a community implement them.

Issues and Concerns:

- Each community needs to develop and maintain an asset management program;
- Each community needs to educate the public about the implications of using certain products and how some hazardous materials can eventually migrate to drinking and swimming water. The education program should also include information relative to what is considered flushable (human waste and toilet paper) and what is not flushable (everything else);
- Local decision makers need to understand their local wastewater treatment and water supply needs and communicate those needs to the public;
- Plan and design for necessary improvements and identify potential funding sources. Conduct detailed process-level energy audits at each facility and identify energy efficiency improvement projects for implementation. Develop a continuous improvement process (Plan-Do-Check-Act). Use the savings and rebates from initial projects to help fund additional projects; and.
- Share success stories.

Septage

Table 2.2 below provides information on the amount of septage in gallons received by the WRBP in 2011 and 2013. Although there is some fluctuation in the amount of septage coming to the WRBP facility each year, the volumes received have been relatively stable since the WRBP increased their tipping fees by $5/1000 gallons in 2011. The WRBP does not control the amount charged by haulers to customers. Amounts of septage received have always fluctuated with the economy and weather conditions (harsh winters and poor tourist seasons reduce septage tank maintenance). Municipalities may also have signed other 485-A:5b agreements (see http://www.gencourt.state.nh.us/rsa/html/L/485-A/485-A-5-b.htm) with other facilities. This statute provides for inter municipal agreements for septage disposal. Comparing the difference from CY 2011 and CY 2013, WRBP experienced an overall increase of 1% or 26,200 gallons of total septage received from Lakes Region communities. The WRBP annually receives a total of 5,000,000 gallons of septage from communities throughout New Hampshire and Vermont. WRBP's rates are consistent with the "market" rate changed by other WWTPs.

Table 2.2 Septage Received by the WRBP in 2011 and in 2013					
Municipality	**CY 2011**		**CY 2013**		**Change**
Alexandria	31,800		41,400		30%
Alton	37,100		32,200		-13%
Andover	92,600		78,400		-15%
Ashland	7,800		7,500		-4%
Barnstead	1,200		1,000		-17%
Belmont	243,400		285,550		17%
Bridgewater	53,100		47,550		-10%
Bristol	133,900		107,300		-20%
Center Harbor	83,500		66,300		-21%
Danbury	17,250		37,900		120%
Effingham	4,500		3,800		-16%
Franklin	221,600		231,600		5%
Freedom	8,050		8,800		9%
Gilford	385,600		398,700		3%
Gilmanton	74,200		131,600		77%
Hebron	22,450		46,600		108%
Hill	25,400		34,600		36%
Holderness	46,950		68,500		46%
Laconia	139,050		157,200		13%
Meredith	422,700		381,100		-10%
Moultonborough	810,300		750,750		-7%
New Hampton	44,500		81,900		84%
Northfield	262,750		167,500		-36%
Ossipee	39,050		23,150		-41%
Sanbornton	298,300		293,300		-2%
Sandwich	47,300		41,600		-12%
Tamworth	36,850		54,700		48%
Tilton	193,700		195,200		1%
Tuftonboro	12,900		38,200		196%
Wolfeboro	0		10,100		100%
LR Total	3,797,800		3,824,000		1%

Source: Winnipesaukee River Basin Project, 2014

Issues and Concerns:

- Need to educate the public on the value of septage receiving facilities

Septic Systems

Since a large portion of the Lakes Region is rural and not served by a wastewater treatment facility, most households and businesses use individual septic systems. These individual systems can pose a threat to the water quality due to the potential lack of proper maintenance and repair.

Another issue of concern is that many septic systems are not upgraded when small summer camps on the shorelines are converted to larger, year-round homes. These older septic systems have often been poorly maintained, do not have the capacity to handle the additional load, and are frequently nearing their life expectancy. These issues can contribute to sewage entering the lakes and rivers, and bacteria entering the ground water. Many locations along the shoreline are currently impaired due to *fecal coliform* and *Escherichia coli* bacteria, or chlorophyll A and algal blooms, leading to beach closures and unsafe water quality conditions. A few organizations in the region routinely provide education and outreach to homeowners in order to raise awareness about the maintenance requirements of a septic system, or how to identify a failing system.

When a septic system begins to experience a failure, a proactive landowner will seeks the services of a licensed septic designer and constructs a new system. When complaints are received by the municipality or the NH DES, the local health officer will inspect the site and facility and determine if a new system is needed. Municipalities normally maintain a record of complaints of this nature.

As the population has increased, so has the amount of waste treatment by-products of septic and sludge, from both septic systems and wastewater treatment facilities. Traditional disposal methods are increasingly difficult to use and pose their own unique set of problems and issues. As research is conducted and the population becomes more aware of the issues, more informed decisions can be made to better recycle or dispose of these products. Even the best designed and maintained septic system will release phosphates and some nitrogen compounds into ground water. The ground water will eventually migrate into spring water or directly into streams and lakes. It is important for homeowners to understand the value of using low phosphate agents and avoid flushing any hazardous waste into their septic systems.

Issues and Concerns:

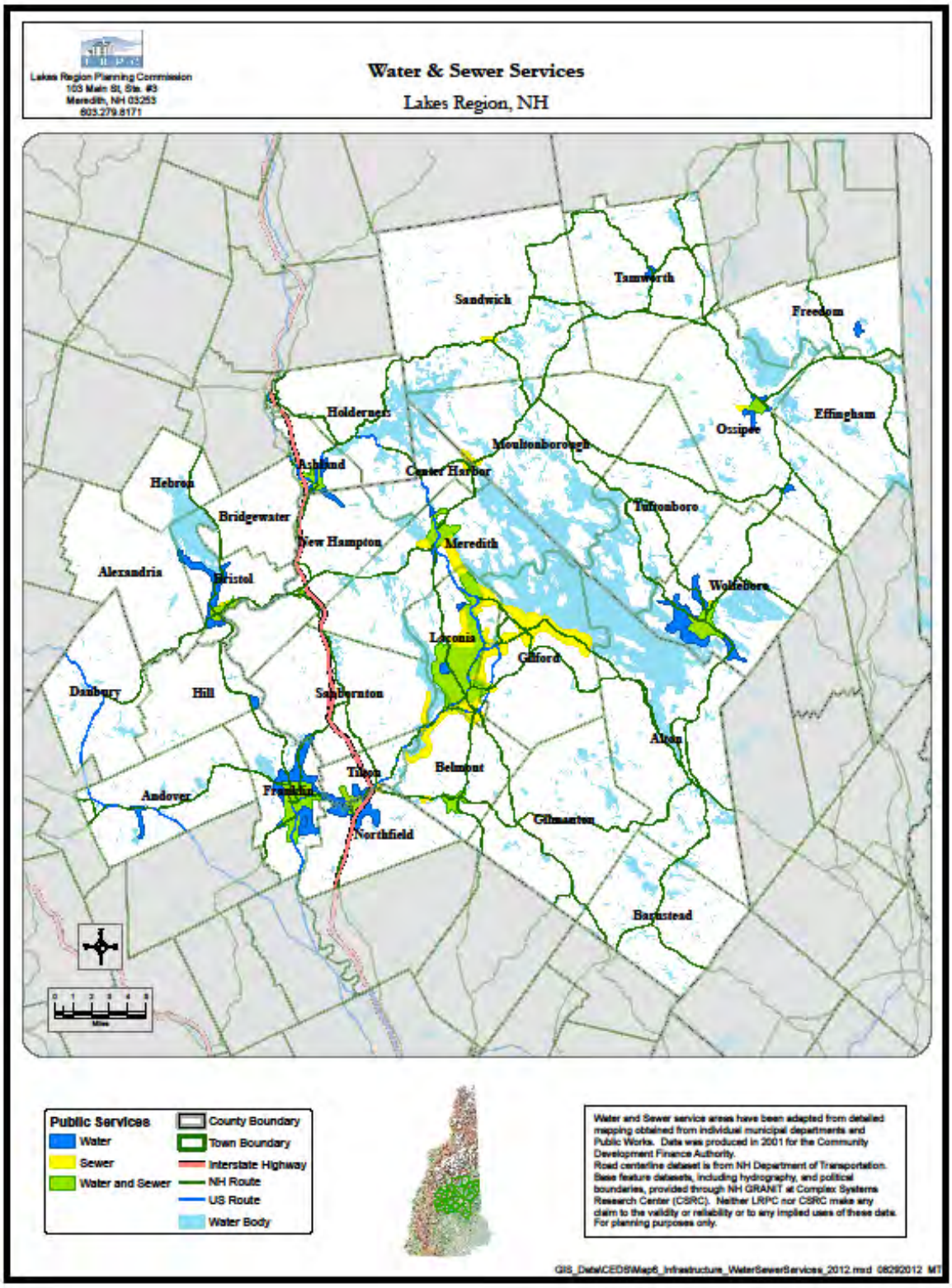
- Need for continuous education on the proper maintenance of septic systems.

Water Supply Systems

The Lakes Region contains 42 percent of the total water area in the state of New Hampshire. In addition to the nearly 12 percent of surface water covering the region, approximately five percent sits over stratified drift aquifers. Compared to bedrock aquifers, stratified drift aquifers are the more productive. However, they are also the most vulnerable to contamination. This is of particular importance when determining allowable land use activities over high yield (transmissivity) areas. Due to the characteristics of these high-yield areas, gravel pits are often located on them. Other sources of potential contamination sources include leaking underground storage tanks, failing septic systems, improper disposal of hazardous chemicals, or vehicular accidents. Planning and zoning are tools communities can use to address these potential problems by adopting an aquifer overlay district, wellhead protection district, greater setbacks from surface waters, and limiting contact recreation in surface waters providing drinking water.

While there is currently an abundance of clean, potable water for the region, protection of these vital resources should be paramount to communities. The majority of the region gets its water from private ground water wells. A permit is required from the New Hampshire

Department of Environmental Services for any private water system withdrawing greater than 57,600 gallons per day (GPD).



Public water supply systems in the region provide town and business centers with water from mainly ground water sources (Map 6). All systems operating in the region are listed in Table 2.3.

Table 2.3: Public Water Supply Systems in the Lakes Region

Community Water System (CWS)	Town	Category*	Population Served	Service Connections
Alton Water Works	Alton	Large CWS	1750	703
Andover Village District	Andover	Major CWS	650	120
Ashland Water Department	Ashland	Major CWS	1500	550
Pac Locke Lake Water System/SEC S	Barnstead	Small CWS	83	33
PEU Locke Lake Water System	Barnstead	Major CWS	2120	856
Belmont Water Department North	Belmont	Large CWS	150	50
Belmont Village Water District	Belmont	Large CWS	1612	645
Bristol Water Works	Bristol	Major CWS	3327	1331
Franklin Water Works	Franklin	Major CWS	7000	2600
Freedom Water Precinct	Freedom	Major CWS	163	67
Gilford Village Water District	Gilford	Small CWS	130	36
Gunstock Acres Village District	Gilford	Large CWS	1440	576
Hill Water Works	Hill	Large CWS	350	139
Laconia Water Works	Laconia	Major CWS	12000	5800
Meredith Water Department	Meredith	Major CWS	3500	1052
Paradise Shores	Moultonborough	Major CWS	1881	753
New Hampton Village Precinct	New Hampton	Major CWS	600	125
Tilton Northfield Water District	Northfield	Major CWS	2500	941
Carroll County Complex	Ossipee	Small CWS	210	37
Ossipee Water Department	Ossipee	Major CWS	850	325
Tamworth Water Works	Tamworth	Small CWS	265	60
Lochmere Village District	Tilton	Small CWS	345	138
Wolfeboro Water and Sewer	Wolfeboro	Major CWS	5550	2300

Source: NH DES website

*****Category - identifies the size/type of CWS:

- Major CWS (>1500 population or surface water)
- Large CWS (>1000 population)
- Small CWS (<1000 population)

Source: NH Department of Environmental Services, 2012

At present, information is not easily available on water supply needs for the facilities listed in Table 2.3. A majority of Lakes Region residents are not serviced by a water supply system and thus rely on privately owned wells. Most of these are bedrock wells. Private wells in New Hampshire are not regulated and testing is not required. Arsenic, radon gas, and other hazardous, natural substances are commonly found in private NH well water. These

compounds can have serious long-term health effects. Well owners should be informed of these risks and encouraged to test their water. Filters and other treatment systems are available to remove these compounds from well water.

Issues and Concerns:

- Local decision makers need to understand their local water supply needs and communicate those needs to the public;
- Plan and design for necessary improvements and identify potential funding sources; and
- Educate those with private wells to conduct periodic testing and, when high levels of natural substances are detected, seek mitigation alternatives.

Stormwater

Stormwater is water from rain or melting snow that does not soak into the ground. Stormwater in a forest, meadow, or other natural environment usually soaks into the ground, i.e., infiltrates, or is filtered as it flows along the ground and over native vegetation. Trees and other green vegetation will absorb and utilize fertilizing compounds. This material will become part of plants tissue. In this case trees will grow faster and, if harvested, the fertilizing compounds will remain in the end product. When forests and meadows are developed, they are commonly replaced with impervious surfaces such as houses, buildings, roads and parking lots. Impervious surfaces prevent stormwater from soaking into the ground, which creates excess stormwater runoff. Stormwater can become polluted when it runs off streets, lawns, farms, and construction and industrial sites if there are fertilizers, dirt, pesticides, oil and grease, or other pollutants in its path. When polluted stormwater is left untreated, it enters our rivers, lakes, and coastal waters and can cause water quality impairments. Stormwater is of concern for two main issues: one related to the volume and timing of runoff water, and the other related to potential contaminants that the water is carrying.

Water runoff from its source (whether rain or snow) is a critical issue for the Lakes Region and its many water bodies. The conversion of natural ground cover to developed land affects the infiltration of precipitation and snow melt. As land is made more impervious, the amount, velocity and duration of runoff increase. Impervious cover as parking lots and roadways often contain pollutants. Fertilizers and pesticides applied to land of vegetated cover can migrate off site with runoff. Learn more about the communities current stormwater strategies here (PDF, 121kb).

In general, stormwater runoff from polluted sources should be treated for removal of the pollutants before moving far from its source. Stormwater runoff should also be controlled to as close to pre-conversion conditions as possible to minimize erosion and flooding. The NH DES and US EPA are very concerned about stormwater runoff and stormwater management issues. See the following for additional information.
http://des.nh.gov/organization/divisions/water/stormwater/categories/overview.htm.

In the Lakes Region, there are no municipalities that have been designated as Municipal Separate Storm Sewer System (MS4) communities.

The report entitled Overview of New Hampshire Stormwater Needs, 2012 describes the process for determining stormwater and wastewater needs on a local municipal basis. In part the report states:

"Introduction: In 2012, New Hampshire's stormwater needs and costs were reported in two ways. The first was the Environmental Protection Agency's 2012 Clean Watersheds Needs Survey (CWNS), which collects data every four years for wastewater and stormwater needs in every state. In the second, the restrictive definition of stormwater "needs" as defined in the CWNS was considered, supplemented, and refined by New Hampshire stormwater experts. Ultimately, a description that seemed best to represent New Hampshire stormwater needs was attained and termed "New Hampshire 2012 Stormwater Needs." In both cases, a carefully considered innovative method was applied to achieve a reasonable representation of the cost of stormwater work in the state.

Issues and Concerns:

- Educated the public about the effects of over fertilization of lawns and channelizing of stormwater runoff.
- Mapping of catch basins, culverts and stormwater discharge points is needed;
- Definition of imperviousness or impervious surface needs to be clarified;
- Some communities' zoning is based on "% green space required" rather than "maximum % impervious cover allowed";
- Stormwater regulations need to be integrated with Erosion and Sediment Control Regulations;
- Adopt stronger provisions for stream and wetland buffers in local ordinances;
- Estimates of current and future impervious cover data is needed for communities to make better informed planning decisions;
- Include stormwater affects in road and highway condition surveys and be part of the criteria for prioritization of maintenance or reconstruction.
- A review of limits of impervious cover by zone is needed as the minimum amount of impervious cover allowed is 25 percent and impairments begin to be seen between 10-20 percent imperviousness.

Attachment II entitled 2012 Stormwater Needs for Lakes Region Planning Commission identified capital stormwater needs for the Lakes Region at $3,627,296. Total Clean Watershed Needs for the region are $32.2 M.

Regional Opportunities

Most residents of the Lakes Region place a high priority on maintaining water quality and conserving natural resources. However, many people do not fully understand how one's everyday decisions can be at odds with those goals. More effort is required to educate residents, homeowners, and students so that all can work together to achieve the commonly held conservation aspirations. Many opportunities exist for Lakes Region communities to work together on natural resource protection activities and the enhancement of water quality. By working together, participating communities in watershed planning efforts, especially those of the Winnipesaukee Gateway, have achieved impressive results.

The Winnipesaukee River Basin Project (WRBP) based in Franklin, NH, at the Franklin Wastewater Treatment facility, is an excellent example of regional cooperation in advancing environmental quality. The WRBP has enabled development to occur along the shoreland in a responsible manner. As noted, the Town of Wolfeboro is exploring alternatives for the management of its wastewater and one option is the connection with the WRBP.

As noted, progress has been achieved in and conservation and land stewardship and more can be accomplished through the work of land trusts guided by the Conservation Plan prepared by the Forest Society.

The Winnipesaukee Watershed Association has initiated a "floating classroom" program. This will provide a creative and entertaining water ecology education to school groups, summer camps, families and adults. The class will be conducted out in the lake on a pontoon boat. Participants will learn how to collect information on water quality, what it means and in the process explain how we affect it. With the majority of the program paid for by grants and business support, a small fee will be charged to cover expenses. With reliable outside support this program could be expanded to have a boat and crew working out of each of the major towns with in the plan area.

LWWA is currently organizing other conservation organizations in the lakes region. Known as WECAN, this group will identify and support high priority projects that help meet the objectives of each participating group. They can coordinate and cooperate to accomplish valuable activities rather than compete for grants and donations. This includes acquiring key parcels of land, sharing information between memberships or conducting education activities for the lakes region population.

Resources for Communities

There are many environmental, natural resource and water quality organizations that can assist communities. The LRPC can facilitate the process by providing information on these organizations and identifying an agency or organization with a particular need.

Sub-watershed plans have been completed in several communities in the lakes region. These plans have multiple benefits. Citizens who participate learn about how we affect water quality and how to prevent negative outcomes. Current problem sites are identified as well as future areas of concern. Land owners and governments can find solutions before problems

develop. New plans sponsored by LWWA will continue to be initiated as grant money becomes available. There are a number of consulting firms familiar with our area that can assist in the preparation of watershed plans with community support.

There are models and on line tools that can help property owners and associations measure their environmental footprint as well as help them find solutions. This service is free and can be found at New Hampshire Homeowner's Guide to Stormwater Management and A Shoreland Homeowner's Guide to Stormwater Management.

Goals and Recommendations

Goal: Recognize the role and value of, and then protect and improve the quality of lakes, rivers, agricultural, forest, wildlife and other natural resources within the Lakes Region by utilizing management practices that represent the most economical and effective technique to protect water quality and the natural resource base and by encouraging regional cooperation.

Recommendations:

- Promote public awareness and education wherever possible. State and local governmental bodies and conservation groups cannot change our environmental course alone. The population must want and community leaders must be willing to adopt practical solutions supported by voters;
- Ensure that business and local governments are aware of the economic consequences of declining water quality;
- Support watershed planning efforts insuring that current problem areas are addressed and future affects are predicted and mitigated;
- Provide knowledge, planning tools and other information to help property owners and communities to find and develop solutions;
- Support monitoring efforts that demonstrate how water quality is declining or improving so that area residents or seasonal residents can see the changes taking place;
- Publicize positive and negative water resources events such as cyanobacteria outbreaks or community storm water remediation projects; and
- Recognize volunteers, organizations and leaders who donate their valuable time and effort toward supporting environmental protection and insuring resource health into the future.

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APPENDICES

Appendix A - Construction of Bio-retention basin by City of Laconia

Appendix B - Watershed Planning by Forest Bell, FB Environmental Services

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APPENDIX A

Construction of Bio-retention basin by City of Laconia
April 1, 2014

Paugus Bay is an enormously valuable resource to the City of Laconia. Its waters provide the City with a quality drinking water supply and with numerous recreation, commercial, and environmental benefits. As part of a Comprehensive Drainage Study started in 2009, the City identified several areas where simple changes to the stormwater system could help improve stormwater management and water quality protection. The old stormwater system was designed with one intent, to move stormwater off the roads and into the lake as fast as possible. Unfortunately, this design method also moves pollutants into the lakes as well. The first inch of rainfall (first flush) in a storm event carries most of the nasties (brake dust, oil and gas drips, bird droppings, anything you can think of that is on the land surface.). Treating that first inch of rainfall makes a significant impact on water quality.

In November of 2013, the Department of Public Works completed construction a bio-retention basin located at the intersection of White Oaks Road and Weirs Boulevard. The existing stormwater system discharged onto private property bordering Paugus Bay without any treatment other than catch basin sumps. The intense storm events, in the mid-2000s, caused moderate property damage and sediment plumes. The intent of the project was to inject a disconnection into the system and provide an opportunity for the first flush to be treated before discharging to the lake. Soil properties are such that provide an opportunity for infiltration that would take some of the pressure off the high intensity events. The project was partly funded through a NH DES grant secured by Lakes Region Planning Commission. The bio-retention basin, engineered by Loureiro Engineering Associates, is designed using the powerful properties of compost and plants. Compost is very effective in removing stormwater pollutants such as petroleum hydrocarbons, bacteria, nutrients, and metals. As the rain enters the basin, it infiltrates through the open rock surface and passes through a two and a half foot layer of compost. The compost will absorb the stormwater like a sponge and begin to remove the pollutants from the water. The treated stormwater will also slowly drain into the surrounding soils making its way into the groundwater, reducing the discharges to the lake. When stormwater begins to pond in the basin, plants and amended soils located on the slopes will begin absorbing the water and removing the pollutants. Rainfall amounts exceeding the first flush capacity will bypass the basin.

Bio-retention basins are capable of removing between 80 percent to 90 percent of petroleum hydrocarbons, sediment, and bacteria and 70 percent to 80 percent of nutrients like nitrogen and metals like copper and zinc which can affect the health of fish. Improving water quality in the Lakes Region is an effort in which everyone who lives and works in the region needs to participate.

The Paugus View Condo Association recognized the importance of protecting the Lake and was very willing to allow a drainage easement on their property enabling the bio-retention basin to be large enough to make a difference. The association's environmental stewardship is a great example of how working partners in the watershed can make a difference.

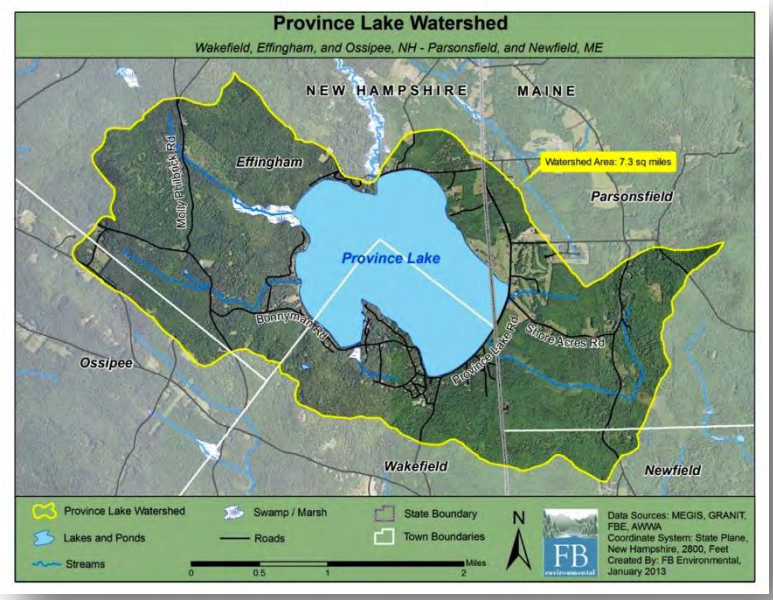
APPENDIX B

Watershed Planning by Forest Bell, FB Environmental Services

An effective watershed planning project generally needs two key ingredients. First, there must be sound science utilized to be able to assess the impaired or threatened waterbody and its entire watershed. Secondly, there should be a dedicated and motivated community to ensure that the plan is effectively implemented. It's become clear to me over the last ten years that there is an outstanding citizenry in the Lakes Region of New Hampshire that is committed to protecting and improving their precious natural resources.

Province Lake photo courtesy of Acton-Wakefield Watersheds Alliance

Province Lake in Effingham and Wakefield, New Hampshire, and Parsonsfield, Maine, is a prime example of this dedicated community spirit and commitment to science. The picturesque and very shallow lake is currently experiencing cyanobacteria blooms that can be toxic to human health. The cyanobacteria are being fed by excessive amounts of phosphorus which are entering the lake through various sources, including stormwater runoff from the contributing watershed. FB Environmental Associates is providing the planning and modeling assistance for a comprehensive watershed plan that will be completed in June of 2014. The Plan is being developed as a team effort between the Province Lake Association, Acton-Wakefield Watersheds Alliance, and New Hampshire Department of Environmental Services. The amount of public involvement in all phases of the project has been outstanding. Citizens have participated in a steering committee, a watershed survey, a septic survey, an action plan prioritization process, and several outreach events. While there is much work to do in the years ahead for Province Lake, the citizens and project partners have committed to a long-term sustainable effort for years to come, meaning that the potential for water quality improvement is extremely high.



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ATTACHMENTS

Attachment I – Preliminary Estimate 2012 Clean Watershed Needs Survey Summary by Town and Wasterwater Category

Attachment II – Preliminary Estimate 2012 Stormwater Needs for Lakes Region Planning Commission

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ATTACHMENT I

***Preliminary Estimate* 2012 Clean Watershed Needs Survey Summary by Town and Wastewater Category**

Town Name	Total Needs (Sum of all Categories)*	Wastewater Treatment	Sewer Rehabilitation and Replacement	New Sewers	Combined Sewer Overflow Abatement	Stormwater
Alexandria	$1,098,325					$1,098,325
Alton	$1,612,201					$1,612,201
Andover	$1,013,684					$1,013,684
Ashland	$2,230,847	$1,819,361	$125,968			$285,518
Barnstead	$1,083,195					$1,083,195
Belmont	$2,258,354		$1,515,859			$742,495
Bridgewater	$541,653					$541,653
Bristol	$30,272,836		$375,148	$29,051,108		$846,580
Center Harbor	$1,813,210	$136,307	$1,340,616			$336,287
Danbury	$952,269					$952,269
Effingham	$980,492					$980,492
Franklin	$17,267,322		$6,171,759	$8,724,645		$2,370,918
Freedom	$870,109					$870,109
Gilford	$5,216,386		$98,129	$4,906,428		$211,829
Gilmanton	$1,453,967					$1,453,967
Hebron	$425,254					$425,254
Hill	$672,704					$672,704
Holderness	$7,506,630			$7,419,946		$86,684
Laconia	$13,336,435		$829,962	$11,128,127		$1,378,346
Meredith	$20,360,258		$4,521,083	$14,822,172		$1,017,003
Moultonborough	$1,514,427					$1,514,427
New Hampton	$928,580					$928,580
Northfield	$3,470,140		$1,940,680			$1,529,460
Ossipee	$2,613,381	$751,618	$73,400			$1,788,363
Sanbornton	$819,423					$819,423
Sandwich	$2,301,451					$2,301,451
Tamworth	$1,509,053					$1,509,053
Tilton	$2,929,004		$1,463,139	$855,390		$610,475
Tuftonboro	$1,024,670					$1,024,670
Winnipesaukee River Basin Program	$54,682,869	$53,251,658	$1,431,211			
Wolfeboro	$5,113,025	$1,195,874	$1,673,015			$2,244,136
Total LRPC Region	**$187,872,154**	**$57,154,818**	**$21,559,969**	**$76,907,816**	**$0**	**$32,249,551**

* includes wastewater collection, treatment and stormwater needs. Source: NH DES

Attachment II

Preliminary Estimate 2012 Stormwater Needs for Lakes Region Planning Commission																	
			Clean Watersheds Needs Survey[1]					Additional State Needs									
			Capital					Non-Capital			Capital						
Community Name	Innovative Method Category[2]	Community Category[3]	Conveyance	Traditional Treatment	Green Infrastructure/ LID	Stormwater Management	CWNS Totals	Operation and Maintenance	Watershed/ Water Quality Planning	Non-Capital Subtotal	NPS Control: Hydro-modification	Road/ Drainage	Flooding	Other	Capital Subtotal	Additional State Needs Total	Grand Total
Alexandria	Extrap	Rural	$ 410,285	$ 194,971	$ 363,393	$ 129,676	$ 1,098,325	$ 915	$ 26,866	$ 27,781	$ 147,390	$ 56,112	$ -	$ 33,719	$ 237,222	$ 265,003	$ 1,363,328
Alton	Extrap	Rural	$ 602,246	$ 286,193	$ 533,415	$ 190,347	$ 1,612,200	$ 1,343	$ 39,436	$ 40,779	$ 216,350	$ 82,366	$ -	$ 49,496	$ 348,211	$ 388,990	$ 2,001,191
Andover	Extrap	Rural	$ 378,667	$ 179,946	$ 335,389	$ 119,682	$ 1,013,684	$ 845	$ 24,796	$ 25,640	$ 136,032	$ 51,788	$ -	$ 31,121	$ 218,941	$ 244,581	$ 1,258,265
Ashland	Extrap	Rural	$ 106,657	$ 50,684	$ 94,467	$ 33,710	$ 285,518	$ 238	$ 6,984	$ 7,222	$ 38,315	$ 14,587	$ -	$ 8,766	$ 61,668	$ 68,890	$ 354,408
Barnstead	Extrap	Rural	$ 404,633	$ 192,286	$ 358,387	$ 127,889	$ 1,083,196	$ 903	$ 26,496	$ 27,399	$ 145,360	$ 55,339	$ -	$ 33,255	$ 233,954	$ 261,353	$ 1,344,548
Belmont	Contrib	U. Cluster	$ 742,495	$ -	$ -	$ -	$ 742,495	$ -	$ -	$ -	$ -	$ 150,000	$ -	$ -	$ 150,000	$ 150,000	$ 892,495
Bridgewater	Extrap	Rural	$ 202,337	$ 96,153	$ 179,212	$ 63,951	$ 541,653	$ 451	$ 13,249	$ 13,701	$ 72,687	$ 27,673	$ -	$ 16,629	$ 116,989	$ 130,690	$ 672,342
Bristol	Contrib	Rural	$ 552,382	$ -	$ -	$ 290,774	$ 843,156	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 843,156
Center Harbor	Extrap	Rural	$ 125,622	$ 59,697	$ 111,264	$ 39,704	$ 336,286	$ 280	$ 8,226	$ 8,506	$ 45,128	$ 17,181	$ -	$ 10,324	$ 72,633	$ 81,139	$ 417,425
Danbury	Extrap	Rural	$ 355,725	$ 169,044	$ 315,069	$ 112,431	$ 952,268	$ 793	$ 23,293	$ 24,087	$ 127,790	$ 48,650	$ -	$ 29,235	$ 205,676	$ 229,762	$ 1,182,031
Effingham	Extrap	Rural	$ 366,268	$ 174,054	$ 324,407	$ 115,763	$ 980,493	$ 817	$ 23,984	$ 24,801	$ 131,577	$ 50,092	$ -	$ 30,102	$ 211,772	$ 236,572	$ 1,217,065
Franklin	Contrib	U. Cluster	$ 2,213,080	$ -	$ -	$ 157,838	$ 2,370,918	$ -	$ 175,000	$ 175,000	$ -	$ 100,000	$ -	$ 500,000	$ 600,000	$ 775,000	$ 3,145,918
Freedom	Extrap	Rural	$ 325,034	$ 154,459	$ 287,885	$ 102,731	$ 870,108	$ 725	$ 21,284	$ 22,009	$ 116,764	$ 44,453	$ -	$ 26,713	$ 187,930	$ 209,939	$ 1,080,047
Gilford	Contrib	U. Cluster	$ 211,829	$ -	$ -	$ -	$ 211,829	$ -	$ -	$ -	$ 275,000	$ -	$ -	$ -	$ 275,000	$ 275,000	$ 486,829
Gilmanton	Extrap	Rural	$ 543,137	$ 258,104	$ 481,061	$ 171,665	$ 1,453,968	$ 1,211	$ 35,565	$ 36,777	$ 195,116	$ 74,282	$ -	$ 44,638	$ 314,035	$ 350,812	$ 1,804,780
Hebron	Extrap	Rural	$ 158,856	$ 75,490	$ 140,700	$ 50,208	$ 425,254	$ 354	$ 10,402	$ 10,756	$ 57,067	$ 21,726	$ -	$ 13,056	$ 91,849	$ 102,605	$ 527,859
Hill	Extrap	Rural	$ 251,292	$ 119,416	$ 222,572	$ 79,424	$ 672,704	$ 560	$ 16,455	$ 17,015	$ 90,274	$ 34,368	$ -	$ 20,652	$ 145,294	$ 162,310	$ 835,014
Holderness	Contrib	Rural	$ 51,326	$ 33,077	$ 2,281	$ -	$ 86,684	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 86,684
Laconia	Contrib	Lg N-MS4	$ 1,326,618	$ -	$ -	$ 41,001	$ 1,367,619	$ -	$ 180,000	$ 180,000	$ -	$ 1,300,000	$ -	$ -	$ 1,300,000	$ 1,480,000	$ 2,847,619
Meredith	Extrap	Rural	$ 379,907	$ 180,535	$ 336,487	$ 120,074	$ 1,017,003	$ 847	$ 24,877	$ 25,724	$ 136,477	$ 51,958	$ -	$ 31,223	$ 219,657	$ 245,382	$ 1,262,385
Moultonborough	Extrap	Rural	$ 565,722	$ 268,837	$ 501,065	$ 178,803	$ 1,514,428	$ 1,262	$ 37,044	$ 38,306	$ 203,229	$ 77,371	$ -	$ 46,494	$ 327,094	$ 365,400	$ 1,879,828
New Hampton	Extrap	Rural	$ 346,876	$ 164,839	$ 307,231	$ 109,634	$ 928,581	$ 774	$ 22,714	$ 23,488	$ 124,611	$ 47,440	$ -	$ 28,508	$ 200,560	$ 224,047	$ 1,152,628
Northfield	Extrap	U. Cluster	$ 1,005,725	$ 76,519	$ 11,257	$ 435,959	$ 1,529,460	$ -	$ 6,085	$ 6,085	$ 29,762	$ 81,498	$ -	$ 44,330	$ 155,590	$ 161,675	$ 1,691,135
Ossipee	Extrap	Rural	$ 668,052	$ 317,465	$ 591,700	$ 211,146	$ 1,788,363	$ 1,490	$ 43,745	$ 45,235	$ 239,990	$ 91,366	$ -	$ 54,904	$ 386,260	$ 431,495	$ 2,219,858
Sanbornton	Contrib	Rural	$ -	$ 573,596	$ 245,827	$ -	$ 819,423	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 819,423
Sandwich	Extrap	Rural	$ 859,719	$ 408,546	$ 761,461	$ 271,725	$ 2,301,451	$ 1,918	$ 56,296	$ 58,213	$ 308,844	$ 117,579	$ -	$ 70,656	$ 497,079	$ 555,292	$ 2,856,743
Tamworth	Extrap	Rural	$ 563,715	$ 267,882	$ 499,287	$ 178,169	$ 1,509,054	$ 1,257	$ 36,913	$ 38,170	$ 202,508	$ 77,096	$ -	$ 46,329	$ 325,933	$ 364,103	$ 1,873,157
Tilton	Extrap	U. Cluster	$ 401,430	$ 30,542	$ 4,493	$ 174,010	$ 610,475	$ -	$ 2,429	$ 2,429	$ 11,879	$ 32,530	$ -	$ 17,694	$ 62,103	$ 64,532	$ 675,007
Tuftonboro	Extrap	Rural	$ 382,771	$ 181,896	$ 339,024	$ 120,979	$ 1,024,671	$ 854	$ 25,064	$ 25,918	$ 137,506	$ 52,349	$ -	$ 31,458	$ 221,314	$ 247,232	$ 1,271,903
Wolfeboro	Contrib	Rural	$ 958,782	$ 1,200,070	$ 68,248	$ -	$ 2,227,100	$ 11,000	$ -	$ 11,000	$ 625,000	$ -	$ -	$ 160,355	$ 785,355	$ 796,355	$ 3,023,455
Percent of Total Stormwater Needs			**38%**	**14%**	**18%**	**9%**	**78%**	**0%**	**2%**	**2%**	**9%**	**7%**	**0%**	**3%**	**19%**	**22%**	**100%**
Total Stormwater Needs1			**$ 15,461,188**	**$ 5,714,300**	**$ 7,415,582**	**$ 3,627,296**	**$ 32,218,367**	**$ 28,838**	**$ 887,203**	**$ 916,041**	**$ 3,814,656**	**$ 2,757,805**	**$ -**	**$1,379,656**	**$ 7,952,117**	**$ 8,868,158**	**$ 41,086,525**

Source: NH Department of Environmental Services, 2014.

1. This data is unpublished and preliminary. It has not been approved by Congress.

2. Contributing (Contrib) vs. Extrapolated (Extrap) Communities: Dollar values for contributing communities were taken from actual, documented stormwater projects and their associated costs. Contributing communities were used to set a per acre rate for extrapolated communities. Therefore, dollar values for extrapolated communities are representative and do not reflect actual, documented data. See NH Innovative Method section of Overview for more information.

3. Community Categories were determined by MS4 status, population size and density.

Economic Opportunity, Environmental Quality

Lakes Region Plan 2015-2020

Natural Hazards & Climate Change

LAKES REGION PLANNING COMMISSION
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Meredith, NH 03253
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Table of Contents

Natural Hazards & Climate Change

I. Existing Conditions

A. Hazards in the Lakes Region

The Lakes Region is susceptible to a variety of natural hazards. The most frequently occurring hazard events include flooding, severe winter weather, and severe wind events. Occasionally, two or more of these hazards occur at the same time, such as during a tropical storm when flooding and high winds occur simultaneously.

Weather events are often regional in nature, impacting the entire state or a portion of the state. Local impacts from an event can vary. Some hazards, such as downbursts, are limited to a small area, while others such as a nor'easter impact the entire region. While some hazard events seem to occur randomly, the location of where certain hazard events, such as localized flooding, are likely to occur is predictable.

Weather and hazard data tend to be reported on a county-wide or state-wide basis. The Lakes Region encompasses all of Belknap County and portions of Carroll, Grafton, and Merrimack Counties. Historical data gives us an awareness of the hazards we have experienced in the past and a sense of what we should expect in the future. Often these reports include a description of the impact that the events have had on people and the built environment. Figure 1 shows the Declared Disasters that have impacted New Hampshire since 2007. In some cases the declaration applies to the entire state while in other cases only certain counties are named in the declaration. The amount of funding is based in part upon estimated damages and population. Between 1986 and 2013 there were 28 Presidentially Declared Disasters or Emergency Declarations that impacted one or more of the four counties in the Lakes Region. Ten of those declared events occurred prior to 2002, while eighteen declared events have occurred since 2003.

Figure 1 – Disaster Declarations in New Hampshire since 2007

Major Disaster Declarations in Lakes Region Counties

Hazard	Event Date	Declaration Date	Belknap	Carroll	Grafton	Merri-mack	State-wide	Damages ($)	Declaration ID
Flooding	4/15/2007 - 4/23/2007	4/27/2007	X	X	X	X	X	$27 Million	DR-1695
Tornado	7/24/2008	8/11/2008	X	X				$422,000	DR-1782
Flooding	7/24/2008 - 8/14/2008	9/5/2008	X	X	X			$3.2 Million	DR-1787
Flooding	9/6/2008 - 9/7/2008	10/3/2008					X	$824,000	DR-1799
Severe Winter Storm	12/11/2008 - 12/23/2008	12/13/2008					X		EM-3297
Severe Winter Storm	12/11/2008 - 12/23/2008	1/2/2009					X	$15 Million	DR-1812
Severe Winter Storm	2/10/2010 - 3/3/2010	3/29/2010			X	X		over $2 Million	DR-1892
Flooding	5/26/2011 - 5/30/2011	7/22/2011			X			$12 million	DR-4006
Flooding	8/26/2011	8/27/2011					X		EM-3333
Flooding	8/26/2011 - 9/6/2011	9/3/2011		X	X	X		$2.1 million	DR-2046
Severe Winter Storm	10/29/2011 - 10/30/2011	11/1/2011					X		EM-3344
Flooding	10/26/2012 - 10/31/2012	10/30/2012					X		EM-3360
Flooding	10/26/2012 - 11/6/2012	11/28/2012	X	X	X			$179,000	DR-4095
Severe Winter Storm	2/8/2013 - 2/10/2013	3/19/2013	X	X		X			DR-4105
Flooding	6/26/2013 - 7/3/2013	8/2/2013			X				DR-4139

Source: http://www.fema.gov/disasters?field_state_tid=33&field_disaster_type_term_tid=All&field_disaster_declaration_type_value=All&items_per_page=10&page=1

Weather in particular is a dynamic phenomenon. There are a number of factors that influence weather, which is often the driving factor in New England's hazards. With the development of computer modeling that can analyze massive amounts of data, weather forecasting has advanced significantly during the last several decades. The exact path of a hurricane or nor'easter is often difficult to predict but small differences can have a significant effect on what type of weather a particular area receives. Tropical Storm Irene is an example of this; while Vermont and northwestern New Hampshire received huge amounts of rainfall, resulting in swollen streams and rivers and catastrophic erosion, eastern New Hampshire and the Lakes Region escaped with relatively minor amounts of flooding (see http://www.erh.noaa.gov/gyx/Irene/Irene%20Rainfall.PNG).

By looking back over past records scientists can often detect patterns in the region's climate. A recent detailed review of climatic data for the state shows that winter temperatures have been rising along with the number of intense rain and snowstorms. Where we can plan, we should plan. Mitigating the impacts of hazard events on people's lives and property both public and private is prudent.

1. Flood

Flooding is defined as a temporary overflow of water onto lands that are not normally covered by water. It results from the overflow of rivers and tributaries or inadequate drainage. With the varied terrain of the Lakes Region, a variety of forms of flooding can occur ranging from rushing streams

in mountainous areas such as the Sandwich, Squam, and Belknap ranges to bigger rivers, wider floodplains, and even overfilled lakes.

Figure 2 - Pemigewasset River flooding in Holderness along NH Rte. 175A, April 2011
Credit: http://farm7.staticflickr.com/6079/6092948164_57ea16a060_z.jpg

a) Floodplains

Flooding is most commonly associated with structures and properties located within the 1% annual (or 100-year) floodplain. Areas in this floodplain have been identified as having a one percent chance of flooding any given year. Residents and community decision-makers can refer to real-time data from stream gauges which report the height of many of rivers and lakes throughout the region.[1] This can be compared with historical data at these sites, sometimes dating back more than a century.

b) Road Washouts

Numerous streams crisscross the region's landscape, supplying the ponds, rivers, and lakes which dominate the area. While some are identified as having floodplains, others merely become rushing streams in a heavy rainfall or quick snowmelt. Where these are in proximity to roads, they can result in erosion and washout of roads and culverts. Steep hillsides are particularly susceptible to such damage.

Figure 3 - Beech Pond Road Wolfeboro, 2008

c) Dams

Dams in New Hampshire are classified by the New Hampshire Department of Environmental Services Dams Bureau. The four dam hazard classifications (High, Significant, Low, and Non-Menace) are based on the potential losses associated with a dam failure. High and Significant Hazard dams have the highest potential for damage; this could include damage to state or municipal

[1] US Geological Survey stream gauges http://waterdata.usgs.gov/nh/nwis/sw.

roadways as well as structures. There are 362 active dams in the Lakes Region; 13 are high hazard dams, 24 are significant hazard dams, and 60 are low hazards, the rest are non-menace dams.

Figure 4 – Significant and High Hazard Dams in the Lakes Region

Hazard Class	NAME	TOWN	RIVER	HEIGHT (ft.)	DRAINAGE AREA (sq. mi.)	OWNER
H	FRANKLIN FALLS FLOOD CTRL	FRANKLIN	PEMIGEWASSET RIVER	140.00	1000.00	Federal
H	AYERS ISLAND DAM	BRISTOL	PEMIGEWASSET RIVER	90.00	746.00	Utility
H	EASTMAN FALLS DAM	FRANKLIN	PEMIGEWASSET RIVER	27.00	1013.00	Utility
H	SAWYER LAKE DAM	GILMANTON	BADGER BROOK	19.00	1.60	Local
H	SQUAM LAKE DAM	ASHLAND	SQUAM RIVER	18.00	57.80	State
H	SARGENT LAKE DAM	BELMONT	TIOGA RIVER	17.00	2.78	Private
H	ALTON POWER DAM	ALTON	MERRYMEETING RIVER	16.00	35.40	State
H	SUNCOOK LAKE DAM	BARNSTEAD	SUNCOOK RIVER	16.00	54.80	State
H	GRIST MILL POND DAM	ASHLAND	SQUAM RIVER	16.00	58.60	Private
H	LAKE WAUKEWAN DAM	MEREDITH	TR LAKE WINNIPESAUKEE	15.00	12.50	Private
H	CRESCENT LAKE DAM	WOLFEBORO	SMITH RIVER	15.00	36.00	Local
H	WEBSTER LAKE DAM	FRANKLIN	CHANCE POND BROOK	14.00	19.00	State
H	NEWFOUND LAKE DAM	BRISTOL	NEWFOUND RIVER	12.00	95.00	State
S	WOLFEBORO SEWAGE LAGOON	WOLFEBORO	BLOOD BROOK	45.00	0.06	Local
S	DAN HOLE RIVER DAM	OSSIPEE	DAN HOLE	29.00	11.89	Local
S	CLEMENT DAM	TILTON	WINNIPESAUKEE RIVER	26.00	500.00	Private
S	STEVENS MILL DAM	FRANKLIN	WINNIPESAUKEE RIVER	22.00	474.00	Private
S	BRADLEY LAKE DAM	ANDOVER	HAME SHOP BROOK	19.00	4.00	Local
S	IPC UPPER DAM	BRISTOL	NEWFOUND RIVER	17.50	96.40	Private
S	SUNSET LAKE DAM	ALTON	SUNCOOK RIVER	17.00	6.90	State
S	BOG POND DAM	DANBURY	BOG BROOK	17.00	7.20	State
S	LAKE KANASATKA DAM	MOULTONBOROUGH	TR LAKE WINNIPESAUKEE	17.00	7.30	State
S	MELVIN RIVER DAM	TUFTONBORO	MELVIN RIVER	16.50	15.61	State
S	COPPS POND DAM	TUFTONBORO	WINGATE BROOK	16.00	4.40	State
S	CRYSTAL LAKE DAM	GILMANTON	SUNCOOK RIVER	16.00	27.00	State
S	LOWER IPC DAM	BRISTOL	NEWFOUND RIVER	16.00	96.10	Private
S	BARNSTEAD PARADE DAM	BARNSTEAD	SUNCOOK RIVER	16.00	114.00	State
S	ASHLAND SEWAGE LAGOON DAM	ASHLAND	NA	15.00	0.00	Local
S	GORDON HILL WATER SUPPLY POND	NEW HAMPTON	DICKERMAN BROOK	14.50	0.60	Local
S	BIG DAN HOLE POND DAM	OSSIPEE	DAN HOLE POND	12.50	5.68	Local
S	JACKSON POND DAM	NEW HAMPTON	JACKSON POND	12.00	1.05	Private
S	DICKERMAN POND DAM	NEW HAMPTON	DICKERMAN BROOK	11.00	1.96	State
S	CAMP BELKNAP SEWAGE LAGOON	TUFTONBORO	NA	10.00	0.00	Private
S	HIGHLAND LAKE DAM	ANDOVER	TR SUCKER BROOK	9.20	5.02	Local
S	CLEARWATER CAMP LAGOON DAM	MEREDITH	NA	8.00	0.00	Private
S	RUST POND DAM	WOLFEBORO	PERRY BROOK	8.00	2.66	Private
S	NEWFOUND RIVER DAM	BRISTOL	NEWFOUND RIVER	7.00	98.24	Private

Some of these dams generate hydroelectric power and many are used for flood control. By adjusting the height of the dam, the owner regulates water levels both upstream and downstream of the dam. Lowering the water level on lakes in the fall facilitates repair work on docks and reduces the possibility of damage to docks in the winter due to ice. In the spring, the owner of the dam controls how much water is released and a balance has to be struck between upstream and downstream needs. Release of too much water all at once can result in flooding and damages downstream, but holding back too much water during a wet spring or summer can lead to flooding of shorefront properties.

d) Ice Jam

Ice forming in riverbeds and against structures presents significant hazardous conditions for communities. Meltwater or stormwater may encounter these ice formations and apply lateral and/or vertical force upon structures. Moving ice may scour abutments and riverbanks. Ice may also create temporary dams. These dams can create flood hazard conditions where none previously existed. As indicated by the stream gauge (Figures 5 and 6) record, ice jams can lead to very rapid changes in river levels (in this case a fifteen foot increase in twelve hours).

Flood Risk Management

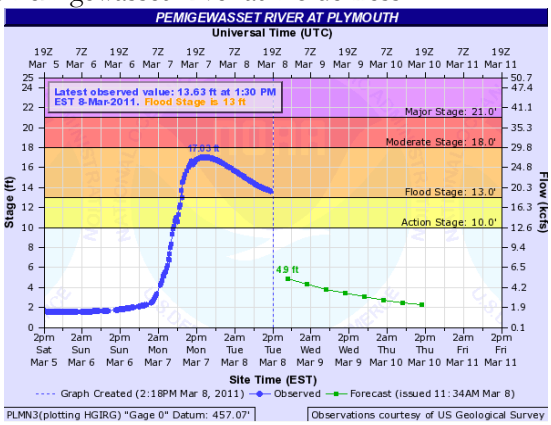
Franklin Falls Dam was built and constructed in 1943 on the Pemigewasset River to protect cities and towns along the Merrimack from flood damage. The operation of the Franklin Falls Dam is different from the operation of other Federal flood control dams in New England for two primary reasons: The dam is built on a major tributary river with the largest upstream watershed of all Federal flood control dams in New England, and the dam has a limited storage capacity (equivalent of 2.8 inches of runoff across the entire watershed) while most Federal dams in New England have between 6 to 8 inches of runoff across their respective, smaller watersheds.

Since the dam has such an enormous watershed and very limited storage capacity by design, it is operated to reduce downstream maximum peak flows and alter the timing of when peak flows impact downstream properties and populations. Since its conception in 1943, Franklin Falls Dam has prevented more than $165 million in damages.

http://www.nae.usace.army.mil/Missions/Recreation/FranklinFallsDam.aspx

Figures 5 and 6: Ice jam on the Pemigewasset River at Holderness

March 2011 Ice Jam at NH Route 175A bridge across the Pemigewasset River



Stream gauge at bridge indicating change in river level in early March 2011.

2. Severe Winter Weather

Winter weather conditions in particular can vary a great deal throughout the region; there may be snow in the mountains of Sandwich or Alexandria, sleet in Meredith, and rain in Barnstead.

A heavy snowstorm can be defined as one which deposits four or more inches of snow in a twelve hour period. The region typically receives greater than 66" of snow annually.[2] Records from the Laconia Airport indicate that eight or more inches have fallen in a single day on most dates from late November through mid-March but the average snowfall on any day from November through April is less than an inch. The record also shows that deposits of more than ten inches have happened in each of these months and on several days in February. Gilford has seen more than fifteen, and even twenty inches of snow in one day.

In the winter months, the region may experience blizzard conditions. A blizzard is characterized by sustained winds or frequent gusts of 35 miles per hour or greater and considerable amounts of falling or blowing snow that last for a duration of three hours or longer. The combination of winds and snow reduce visibility to less than a quarter mile.[3]

Figure 7: Roof collapse, Franklin, NH - 2008

New Hampshire generally experiences at least one or two nor'easters each year with varying degrees of severity. A nor'easter is defined as a large anticyclone weather system that resides near the New England region. These storms have the potential to inflict more damage than many hurricanes because high winds can last from twelve hours to three days, while the duration of hurricanes ranges from six to twelve hours. A

[2] *Northeast States Emergency Consortium,* http://www.nesec.org/, visited January 25, 2011.
[3] "Winter storm terms," http://www.fema.gov/hazard/winter/wi_terms.shtm, visited February 8, 2011.

nor'easter also has the potential to sustain hurricane force winds, produce torrential rain, and create blizzard conditions in winter months.

An ice storm coats trees, power lines, streets, vehicles, and roofs with a very slick and heavy layer of ice. In the winter of 1998, a major ice storm crippled much of New Hampshire, coating everything with as much as three inches of ice, resulting in more than $17 million in damages. In the Lakes Region elevation is a major factor; those areas over 1,000' in elevation were hit especially hard during this event. The U.S. Army Corps of Engineers, Cold Regions Research and Engineering Laboratory estimates a 40 – 90 year return period for an event with a uniform ice thickness of between 0.75 and 1.25 inches. Ten years later (2008), however, New Hampshire was struck again by another severe ice storm, this time damages cost $15 million.

3. Severe Wind

On average, six tornadoes touch down somewhere in New England each year. There is no way of knowing where or when the next damaging tornado will strike as they are among the most unpredictable weather phenomena. Downbursts are 10 times more likely to occur than tornadoes.

a) Hurricane

Hurricanes are severe tropical storms that have winds of at least 74 miles per hour. In the Lakes Region they could produce heavy rain and strong winds that could cause flooding or damage buildings, trees, power lines, and cars.[4] Hurricanes are measured by the Saffir-Simpson Hurricane Scale: a 1-5 rating based on a hurricane's intensity using wind speed as the determining factor with Category 5 being the strongest. New Hampshire has not experienced a severe hurricane since 1938. On September 21, 1938, a Category 3 hurricane claimed 13 lives in New Hampshire and many more throughout New England. Official records at the Weather Bureau in Concord show sustained winds of 56 miles per hour, but around the state, gusts around 100 miles per hour were reported, mostly due to topographical acceleration. The Merrimack River rose nearly 11 feet above its flood stage, *The Hanover Gazette* reported that in New Hampshire, 60,000 people were homeless and many areas were without power. Damages were estimated at $22 million.[5] Hurricane Bob, a Category 2 storm, in 1991, was declared a major federal disaster in New Hampshire and is recorded as a severe storm in the state's history.[6]

b) Tornado

Tornadoes are violent rotating storms that extend to the ground with winds that can reach 300 miles per hour. They are produced from thunderstorms and can uproot trees and buildings. Tornados are classified using the Fujita Scale ranging from the F0 up to the F6, based on wind speed (ranging from 40 mph to over 300 mph) and physical damage. Since 1964 there have been 24 tornados reported in the four counties represented in the Lakes Region, all have been F0, F1, or F2. In July 2008 an F2 tornado ran through five counties in New Hampshire and impacted Alton, Wolfeboro, and Ossipee.

[4] http://www.fema.gov/hazard/hurricane/hu_about.shtm, visited January 25, 2011.
[5] http://www.nh.gov/safety/divisions/hsem/NaturalHazards/index.html, visited January 25, 2011.
[6] http://www.fema.gov/news/event.fema?id=2118 visited January 25, 2011

c) Downburst

According to the National Oceanic and Atmospheric Administration (NOAA), a downburst is a strong downdraft, rotational in nature, which causes damaging winds on or near the ground. Winds can exceed 130 mph.[7] Downbursts fall into two categories based on their size:

- microbursts, which cover an area less than 2.5 miles in diameter, and
- macrobursts, which cover an area at least 2.5 miles in diameter.

Microbursts do occur in the Lakes Region; in 2012 one occurred in Tilton and one in Franklin. There were no injuries but several homes and vehicles were damaged by downed trees.

4. Fire

a) Wildfire

A wildfire is defined as a fire in wooded, potentially remote areas that may endanger lives. Typically wildfires in the northeast are small in size, although there is the potential for larger fires. New Hampshire has about 500 wild land fires each year; most of these burn less than half an acre. Much of the Lakes Region is forested and susceptible to fire. In 2012, 76 acres burned over a two-day period in Hill. In the 1950s several thousand acres burned in Tuftonboro, Ossipee, and Effingham.

b) Conflagration

Conflagration is an extensive, destructive fire in a populated area that endangers lives and affects multiple buildings. Historically, many New Hampshire towns were settled in areas near the confluence of waterways in order to power the mills. Often the town centers were at a low point in the topography, resulting in dense residential development on the steeper surrounding hillsides. Hillsides provide a natural updraft that makes fire fighting more difficult. In particular, structural fires spread more readily in hillside developments because burning buildings pre-heat the structures that are situated above them.

Within the Lakes Region, the City of Laconia was the site of one of the most devastating conflagration to occur in the State of New Hampshire. The 1903 Great Lakeport Fire consumed more than 100 homes, two churches, two factories, a large mill, a power plant, and a fire station. The town of Wolfeboro's history includes a small conflagration in the winter of 1956.

Figure 8: April 12, 2009 – Alton Bay

The majority of structures in the region are old, wood buildings, some of which lack fire suppression systems. As such, several town and city centers in the region are susceptible to conflagration. In April 2009 the Alton Bay Christian Conference Center, a complex of seasonal cottages built closely together up a hillside with limited vehicular access between buildings, caught fire, resulting in an 11-alarm fire that destroyed more than 40 structures.

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[7] *Weather Glossary*. National Oceanic and Atmospheric Administration, http://www.weather.gov/glossary/index.php?letter=d, visited March 8, 2011.

5. Earthquake

An earthquake is a series of vibrations in the Earth's crust induced by the abrupt rupture and rebound of rocks in which elastic strain has been slowly accumulating. Earthquakes are commonly measured using *magnitude*, or the amount of seismic energy released at the epicenter of the earthquake. The Richter magnitude scale is a mathematical device used to compare the size of earthquakes.

Figure 9 – Richter Table[8]	
Magnitude	**Earthquake Effects**
2.5 or less	Usually not felt, but can be recorded by seismograph.
2.5 to 5.4	Often felt, but only causes minor damage.
5.5 to 6.0	Slight damage to buildings and other structures.
6.1 to 6.9	May cause a lot of damage in very populated areas.
7.0 to 7.9	Major earthquake. Serious damage.
8.0 or greater	Great earthquake. Can totally destroy communities near the epicenter.

New Hampshire is considered to be in an area of moderate seismic activity with respect to other regions of the country. This means the state could experience large (6.5-7.0 magnitude) earthquakes, but they are not likely to occur as frequently as in a high hazard area like the Pacific coast. There is the potential for earthquakes in the region to register 5.5 on the Richter Scale, causing slight damage to buildings and structures. Due to the unique geology of New Hampshire, earthquake propagation waves travel up to 40 times further than they do in the western United States, possibly enlarging the area of damage.[8] The strongest earthquakes to strike New Hampshire occurred December 20 and 24, 1940 in the town of Ossipee. Both earthquakes had a magnitude of 5.5 and were felt over an area of 400,000 square miles.

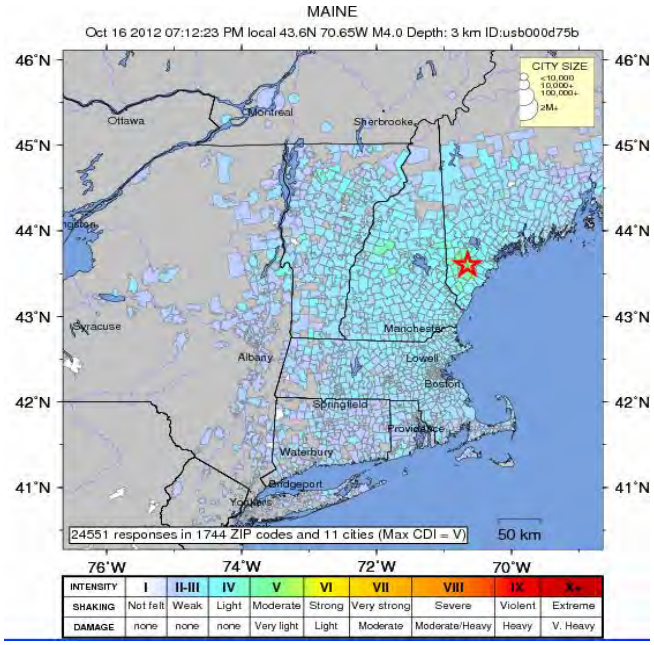

Figure 10: Areas where the October 16, 2012 earthquake was felt.

On average, the Lakes Region experiences an earthquake every two years, though these earthquakes are mild and go mostly undetected by people. Sanbornton and Tamworth are identified as major epicenters in the region.[9] A search of the USGS National Earthquake Information Center database shows that since 1977 there have been 15 earthquakes with a magnitude of at least 3.0 within a 100 km (62 mi.) radius of the region; the largest was magnitude 4.5.[10] Two such earthquakes have occurred since 2006; a 3.4 event in 2010 centered in

[8] http://www.nh.gov/safety/divisions/hsem/NaturalHazards/index.html visited February 8, 2011.
[9] http://des.nh.gov/organization/commissioner/pip/factsheets/geo/documents/geo-3.pdf , pg. 3, visited January 25, 2011.
[10] USGS. http://earthquake.usgs.gov/earthquakes/eqarchives/epic/, Accessed August 2, 2012

Penacook, NH and a 4.0 quake in southern Maine shook the region on October 16, 2012. [11]

6. Health Hazards

There are several other natural hazards that can impact the health and welfare of Lakes Region. Elements such as arsenic and radon are naturally found in some of our bedrock and can be released over time, seeping in to water wells or building up in the air of underground rooms such as basements. Both are colorless, odorless gasses; the only way of detecting their presence is through testing.

Wells drilled into New Hampshire's bedrock fractures have about a 1 in 5 probability of containing naturally occurring arsenic above 10 parts per billion, the threshold set by the US Environmental Protection Agency (EPA) in 2001. Prolonged exposure to levels above this threshold is associated with increased risk of cancer and other non-cancerous effects.[12]

Radon is a naturally occurring colorless, odorless radioactive gas usually associated with granite rock formations. The gas can seep into basements through the air or be transported via water and released once the water is aerated, such as during a shower. Extended exposure to radon can lead to higher rates of cancer in humans. Radon is not a singular event; it can take years or decades to see the effects. The NH Office of Community and Public Health's Bureau of Radiological Health indicates that one third of homes in New Hampshire have indoor radon levels that exceed the US Environmental Protection Agency's "action level" of 4 pCi/l..[13,14]

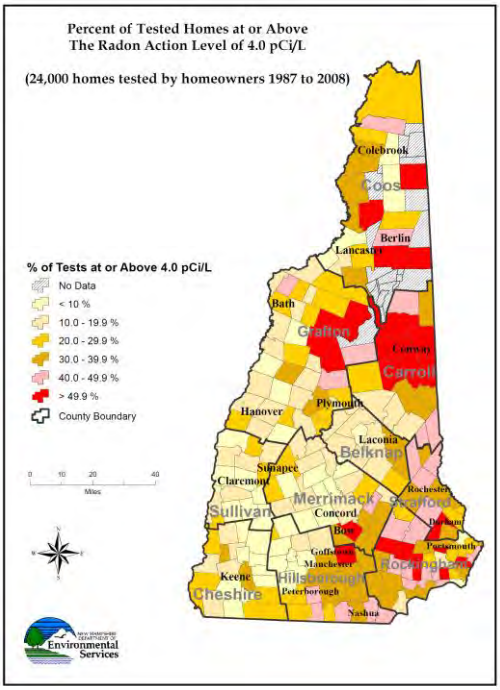

Figure 11 - Radon by Municipality

B. Potential Impacts

1. People

On August 4, 2008, rain events caused substantial flash flooding and washouts in Ashland, New Hampton, Center Harbor, and Meredith. In addition to property damages, a young girl died in Ashland as a result of this storm.[15] Intense winds and ice or heavy, wet snow can result in downed trees, limbs, and wires blocking road access and cutting power to neighborhoods and entire communities. Actions that can reduce the likelihood or impacts due to these hazards include regular tree maintenance programs, underground wires, and limiting the number of single-access roads. Communities can also identify and publicize cooling centers and shelters with heat. Many Lakes Region communities have also publicized through brochures, at meetings, and on municipal

[11] USGS, Earthquake Archive Search. http://earthquake.usgs.gov/earthquakes/search/ accessed August 8, 2013
[12] NH DES, Arsenic Information. http://des.nh.gov/organization/divisions/water/dwgb/capacity/arsenic.htm accessed April 10, 2014.
[13] http://www.nh.gov/safety/divisions/hsem/NaturalHazards/index.html visited February 8, 2011.
[14] NH DES Radon Program http://des.nh.gov/organization/divisions/air/pehb/ehs/radon/index.htm, accessed October 9, 2012.
[15] USAToday http://usatoday30.usatoday.com/news/nation/2008-08-08-596728286_x.htm.

websites what those who need power for medical equipment should do in the event of a temporary power outage.

2. Structures

Flat-roofed buildings are particularly susceptible to damage from snow and ice loads. Enforcement of state and local building codes and reminding owners of the benefits to keeping the roof cleared can reduce occurrences of roof-collapse. Older buildings constructed of masonry are quite rigid and susceptible to damage in a strong earthquake.

Buildings in floodplains and floodways are susceptible to damage. More than 800 properties in the Lakes Region are insured under the National Flood Insurance Program (NFIP); still more may be covered by private insurers. Since the mid-1970s, 380 losses have been paid through this program, totaling $2.8 million. One-third of these payments have been on repetitive losses. Ensuring that floodplain ordinances are up to date and followed through on code enforcement can reduce the susceptibility of new structures to flooding. Working with owners of existing structures that are in the floodplain, especially those that have had repetitive losses to elevate, flood-proof, or even move these structures out of the floodplain can reduce the risk of loss.

3. Infrastructure

A relatively large earthquake would impact roads and bridges, potentially limiting the ability of emergency services to be rendered. Rushing water causes erosion and can result in road washouts. Implementing workable stormwater management regulations and road and driveway standards, limiting construction on steep slopes, and planning for more intense storm events in stormwater calculations can all help to reduce damages to roads, bridges, culverts, and other drainage infrastructure.

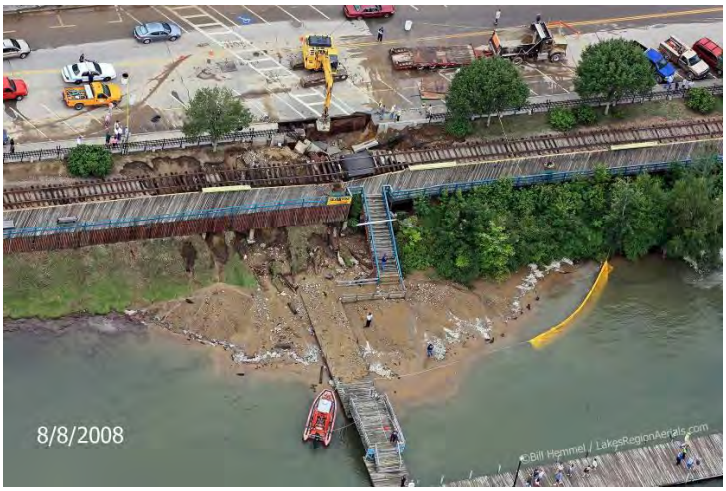

Figure 12: Washout at Weirs Beach, Laconia – 2008

When electrical wires come down during wind or ice storms, many people throughout the state and region can be affected. As more sectors of the region's economy, communications systems, and emergency response services rely on internet connectivity, ensuring the reliability of this transmission infrastructure gains importance. In some areas protection simply involves limiting the likelihood that limbs and trees will come down on wires, other cases it may be more be more technological in nature. Due to the configuration of transmission networks, even events beyond the boundaries of this region can impact local power supplies.

II. FACTORS AFFECTING HAZARDS AND IMPACTS

Numerous factors may affect natural hazards and the impact that they have upon a region. Some affect the hazards themselves; for example, a change in climate may result in changes in the frequency of severity of a particular type of hazard event. Factors such as where development occurs or the type of construction can reduce the impact that an event may have on homes, businesses, infrastructure, and individuals.

A. Climate Changes (past, present, and future)

1. Weather, Climate, Hazards

Weather is the hourly and daily changes in local conditions such as temperature, precipitation, humidity, and wind. Climate is the 30-year average of these indicators. Many of the hazards discussed in this chapter are either weather events such as severe wind or ice storms or they are often linked to weather events, as in flooding. Thus, changes in climate will likely have an affect on some of the hazards impacting the region. As communities consider how best to protect people, infrastructure, and properties from hazards, it would be prudent for them to consider these anticipated changes in the region's climate.

An extensive review of climate data in New Hampshire was conducted by the Earth Systems Research Center at the University of New Hampshire's Institute for the Study of Earth, Oceans, and Space. This work produced two reports, one for southern NH and one for northern NH; much of the information in this section is based on that analysis. The Lakes Region is considered as part of southern NH with the northern reaches of the region, Tamworth, Sandwich, and Holderness overlapping into northern NH. This study reviewed weather records from 1895 through 2012. They explored trends over the past century; identifying increases in some temperatures and increases in the number of heavy precipitation events since 1970.

2. Temperature

Southern New Hampshire has grown warmer over the past century; most locations showed consistent long-term increases in both minimum and maximum temperatures. In most cases this increase was detected throughout the year. The greatest increase was found in the nighttime minimum temperatures, especially during the winter. Much of that warming has occurred since 1970, with four to five fewer "cold days" (less than 32°F) per decade.

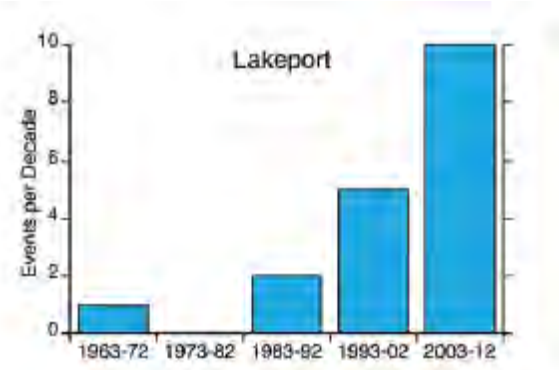

Figure 13: Number of very heavy (>4" in 48 hrs.) precipitation events per decade

3. Precipitation

There has been a modest increase in the amount of precipitation falling on the region over the past century and the rate of increase has been greater since 1970. The noticeable change in precipitation is the manner in which it occurs. The number of very heavy precipitation events, those producing over four inches of precipitation in a 48-hour period, has shown at least a four-fold increase since 1960[16].

[16] Wake, C., et.al. (2014). *Climate Change in Southern New Hampshire: Past, Present, Future*. Online at http://climatesolutionsne.org/sites/climatesolutionsne.org/files/2014_southernnh_climate_assessment_unhsi_csne_gsf.pdf.

4. Snow Cover and Ice Out

Changes in ice-out dates are frequently used as an indicator of winter/early spring climate changes as the date closely correlates with surface air temperatures in the months prior to the breakup of the ice. Overall, ice-out dates have been occurring earlier over the past 115 years and, since 1970, about a week earlier. The number of snow-covered days (one or more inches of snow on the ground) has been decreasing by about two days per decade since 1970.

5. Additional Climate Change Indicators

The length of the growing season in southern New Hampshire has increased by 6-10 days per decade since 1960. In 2012 the US Department of Agriculture (USDA) revised its plant hardiness maps to show that most of the Lakes Region had shifted from Zones 4b and 5a to a mix of Zones 5a and 5b, representing a 5°F increase in minimum winter temperature (Figures 14a and b). It also has increased the likelihood of increased heat stress, inadequate winter chill period (time below freezing required by many fruit trees), and increased pressure from invasive species.

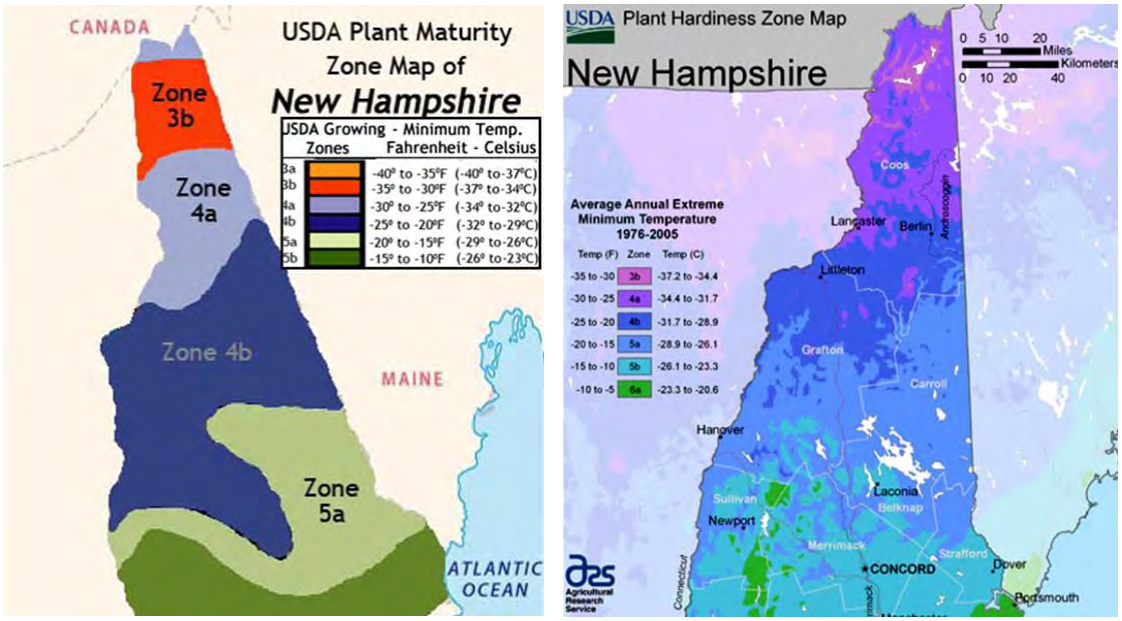

Figure 14a and 14b. USDA plant hardiness zones prior to 2012 (left) and after 2012 (right). From http://www.growing-herbs.com/zones/new_hampshire.html.

B. Future Climate Change

Using multiple models Wake, et al. (2013) modeled two separate scenarios for future climate conditions in New Hampshire based on a high and a low level of global output of heat-trapping emissions such as carbon dioxide, ozone, and methane. The models rely upon multiple variables including energy usage, fuel types, and advances in technology. Our current pattern is projected to result in an outcome similar to the high emissions model. From these models, both near term (2010 – 2039) and long-term (2070 – 2099), projections were made.

1. Temperature

In the short term, temperature is projected to rise 2°F regardless of whether low emissions or high emissions are produced. However, in the long-term there is a difference as the low emissions

scenario produces a 4°F increase and the high emissions scenario results in an 8-9°F increase. The projected number of days above 90°F in southern New Hampshire will rise from less than ten per year to 20 days by the end of the century with a low emissions scenario and more than 50 days per year in a high emissions scenario. From 1980-2009 southern New Hampshire experienced an average of 164 nights where the temperature dropped below 32°F; under the low emissions scenario this would drop to 144 days by the end of the century and 120 under the high emissions scenario.

2. Precipitation

Annual precipitation is projected to increase 17-20 percent by the end of the century under both emissions scenarios. The Lakes Region can expect to experience more extreme precipitation events in the high emissions scenario. From 1980-2009 there were an average of 4.3 very heavy precipitation events per decade under the low emissions scenario; we can expect ten such events per decade, while under the high emissions scenario we will likely see twelve very heavy precipitation events each decade by the end of the century.

3. Snow Cover

The models project that there will be a 20 percent decrease in snow covered days by the end of the century under low emissions (89-95 days) and 50 percent decrease under high emissions (52 days).

4. Other

The growing season is projected to increase by 20 days under low emissions scenario and 49 days under high emissions by the end of the century. Impacts will likely be lower crop yields due to heat stress and fewer chilling days and increased pressures from invasive species.

C. Development Activity

1. Floodplains

All Lakes Region communities have a floodplain ordinance, which regulates development in the floodplain. These ordinances require that structures in the floodplain meet certain standards such as raising the lowest floor of the building above the highest level that water is expected to reach and ensuring that mobile homes are securely tied down. A floodplain ordinance also requires that the community take active steps to enforce the standards and maintain records. In return for adoption and implementation of an ordinance, property owners are eligible to purchase flood insurance through the NFIP.

In recent years changes have been made to the program to make it operate more effectively in an effort to reduce damages, get rate-payers to bear more of the program costs, and better reflect the current and anticipated changes in flood levels.

New Hampshire's Shoreland Water Quality Protection Act (RSA 483B) provides minimum standards for all public waters in the state regarding use of the land within 250' of the shore. The intent of this law is to protect not only the environment and natural resources but also to protect buildings and land from flooding and erosion. Many activities within the protected shoreland require a permit from NH DES. Local planning boards should be familiar with this law and how it may impact their review and approval of projects. Municipalities may adopt stricter standards if they wish.

Another method of restricting development on land that is prone to flooding is to either place the land in conservation or purchase the land development rights. When the Franklin Falls dam was built, some land upstream of the dam was placed under control of the US Army Corps of Engineers; most of it is available to the public for recreational use.

2. Hillsides and Ridges

About thirty percent of the land in the Lakes Region has a slope of at least 15% and more than a third has a slope of 25% or more. While construction on steep slopes may be feasible, it is not advisable due to concerns about erosion from the construction site, road, and driveway both during and after construction. Accessibility by emergency vehicles can be a concern. Many Lakes Region communities have steep slopes ordinances as well as road and driveway standards to guide development in a manner that will limit the potential damage to the land, property, and infrastructure due to erosion.

D. Changing Demographics

The average age of Lakes Region residents is higher than the rest of the state. Approximately 20 percent of the population of Belknap and Carroll Counties is over 65 years old, twice the figure for the entire state.[17] Communities need to plan for an aging population and have the capacity to address the needs of this demographic, especially in conjunction with hazard events. The implications for communities include addressing the special needs of this population when power supplies are compromised, such as those needing oxygen, heating and cooling the elderly population, and providing a means of transport.

III. Barriers & Opportunities

A. Mitigation

To help the Lakes Region become as resilient as possible to hazards in both the short- and long-term, actions can be taken to both mitigate the hazards (reduce the likelihood of the hazard occurring) and mitigate the impacts of the hazards on people, structures, infrastructure, and businesses (sometimes referred to as "adaptation").

B. Current Planning

All communities in the region have hazard mitigation plans and local emergency operations plans. Each community has a locally adopted master plan, which sets down the best and most appropriate future development of the area and to aid the planning board in designing ordinances. The master plan must have a vision and a land use section and under section NH RSA 674:2 III (e) the community may also include, "a natural hazards section which documents the physical characteristics, severity, frequency, and extent of any potential natural hazards to the community. It should identify those elements of the built environment at risk from natural hazards as well as extent of current and future vulnerability that may result from current zoning and development policies." Some communities have adopted their hazard mitigation plan by reference as the natural hazards section of their master plan.

Sixty percent of the communities in the Lakes Region have developed a Water Resources Plan for Rural Fire Protection, which involved inventorying and mapping cisterns, fire ponds, dry hydrants, assessing protection levels, identifying gaps, and making recommendations for rural firefighting

[17] NH Office of Energy and Planning, Census 2010 http://www.nh.gov/oep/data-center/census/index.htm

sources. These were developed by North Country Resource and Development Commission. All communities are covered by one of five regional public health networks, which help coordinate health care preparedness in the event of a disaster http://nhphn.org/.

As noted earlier, all communities participate in the National Flood Insurance Program and have some level of floodplain ordinance. Digital floodplain maps were produced by FEMA for Merrimack, Grafton, and Carroll Counties in the last ten years, providing a convenient and precise mapping layer as well as the opportunity for communities and individuals to review and comment on the floodplain boundaries; however, Belknap County communities are still working with the paper maps drawn in the 1970s and 1980s due to funding limitations at FEMA and a shift in priorities to coastal mapping.

A number of communities in the region have implemented steep slopes ordinances, limiting development in areas that are prone to erosion. Likewise many communities have road standards, for some these include private roads and driveways. While having such standards does add to the cost of development, some of those costs may be recouped over the long term in the form of reduced road maintenance costs and depreciation. These standards are important for emergency vehicles being able to access the property.

Neighborhood Action

Not all planning and mitigation efforts need to start with the municipality. The Chocorua Ski & Beach Club Association in Tamworth is an example of a neighborhood taking action to mitigate the likelihood of wildfire damaging their homes.

The Ski & Beach Club is home to 190 residents. The development sits in the Ossipee Pine Barrens, which is particularly susceptible to wildfire. Several wildfires burned more than 1,000 acres each in this area in the 1950s.

The Chocorua Ski & Beach Club Association has been recognized as a Firewise Community site since 2007. By adhering to their Best Management Practices the residents of this development are safer and more aware of the wildfire risks. http://www.firewise.org/

C. Awareness/Communication

As noted in the beginning of this chapter, weather forecasting and reporting has improved greatly over the past several decades. Residents and visitors have numerous media outlets for reports on impending natural hazard events. Likewise there are multiple media outlets for finding out about local conditions and resources. Most Lakes Region communities post official alerts on their municipal webpage and many can contact residents and businesses through an alert program such as Reverse 911, Code Red, or Everbridge, which enable public safety officials to notify residents of hazardous situations.

More communities in the region are reaching out to provide access to informational materials to help people in the region be prepared for hazards at town halls, public libraries, and on websites. Some provide workshops for residents and businesses.

D. Funding

Taking action to reduce the likelihood that a hazard event will impact people, structures and infrastructure, and businesses throughout the region usually does involve a cost. FEMA has calculated that each dollar spent on prevention can save four dollars spent on recovery. Education and outreach are often relatively low cost efforts; likewise ordinances and regulations are usually fairly inexpensive to create and adopt but may place additional costs on residents, developers, and

businesses. Infrastructure projects usually have a high cost to the community. In all cases there needs to be a consideration of the short- and long-term costs with the associated benefits.

For some actions, assistance with funding is available from sources such as FEMA, Community Development Block Grant (CDBG), US Department of Agriculture (USDA), and Economic Development Administration (EDA). Matching funds and a benefit-cost analysis are required for most programs.

E. Collaboration

All Lakes Region communities are served by regional hazmat teams. Fire and police departments throughout the region have mutual aid agreements with nearby communities which facilitate the giving and receiving of assistance in an emergency. Some of the region's public works departments have similar arrangements coordinated through UNH Technology Transfer (http://www.t2.unh.edu/ma).

IV. Goals, Objectives, Actions

A. Planning

1. Continue to work with communities and FEMA to update local hazard mitigation plans
2. Provide GIS mapping assistance to communities, including HAZUS mapping to help analyze risks from hazards
3. Assist communities in mapping, inventorying, and assessing infrastructure
4. Provide planning and mapping support to communities through the Fluvial Erosion Hazard program to identify areas most susceptible to riverine erosion
5. Promote planning efforts that reduce the likelihood of impact due to flooding, including:
    a) development of accurate, up-to-date floodplain mapping (FEMA), especially in Belknap County
    b) implementation of floodplain ordinances to reduce development in the floodplain
    c) development and implementation of stormwater and steep slopes ordinances/regulations along with road and driveway standards to reduce the likelihood of erosion
    d) use of drainage infrastructure (culverts, bridges, ditches) with the capacity to accommodate very heavy precipitation events
    e) encourage regular inspections and communication between dam owners, NH Department of Environmental Services, and communities both up- and downstream regarding maintenance and flow.
6. Promote the development of tree maintenance programs both public and private to the reduce the likelihood that trees and limbs will damage infrastructure and property during wind and ice events
7. Promote planning efforts that reduce the likelihood of impact on homes, businesses, and people due to fire, including implementation of many of the FireWise principles
8. Encourage the adoption and implementation of the state building code, which includes structural protections against seismic events

9. Promote planning efforts that reduce the likelihood of impact to the region due to health hazards
    a) promote home water monitoring for substances such as arsenic and radon
    b) encourage coordination between communities, stakeholders, and regional health networks
10. Encourage efforts to identify and remedy any "choke points" in the regional energy infrastructure system.

B. Mitigation

1. Explore opportunities for funding of projects that have regional importance through FEMA and other entities
2. Where appropriate, facilitate the purchase and removal of flood-prone structures
3. Encourage energy use practices that result in a lower carbon emissions

C. Education, Outreach

1. Provide opportunities for local decision-makers to learn more about state and national hazard planning efforts and opportunities. Topics might include
    - FEMA grant programs & other funding opportunities
    - NHDES dam bureau
    - Floodplain mapping & Flood Insurance program
    - Anticipated impacts of climate change on hazards

V. RESOURCES

Program	Comment	website
National Oceanic and Atmospheric Administration (NOAA)	Weather information	http://www.noaa.gov/
NOAA: Storm Events Database	Searchable database of storm events	http://www.ncdc.noaa.gov/stormevents/
US Geological Survey Water Data for New Hampshire	Searchable database for stream gauges/water levels, historical and real-time	http://waterdata.usgs.gov/nh/nwis
FEMA Home Page	Information about disaster preparation, mitigation, and resources	http://www.fema.gov/
FEMA Map Service Center	FEMA Flood Maps	https://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1
FireWise Communities	Program for homeowners and communities to help make property resistant to wildfire	http://www.firewise.org/
Fire Adapted Communities	Build fire resiliency into a community	http://www.fireadapted.org/

Program	Comment	website
New Hampshire Division of Forests and Lands - Fire Prevention,	Information about fires and fire prevention in New Hampshire	http://www.nhdfl.org/fire-control-and-law-enforcement/fire-prevention.aspx
US Geological Survey – Earthquake Hazards Program	Information about earthquakes, including a searchable database	http://earthquake.usgs.gov/
NH Department of Environmental Services Arsenic Information	Information about arsenic, testing programs, and treatment options	http://des.nh.gov/organization/divisions/water/dwgb/capacity/arsenic.htm
New Hampshire Public Health Networks	An overview of the network and links to regional networks	http://nhphn.org/
NH NRCS Watershed Protection Programs	A variety of planning and protection programs.	http://www.nrcs.usda.gov/wps/portal/nrcs/main/nh/programs/planning/
New Hampshire Homeland Security and Emergency Management	Home page – Information about planning, training, mitigation, recovery, and funding	http://www.nh.gov/safety/divisions/hsem/index.html
New Hampshire Homeland Security and Emergency Management, Hazard Mitigation Grant Program	Listing of various planning, mitigation programs and documents	http://www.nh.gov/safety/divisions/hsem/HazardMitigation/hmgp.html
Adaptation Toolkit for Municipalities	A thorough resource for communities to help in planning for climate change from basic information to assessments, implementation and funding options.	http://des.nh.gov/organization/divisions/air/tsb/tps/climate/toolkit/index.htm
Climate Change in Southern New Hampshire: Past, Present, Future	A comprehensive review of data regarding past changes in New Hampshire's climate, review of impacts, and modeling of future scenarios – south of the Sandwich Range	http://climatesolutionsne.org/sites/climatesolutionsne.org/files/2014_southernnh_climate_assessment_unhsi_csne_gsf.pdf
Climate Change in Northern New Hampshire: Past, Present, Future	A comprehensive review of data regarding past changes in New Hampshire's climate, review of impacts, and modeling of future scenarios – Sandwich Range north	http://climatesolutionsne.org/sites/climatesolutionsne.org/files/2014_northernnh_climate_assessment_unhsi_csne_gsf.pdf
National Climatic Data Center	Source for data, maps, and reports on climate information	http://www.ncdc.noaa.gov/
US Environmental Protection Agency: Climate Change Impacts	Information about the impacts of climate change on various aspects of the environment and economy in the Northeast	http://www.epa.gov/climatechange/impacts-adaptation/northeast.html

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Economic Opportunity, Environmental Quality

Lakes Region Plan 2015-2020

Energy Efficiency and Green Building

LAKES REGION PLANNING COMMISSION
103 Main Street • Humiston Building
Meredith, NH 03253
603-279-8171 • www.lakesrpc.org

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TABLE OF CONTENTS

ENERGY EFFICIENCY AND GREEN BUILDING

EXECUTIVE SUMMARY

INTRODUCTION

Energy is a very complex geopolitical and economic issue that transcends local, state, multi state, national and international levels. Energy and green building connect many planning functions including land use, housing, transportation, environment, and natural resources. This chapter provides information on energy use and possible alternatives with the goal of creating a more resilient and sustainable community. Through local efforts and the sharing of information regarding innovative approaches to energy efficiency, the Lakes Region can reduce its dependence on fossil fuels and become more resilient.

EXISTING ENERGY CONDITIONS

New Hampshire has a Renewable Portfolio Standard (RPS) that requires 24.8 percent of electricity sold to come from renewable energy resources by 2025; in 2013, 16 percent of New Hampshire's net electricity generation came from renewable energy. In 2011, NH was the ninth lowest per capita consumer of energy among the states and the transportation sector accounted for 35 percent of the state's energy consumption. In 2013 the Seabrook nuclear power reactor provided 55 percent of the state's net electricity generation for that year, and natural gas accounted for 21 percent of the state's net electricity generation. The state does not produce coal and the coal share of New Hampshire's electricity generation has declined due to cheaper natural gas options. Coal still typically provides up to 14 percent of net electricity generation.

A major contributor to New Hampshire's economy is forest products, including wood chips and wood pellets that are the mainstay of New Hampshire's biomass energy industry. Fossil fuel products dominate New Hampshire's energy consumption, and the state's residential consumption per capita is among the highest in the nation, in part because of heavy dependence on heating oil during the long winters. New Hampshire neither produces nor refines petroleum. While natural gas is not produced in New Hampshire, the state still consumes it and about two-thirds of natural gas is used to generate electricity. Homeowners have been switching to using natural gas for home heating in recent years.

Major renewable energy projects in New Hampshire include wind, hydropower and biomass; nearly 14 percent of New Hampshire's net electricity generation comes from renewable resources, with hydroelectric facilities providing slightly more than half and biomass facilities supplying most of the

rest. Most biomass resources use wood and wood waste-derived fuels, such as wood chips and wood pellets.

Community Attitudes

In the summer of 2013, the UNH Survey Center conducted a telephone survey with 400 residents living in the Lakes and Central region for the purpose of identifying residents' views on topics regarding energy efficiency. Results of this survey show that 78 percent of residents support higher energy efficiency standards in new buildings, over 70 percent of residents support an expansion of incentives for home energy efficiency improvements and promotion of renewable energy sources. Not as many residents supported electric car charging stations.

When it comes to government involvement, 49 percent of residents think local government should be very involved, and 12 percent think local government should not be very involved or should not be involved at all. When asked about prioritizing investment of public dollars, top priority responses were for environmental protection and conservation of natural resources (26 percent). This is followed by safe and affordable housing choices, economic development, and energy efficiency. Development of infrastructure and weather-related preparedness were the lowest priority items.

Local Energy Efforts

Local governments in the Lakes Region have improved the energy efficiency in their community. This section highlights the efforts by many of the Lakes Region communities that have taken part in improving their communities, including Center Harbor, Laconia, Wolfeboro, Meredith, Sandwich, and Tuftonboro.

Impacts of Energy Consumption and Energy Choices

The planning community recognizes that energy, in its various aspects, impacts the health, safety, quality of life, and economic vitality of any region and should be addressed at state and local levels through the planning process. Costs for coal, gas, and oil continue to increase and lessening our dependence on these fuels can be very beneficial to the community. These benefits may include: reduction of operating costs for buildings and vehicles, more efficient and longer-lasting buildings, diversifying energy supplies and using more local, renewable resources, and creation of safer streets with multiple transportation options. In June 2014, the U.S. Environmental Protection Agency (EPA) released new proposed regulations regarding emissions of carbon dioxide and other greenhouse gases.

ENERGY PLANNING AND GREEN BUILDING

The building sector consumes nearly half of all energy produced in the United States and similarly in New Hampshire. Half of CO2 emissions in New Hampshire are emitted by the building sector, and the state faces a great challenge with cold climate winters and the increasing temperatures of summer. Creating resilient buildings by following green building guidelines will be better for overall energy use and will increase the ability of the building to withstand New England weather.

Energy conservation and energy efficiency are also ways that building owners can lessen their energy use. NHOEP provides information on how to reduce energy use as well as renewable energy incentives for solar electric, solar hot water, or wind on-site installations.

New Hampshire's Potential for Energy

The NH OEP webpage has excellent information on energy efficiency and renewable energy - http://www.nh.gov/oep/energy/saving-energy/index.htm

Wind — A resource map provided by the US Department of Energy's Wind Program and the National Renewable Energy Laboratory indicates that New Hampshire has wind resources consistent with community-scale production. The excellent wind resource areas in the state are on the ridge crests and off shore. The White Mountain region in northern New Hampshire is the most prominent area. Certain ridge crests in the western part of the state can also have excellent wind resource.

Biomass — In New Hampshire, biomass generally refers to low value wood generated from traditional harvesting practices. Currently, New Hampshire has eight existing biomass plants in Alexandria, Berlin, Bethlehem, Bridgewater, Springfield, Portsmouth, Tamworth and Whitefield. The Lakes Region shows significant potential for small scale biomass projects.

Solar — Currently Lakes Region has several solar arrays including the Sandwich public works garage and Lakes Region Community College. Building owners can have their own on-site arrays or participate in group net metering which allows a certain number of members to own a portion of the energy that a larger array can produce. Large-scale solar installations could prove to be an effective means of energy production for large businesses or communities as an alternative energy source.

INTEGRATING ENERGY WITH TRADITIONAL PLANNING CONCEPTS

Energy touches all areas of planning including land use, housing, transportation and environmental issues. More and more communities are making these connections and are trying to promote energy efficiency and conservation in land-use planning. This includes changing to a mix-use zoning, encouraging other alternative forms of transportation design, encouraging residents to buy local, and setting new building policies and codes for efficiency. Other land-planning tools are outlined in this section.

RECOMMENDATIONS FOR AN ENERGY FUTURE

Energy is a broad, multilayered, geopolitical and economic issue that it best addressed at the state and national levels. Depending on the level of interest and enthusiasm, local governments can play an effective role through a local energy committee which works to make energy efficiency improvements to municipal buildings, encourages the use of renewable energy, enforces the State's energy code, and is an advocate for energy efficiency and green building design. A need exists for continued assistance and involvement of the LRPC. In the energy field, the role of the Lakes Region Planning Commission should involve public information, education and outreach, information sharing and technical assistance with small-scale energy efficiency and renewable energy projects.

Focus for Local Governments

The following is a menu of energy activities local government can consider.

Solar: The solar aggregation program involves a lead local government or several local governments or a region working together to advertise for and retain a third party solar developer.

Lighting: Public Service New Hampshire and the NH Electric Cooperative can assist local governments in converting municipal lighting to efficient LED (light-emitting diode) street lights.

Transportation: The transportation sector is a major contributor to greenhouse gas emissions. Through the LRPC's Transportation Advisory Committee, local government can encourage measures to reduce travel demand, such as additional public transit, car and van pooling, ride sharing and others.

Education: Entities such as New Hampshire Local Energy Solutions, Jordan Institute, NH PUC's Energy Efficiency and Sustainability Board, and the New Hampshire Sustainable Energy Association can develop an integrated education, outreach, and workforce training programs for the region.

Energy Efficient Buildings: Local governments can consider establishing green building ordinances for municipal buildings which provide incentives for the use of new construction or major renovations of town buildings to meet US Green Building Council LEED standards.

Land Use Planning: The way communities are designed, planned, and built influences the amount of energy used, how energy is distributed, and the types of energy sources that will be needed in the future. Energy efficiency can be incorporated into land use planning.

A Regional Approach

Coordinated and integrated policies: Region-wide energy efficiency can best be implemented when other public policies are taken into consideration. Implementation of energy measures work best when integrated with programs dealing with other regional issues such as land use, air quality, transportation, housing and economic development and other issues.

LRPC Goals

Regional goals include:

1. Strive to provide affordable renewable energy;
2. Increase renewable energy incentives;
3. Increase education on energy efficiency issues and alternatives;
4. Encourage a sustainable funding pattern for energy efficient infrastructure;
5. Promote and encourage smart growth and Green infrastructure planning techniques; and
6. Increase energy efficiency of existing and future buildings.

Recommendations

- Develop a Comprehensive Region-wide Sustainability Plan/Energy Plan
- Utilize Smart Growth and Livability Principles
- Coordination between energy concerns and policies for land use, transportation, housing, environment and others
- Increase small-scale local energy production
- Increase the energy efficiency of existing and future buildings in the Region
- Increase regional use of and support for renewable energy
- Encourage and support the work of local energy committees

If the LRPC were to assist and follow through on energy efficiency and green building initiatives, the commission would require an additional funding source through a dedicated source.

SECTION I — INTRODUCTION

Purpose

Energy and Green Building is a broad topic that connects with and relates to many other planning functions such as land use, housing, transportation, environment, natural resources. The purpose of the Energy Efficiency and Green Building Chapter is to provide the public and decision makers with information on existing and future conditions of energy usage, key energy issues, and key recommendations. The chapter is not intended to be a comprehensive energy plan but rather a compilation of existing information and resources. Energy is a complex commodity that has local, regional, state, national and international ramifications and impacts. The concerns and challenges facing the Lakes Region are shared by many other regions across the state and country. The region's reliance on fossil fuels makes the area increasingly vulnerable as these energy sources become scarcer and more costly. In the Lakes Region, communities with low population densities and cold climates typically have high energy usage for home heating and transportation. Communities have expressed interest in becoming more energy efficient for both residential and nonresidential uses.

The Lakes Region's vision is to become a more resilient and sustainable community by lessening the region's dependence on fossil fuels and becoming more energy efficient. This chapter will review existing conditions to identify areas where energy improvements and better practices such as Green Building can take place. This chapter will provide information on existing conditions and a brief overview of current energy use in the region.

As noted, the chapter is primarily educational by providing information regarding the tools and techniques available for energy efficiency and energy-saving alternatives, existing programs, and green building options. The goals are to:

- Encourage energy independence and energy self-reliance by exploring available energy sources and options;
- Reduce the use of fossil fuels and emissions of greenhouse gases such as carbon dioxide;
- Encourage initial investment in sustainable energy sources to reduce dependence on fossil fuels and eventually cut energy costs;
- Share information regarding innovative approaches to energy efficiency and renewable energy; and
- Encourage local governments to integrate energy efficiency techniques into traditional planning concepts addressing land use and transportation issues.

Definitions

Since many definitions are used in the energy and green building field, it is important to have a common base of definitions.

Energy efficiency is defined as creating the same benefit of output, but with less energy as an input. When purchasing energy intensive goods, there exists an opportunity to purchase energy efficient alternatives that may lower long-term costs of owning the item. The energy efficient alternatives sometimes cost more to initially purchase but will cost less to own over its useful life because the energy consumption is lower. New Hampshire's regulated electric utilities provide incentives for selected products and energy efficient measures.

Green building is defined by the US Environmental Protection Agency as the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life-cycle from siting to design, construction, operation, maintenance, renovation and deconstruction. This practice expands and complements the building design concerns of aesthetics, economy, utility, durability and comfort.

Renewable energy includes resources that rely on fuel sources that restore themselves over short periods of time and do not diminish. Such fuel sources include the solar, wind, moving water, organic plant and waste material (eligible biomass), and the earth's heat (geothermal). Although the impacts are small, some renewable energy technologies have an impact on the environment.

http://www.epa.gov/greenpower/gpmarket/

Sustainable energy is a term used to describe energy generation systems that do not use nonrenewable fuel sources (fossil fuels) and that meet the needs of current generations without compromising the ability of future generations to also meet their needs. Examples of sustainable energy choices would be reduction in energy demand, solar photovoltaic systems and solar hot water, wind energy systems, biomass heating, co-generation systems, and hydroelectric systems.

http://www.epa.gov/climatechange/glossary.html

Climate change refers to any significant change in the measures of climate lasting for an extended period of time. In other words, climate change includes major changes in temperature, precipitation, or wind patterns, among others, that occur over several decades or longer.

ENERGY STAR is a U.S. Environmental Protection Agency (EPA) voluntary product labeling program that helps businesses and individuals save money and protect our climate through energy efficiency.

Fossil Fuel is a general term for carbon-based materials formed from decayed plants and animals that have been converted to crude oil, coal, natural gas, or heavy oils by exposure to heat and pressure in the earth's crust over hundreds of millions of years.

Greenhouse Effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. Some of the heat flowing back toward space from the Earth's surface is absorbed by water vapor, carbon dioxide, ozone, and several other gases in the atmosphere and then reradiated back toward the Earth's surface. If the atmospheric concentrations of these greenhouse gases rise, the average temperature of the lower atmosphere will gradually increase.

Energy conservation refers to reducing energy usage through a change in habits and active choices, as opposed to energy efficiency which addresses energy use reduction in a systematic manner.

Net metering allows residential and commercial customers who generate their own electricity from renewable energy to feed electricity back into the grid as surplus energy and to draw from the grid as needed.

Group net metering was established in New Hampshire and is also known as virtual net metering which allows net-metered renewable energy facilities, known as hosts, to share the proceeds from surplus electricity generation with other electric utility account holders, known as group members. Group members do not have net metered renewable energy facilities and do not have to make any changes to their existing electric service.

LEED certified buildings LEED, or Leadership in Energy & Environmental Design, is a green building certification program that recognizes best-in-class building strategies and practices. To receive LEED certification, building projects satisfy prerequisites and earn points to achieve different levels of certification. Prerequisites and credits differ for each rating system, and teams choose the best fit for their project. http://www.usgbc.org/leed

Complete Streets are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to operate on time and make it safe for people to walk.

SECTION II — EXISTING ENERGY CONDITIONS

Energy use in New Hampshire

The US Department of Energy's Energy Information Administration (EIA) provided much of the following information. New Hampshire energy highlights include:

- The state was the ninth lowest per capita consumer of energy among the states in 2011;
- The transportation sector accounted for 35 percent of the state's energy consumption in 2011;
- The Seabrook nuclear power reactor, the largest in New England, provided 55 percent of the state's 2013 net electricity generation;
- Natural gas accounted for 21 percent of the state's net electricity generation in 2013, down from a record-high of 37 percent in 2012; and
- New Hampshire's Renewable Portfolio Standard (RPS) requires 24.8 percent of electricity sold to come from renewable energy resources by 2025; 16 percent of New Hampshire's net electricity generation came from renewable energy in 2013.

New Hampshire is second only to Maine in the percentage of land that is forested. Forest products, including cordwood and wood pellets for space heating, are an important part of the state economy and the mainstay of New Hampshire's biomass energy industry. Nearly one in 12 homes depend on wood products as a primary heat source. For more than 150 years, the state has been a popular tourism destination for its seacoast, lakes, and mountains and, over time, the use of energy for transportation has increased. Transportation is the leading energy-consuming sector, followed by the residential sector. With one in 10 New Hampshire homes seasonally occupied, energy usage for residences increases in certain months of the year. New Hampshire has four operating electric distributers: Public Service Company of New Hampshire (PSNH), Liberty Utilities, Granite State Electric Company (GSEC), Unitil Energy Systems, Inc. (UES), and the New Hampshire Electric Cooperative, Inc. (NHEC) and municipal utilities in Ashland, New Hampton and Bristol.

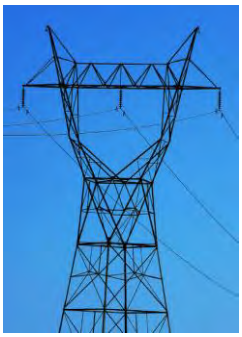
Petroleum: Petroleum products dominate New Hampshire's energy consumption, and the state's residential consumption per capita is among the highest in the nation, in part because of heavy dependence on heating oil during the long winters. New Hampshire neither produces nor refines petroleum. Portsmouth, New Hampshire's only seaport, has terminal and storage facilities for heating oil, propane, and other refined products. Marine terminals connect with railroad lines and highways to take products inland. Distributors also bring in supplies by rail and truck from neighboring states.

The transportation sector consumes more petroleum products than any other sector. State law requires the use of a biodiesel blend in state vehicles unless the blend costs more than all-petroleum fuel. The state also requires reformulated motor gasoline blended with ethanol in the populated areas of southeastern New Hampshire to limit ozone formation.

Nearly half of all New Hampshire households rely on petroleum as their primary heating fuel, making the state particularly vulnerable to distillate fuel oil shortages and price spikes during the winter months.

Natural Gas: New Hampshire does not produce natural gas but receives natural gas by interstate pipelines from Maine and Canada. More than one-half of the natural gas in the pipelines transits the state to reach consumers in Massachusetts. About two-thirds of New Hampshire natural gas is consumed to generate electricity, with the rest distributed among the commercial, residential, and industrial sectors. About 20 percent of New Hampshire households use natural gas for primary home heating. Because of recent differences between natural gas and home heating oil prices, numbers have been increasing for homeowners that have been switching to natural gas. Despite the increase and due to lack of infrastructure, New Hampshire is still among the lowest states in per capita natural gas consumption. In the region, the natural gas pipeline ends in Laconia.

Coal: New Hampshire does not produce any fossil fuels. Coal is brought into New Hampshire by railroad from Pennsylvania, West Virginia, and Virginia, and imported by ship from South America. New Hampshire has two coal-fired generating stations, Schiller at Portsmouth and Merrimack at Concord. The Schiller station can burn either coal or oil, and one unit was converted in 2006 to burn woody biomass. The coal share of New Hampshire's electricity generation has declined due to cheaper natural gas options, but coal still typically provides up to one-seventh of net electricity generation.



Electricity: New Hampshire's electricity use per capita, like most of New England's, is low, in part because of mild summers and fewer than one in 10 households use electricity as a primary energy source for home heating. Up to half of New Hampshire's net electricity generation comes from the Seabrook nuclear plant, the largest nuclear station in New England. Natural gas, the second-biggest generating source, provides between one-fourth and one-third of net electricity production. Coal, hydroelectric power, and biomass supply nearly all the rest. Most of New Hampshire's net electricity production comes from just five large generating plants. Electricity generation from natural gas has increased markedly since 2003 with the commissioning of two large generating stations. As increasing amounts of natural gas are used for electricity, in New Hampshire and in New England as a whole, assurance of natural gas supply is becoming a critical strategic energy issue for the region.

Renewable Energy: Most new large renewable energy projects under development in New Hampshire are powered by wind or biomass. Two proposed biomass projects are located in the northern region of the state. About 14 percent of New Hampshire's net electricity generation comes from renewable resources, with hydroelectric facilities providing slightly more than half, and biomass facilities supplying most of the rest. Most biomass resources use wood and wood waste-derived fuels, such as wood chips, from the state's forest industry.

New Hampshire has wind power potential along its mountain ridges throughout the state and along its Atlantic coastline. The state's first modern wind farm opened in 2008, and more than six projects are operating or in development. However, wind farms have become controversial due to their visual impact and perceived noise impact for those who reside nearby.

New Hampshire has a Renewable Portfolio Standard (RPS) that sets requirements that escalate to 2025, when 24.8 percent of electricity sold in the state must come from renewable sources. Hydroelectric and biomass generating facilities in the state are mostly small and older; on average, biomass facilities are about 25 years old, and hydroelectric facilities are more than 50 years old. In 2012, New Hampshire became the first state to offer RPS credit for renewable thermal projects, including new or expanded biomass, solar, and geothermal resources, which deliver their energy as heat instead of electricity. The table below is a list of small power producing facilities near or in the Lakes Region.

Facility	**Location**	**Production**	**Type**
River Bend	Franklin	1,700 kw	Hydro
Stevens Mill	Franklin	236 kw	Hydro
Franklin Industrial	Merrimack county	1.9 mw	Hydro
Clement Dam	Laconia	2.4 mw	Hydro
Golden Pond	Ashland	84 kw	Hydro
Lakeport	Laconia	705 kw	Hydro
Lochmere Dam	Lochmere	1.2 mw	Hydro
Salmon Brook	Franklin	.250 mw	Hydro
Eastman Falls	Franklin	6.5 mw	Hydro
Pine Tree Power	Tamworth	20 mw	Biomass
Bridgewater Power	Bridgewater	15 mw	Biomass

The following Tables 2.1, 2.2 and 2.3, and Figures 1, 2, and 3 show NH's consumption and generation for electricity compared to the US average.

Table 2.1

Consumption for Electricity Generation	New Hampshire	Share of U.S.	Period
Petroleum	79 thousand barrels	2.60%	14-Feb
Natural Gas	426 million cu ft.	0.10%	14-Feb
Coal	120 thousand short tons	0.20%	14-Feb

Source: www.eia.gov (NH information)

Table 2.2			
Net Electricity Generation (share of total)	New Hampshire	U.S. Average	Period
Petroleum-Fired	3.90%	0.60%	14-Feb
Natural Gas-Fired	3.80%	23.20%	14-Feb
Coal-Fired	19.50%	44.50%	14-Feb
Nuclear	56.40%	19.40%	14-Feb
Hydroelectric	6.50%	5.40%	14-Feb
Other Renewables	9.70%	6.40%	14-Feb

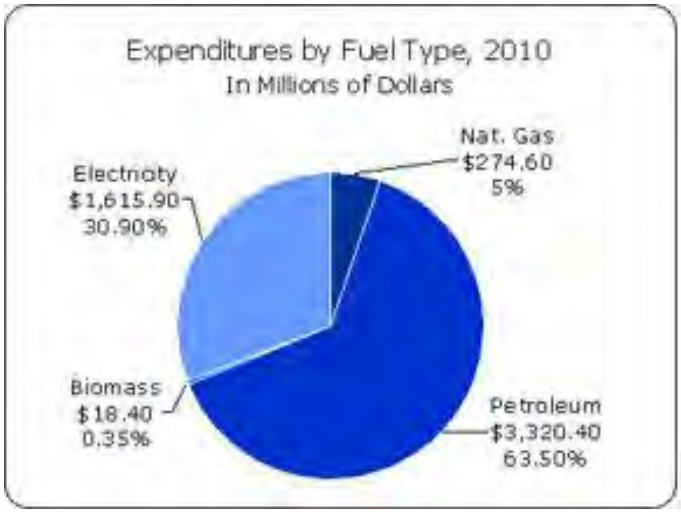
Source: www.eia.gov (NH information)

New Hampshire's Energy Expenditures

According to the Office of Energy and Planning, total expenditures on energy in New Hampshire in 2010 were approximately 8 percent of the state's GDP. NH imports nearly all of its energy sources. In figure 1.2, 100 percent of the Petroleum and Natural Gas categories are imported, and nearly 85 percent of the base fuels for electricity are imported.

Figure 1

Data from EIA State Energy Data System Table F28: Total Energy Consumption, Price, and Expenditure Estimates, 2010



Transportation is the greatest consuming sector of energy as it accounts for 44 percent of energy costs in New Hampshire, followed by residential, commercial and then industrial.

Figure 2

Data from EIA State Energy Data System Table ET2:
Total End-Use Energy Price and Expenditure Estimates, 1970-2010, New Hampshire

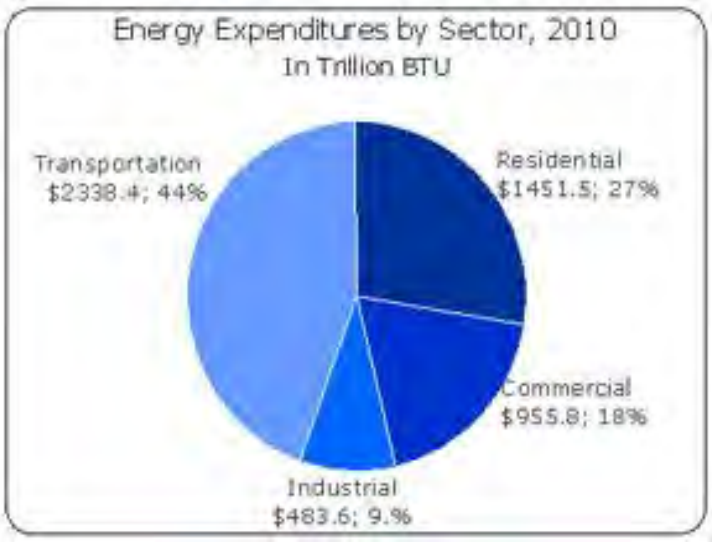


Figure 3
Data from EIA State Energy Data System Table CT8
Electric Power Sector Consumption Estimates, Selected Years, 1970-2010, New Hampshire

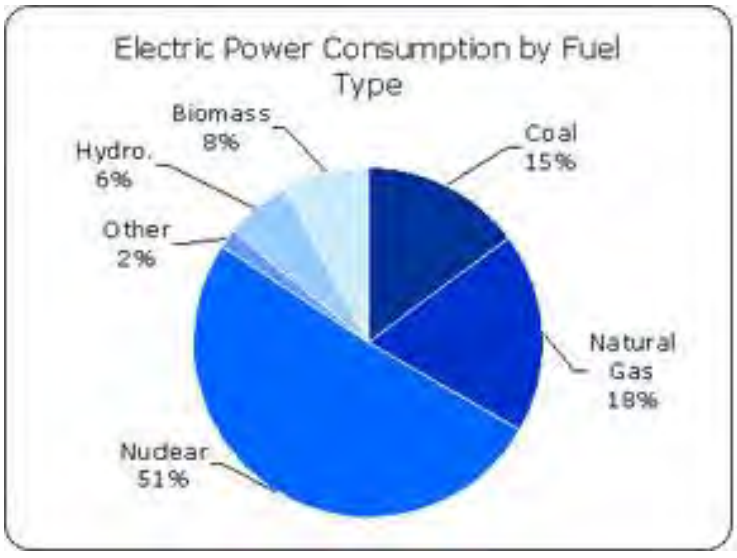


Table 2.3 shows energy type use across three types of housing units: occupied, owner-occupied, and renter-occupied. In all housing units fuel oil is the most common energy fuel type used. Occupied housing units and owner-occupied units follow with utility gas and bottled/tank gas. Renter-occupied follows fuel oil with utility gas and electricity.

Table 2.3

NEW HAMPSHIRE	Occupied Housing Units		Owner-Ocupied Housing Units		Renter Occupied Housing Units	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Utility gas	19.70%	+/-0.3	15.50%	+/-0.3	30.60%	+/-0.9
Bottled, tank, or LP gas	13.40%	+/-0.3	14.90%	+/-0.3	9.80%	+/-0.5
Electricity	7.70%	+/-0.3	3.10%	+/-0.2	19.50%	+/-0.7
Fuel oil, kerosene, etc.	49.90%	+/-0.4	55.80%	+/-0.5	34.60%	+/-1.0
Coal or coke	0.10%	+/-0.1	0.20%	+/-0.1	0.00%	+/-0.1
All other fuels	8.40%	+/-0.2	10.40%	+/-0.3	3.30%	+/-0.3
No fuel used	0.70%	+/-0.1	0.10%	+/-0.1	2.20%	+/-0.2

[See Appendix A for individual Lakes Region communities]

Community Attitudes

In the summer of 2013, the UNH Survey Center conducted a telephone survey with 400 residents living in in the Lakes and Central region for the purpose of identifying residents' views on topics regarding energy efficiency. The following are the responses.

Figure 4 shows responses from residents on supporting energy policy changes.78 percent of residents support higher energy efficiency standards in new buildings with 58 percent in "strong support." Over 70 percent support an expansion of incentives for home energy efficiency improvements and promotion of renewable energy sources such as solar, wind, and geothermal. Only 34 percent of residents were in support of public charging stations for electric vehicles.

Figure 4

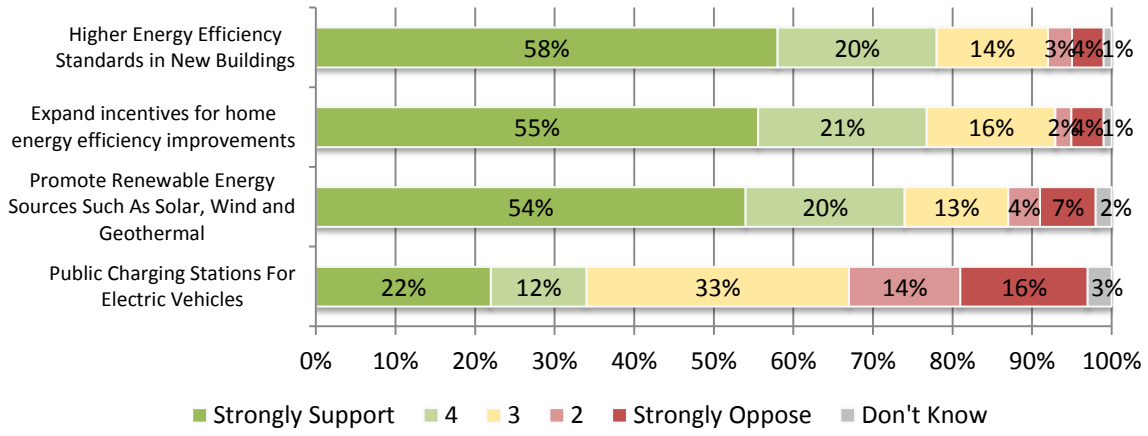


Figure 5 includes responses regarding how involved should local government be in guidelines for renewable energy. Responses for the Central and Lakes regions mirrored those of the state. Nearly half of resident respondents (49%) believe that the local governments should be very involved and

38 percent responded that government should be somewhat involved. 6 percent think local government should be "not very involved" and 6 percent responded that local government should not be involved at all.

Figure 5

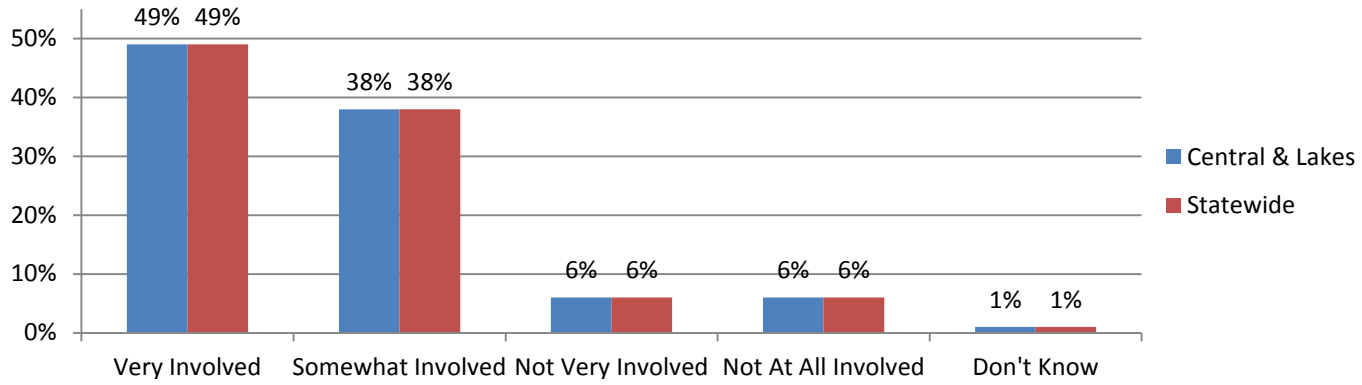
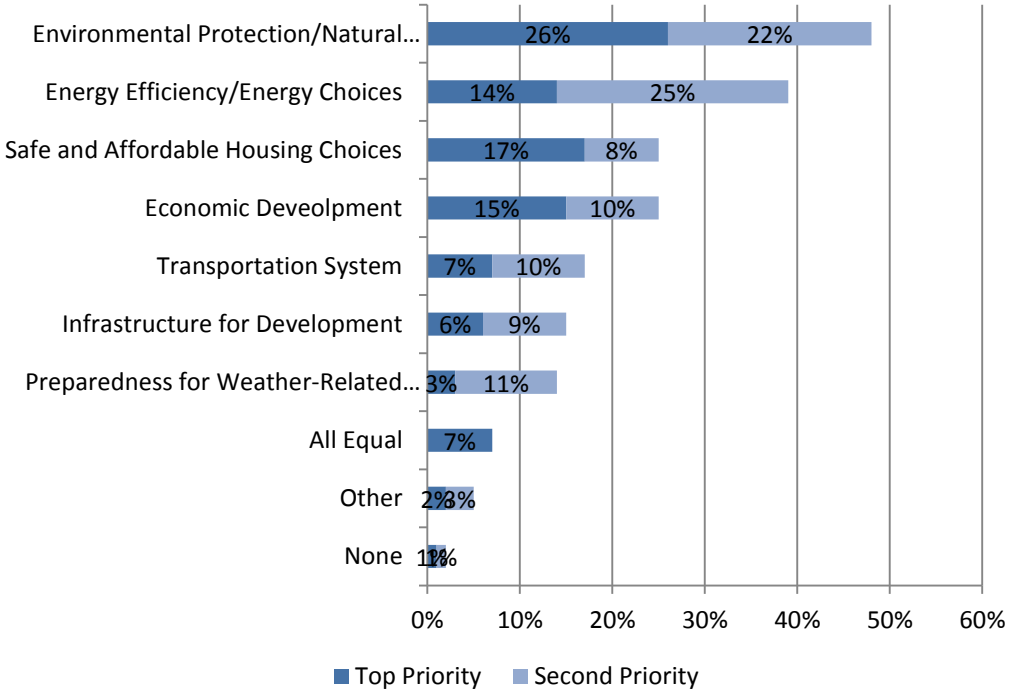


Figure 6 shows responses for how residents prioritize investing public dollars. Residents' top priority for investing public dollars is environmental protection and conservation of natural resources (26%). This is followed by safe and affordable housing choices, economic development, and energy efficiency.

Figure 6



Local Energy Efforts

Local governments throughout New Hampshire are taking a role in the energy arena, and by their leadership they can set an example for t homeowners and businesses. The following are Lakes Region examples worthy of note:

Center Harbor: The Town, with assistance from its Energy Committee, has implemented a number of improvements such as more efficient lighting, new windows …. .

Laconia: Since 2009, the City staffed Energy Committee has worked to implement energy efficiency cost saving steps. Some of these efforts include changing light bulbs and fixtures, adjusting thermostats, upgrading office spaces, increasing insulation, improving HVAC and other related activities. At this time, the City now desires to have the community at large — homeowners, businesses and non-profit organizations — more involved in the energy planning effort.

Wolfeboro: The Town has an energy committee that focuses on identifying opportunities for residents to save energy and reduce greenhouse gas (GHG) emissions; and to work to assure that cost-effective energy efficiency practices and GHG reduction strategies are implemented town-wide.

Kingswood High School in Wolfeboro has undergone renovations since 2009 that includes an 800-ton capacity, closed loop, ground source geothermal heating and cooling system strategically located under newly built athletic fields. The system utilizes over 300 geothermal wells and serves the entire campus. Brewster Academy has completed several energy efficiency projects.

The school has also constructed a new 51,000 square foot Multipurpose Performing Arts Center in 2010 that uses sustainable design concepts. These include a water-to-water ground source heat pump plant, rainwater harvesting that addresses 100 percent of toilet water usage, demand control ventilation that adjusts based on occupancy per room, and an energy recovery ventilation system.

Lakes Region Community College: LRCC has an Energy Services and Technology Program which enables students to enter the energy field. The College has conducted energy audits and upgrades and installed two solar arrays totaling 16 kW in electricity production.

Meredith: Established in 2010, the Meredith Energy Committee (MCC) has been very active in three areas: completion of energy audits, lighting upgrades to municipal buildings, and energy planning. The Town completed energy audits for five municipal buildings with assistance from the American Recovery and Reinvestment Act of 2009 (ARRA). The audits evaluated the building's envelope, mechanical systems, and domestic hot water. The intent of the audit is to reduce energy consumption and energy costs. A major focus of the MCC has been information gathering and public education, having sponsored workshops for homeowners, real estate professionals and persons interested in code compliance. When the Town issues a RFP for an upgrade to a municipal building or facility, the Town now requires the vendor to respond to energy conservation and energy efficiency issues.

The Meredith Energy Committee has created the "Meredith Energy Handbook". This web-based document includes an estimate of locally generated greenhouse gases as background information for local energy conservation. The Committee sponsored an educational Energy Fair for residential and non-residential uses in January 2010 and plans a similar event in late fall 2014.

Sandwich: The Town completed energy audits and upgrades to the Town hall. Using volunteer labor and assistance from a local electrician, the Town's Energy Committee installed a solar array on the Fire Station and one on the Town's garage. The Town has a power purchase agreement with Frase Electric.

Tuftonboro: Solar Inflector vertical shades were installed on three windows at the Town office. The shades are designed to reflect the heat from the sun and 90 percent of harmful UV rays in the summer; in the winter, the shades became a passive solar heat source and block the cold. The Town installed a wood pellet boiler in the town building.

Plymouth Area Renewable Energy Initiative (PAREI). This group helps residents and businesses install solar hot, solar electric and weatherization projects in a cooperative manner, similar to the "barn raising" activities of 18th and 19th Century New England.

Many Lakes Region towns applied for sub-grants under New Hampshire's Energy Efficiency and Conservation Block Grant Program funded by ARRA for a broad array of energy efficiency and renewable energy projects. Many towns were chosen to have their projects funded. Ashland, Holderness, Ossipee, Tamworth, and Wolfeboro made town buildings more energy efficient and reduced waste. Effingham and Tuftonboro have switched some of their buildings to using wood pellet boiler systems. Belmont, Tamworth, and Laconia are making lighting upgrades and Wolfeboro and Meredith are working on energy plans for their communities. Many communities received assistance for energy audits and studies. The following are resources local energy committees might find helpful.

Field Guide to NH's Municipal Buildings & Energy Audit Guidelines One of the challenges for New Hampshire towns and cities wanting to manage their building energy use is figuring out what kind of audit expertise they might need and how to ask for it. The energy auditing industry varies in procedure and depth, and each auditor brings their own individual strength and style to the table.

Recognizing this and other challenges, the NH Sustainable Energy Association, in collaboration with the Municipal Energy Working Group, and with funding from the New Hampshire Charitable Foundation, sponsored the development of a Field Guide to New Hampshire's Municipal Buildings and Energy Audit Guidelines. This instructional resource is broken down into two sections – the Field Guide and Energy Audit Guidelines. Source: NH Sustainable Energy Association.

- NH Handbook on Energy Efficiency and Climate Change, Volume 1 This guide gives New Hampshire citizens a brief introduction on how to help mitigate climate change at the local level. Community-scale activities such as energy benchmarking and efficiency upgrades will not only reduce your town's fossil fuel emissions and fuel-related costs they will also make an important public statement about your values and priorities. *Updated 2008; Source: Clean Air-Cool Planet*

- NH Handbook on Energy Efficiency and Climate Change, Volume 2 This volume is provided to help local governments and energy committees or commissions measure and manage their energy consumption. Volume II explains how to obtain your energy data, what tools and software exist, and includes a chapter focused on financial resources available to communities. *Updated 2009; Source: Clean Air-Cool Planet*

Organizations and websites of interest:

New England Energy Group http://www.nelocalenergy.org/nh-local-energy-work-group.html

New Hampshire Energy Solutions http://www.nhenergy.org/

New Hampshire Sustainable Energy Association http://www.nhsea.org/

The Jordan Institute www.jordaninstitute.org

Impacts of Energy Consumption and Energy Choices

The planning community recognizes that energy, in its various aspects, impacts the health, safety, quality of life, and economic vitality of any region and should be addressed at state and local levels through the planning process. The community survey results revealed that residents also have an interest in becoming more sustainable within their community.

As energy costs continue to increase, there is a growing concern over the environmental impact and health costs of major forms of energy production. The United States uses these expensive fuels (coal, gas and oil) for most energy needs including electricity, heating, and transportation. The LRPC can help the Lakes Region identify areas where there can be a reduction in dependence on these expensive fuels. Reducing dependence on such energy supplies serves many purposes including:

- Reducing operating costs for buildings and vehicles;
- Providing buildings that operate more efficiently over a longer period of time;
- Creating energy security by diversifying energy supplies to include more local supplies such as wood and renewables;
- Retaining money in the local and regional economy by using local sources;
- Creating more multi-modal mobility options for citizens; and
- Increasing U.S. energy security by decreasing dependence on foreign oil
- Increasing comfort, durability and resilience in buildings
- Improving occupancy rates in commercial buildings

SECTION III — ENERGY PLANNING AND GREEN BUILDING

Introduction

Buildings are the largest human-induced contributor to climate change in the US and globally. The building sector consumes nearly half of all energy produced in the United States and similarly in New Hampshire. Half of CO2 emissions in New Hampshire are emitted by the building sector and the state faces a great challenge with cold climate winters and the increasing temperatures of summer.

Seventy percent (70%) of New Hampshire heats with oil, propane, or kerosene, and 25 percent heats with natural gas. Despite the lower costs of natural gas fuel, there is little expectation of increased availability of the fuel source in New Hampshire. This means that 95 percent of heating in New Hampshire is accomplished with use of fossil fuels that are not native to the state.

New England is prone to weather extremes — heat and cold — as well as precipitation in all forms. We overwhelmingly rely on fossil fuels to heat out buildings. Most buildings are not built to address the current expectations of energy performance or comfort.

Resilient buildings are much more energy efficient and are better prepared to withstand weather and energy volatility. (www.resilientbuildingsgroup.com)
http://www.resilientbuildingsgroup.com/news-and-resources.html

Table 3.1: Home Heating Consumption Fuel Use in NH and U.S. Average

Consumption for Home Heating	New Hampshire	U.S. Average	Period
Natural Gas	19.70%	49.40%	2012
Fuel Oil	49.90%	6.50%	2012
Electricity	7.70%	35.50%	2012
Liquefied Petroleum Gases	13.40%	5.00%	2012
Other/None	9.20%	3.60%	2012

Source: www.eia.gov (NH information)

Green Building

Many programs and incentives exist to ensure proper building design. Each program has its own set of guidelines that needs to be followed in order to obtain the program's certification and meet specified standards. Some of the Green Building programs are LEED (Leadership in Energy and Environmental Design), Passive House, ZNE (Zero Net Energy), Green Globes, and National Green Building Standard.

Although it is becoming more common for newly constructed buildings to follow Green Building guidelines, not all energy efficient buildings need to be new construction projects. Any existing building can be retrofitted to be more energy efficient as well. Green Building, however, is a broad

concept with many different techniques; anyone looking to improve historic sites and buildings should be careful to use the proper measures to restore the building for modern use or occupancy. Some processes work well with the old buildings, while others can damage or change the aesthetics. Finding the right guidelines for your specific project and working with the right team will bring about the best results.

Energy Conservation

Energy conservation can be practiced by anyone who wants to lessen their energy usage; it can be finding simple, low-cost ways to use less energy in daily activities. Examples may include unplugging small appliances when not in use or air-drying clothes.

The NH Office of Energy and Planning provides Energy Conservation Tips at their website
The US Department of Energy also has an Energy Saver's Guide
http://energy.gov/sites/prod/files/2013/06/f2/energy_savers.pdf

Energy Efficiency

While conservation measures are a great first step, energy efficiency upgrades have an even greater savings potential. Hiring an energy auditor can help identify ways to improve the efficiency of your home.

- Consumers can seek out auditors or contractors who have a certification such as those from the Residential Energy Performance Association of New Hampshire, the Buildings Performance Institute, or the Association of Energy Engineers. To learn more visit http://www.nh.gov/oep/energy/saving-energy/index.htm
- Municipalities can also make use of the Field Guide to New Hampshire's Municipal Buildings & Energy Audit Guidelines.
- ENERGY STAR is a U.S. Environmental Protection Agency (EPA) voluntary program that helps businesses and individuals save money and protect our climate through energy efficient appliances. When buying appliances and other products, buyers can look for the products with the ENERGY STAR label that have met recognized efficiency requirements.

Once an individual decides to move forward with an efficiency project, New Hampshire has a suite of rebate programs available to help with the cost. For more information, visit NH Saves.com.

Renewable Energy

Consumers may also be able to save money on their energy bills by installing an on-site renewable energy system such as solar electric, solar hot water and central wood-pellet boilers or furnaces. Information about financial assistance for renewable systems can be found at: NH PUC's Renewable Energy Incentives page

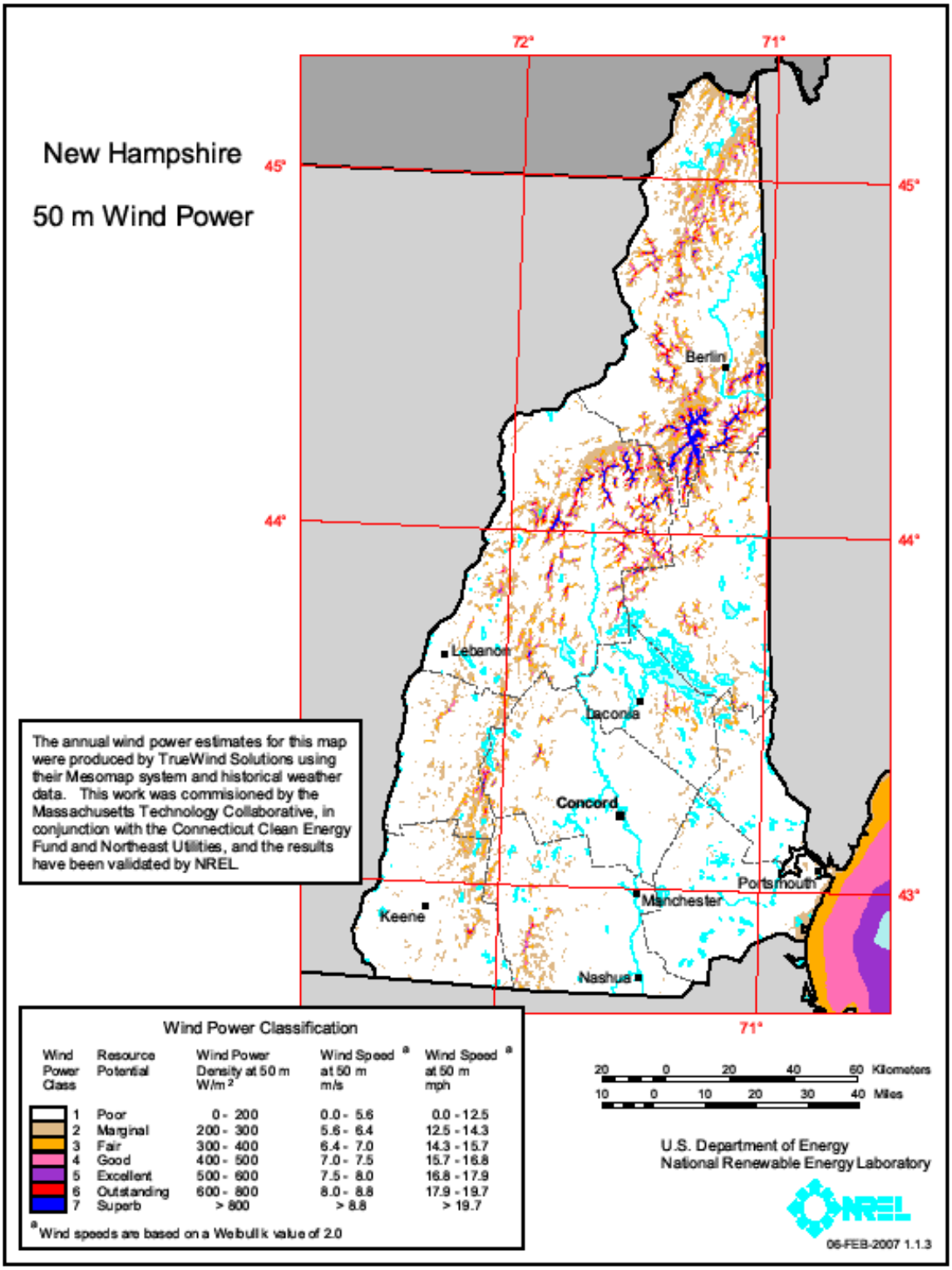
New Hampshire's Potential for Renewable Energy

The U.S. Department of Energy (DOE) Wind Program and the National Renewable Energy Laboratory published a 50-meter height wind resource map for New Hampshire. This map is a key piece of understanding the state's wind resource potential from a development, policy, and a jobs and economic development impact perspective.

This resource map shows estimates of wind power density at 50 meters above the ground and depicts the resource that could be used for community-scale wind development using wind turbines at 50-60-m hub heights.

As a renewable resource, wind was classified according to wind power classes, which were based on wind speed frequency distributions and air density. These classes ranged from Class 1 (the lowest) to Class 7 (the highest). In general, at a 50-m height, wind power Class 4 or higher could have been useful for generating wind power with turbines in the 250-kW to 750-kW rating. Given the advances in technology, resources below Class 4 may now be suitable for the new midsize wind turbines. In recognition of these continuing advancements in wind energy technologies and the ability for the current generation of wind turbines to extract cost competitive wind energy from lower wind speeds, DOE has moved away from the wind power classification system and now reports wind speeds only.

The map indicates that New Hampshire has wind resources consistent with community-scale production. The excellent wind resource areas in the state are on the ridge crests. The White Mountain region in northern New Hampshire is the most prominent area. Certain ridge crests in the western part of the state can also have excellent wind resource.



http://apps2.eere.energy.gov/wind/windexchange/pdfs/wind_maps/nh_50m.pdf

Biomass

In New Hampshire, biomass generally refers to low value wood generated from traditional harvesting practices. Currently, New Hampshire has electricity generating biomass plants in Alexandria, Berlin, Bethlehem, Bridgewater, Springfield, Portsmouth, Tamworth and Whitefield. These seven active biomass plants can produce 144 MW of electricity, have a capacity of 1.8 million tons of biofuel, and have provided 150 direct jobs.

Biomass Project
Berlin, NH

From a community planning and development perspective, community scale wood heat has the most potential to benefit local communities and residents. The NH Wood Energy Council focuses its efforts on "community scale" wood heat. In the last five years, over 60 New Hampshire schools, municipal and governmental buildings, hospitals, nursing homes, jails, office complexes, multi-family residential and manufacturing plants have converted to wood heat. In addition, there is growing interest for "District" systems that serve school campuses as well as downtown cores. Since the consumption of wood for a "community scale" system is generally small, about a few hundred tons a year, this method allows for a sustainable approach for the NH wood resource.

There is significant potential for small scale biomass projects such as the Winnisquam Regional Middle High School in Tilton, which uses wood chips in a hot water system. The Carroll County Home uses a wood pellet system and the Grafton County Home installed a wood chip boiler to heat much of the facility. In addition to saving energy costs, the use of wood products by these facilities adds value to the local economy.

Solar

New Hampshire has the potential to average a daily total radiation of 3-5 KWH per Sq. Meter per Day. Large-scale solar installations could prove to be an effective means of energy production for large businesses or communities as an alternative energy. Net metering allows surplus generation of energy to be stored in the grid and used when necessary.

Currently New Hampshire has several solar arrays; the largest is the 525kW solar array installed on the top level of the Manchester Airport parking garage. Other solar projects include a 51kW solar array PSNH installed on their roof in 2009 and a 50kW array on the

roof of the Stonyfield Farm Yogurt Factory installed in 2005. The Plymouth village water and sewer facility has a solar array.

As noted, the Town of Sandwich and others have installed solar arrays on municipal buildings.

Power Purchase Agreements (Desire)

Power Purchase Agreements (PPAs) are now quite common for solar projects that are sited on municipal land. The municipality enters into an agreement with a developer in which the municipality purchases power from the solar project at or below current market rates, and are otherwise required to pay little to no upfront costs. The developer, as a private enterprise leasing the land, in turn takes advantage of tax incentives and depreciation, while also receiving a guaranteed rate on the electricity produced over a fixed period of time, typically between 5 and 10 years.

After the initial contract period expires, the municipality can either renegotiate and renew the agreement, or purchase the solar project at a reduced and depreciated cost. Thus, PPAs provide municipalities with the flexibility to initially have on-site renewable generation, without the responsibility of financing, designing, installing, and maintaining the project and with the opportunity for outright ownership once the cost comes down due to depreciation.

Group Net Metering

Though many people may want renewables sited on their property or home, not all sites are suitable for solar generation. Some sites may be severely shaded, oriented in a way that makes solar impractical, or a homeowner lacks the necessary land to fulfill their energy needs with small scale wind or solar. Group net metering allows for all properties to be able to benefit from solar energy. This allows a group of properties on separate meters that are part of the same energy supplier to split the cost of putting up solar arrays on a suitable property. This property is the host property. All participants with their own meters are known as members, and they enter an agreement where they receive a percentage of the energy production from the array.

Current Energy Efficiency Programs

New Hampshire currently has a variety of programs that help homeowners, cities, towns, school districts, businesses and industries, and entire regions to cut their energy use and reduce pollution. The Lakes Region Planning Commission and its member communities should explore and take advantage of these programs. The New Hampshire Office of Energy and Planning (NHOEP) operates several energy programs in partnership with both private and public entities to promote a sustainable, environmentally sound future for New Hampshire as well as to encourage conservation and renewable energy source.

New Hampshire also has two clean transportation programs that seek to reduce emissions by automobiles, trucks and buses and to reduce the state's reliance on foreign oil supply. Additionally, the two major electric utility providers in the region, PSNH and New Hampshire Electric Cooperative, provide energy efficiency incentive programs designed to reduce energy use, save money and protect our environment. The following section briefly discusses some of these programs that are being used to promote sustainable energy use in greater detail.

Tools for Energy Efficiency

Many communities have established Local Energy Commissions (LECs) under NH RSA 38-D: 4. The LEC can maintain and update the Energy Chapter and coordinate local efforts to implement chapter recommendations. The following is a partial list of potential grant and loan programs.

For Local Governments:

NHSaves Programs — Electric Utilities

Gas Networks — Gas Utilities

Municipal Energy Reduction Fund (MERF) — NH CDFA http://www.nhcdfa.org/energy-efficiency/

Sustainable Energy Programs — NH PUC
http://www.puc.nh.gov/Sustainable%20Energy/SustainableEnergy.htm

For Homeowners:

NHSaves Programs — Electric Utilities

Gas Networks — Gas Utilities

Sustainable Energy Programs — NH PUC

For Businesses:

NHSaves Programs — Electric Utilities

Gas Networks — Gas Utilities

Sustainable Energy Programs — PUC
http://www.puc.nh.gov/Sustainable%20Energy/SustainableEnergy.htm

Pay for Performance Program — TRC Solutions

Energy Conservation Revolving Loan Fund — NH Business Finance Authority

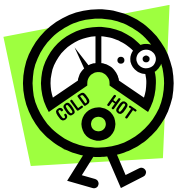
Enterprise Energy Fund — NH CDFA http://www.nhcdfa.org/energy-efficiency/

Green Building Design

The original definition for Green Building came from market and advocacy groups and now has been embraced by EPA and the US Department of Energy. Design professionals consider different approaches to green building. For example, The Jordan Institute and its Resilient Buildings Group include reduction in the use of fossil fuel energy and energy-use in general. The International Code Council (ICC) for 2015 is moving in this direction. Regarding guidelines or standards, an owner, contractor or builder can follow one of several Green Building designations. These approaches and programs include LEED, Passive House, Zero Net Energy (ZNE), Green Globes, National Green Building Standard and others. Each has slightly different requirements and motivations. The particular approach taken depends on will power, resources and competency of the property owner and designer/contractor. For historic buildings, the owner/designer needs to balance the preservation of the historic resources and to improve it for modern use and occupancy. Websites of interest: www.gbcnh.org and www.jordaninstitute.org.

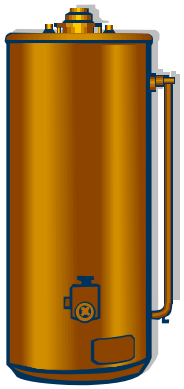
Low-Cost Energy Saving Options

■■ Install a programmable thermostat to manage your heating and cooling systems efficiently and thus lower utility costs.



■■ Air dry dishes instead of using your dishwasher's drying cycle.

■■ Turn off lights, TVs, entertainment systems, and your computer and monitor when you are not in the room.



■■ Use power strips for electronics and turn the power strips off when the equipment is not in use—TVs in standby mode still use several watts of power.

■■ Lower the thermostat on your water heater to 120°F.

■■ Take short showers instead of baths and use low-flow shower heads for additional energy savings.

■■ Wash only full loads of dishes and clothes. Use cold water for laundry.

■■ Air dry clothes.

■■ Look for the ENERGY STAR® label on light bulbs, home appliances, electronics, and other products. ENERGY STAR products meet strict efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy.

The Vermont Green Building Network is a strong leader in Green Building from the energy use, indoor air quality, toxicity, cradle-to-cradle embedded energy and resource use, etc. Other important organizations focused on green building include the Rocky Mountain Institute, New Buildings Institute, Architecture 2030, Building Science Corporation, and in New Hampshire US Green Building Council, NH Chapter American Institute of Architects, Environmental Guild/NH Chapter, The Jordan Institute and others.

The International Code Council develops building codes, including the International Energy Conservation Code (IECC). The 2009 (in use by New Hampshire) and 2012 Energy Code cycle updates addressed energy-use reductions at 16 percent and 14 percent reductions over the 2006 baseline, respectively. The 2015 IECC will take the next step in applying existing technologies to further improve the efficiency of new construction and major renovations. IECC's long term goal is for the baseline energy code to achieve net zero energy for new construction and major renovations by 2050.

New Hampshire plans to begin reviewing the 2015 IECC when it is released in late 2014, skipping the 2012 IECC.

SECTION IV — INTEGRATING ENERGY WITH TRADITIONAL PLANNING CONCEPTS

Introduction

Energy efficiency and energy conservation are important and interrelated components of a municipal planning program as they bring together land use, housing, transportation and environmental issues. More and more communities are taking this approach. High energy cost and the unknowns associated with climate change issues are factors that can limit the development potential of a community. The way communities are designed, planned, and built can influence the amount of energy used, how energy is distributed, and the types of energy sources that will be needed in the future. Energy efficiency can be incorporated into land use planning in a number of ways, one of which is adoption of mixed-use zoning. This zoning approach allows greater accessibility to desired services without requiring greater mobility. Other ways to promote energy efficiency and conservation in land use planning include:

- Encourage livable, walkable land use policies and regulations;
- Encourage alternative forms of transportation in the planning and design of the community;
- Encourage energy efficient development through subdivision and site plan review regulations, zoning ordinance and building codes. Site design techniques that take advantage of sun exposure, difference in microclimate, and landscaping reduce a development's demand for fossil fuel derived energy sources and reduce overall energy consumption;
- Encourage increased reliance on the local food supply in order to reduce transportation energy needed to get food to our homes and to increase local economic health by keeping money in the community; and
- Encourage organic farming. Local organic farmers do not rely upon petroleum-derived fertilizers and pesticides and thus save energy at the farm.

A municipality should strive for consistency regarding energy efficiency and traditional land use planning in its planning program through periodic updates to the Master Plan, Zoning Ordinance and Site Plan and Subdivision Regulations.

Land Use Planning Tools

The municipal zoning ordinance is the primary legal document that affects land policy. RSA 674:17 Purposes of local Zoning Ordinance states the ordinance is designed to "protect the public health and safety" of the community through a well-managed land use pattern, to avoid congestions, to prevent overcrowding of the land, to encourages an efficient traffic flow, to assure proper use of natural resources, among other items. S tate law encourages energy efficient activities through the planning and zoning process. In 2011, the NH Legislature added the following as a new provision in RSA 674:17:

> "To encourage the installation and use of solar, wind, or other renewable energy systems and protect access to energy sources by the regulation of orientation of streets, lots, and buildings; establishment of maximum building height, minimum set back requirements, and

limitations on type, height, and placement of vegetation; and encouragement of the use of solar skyspace easements under RSA 477. Zoning ordinances may establish buffer zones or additional districts which overlap existing districts and may further regulate the planting and trimming of vegetation on public and private property to protect access to renewable energy systems."

Several years ago, the NH Legislature amended RSA 674:2 Master Plan: Purpose and Description by including an Energy Chapter as part of the local Master Plan. The provision states: "An energy section, which includes an analysis of energy and fuel resources, needs, scarcities, costs, and problems affecting the municipality and a statement of policy on the conservation of energy."

In 2011, the NH Legislature adopted RSA 53-F Energy Efficiency and Clean Energy Districts, which allows commercial building owners to finance energy efficiency and renewable energy [rojects through municipal tax assessments with private financing. The legislature updated the statute in 2014. For further information see Jordaninstitute.org – CPACE for NH.

In 2009, the NH Legislature adopted RSA 38-D Energy Commissions, which allows local governments to establish a local Energy Commission with the stated duties to:

"(a) Research municipal energy use and cost and make such information available to the town on at least an annual basis.

(b) Make recommendations to local boards and committees pertaining to municipal energy plans and sustainable practices such as energy conservation, energy efficiency, energy generation, and zoning practices."

As noted, energy efficient development ordinances are permitted as a means of carrying forth the purposes of zoning ordinances. RSA 674:17 I (j) encourages the use of solar, wind, or other renewable energy systems. The law also gives zoning ordinances the power to establish buffer zones or other zoning districts that overlap any existing districts. When these zoning provisions, promoting renewable energy and efficiency, are combined with enabling legislation for performance standards under RSA 674:21 I (h), communities can develop a comprehensive zoning article that provides incentives to developers in exchange for meeting a number of energy efficiency performance standards.

Communities can include energy efficiency standards into their subdivision regulations through power granted in RSA 674:36 II (k), which establishes the groundwork for the protection of energy sources through the establishment of lot standards, street orientation, and other requirements. These provisions are similar in their intent as is provided for zoning ordinances, under RSA 674:17 I (j), as described above. It is important that the local Master Plan reference the need for these types of regulations. Energy efficiency language can be included in local site plan review regulations as an innovative land use control per RSA 674:44 II (i).

From the new initiatives and actions noted, the NH Legislature recognizes the important connection between energy and traditional community planning concepts and techniques. By providing communities with these options for energy planning, the Legislature encourages local governments to consider the natural linkage between energy and traditional community planning.

"Smart Growth"

In 2000, the Legislature created NH RSA 9-B:3 and in the subsection defined "smart growth" as the control of haphazard and unplanned development and the use of land which results, over time, in the inflation of the amount of land used per unit of human development, and of the degree of dispersal between such land areas. "Smart growth" also means the development and use of land in such a manner that its physical, visual, or audible consequences are appropriate to the traditional and historic New Hampshire landscape. Smart growth may include denser development of existing communities, encouragement of mixed uses in such communities, the protection of villages, and planning so as to create ease of movement within and among communities. Smart growth preserves the integrity of open space in agricultural, forested, and undeveloped areas.

Zoning Tools

Planning and zoning concepts and tools such as mixed use development, compact village centers, preservation of open spaces, lot size averaging help to reduce energy by reducing the number of vehicle trips between shopping areas and the distance between these shopping areas and where residents live. Alternative transportation reduces vehicular traffic and subsequently greenhouse gas emissions. Many local governments embrace the concept of a walkable community whereby residents can walk to shopping, employment and other needs. In 2013, the Town of Bristol invested in transportation and landscaping improvements, which has made the downtown area safer and more walkable for school children and the general population.

SitePplanning

Site design techniques that take advantage of sun exposure, differences in microclimate and landscaping, and low impact development (LID) reduce a development's demand for fossil fuel derived energy sources and lower energy consumption. These planning techniques can be used in designing residential and non-residential developments, deciding on density levels, integrating different land uses, and designing transportation and circulation systems. Planning Boards can implement energy efficient planning principles through updates to their Subdivision and Site Plan Review Regulations, zoning ordinance, and building codes. The Planning Board can apply these common sense practical approaches to energy planning when its reviews residential and non-residential developments for approval. When a community begins to prepare or update its Master Plan, it should highlight energy considerations and its relationship to land use, transportation, economic development, and natural resource policies.

There are several resources available to communities interested in this topic. The NH Office of Energy and Planning (OEP) has many resources located on its website.

http://www.nh.gov/oep/resource-library/subject-list.htm

The NH Department of Environmental Services has a very educational climate change adaptation tool kit.

http://des.nh.gov/organization/divisions/air/tsb/tps/climate/toolkit/index.htm

Lakes Region communities should review their current local land use regulations to determine if they encourage a reduction in energy consumption. Education and community engagement are required. Working with the municipalities in the region to encourage smart growth principles, while educating citizens about best practice in land use patterns that promote sustainable energy use and homebuilding, are essential tools in reducing energy demand.

SECTION V — CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

As noted at the beginning of this Chapter, energy is a broad, multilayered, geopolitical and economic issue that is best addressed at the state and national levels. Depending on the level of interest and enthusiasm, local governments can play an effective role through a local energy committee that works to make energy efficiency improvements to municipal buildings, encourages the use of renewable energy, enforces the State's energy code, and is an advocate for energy efficiency and green building design. The challenge in preparing this chapter is the broad scale of the topic and significant amount of information that is available at the local, regional, state, and federal levels. There is a significant amount of information available through the NH Public Utilities Commission (PUC), the NH Office of Energy and Planning (OEP), NH Local Energy Solutions, NH Sustainable Energy Association, The Jordan Institute, and others. When funds were available through the American Recovery and Redevelopment Act (ARRA) program, the LRPC assisted local governments with the following activities:

1. Community Outreach and Education;
2. Technical Assistance;
3. Statewide Local Government Energy Database Development; and
4. Technical Training and Professional Development.

The need exists for continued assistance and involvement of the LRPC. In the energy field, the role of the Lakes Region Planning Commission should involve public information, education and outreach, information sharing, and technical assistance with small-scale energy efficiency and renewable energy projects.

Focus for Local Governments

The following is a menu of energy activities local government can consider.

Solar: The solar aggregation program involves a lead local government or several local governments or a region working together to advertise for and retain a third party solar developer or developers who can coordinate and implement a community- or region-wide Power Purchase Agreement (PPA). This effort would lower solar purchase and installation costs for the customers living or operating a business within the community, communities or region. Typically, the local governments work together to scope out the basic parameters of the program, and the lead local government or host agency issues the RFQ for the solar developer(s).

Lighting: Public Service New Hampshire and the NH Electric Cooperative can assist local governments in converting municipal lighting to efficient LED (light-emitting diode) street lights. NH Saves and the utilities offer myriad of other incentives for energy efficiency.

Transportation: The transportation sector is a major contributor to greenhouse gas emissions. EPA names transportation as the second of five major fuel consuming sectors contributing to carbon dioxide (CO2) emissions from fossil fuel combustion. Through the LRPC's Transportation Advisory Committee (TAC), local governments, working together, can encourage measures to reduce travel demand such as additional public transit, car and van pooling, ride sharing and others.

Education: Organizations such as the Local Energy Working Group, Energy Efficiency and Sustainability Board, the New Hampshire Sustainable Energy Association and The Jordan Institute can develop integrated education, outreach and workforce training programs for the region. These organizations can help publicize energy efficiency tips, incentives and rebates, hold events with an energy focus, incorporate energy savings measures into community events and revise municipal energy goals.

Energy Efficient Buildings: Local governments can consider establishing green building ordinances for municipal buildings which provide incentives for the use of new construction or major renovations of town buildings to meet US Green Building Council LEED standards.

Compliance with Energy Codes: The International Energy Code Council is headed in that direction. Local governments can consider instituting a renewable energy property tax exemption as well as incentives for more stringent building codes than State codes to increase energy efficiency and decrease energy costs for development in the community.

Land Use Planning: The way communities are designed, planned, and built influences the amount of energy used, how energy is distributed, and the types of energy sources that will be needed in the future. E nergy efficiency can be incorporated into land use planning by adopting mixed-use zoning, which would allow greater accessibility to desired services without requiring greater mobility. Other ways to promote energy efficiency and conservation in land use planning include:

- Encourage livable, walkable land use policies and regulations;
- Encourage alternative forms of transportation in the planning and design of a development;
- Encourage energy efficient development through subdivision and site plan review regulations, zoning ordinance and building codes. Site design techniques that take advantage of solar exposure, difference in microclimate, and landscaping reduce a development's demand for fossil fuel derived energy sources and reduce overall energy consumption;
- Encourage increased reliance on the local food supply in order to reduce energy for transportation energy and augment the local economy; and
- Encourage organic farming as local organic farmers do not rely upon the input of petroleum-derived fertilizers and pesticides.

Meredith, Laconia, Wolfeboro and Tilton are examples of municipalities that have been active in planning that is based on energy efficiency.

A Regional Approach

Coordinated and integrate policies: Region-wide energy efficiency can best be implemented when other public policies are taken into consideration. Implementation of energy measures work best when integrated with programs dealing with other regional issues such as land use, air quality, transportation, housing and economic development and other issues. The Lakes Region Planning Commission recognizes that a regional energy plan needs to be created to ensure that municipalities have access to accurate energy information. Current energy challenges require that local governments in partnership move forward together to achieve adequate, affordable, efficient, and environmentally sound energy supplies. It will be important for the Lakes Region Planning Commission and other regional planning commissions in New Hampshire to work together with the state to create awareness on this issue. The education and dissemination of energy efficient programs and alternatives are key pieces to region-wide energy efficiency.

LRPC encourages all municipalities in the region to evaluate the effects of plans, programs, and policies on energy use, and to determine how to reduce energy impacts by making more efficient use of all energy resources. Local governments need to institute an awareness of energy efficiency and energy conservation in their normal work activities.

Goals

The core goals for energy efficiency are listed below.

1. Strive to provide affordable renewable energy;
2. Increase renewable energy incentives;
3. Increase education on energy efficiency issues and alternatives;
4. Encourage a sustainable funding pattern for energy efficient infrastructure;
5. Promote and encourage smart growth and Green infrastructure planning techniques; and
6. Increase energy efficiency of existing and future buildings.

Recommendations

The recommendations listed below are strategic initiatives that demonstrate a commitment to the above goals. Some of these initiatives are also listed in other chapters of the Lakes Region Plan. These strategic initiatives include:

- **Develop a Comprehensive Region-wide Sustainability Plan/Energy Plan** — There is currently no comprehensive or long range plan for the region which addresses sustainable growth patterns and renewable and alternative forms of energy and energy conservation.

- **Utilize Smart Growth and Livability Principles** — Adopt land use policies that allow for energy efficient development and opportunities for renewable energy infrastructure as well as alternative transportation options.
- **Coordination between energy and policies** — Coordinate goals and policies from other planning functions to ensure there is consistency and that energy efficiency is considered in land use, housing, transportation, environmental policies.
- **Increase small-scale local energy production** — Evaluate opportunities and the feasibility of establishing renewable and alternative energy sources at the local and regional scale (solar, geothermal, wood, biofuels, wind, and hydro), evaluate incentives in zoning and/or regulations to encourage installation of renewable and alternative energy sources in private development (for residential and commercial uses), support Combined Heat and Power systems throughout the region as small-scale local production sites.
- **Increase the energy efficiency of existing and future buildings in the Region** — Encourage and assist local governments to conduct municipal energy audits, adopt and enforce improved building energy codes, establish financial incentives to encourage building energy efficiency improvements and energy retrofits. LRPC can be a source of information for innovative energy financing programs to support energy efficiency.

- **Increase regional use of and support for renewable energy** — Ensure that renewable energy facilities are properly sited and do not negatively impact natural resources including scenic views and wildlife habitat; work to establish new or promote existing incentives and financing options for renewables for the residential, commercial, institutional, and municipal sectors.

- **Encourage and support the work of local energy committees** — Identify common areas of interest that are shared by local energy committees and provide technical assistance to enable the committees to achieve their goals. The committees' efforts could focus on assistance to homeowners, green building design initiatives and renewable energy projects.

If the LRPC were to assist and follow through on energy efficiency and green building initiatives, the commission would require an additional funding source through a dedicated source. LRPC, along with the other regional planning commissions, should consider and pursue this potential.

Appendix A – Local Energy Usage by Housing Type

	Occupied Housing Units		Owner-Occupied Housing Units		Renter Occupied Housing Units	
ALEXANDRIA	estimate	margin of error	Estimate	margin of error	estimate	margin of error
Utility gas	1.90%	+/-2.2	0.60%	+/-0.7	8.40%	+/-12.7
Bottled, tank, or LP gas	17.40%	+/-6.1	17.40%	+/-6.4	17.80%	+/-13.2
Electricity	2.50%	+/-2.4	1.10%	+/-1.3	9.30%	+/-14.1
Fuel oil, kerosene, etc.	44.10%	+/-6.2	43.30%	+/-6.9	48.60%	+/-20.2
Coal or coke	0.00%	+/-4.5	0.00%	+/-5.4	0.00%	+/-24.1
All other fuels	34.10%	+/-6.7	37.70%	+/-7.5	15.90%	+/-17.1
No fuel used	0.00%	+/-4.5	0.00%	+/-5.4	0.00%	+/-24.1
ALTON						
Utility gas	2.10%	+/-2.5	0.70%	+/-1.2	8.90%	+/-14.1
Bottled, tank, or LP gas	13.00%	+/-5.6	12.80%	+/-5.5	13.80%	+/-17.0
Electricity	2.50%	+/-3.9	0.00%	+/-1.6	14.60%	+/-21.8
Fuel oil, kerosene, etc.	67.50%	+/-8.3	70.50%	+/-7.5	53.00%	+/-26.6
Coal or coke	0.00%	+/-1.4	0.00%	+/-1.6	0.00%	+/-7.8
All other fuels	14.90%	+/-5.5	16.00%	+/-6.4	9.70%	+/-10.5
No fuel used	0.00%	+/-1.4	0.00%	+/-1.6	0.00%	+/-7.8
ANDOVER						
Utility gas	0.00%	+/-3.0	0.00%	+/-3.4	0.00%	+/-20.0
Bottled, tank, or LP gas	11.50%	+/-4.3	11.60%	+/-4.5	11.30%	+/-13.5
Electricity	3.80%	+/-3.2	1.60%	+/-1.6	18.00%	+/-22.2
Fuel oil, kerosene, etc.	56.40%	+/-7.7	56.70%	+/-7.4	54.10%	+/-29.3
Coal or coke	1.70%	+/-2.6	2.00%	+/-3.0	0.00%	+/-20.0
All other fuels	26.00%	+/-6.4	27.40%	+/-6.8	16.50%	+/-18.5
No fuel used	0.60%	+/-0.9	0.70%	+/-1.1	0.00%	+/-20.0
ASHLAND						
Utility gas	2.70%	+/-4.3	0.00%	+/-12.8	5.20%	+/-8.5
Bottled, tank, or LP gas	10.20%	+/-10.5	6.80%	+/-10.5	13.40%	+/-12.2
Electricity	8.00%	+/-6.7	0.00%	+/-12.8	15.50%	+/-12.3
Fuel oil, kerosene, etc.	68.30%	+/-13.3	82.20%	+/-13.4	55.20%	+/-17.1
Coal or coke	0.00%	+/-6.4	0.00%	+/-12.8	0.00%	+/-12.1

All other fuels	5.30%	+/-4.7	11.00%	+/-9.9	0.00%	+/-12.1
No fuel used	5.50%	+/-6.0	0.00%	+/-12.8	10.80%	+/-11.4
BARNSTEAD						
Utility gas	0.00%	+/-1.8	0.00%	+/-1.9	0.00%	+/-23.7
Bottled, tank, or LP gas	18.30%	+/-5.3	18.20%	+/-5.5	20.20%	+/-20.2
Electricity	3.00%	+/-3.4	3.20%	+/-3.7	0.00%	+/-23.7
Fuel oil, kerosene, etc.	59.30%	+/-7.5	61.40%	+/-7.8	29.40%	+/-20.8
Coal or coke	0.00%	+/-1.8	0.00%	+/-1.9	0.00%	+/-23.7
All other fuels	19.40%	+/-5.5	17.20%	+/-5.4	50.50%	+/-26.8
No fuel used	0.00%	+/-1.8	0.00%	+/-1.9	0.00%	+/-23.7
BELMONT						
Utility gas	2.20%	+/-2.1	2.30%	+/-2.5	1.80%	+/-3.0
Bottled, tank, or LP gas	20.30%	+/-5.6	21.90%	+/-5.9	13.60%	+/-12.8
Electricity	3.10%	+/-2.5	1.00%	+/-1.1	12.40%	+/-11.5
Fuel oil, kerosene, etc.	67.80%	+/-6.2	67.50%	+/-6.5	69.20%	+/-16.9
Coal or coke	0.00%	+/-1.1	0.00%	+/-1.3	0.00%	+/-5.7
All other fuels	6.60%	+/-3.3	7.40%	+/-3.6	3.10%	+/-5.4
No fuel used	0.00%	+/-1.1	0.00%	+/-1.3	0.00%	+/-5.7
BRIDGEWATER						
Utility gas	0.00%	+/-5.4	0.00%	+/-6.1	0.00%	+/-35.3
Bottled, tank, or LP gas	16.80%	+/-6.5	16.40%	+/-6.7	20.30%	+/-21.8
Electricity	4.30%	+/-3.0	4.80%	+/-3.4	0.00%	+/-35.3
Fuel oil, kerosene, etc.	52.30%	+/-7.9	52.60%	+/-8.5	50.00%	+/-22.5
Coal or coke	0.00%	+/-5.4	0.00%	+/-6.1	0.00%	+/-35.3
All other fuels	26.60%	+/-7.6	26.20%	+/-8.6	29.70%	+/-20.3
No fuel used	0.00%	+/-5.4	0.00%	+/-6.1	0.00%	+/-35.3
BRSTOL						
Utility gas	0.00%	+/-2.2	0.00%	+/-3.0	0.00%	+/-8.0
Bottled, tank, or LP gas	13.90%	+/-6.2	19.00%	+/-8.0	0.00%	+/-8.0
Electricity	6.00%	+/-4.8	2.60%	+/-3.6	15.30%	+/-14.2
Fuel oil, kerosene, etc.	66.00%	+/-7.4	59.10%	+/-8.9	84.70%	+/-14.2
Coal or coke	0.00%	+/-2.2	0.00%	+/-3.0	0.00%	+/-8.0
All other fuels	14.20%	+/-5.2	19.40%	+/-7.2	0.00%	+/-8.0
No fuel used	0.00%	+/-2.2	0.00%	+/-3.0	0.00%	+/-8.0

CENTER HARBOR						
Utility gas	0.00%	+/-2.2	0.00%	+/-3.0	0.00%	+/-8.0
Bottled, tank, or LP gas	13.90%	+/-6.2	19.00%	+/-8.0	0.00%	+/-8.0
Electricity	6.00%	+/-4.8	2.60%	+/-3.6	15.30%	+/-14.2
Fuel oil, kerosene, etc.	66.00%	+/-7.4	59.10%	+/-8.9	84.70%	+/-14.2
Coal or coke	0.00%	+/-2.2	0.00%	+/-3.0	0.00%	+/-8.0
All other fuels	14.20%	+/-5.2	19.40%	+/-7.2	0.00%	+/-8.0
No fuel used	0.00%	+/-2.2	0.00%	+/-3.0	0.00%	+/-8.0
DANBURY						
Utility gas	0.40%	+/-0.7	0.50%	+/-0.9	0.00%	+/-22.9
Bottled, tank, or LP gas	19.50%	+/-6.1	18.00%	+/-5.8	24.60%	+/-18.4
Electricity	0.60%	+/-1.0	0.80%	+/-1.3	0.00%	+/-22.9
Fuel oil, kerosene, etc.	45.40%	+/-8.4	44.80%	+/-9.5	47.40%	+/-17.4
Coal or coke	0.60%	+/-1.0	0.80%	+/-1.2	0.00%	+/-22.9
All other fuels	33.50%	+/-7.9	35.10%	+/-8.8	28.10%	+/-17.3
No fuel used	0.00%	+/-5.8	0.00%	+/-7.4	0.00%	+/-22.9
EFFINGHAM						
Utility gas	0.60%	+/-0.8	0.70%	+/-0.9	0.00%	+/-36.3
Bottled, tank, or LP gas	25.30%	+/-7.9	25.80%	+/-8.1	21.30%	+/-21.0
Electricity	0.00%	+/-5.9	0.00%	+/-6.7	0.00%	+/-36.3
Fuel oil, kerosene, etc.	50.90%	+/-9.1	47.90%	+/-9.0	72.10%	+/-22.3
Coal or coke	0.00%	+/-5.9	0.00%	+/-6.7	0.00%	+/-36.3
All other fuels	23.20%	+/-6.7	25.60%	+/-7.2	6.60%	+/-8.9
No fuel used	0.00%	+/-5.9	0.00%	+/-6.7	0.00%	+/-36.3
FREEDOM						
Utility gas	0.00%	+/-5.3	0.00%	+/-6.0	0.00%	+/-32.7
Bottled, tank, or LP gas	9.90%	+/-4.2	8.70%	+/-4.2	18.10%	+/-18.3
Electricity	5.20%	+/-3.7	2.90%	+/-2.3	20.80%	+/-22.3
Fuel oil, kerosene, etc.	67.90%	+/-7.3	73.90%	+/-6.9	27.80%	+/-21.6
Coal or coke	0.00%	+/-5.3	0.00%	+/-6.0	0.00%	+/-32.7
All other fuels	17.00%	+/-6.6	14.50%	+/-5.7	33.30%	+/-29.4
No fuel used	0.00%	+/-5.3	0.00%	+/-6.0	0.00%	+/-32.7
GILFORD						
Utility gas	1.60%	+/-1.6	0.90%	+/-1.1	5.80%	+/-9.0
Bottled, tank, or LP gas	14.60%	+/-4.8	14.10%	+/-4.4	17.80%	+/-18.4
Electricity	5.90%	+/-3.1	4.70%	+/-2.5	13.50%	+/-18.6

Fuel oil, kerosene, etc.	73.80%	+/-5.7	76.20%	+/-5.4	58.80%	+/-20.2
Coal or coke	0.00%	+/-1.0	0.00%	+/-1.2	0.00%	+/-7.0
All other fuels	4.10%	+/-2.3	4.10%	+/-2.3	4.10%	+/-7.3
No fuel used	0.00%	+/-1.0	0.00%	+/-1.2	0.00%	+/-7.0
GILMANTON						
Utility gas	0.00%	+/-2.1	0.00%	+/-2.2	0.00%	+/-26.3
Bottled, tank, or LP gas	28.80%	+/-7.0	27.70%	+/-7.0	43.80%	+/-28.1
Electricity	3.10%	+/-3.6	3.40%	+/-3.8	0.00%	+/-26.3
Fuel oil, kerosene, etc.	44.20%	+/-7.1	44.20%	+/-7.5	43.80%	+/-29.2
Coal or coke	0.00%	+/-2.1	0.00%	+/-2.2	0.00%	+/-26.3
All other fuels	23.90%	+/-6.3	24.80%	+/-6.5	12.50%	+/-19.3
No fuel used	0.00%	+/-2.1	0.00%	+/-2.2	0.00%	+/-26.3
HEBRON						
Utility gas	0.00%	+/-12.7	0.00%	+/-15.5	0.00%	+/-44.0
Bottled, tank, or LP gas	15.50%	+/-8.0	17.40%	+/-9.5	7.10%	+/-11.2
Electricity	3.60%	+/-5.3	0.00%	+/-15.5	19.00%	+/-25.6
Fuel oil, kerosene, etc.	70.50%	+/-9.6	75.30%	+/-10.8	50.00%	+/-24.9
Coal or coke	0.90%	+/-1.5	1.10%	+/-1.9	0.00%	+/-44.0
All other fuels	9.50%	+/-5.5	6.20%	+/-4.8	23.80%	+/-20.0
No fuel used	0.00%	+/-12.7	0.00%	+/-15.5	0.00%	+/-44.0
HILL						
Utility gas	1.40%	+/-1.5	1.50%	+/-1.6	0.00%	+/-54.8
Bottled, tank, or LP gas	10.20%	+/-5.2	8.60%	+/-4.4	33.30%	+/-40.0
Electricity	2.10%	+/-2.1	0.00%	+/-7.1	33.30%	+/-31.9
Fuel oil, kerosene, etc.	55.10%	+/-8.4	57.00%	+/-8.7	25.90%	+/-31.1
Coal or coke	0.00%	+/-6.7	0.00%	+/-7.1	0.00%	+/-54.8
All other fuels	30.80%	+/-7.8	32.80%	+/-8.2	0.00%	+/-54.8
No fuel used	0.50%	+/-0.7	0.00%	+/-7.1	7.40%	+/-13.0
HOLDERNESS						
Utility gas	0.00%	+/-3.8	0.00%	+/-4.9	0.00%	+/-16.4
Bottled, tank, or LP gas	17.10%	+/-7.1	17.00%	+/-8.5	17.40%	+/-14.8
Electricity	2.70%	+/-3.1	1.30%	+/-2.4	7.80%	+/-11.6
Fuel oil, kerosene, etc.	69.50%	+/-9.5	72.80%	+/-10.4	57.50%	+/-22.0
Coal or coke	0.00%	+/-3.8	0.00%	+/-4.9	0.00%	+/-16.4
All other fuels	8.30%	+/-5.0	8.80%	+/-5.8	6.60%	+/-8.7
No fuel used	2.30%	+/-3.7	0.00%	+/-4.9	10.80%	+/-15.9

LACONIA						
Utility gas	23.30%	+/-3.7	16.10%	+/-4.5	33.90%	+/-6.9
Bottled, tank, or LP gas	8.60%	+/-1.9	10.80%	+/-2.7	5.30%	+/-3.1
Electricity	7.20%	+/-2.1	4.80%	+/-2.5	10.70%	+/-3.6
Fuel oil, kerosene, etc.	55.20%	+/-4.0	63.40%	+/-4.6	43.40%	+/-7.2
Coal or coke	0.20%	+/-0.3	0.30%	+/-0.5	0.00%	+/-1.0
All other fuels	3.90%	+/-1.7	4.50%	+/-2.3	3.00%	+/-2.3
No fuel used	1.70%	+/-1.7	0.20%	+/-0.3	3.70%	+/-4.1
MEREDITH						
Utility gas	4.90%	+/-3.9	3.60%	+/-4.1	6.40%	+/-7.0
Bottled, tank, or LP gas	21.60%	+/-11.5	29.10%	+/-16.1	12.80%	+/-11.8
Electricity	7.80%	+/-7.6	0.00%	+/-6.9	16.90%	+/-17.0
Fuel oil, kerosene, etc.	58.40%	+/-14.1	65.40%	+/-15.8	50.30%	+/-22.3
Coal or coke	0.00%	+/-3.8	0.00%	+/-6.9	0.00%	+/-8.0
All other fuels	1.00%	+/-1.6	1.90%	+/-3.1	0.00%	+/-8.0
No fuel used	6.30%	+/-6.9	0.00%	+/-6.9	13.60%	+/-14.6
MOULTONBOROUGH						
Utility gas	0.50%	+/-0.9	0.60%	+/-1.0	0.00%	+/-16.8
Bottled, tank, or LP gas	29.00%	+/-7.3	30.30%	+/-7.9	15.40%	+/-11.9
Electricity	3.10%	+/-2.1	2.80%	+/-2.3	6.20%	+/-10.5
Fuel oil, kerosene, etc.	55.40%	+/-7.7	54.30%	+/-8.5	66.00%	+/-20.9
Coal or coke	0.00%	+/-1.7	0.00%	+/-1.8	0.00%	+/-16.8
All other fuels	12.00%	+/-5.2	12.00%	+/-5.6	12.30%	+/-17.0
No fuel used	0.00%	+/-1.7	0.00%	+/-1.8	0.00%	+/-16.8
NEW HAMPTON						
Utility gas	0.00%	+/-21.9	0.00%	+/-26.8	0.00%	+/-55.9
Bottled, tank, or LP gas	2.50%	+/-3.5	3.20%	+/-4.5	0.00%	+/-55.9
Electricity	0.00%	+/-21.9	0.00%	+/-26.8	0.00%	+/-55.9
Fuel oil, kerosene, etc.	85.00%	+/-8.5	80.90%	+/-11.8	100.00%	+/-55.9
Coal or coke	0.00%	+/-21.9	0.00%	+/-26.8	0.00%	+/-55.9
All other fuels	12.50%	+/-8.1	16.00%	+/-11.3	0.00%	+/-55.9
No fuel used	0.00%	+/-21.9	0.00%	+/-26.8	0.00%	+/-55.9
NORTHFIELD						
Utility gas	11.30%	+/-4.1	6.20%	+/-4.2	27.70%	+/-12.8
Bottled, tank, or LP gas	13.10%	+/-4.6	16.30%	+/-5.9	2.90%	+/-4.7

Electricity	12.30%	+/-5.5	3.60%	+/-2.0	40.40%	+/-18.0
Fuel oil, kerosene, etc.	49.10%	+/-6.6	56.20%	+/-8.2	26.30%	+/-17.2
Coal or coke	0.00%	+/-1.7	0.00%	+/-2.2	0.00%	+/-7.0
All other fuels	14.20%	+/-4.8	17.80%	+/-6.1	2.70%	+/-4.9
No fuel used	0.00%	+/-1.7	0.00%	+/-2.2	0.00%	+/-7.0
OSSIPEE						
Utility gas	0.60%	+/-0.9	0.00%	+/-2.1	3.40%	+/-5.3
Bottled, tank, or LP gas	14.80%	+/-6.3	13.20%	+/-5.2	22.50%	+/-23.9
Electricity	2.70%	+/-2.2	1.80%	+/-2.1	7.20%	+/-8.1
Fuel oil, kerosene, etc.	71.10%	+/-8.1	71.90%	+/-7.9	66.90%	+/-23.0
Coal or coke	0.00%	+/-1.7	0.00%	+/-2.1	0.00%	+/-9.7
All other fuels	10.80%	+/-5.5	13.10%	+/-6.5	0.00%	+/-9.7
No fuel used	0.00%	+/-1.7	0.00%	+/-2.1	0.00%	+/-9.7
SANBORNTON						
Utility gas	2.20%	+/-1.6	2.40%	+/-1.8	0.00%	+/-29.2
Bottled, tank, or LP gas	19.00%	+/-6.6	18.10%	+/-6.9	31.00%	+/-29.9
Electricity	2.10%	+/-2.3	2.30%	+/-2.5	0.00%	+/-29.2
Fuel oil, kerosene, etc.	59.90%	+/-7.1	59.20%	+/-7.3	69.00%	+/-29.9
Coal or coke	0.80%	+/-1.2	0.90%	+/-1.3	0.00%	+/-29.2
All other fuels	15.50%	+/-4.7	16.60%	+/-4.9	0.00%	+/-29.2
No fuel used	0.50%	+/-0.8	0.50%	+/-0.9	0.00%	+/-29.2
SANDWICH						
Utility gas	1.00%	+/-1.1	1.20%	+/-1.3	0.00%	+/-25.9
Bottled, tank, or LP gas	10.60%	+/-4.5	11.10%	+/-4.7	8.20%	+/-9.2
Electricity	3.00%	+/-2.5	3.00%	+/-3.0	3.10%	+/-4.6
Fuel oil, kerosene, etc.	54.20%	+/-6.7	53.20%	+/-7.1	59.20%	+/-18.5
Coal or coke	0.00%	+/-4.9	0.00%	+/-5.9	0.00%	+/-25.9
All other fuels	31.10%	+/-6.1	31.40%	+/-6.6	29.60%	+/-16.9
No fuel used	0.00%	+/-4.9	0.00%	+/-5.9	0.00%	+/-25.9
TAMOWRTH						
Utility gas	0.00%	+/-2.2	0.00%	+/-2.8	0.00%	+/-10.0
Bottled, tank, or LP gas	22.10%	+/-7.6	17.40%	+/-7.6	39.90%	+/-23.8
Electricity	9.60%	+/-6.5	2.10%	+/-2.4	37.80%	+/-24.8
Fuel oil, kerosene, etc.	44.20%	+/-8.1	53.20%	+/-9.1	10.20%	+/-10.1
Coal or coke	0.00%	+/-2.2	0.00%	+/-2.8	0.00%	+/-10.0
All other fuels	24.10%	+/-7.6	27.30%	+/-8.8	12.00%	+/-13.2

No fuel used	0.00%	+/-2.2	0.00%	+/-2.8	0.00%	+/-10.0
TILTON						
Utility gas	49.40%	+/-0.1	52.90%	+/-0.1	42.70%	+/-0.1
Bottled, tank, or LP gas	5.00%	+/-0.1	6.20%	+/-0.1	2.80%	+/-0.1
Electricity	35.50%	+/-0.1	29.80%	+/-0.1	46.30%	+/-0.1
Fuel oil, kerosene, etc.	6.50%	+/-0.1	7.20%	+/-0.1	5.10%	+/-0.1
Coal or coke	0.10%	+/-0.1	0.10%	+/-0.1	0.10%	+/-0.1
All other fuels	2.60%	+/-0.1	3.20%	+/-0.1	1.40%	+/-0.1
No fuel used	0.90%	+/-0.1	0.60%	+/-0.1	1.60%	+/-0.1
TUFTONBORO						
Utility gas	0.00%	+/-2.8	0.00%	+/-3.3	0.00%	+/-19.9
Bottled, tank, or LP gas	8.50%	+/-4.3	7.70%	+/-4.2	13.40%	+/-16.5
Electricity	3.40%	+/-2.4	2.20%	+/-2.1	11.20%	+/-12.8
Fuel oil, kerosene, etc.	58.20%	+/-9.4	60.50%	+/-9.8	42.50%	+/-21.6
Coal or coke	0.00%	+/-2.8	0.00%	+/-3.3	0.00%	+/-19.9
All other fuels	28.00%	+/-8.2	27.20%	+/-8.8	32.80%	+/-26.5
No fuel used	2.00%	+/-3.2	2.30%	+/-3.6	0.00%	+/-19.9
WOLFEBORO						
Utility gas	0.70%	+/-1.1	0.80%	+/-1.4	0.00%	+/-6.8
Bottled, tank, or LP gas	19.10%	+/-6.5	16.40%	+/-5.4	32.90%	+/-24.4
Electricity	7.70%	+/-3.9	6.60%	+/-3.7	13.60%	+/-14.9
Fuel oil, kerosene, etc.	64.70%	+/-7.0	67.00%	+/-6.7	53.40%	+/-23.1
Coal or coke	0.00%	+/-1.1	0.00%	+/-1.4	0.00%	+/-6.8
All other fuels	7.10%	+/-3.6	8.50%	+/-4.3	0.00%	+/-6.8
No fuel used	0.70%	+/-1.0	0.80%	+/-1.2	0.00%	+/-6.8

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APPENDIX A

UNH
STATEWIDE AND REGIONAL SURVEYS

NH Regional Planning Commissions
A Granite State Future
2013 Statewide Survey
Central & Lakes Region Report

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The Survey Center

University of New Hampshire

July, 2013

The University of New Hampshire

Survey Center

The UNH Survey Center is an independent, non-partisan academic survey research organization and a division of the UNH College of Liberal Arts.

The Survey Center conducts telephone, mail, e-mail, Internet, and intercept surveys, as well as focus groups and other qualitative research for university researchers, government agencies, public non-profit organizations, private businesses, and media clients.

Our senior staff have over 40 years experience in designing and conducting custom research on a broad range of political, social, health care, and other public policy issues.

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Executive Summary

During May-July 2013, the University of New Hampshire Survey Center conducted a survey for New Hampshire's nine Regional Planning Commissions, as part of the *Granite State Future* and *New Hampshire Broadband Mapping and Planning* initiatives. Funded in part by a grant from the US Department of Housing and Urban Development, *A Granite State Future* is intended to engage New Hampshire citizens in a public dialogue, at the local, regional and state levels, about what they want for the future of their communities and state. Results from the survey will inform updates to the Regional Master Plans in each of NH's nine planning regions. These regional plans, whose development has been required under State law (RSA 36:47) for over 40 years, are advisory documents designed to provide municipalities with data and strategies to support local decision-making as well as enhance regional cooperation.

With support from the National Telecommunications Information Administration of the US Department of Commerce and in conjunction with the University of New Hampshire and other partners, the New Hampshire Broadband Mapping and Planning Program (NHBMPP) is a comprehensive, multi-year effort that seeks to understand where broadband is currently available in NH, how it can be made more widely available in the future, and how to encourage increased levels of broadband adoption and usage. Results from the survey will inform the broadband plans developed in each of NH's nine planning regions.

The specific areas of interest are New Hampshire resident's opinions on a range of issues facing communities around the State – transportation and broadband infrastructure, housing, economic development, natural resource management, energy and natural hazard mitigation. A survey of two thousand nine hundred and thirty-five (2,935) New Hampshire adults was conducted by telephone between May 9 and July 21, 2013. The response rate was 33% and the margin of sampling error for the survey is +/- 2.2%. (See Technical Report for a more detailed description of survey methods.) The following figures display survey results, detailed tabular results can be found in Appendix A, Appendix B contains the open-ended responses and Appendix C contains the survey instrument.

The intent of this report is to provide NH's regional planning commissions and other interested parties with a broad overview of the data collected. This report should serve as a concrete focus for engaging with these data and using them to design and implement strategies for regional planning. However, every summary statement made in this report will generate numerous questions from the reader about how this data element or piece of information applies to other specific strata of the population or planning domain. Many of these questions can readily be answered by the extensive cross tabulations that are provided for each survey question in Appendix A of this report. Some of the questions that will be generated by this report will require more extensive and sophisticated analyses of these data. Knowing this, it is our hope that New Hampshire Planning leaders will share these data with other academics and community organizations that will actively use these data to help New Hampshire discover more about their local population and about how better to target planning initiatives to meet the needs of those in specific communities.

Each section begins with a summary narrative that is written in the form of short, bulleted sentences that describe selected indicators on the data tables and charts. These narratives are not intended to explain or summarize every indicator in the accompanying data tables. This section was not meant to provide the reader with any conclusions.

It was intended to spark interest in the data and invite you to ask questions of this information and use the data cross tabs accompanying this report to understand better the planning concepts you are concerned about.

The charts and tables that follow display major findings of the survey. They are not intended to exhaustively present all the data in the survey. If no demographic differences were listed then responses were consistent across demographic categories. Not all findings are noted in this report; these are the highlights of the results. Additional results can be found in the detailed tables located in Appendix A.

Key Findings

- Responses from residents of the Central & Lakes Region were largely similar to those of statewide residents. The big differences involved what type of neighborhood residents live in (more Central & Lakes residents live in rural locations away from the town center) and why they have their current internet provider (more Central & Lakes residents say it is their only option available).
- Residents believe that environmental protection and natural resource protection should be the top priority for investing public dollars, and a majority believes that all environmental protection measures mentioned should be high priorities for policymakers.
- Residents view energy efficiency and energy choices as the second most important priority for investing public dollars. Residents are largely in favor of all the proposed energy efficiency and renewable energy projects, except for the idea of having public charging stations made for electric vehicles.
- 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 say that the top activity that their community should actively encourage is promoting local agriculture (93%). Majorities want to encourage many other activities as well, including protecting historic buildings and neighborhoods (90%) and expanding or promoting current businesses (84%).
- Residents view quality schools as the most important thing to have in their community (93%). Other important aspects of a community include having farms, farm stands and forestry businesses (88%), nearby job opportunities (85%), small businesses and retail stores (85%), and grocery stores (80%).
- Residents view maintaining our bridges and highways to be the most important priority for transportation funding (77%). Residents were split on funding for other transportation initiatives, with a narrow majority favoring funding for senior and special needs transportation (53%), and the availability of bike paths (50%).
- The vast majority of residents (93%) have internet access at home, and almost all of them (91%) consider their internet access adequate for their uses. Almost as many (88%) would not be willing to pay any additional money in exchange for faster internet speeds.

Demographics

Sex	C & L	State
Male	50%	49%
Female	50%	51%
Age of Respondent		
18 to 29	15%	19%
30 to 39	14%	15%
40 to 49	21%	20%
50 to 59	20%	20%
60 to 69	16%	14%
70 or older	14%	12%
Years Lived In NH		
5 years or less	5%	9%
6 to 10 years	6%	9%
11 to 20 years	19%	21%
20 or more years	70%	61%
Employment Status		
Employed full-time	49%	48%
Employed part-time	12%	11%
Self-Employed	8%	8%
Retired and not working	21%	20%
Unemployed & looking for work	3%	4%
Not Employed & Not Looking	7%	10%
Children in Household		
No children	64%	66%
One	18%	14%
Two or more	18%	20%

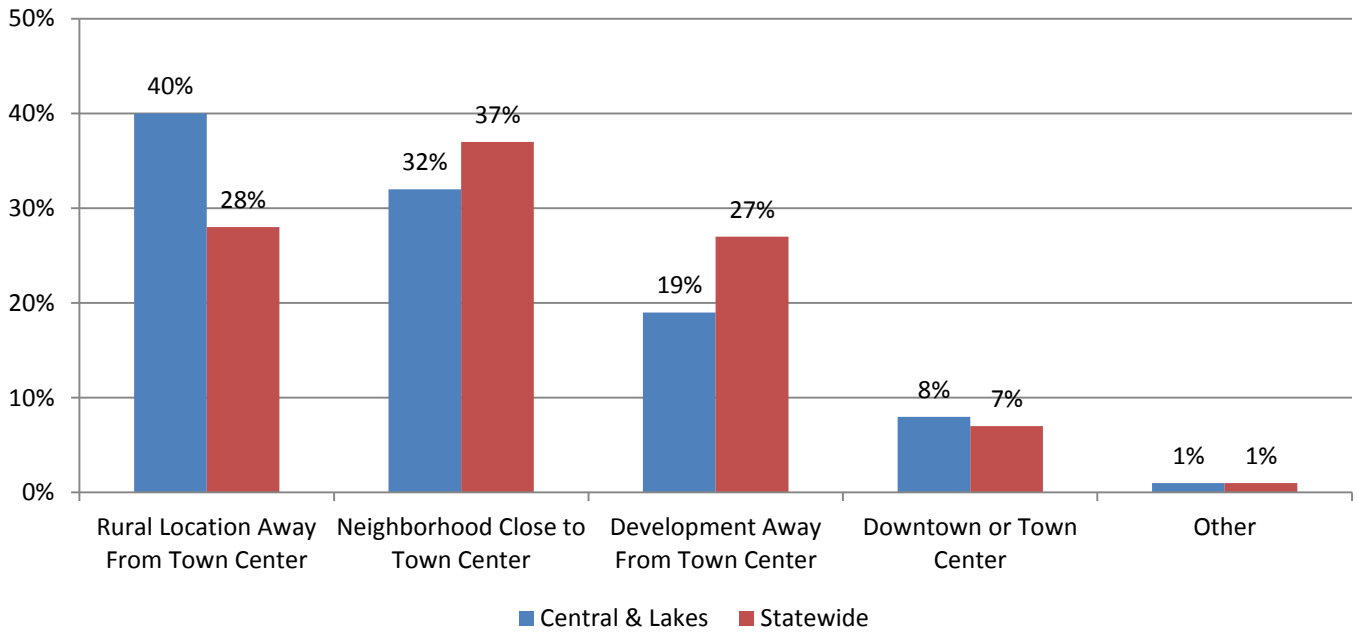
Race of Respondent	C & L	State
White	95%	93%
Non-White	5%	7%
Household Income		
Less than $20,000	11%	10%
$20,000 to $39,999	11%	15%
$40,000 to $59,999	19%	14%
$60,000 to $90,000	23%	21%
$90,001 to $160,000	27%	26%
More than $160,000	9%	14%
Highest Level of Education		
High school or less	24%	20%
Technical school/Some college	18%	22%
College graduate	33%	35%
Postgraduate work	24%	23%
Region of Employment		
Northern NH	14%	10%
Western NH	1%	5%
Central/Lakes	52%	12%
Hillsborough County	9%	22%
Seacoast	5%	20%
Other State	9%	19%
Work At Home	10%	12%

Housing

A plurality of residents (40%) describe where they live as a rural location away from the town center, followed by those in a neighborhood close to a town center (32%), a development away from a town center (19%), and those downtown or a town center (8%). There was also 1% who classified their neighborhood as something else.

- Residents of the Central & Lakes region are *more likely* to live in a rural location away from the town center than statewide residents.
- Those aged 30 to 39 are *more likely* to live downtown or in a town center,
- Households earning more than $160,000 and those aged 60 to 69 are *more likely* to live in a rural location away from the town center.

Figure 1: How would you classify the neighborhood where you live? (q1)



When asked whether they would prefer to live in a small house but have a short commute to work or a large home with a longer commute, a majority (53%) said they would prefer the small home and short commute, 44% would prefer the large home and long commute and 3% did not know **(Figure 2).**

Meanwhile, a slight majority of residents (52%) would prefer to live in a strictly residential neighborhood while 47% would prefer a mixed residential/commercial neighborhood and 1% did not know **(Figure 3).**

- Households with two or more children, households earning more than $160,000 and the self-employed are *more likely* to want a larger home with a longer commute.
- Older adults (60 and older), retired people, households earning between $20,000 and $39,999 and those employed in the Central & Lakes Region are *more likely* to choose a smaller home with a shorter commute.
- Households earning more than $90,000 are *more likely* to want to live in a strictly residential neighborhood.

Figure 2: Large Home with Long Commute or Small Home with Short Commute? (q7a)

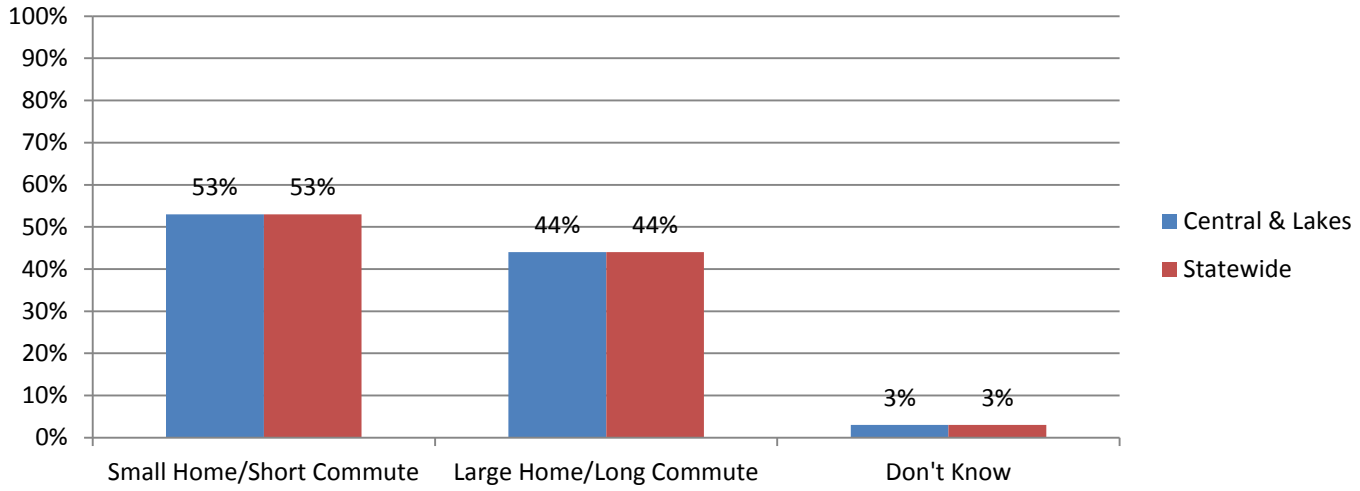
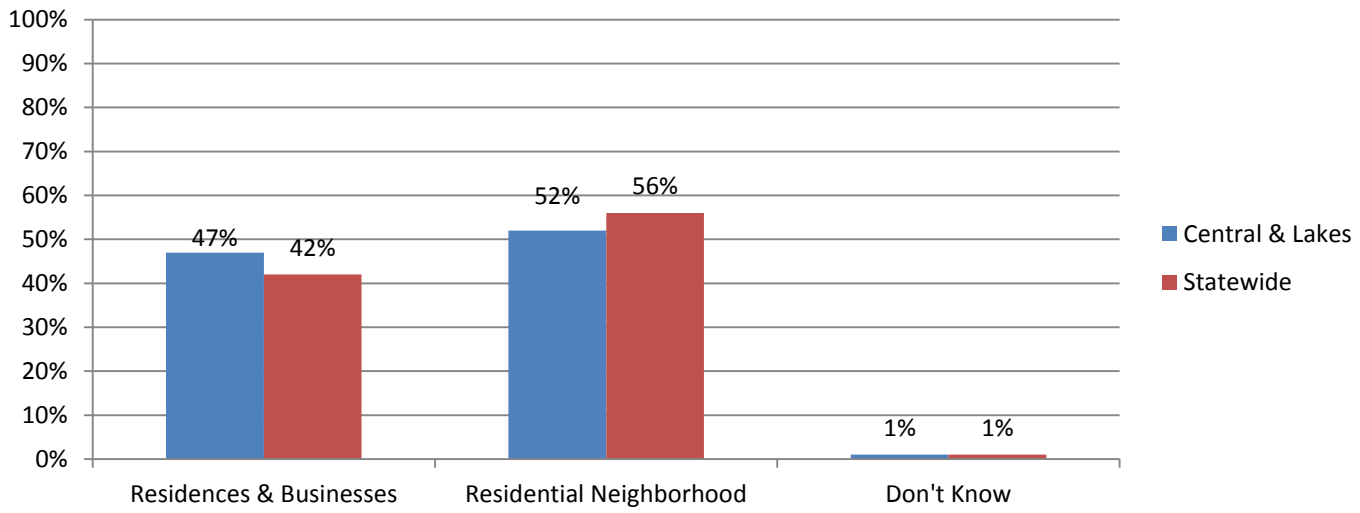


Figure 3: Mixed Neighborhood with Stores or Residential Only Neighborhood? (q7b)



Four in five residents (79%) who answered that they would like to live in a neighborhood with a mix of residences and businesses would prefer a smaller house with a short commute. Two-thirds (67%) of those who chose a residential neighborhood where you have to drive to services also prefer a larger house with a longer commute.

Table 1: Living Preference – Home Size and Commute vs. Type of Neighborhood

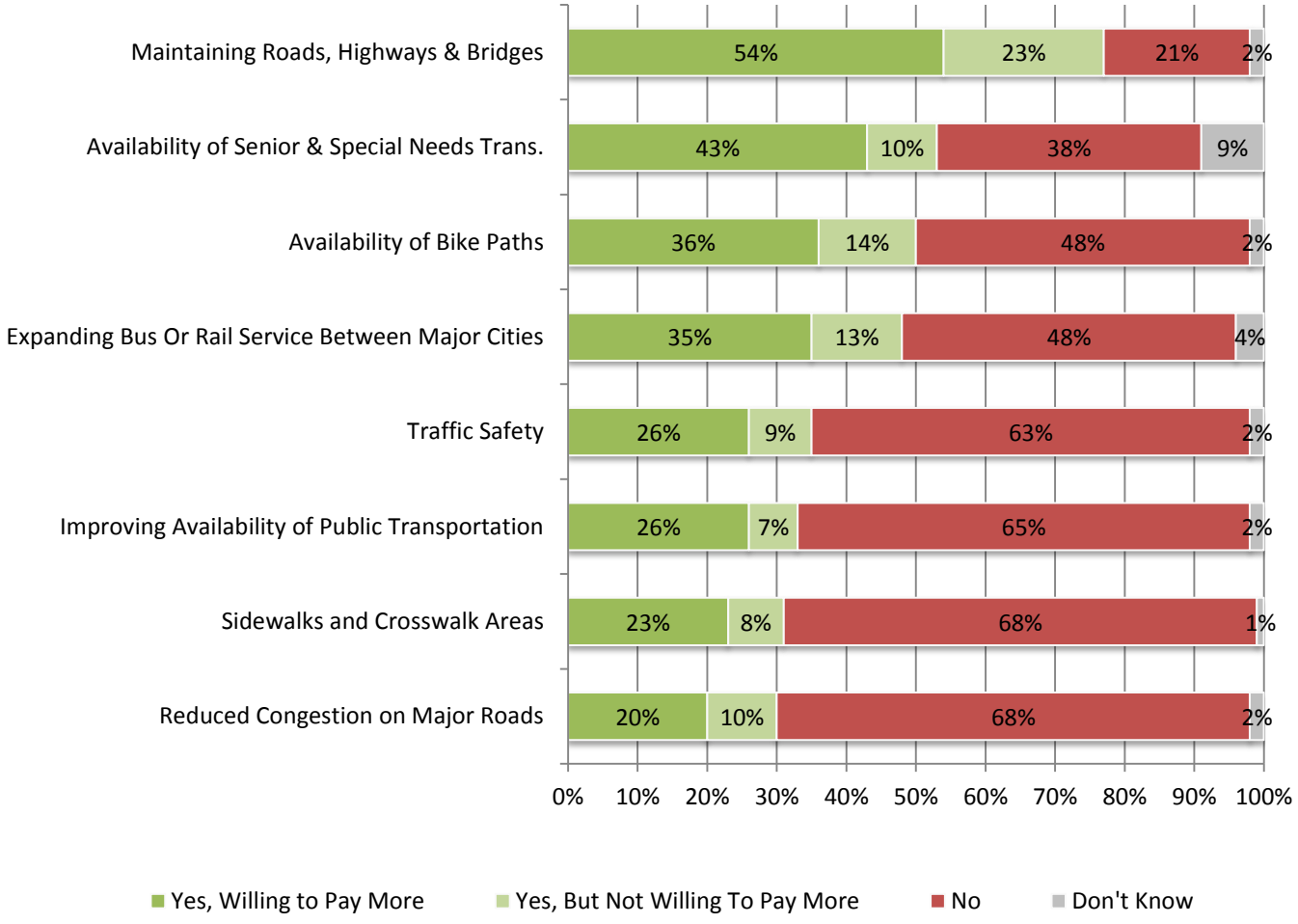
Q7A Would you choose to live in a small home with a small backyard, if it means you have a short trip to work, school or shopping, or would you choose to live in a large home with a large backyard, with a long trip to work school or shopping.	Q7B Would you choose to live in a neighborhood with a mix of residences and businesses where you can walk to stores, schools, and services, OR would you choose to live in a residential-only neighborhood where you needed to drive a car to get to stores, schools and services?		
	Mix of residences and businesses - walk	Residential neighborhood - drive	Total
Small home, small yard	79% (149)	33%(71)	55% (220)
Large home, large yard	21% (40)	67% (143)	45% (183)
Total	47% (189)	53% (214)	100%

Transportation

More than three-fourths (77%) of residents think that policy makers should invest more money in maintaining roads, highways and bridges (with 54% willing to pay more in taxes to do so), followed by improving availability of senior and special needs transportation (53%), improving the availability of bike paths (50%), expanding bus or rail service between major cities (48%), traffic safety (35%), improving the availability of public transportation (33%), sidewalks and crosswalk areas (31%), and reducing congestion on major roads (30%).

- Households with two or more children, those aged 30 to 39 and those who have completed postgraduate work are *more likely* to want investment in the availability of bike paths.
- Household with children and those aged 30 to 39 are *more likely* to want investment in sidewalks and crosswalk areas.
- Young people (18 to 29) are *less likely* to want investment in maintaining roads, highways and bridges and reducing congestion levels and improving senior and special needs transportation.

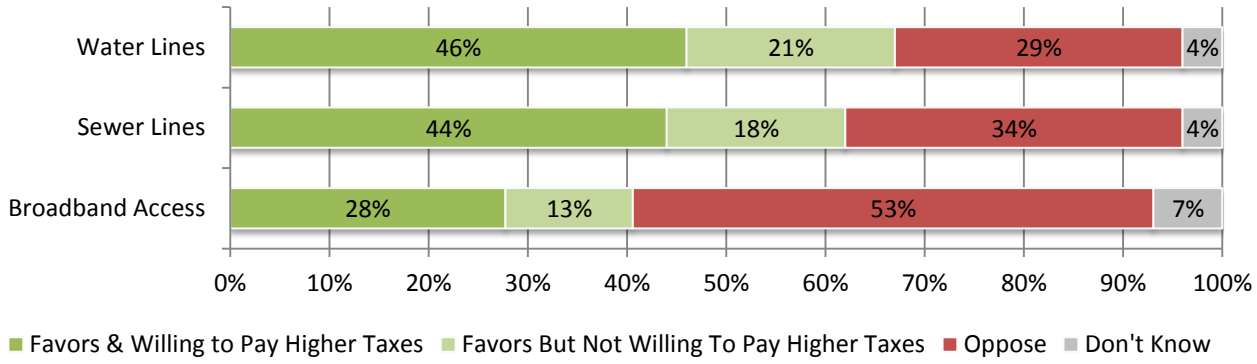
Figure 4: Should Policy Makers Invest More Money in Transportation (q2)



Community Development

Two in three (67%) residents favor using municipal funds to provide water lines to existing and potential development (although just 46% would be willing to pay more in taxes for it), followed by sewer lines (62%) and broadband access (41%).

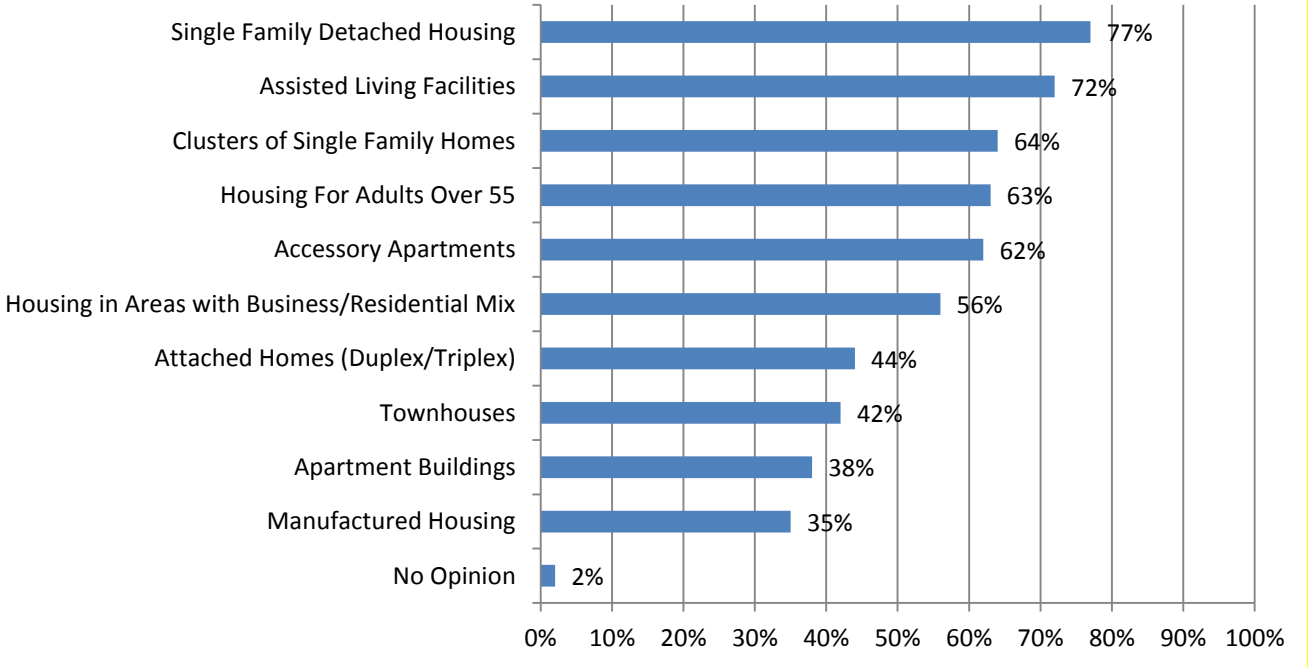
Figure 5: Favor or Oppose Using Municipal Funds to Provide Utilities for Development (q11)



More than three in four (77%) residents think that their town should encourage single family detached housing, followed by assisted living facilities (72%), clusters of single family homes (64%), housing for adults over 55 (63%), accessory apartments (62%), housing in areas with business/residential mix (56%), attached homes (44%), townhouses (42%), apartment buildings (38%), and manufactured housing (35%).

- Young people (18 to 29) and those aged 60 to 69 are more likely to want their town to encourage townhouses.

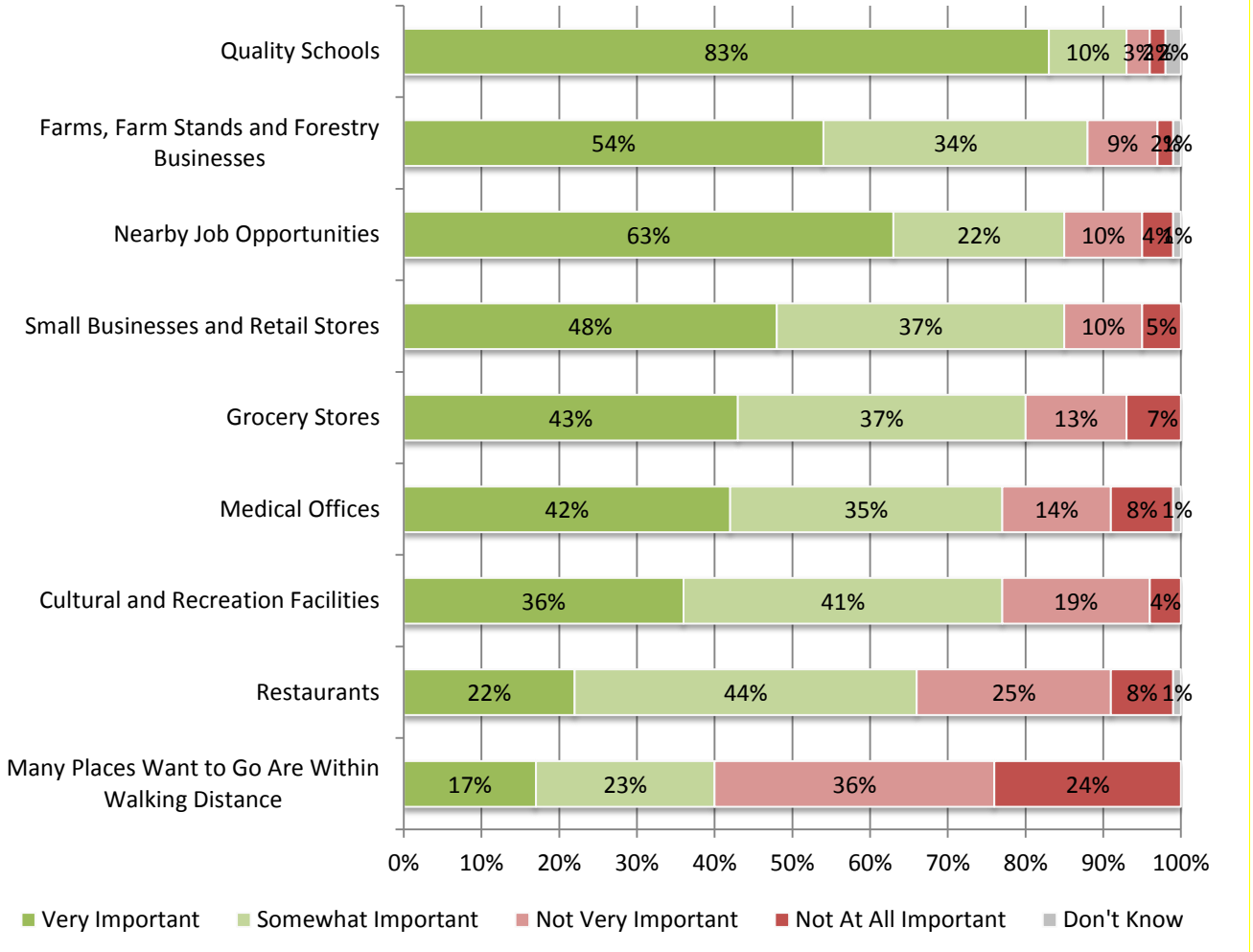
Figure 6: What kinds of housing should your town encourage? Check all that apply (q6)



Nearly all (93%) residents find it important (83% "very important" and 10% "somewhat important") that there are quality schools in their community, followed by farms, farm stands and forestry businesses (88%), having nearby job opportunities (85%), small businesses and retail stores (85%), grocery stores (80%), medical offices (77%), cultural recreation facilities (77%), restaurants (66%) and that many places they want to go are within walking distance (40%).

- Young people (18 to 29), older people (70 to 79), and households earning between $20,000 and $39,999 are *more likely* to think it is very important to have medical offices.
- Households with two or more children and those who are not employed and not looking are *more likely* to think that small businesses and retail stores are very important.
- Those aged 30 to 39 and households earning more than $160,000 are *more likely* to think nearby job opportunities are very important.
- Those aged 40 to 49 and households earning between $40,000 and $59,999 are *more likely* to think that farm, farm stands and forestry businesses are very important.

Figure 7: How Important Is It To Have In Your Community? (q3)



Only 9% of respondents find housing to be very affordable in their town, 61% find it somewhat affordable, 22% find it not very affordable, 3% find it not affordable at all and 4% don't know. When it comes to renting, only 8% find it very affordable, 36% find it somewhat affordable, 19% find it not very affordable, 6% find it not affordable at all and 32% don't know.

- Households earning between $20,000 and $39,999 are *more likely* to think that rent is somewhat affordable.

Figure 8: How Affordable is Housing in Your Town? (q4 & q5)

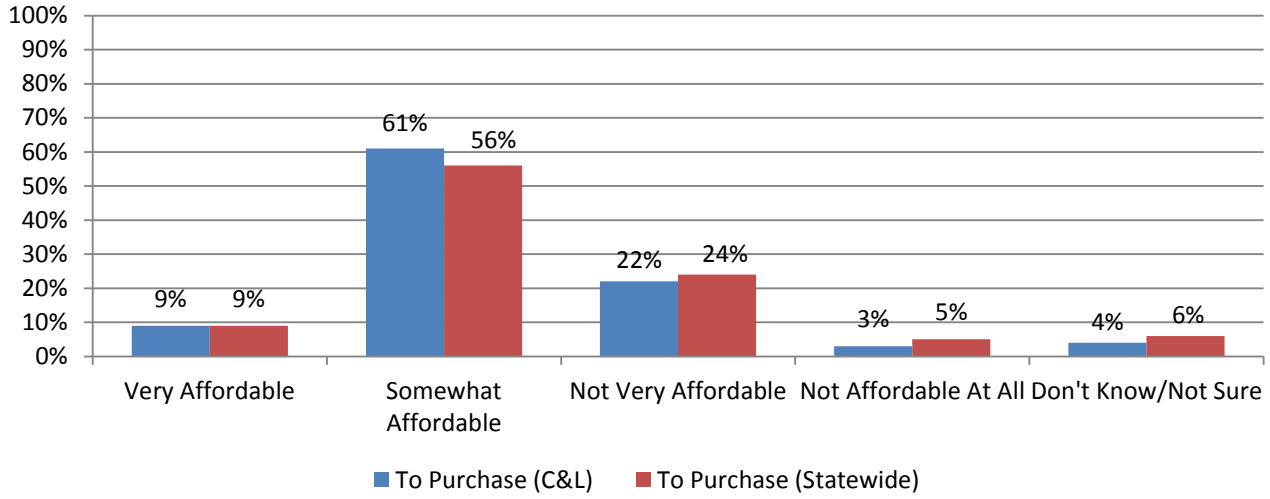
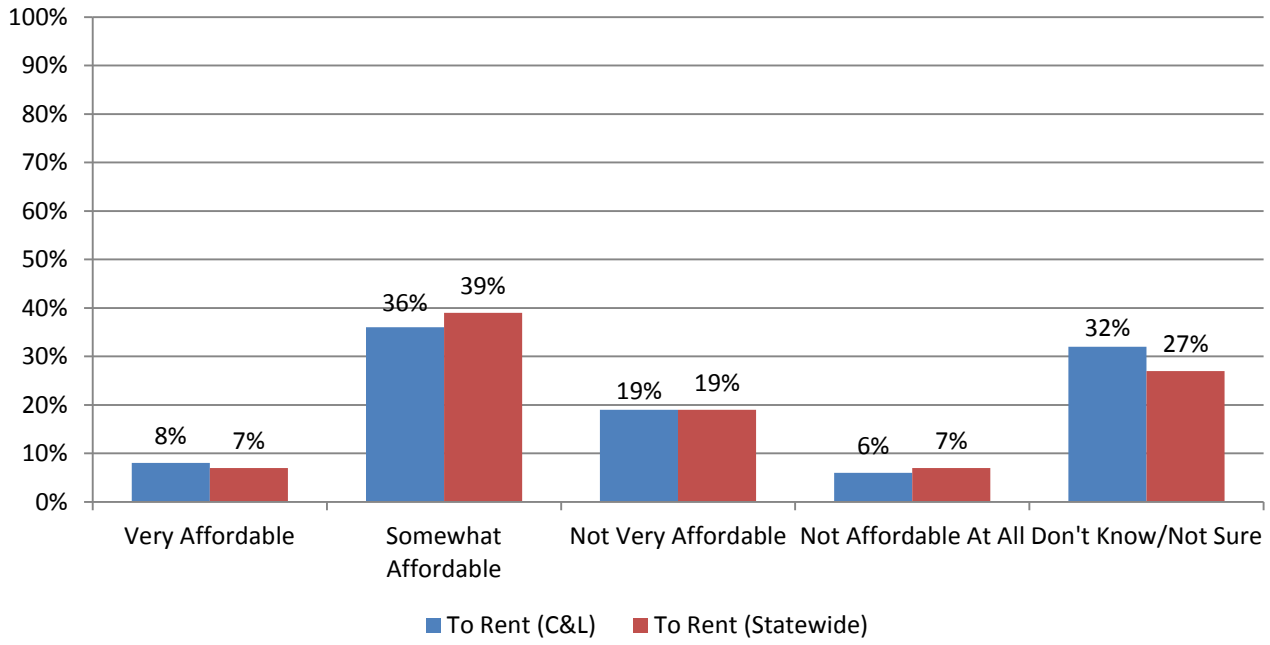


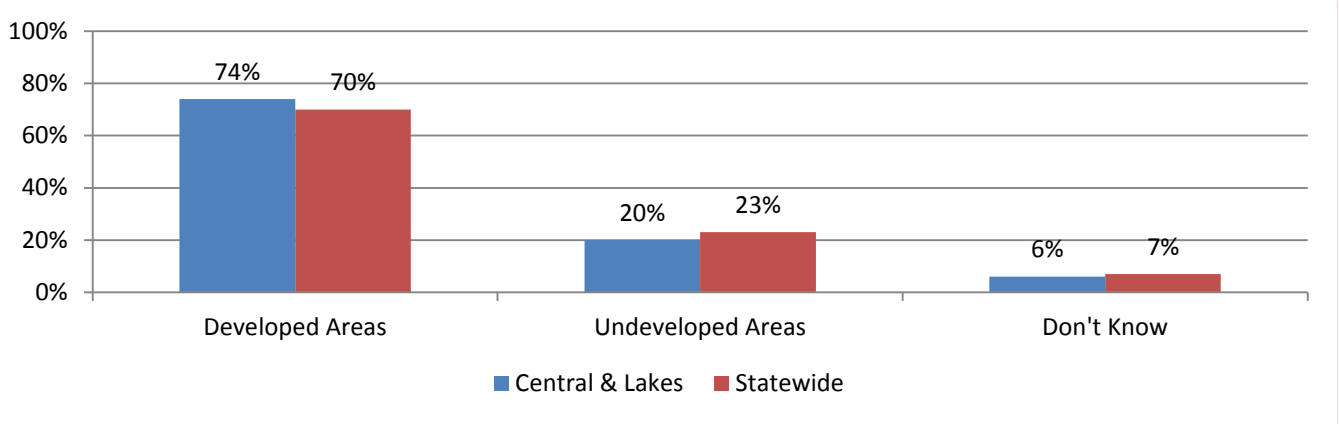
Figure 8b: How Affordable is Housing in Your Town? (q4 & q5)



Three-quarters (74%) of residents think that future development should occur in areas that are already developed while only 20% support development in undeveloped areas and 6% did not know.

- Households earning $40,000 to $59,999 are *more likely* to support growth in undeveloped areas.

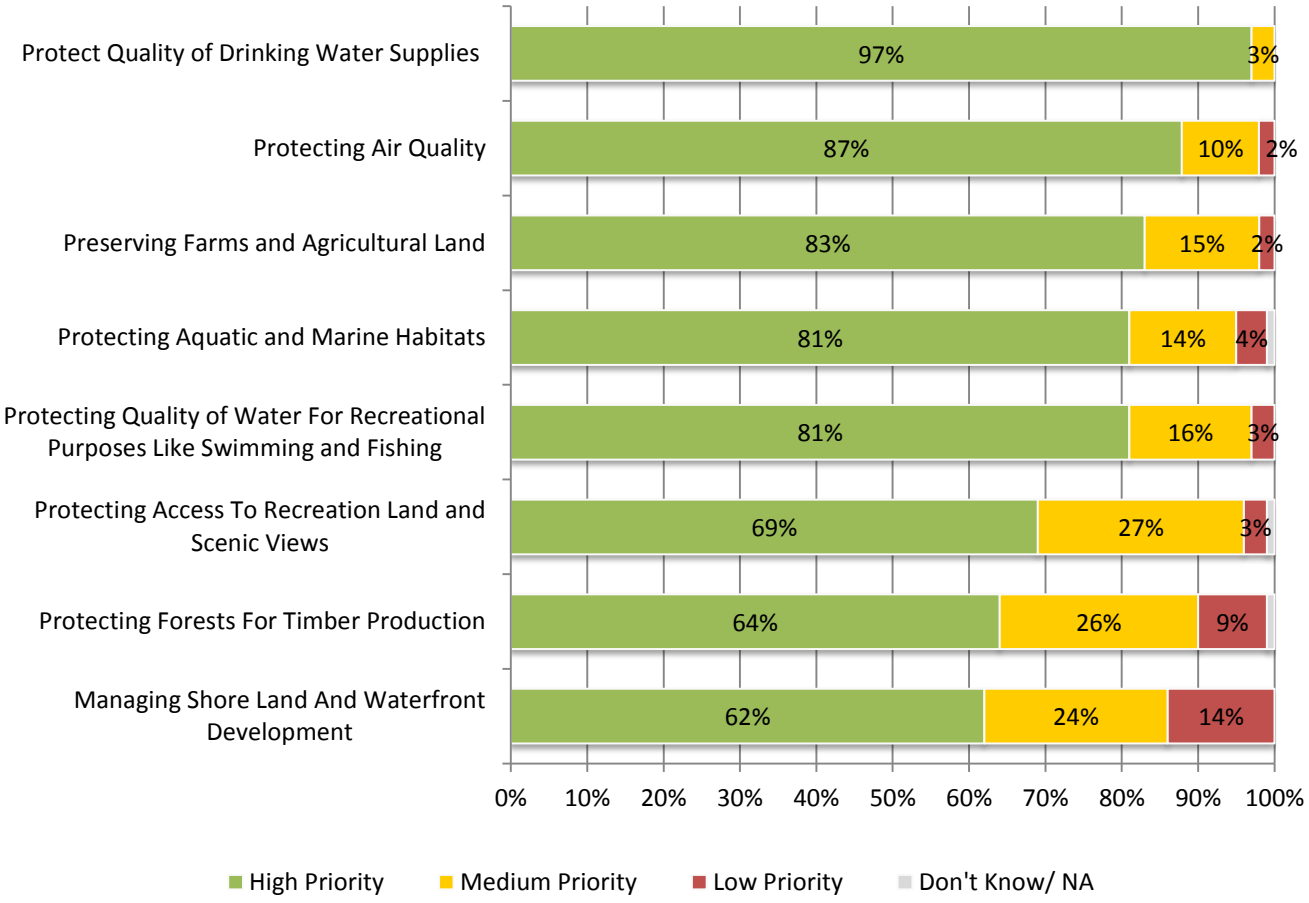
Figure 9: Where should future development occur in your part of the state? (q8)



Environmental Protection

Nearly all residents (97%) view protecting water quality for drinking as a high priority for their community, followed by protecting air quality (87%), preserving farms and agricultural land (83%), protecting aquatic and marine habitats (81%), protecting water quality for recreational purposes like swimming and fishing (81%), protecting access to recreation land and scenic views (69%), protecting forests for timber production (64%), and managing shore land and waterfront development (62%).

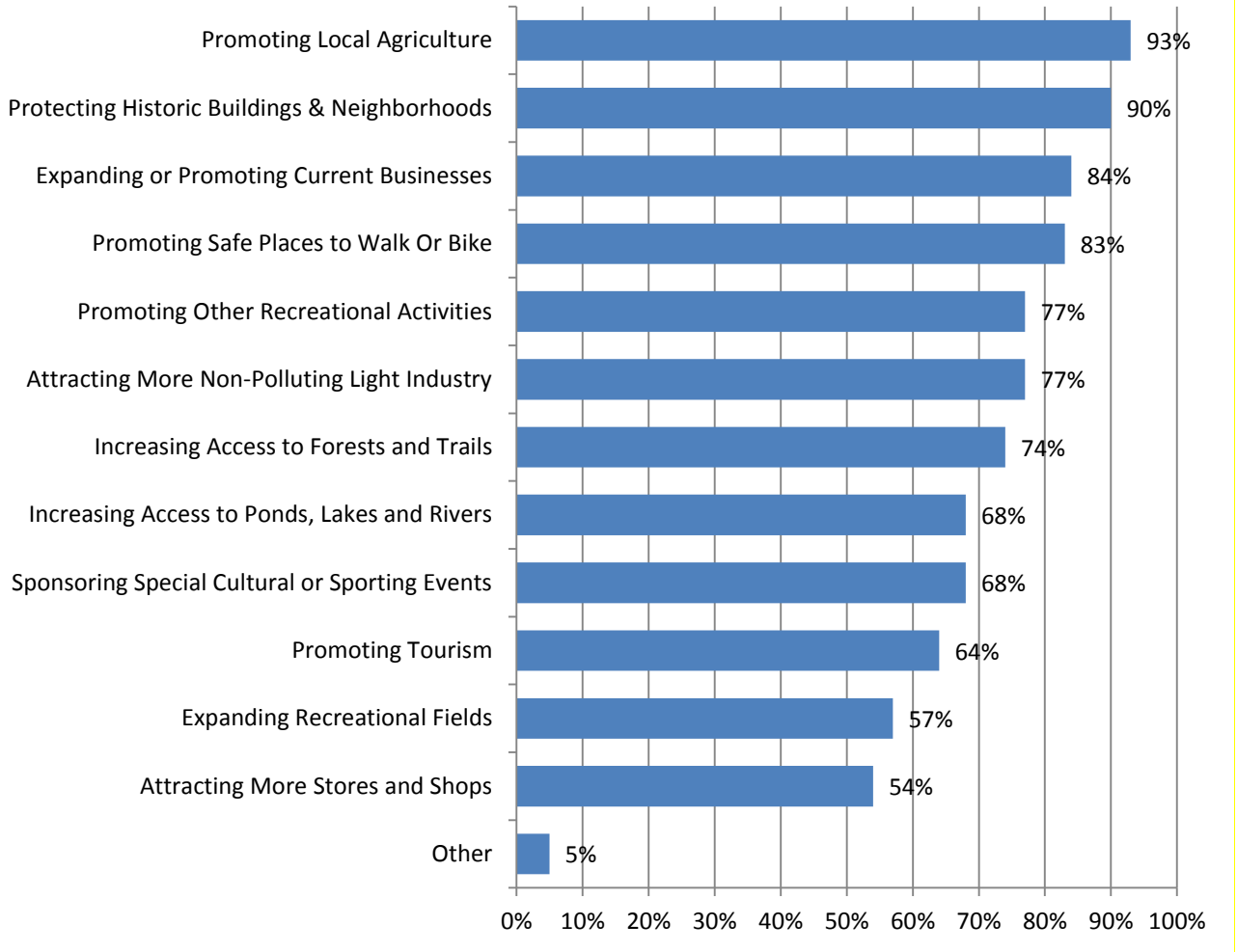
Figure 10: Priority Placed on These Community Issues (q9)



A large majority of residents (93%) say that promoting local agriculture should be actively encouraged in the community, followed by protecting historic buildings & neighborhoods (90%), expanding or promoting current businesses (84%), promoting safe places to walk or bike (83%), promoting other recreational activities (77%), attracting more non-polluting light industry (77%), increasing access to forests and trails (74%), increasing access to ponds, lakes and rivers (68%), sponsoring special cultural or sporting events (68%), promoting tourism (64%), expanding recreational fields (57%), and attracting more stores and shops (54%).

- Households earning between $90,001 and $160,000 and those who are not employed and not looking are *more likely* to say their community should actively encourage increasing access to forests and trails.
- Those who are not employed and not looking and those who have completed postgraduate work are *more likely* to say their community should increase access to ponds, lakes and rivers.

Figure 11: What should be actively encouraged in your community? Check all that apply (q12)

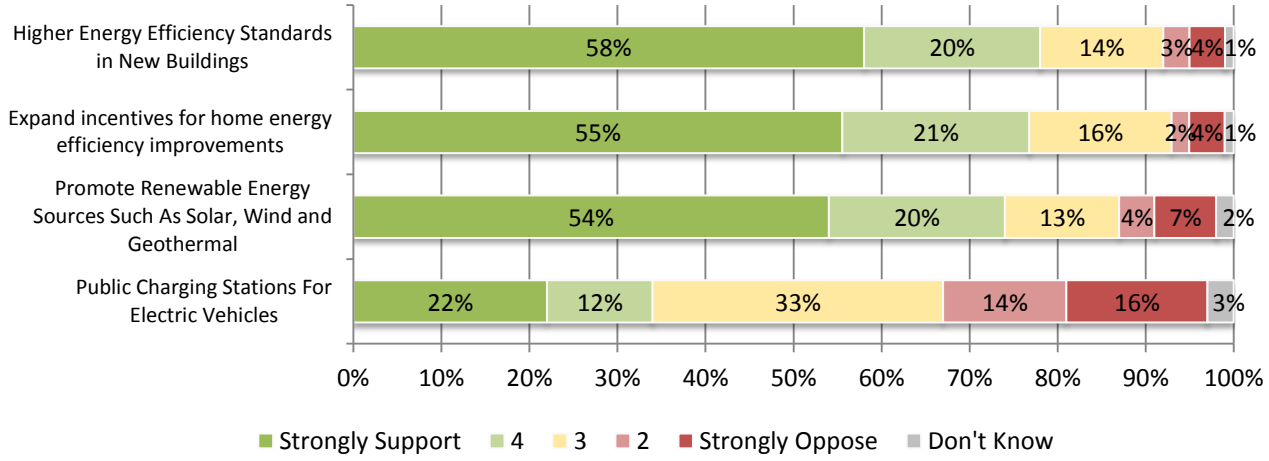


Energy Policies

A large majority of residents (78%) support higher energy efficiency standards in new buildings (with 58% who "strongly support"), followed by expanding incentives for home energy efficiency improvements (76%), and promoting renewable energy sources such as solar, wind and geothermal (74%). Meanwhile only 34% were in support of public charging stations for electric vehicles.

- Households earning between $40,000 and $59,999 and those aged 60 to 69 and those who work at home are *more likely* to strongly support higher energy efficiency standards in new buildings and incentives for home energy efficient improvements.
- Those with a high school education or less and those who are not employed are *more likely* to strongly support public charging stations for electric vehicles.
- Households earning between $40,000 and $90,000 and those aged 60-69 are *more likely* to strongly support promoting renewable energy sources.

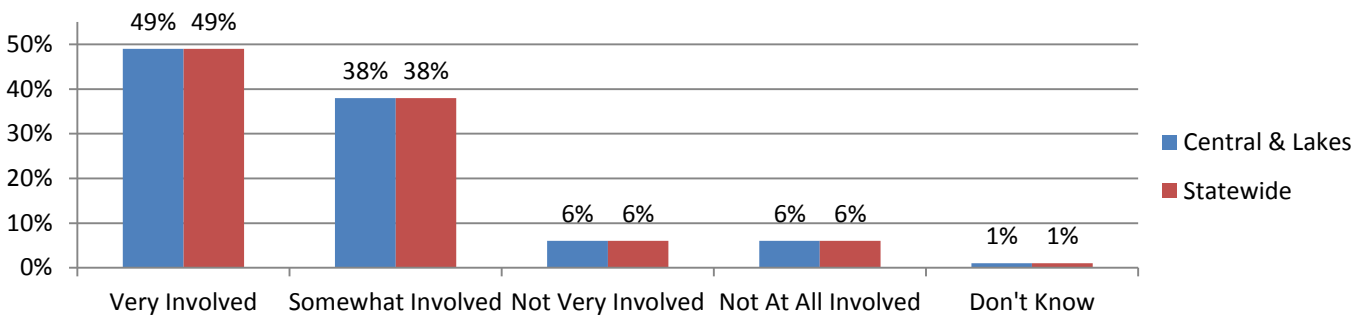
Figure 12: Support/Oppose Energy Policy Changes (q13)



Almost half of residents (49%) think that local governments should be very involved in guidelines for renewable energy (such as large wind farms), 38% think they should be somewhat involved, 6% think they should be not very involved, 6% think they should be not at all involved and 1% don't know.

- Those who have completed postgraduate work and those aged 60 to 69 are *more likely* to want their local government to be very involved in developing energy guidelines.

Figure 13: How Involved Should Local Governments Be In Guidelines For Renewable Energy? (q16)

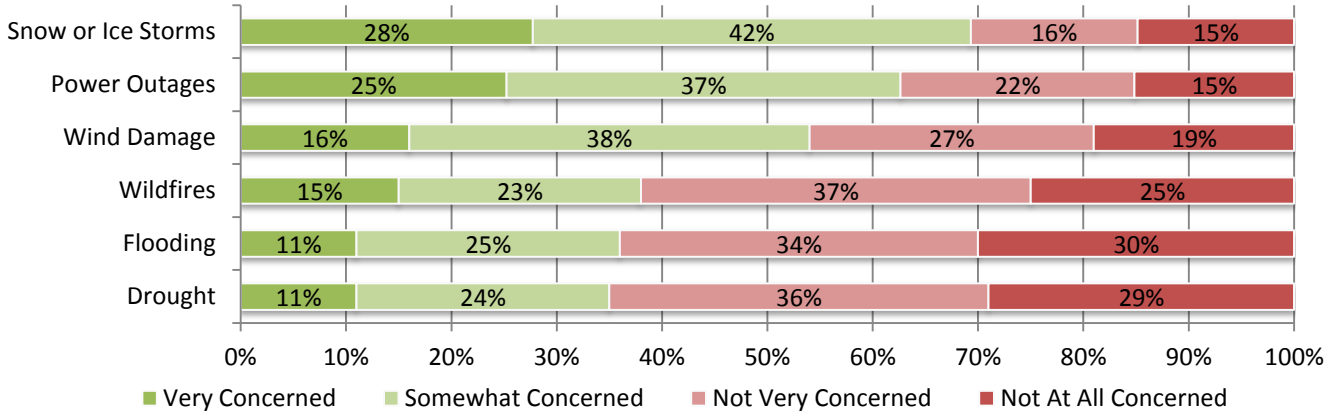


Emergency Preparedness

Seven in ten residents (70%) are concerned (28% "very concerned" and 42% "somewhat concerned") with snow or ice storms in their community followed by power outages (62%), wind damage (54%), wildfires (38%), flooding (36%), and drought (35%).

- Households earning less than $20,000 and young people (18 to 29) are *more likely* to be very concerned about snow or ice storms.
- Older people (70 and older) and households earning less than $20,000 are *more likely* to be very concerned about flooding.
- Older people (70 and older) and those who are not working and not looking are *more likely* to be very concerned about wildfires.
- Households earning between $40,000 and $59,999, those aged 60 to 69 and those who are not employed and not looking are *more likely* to be concerned about power outages.

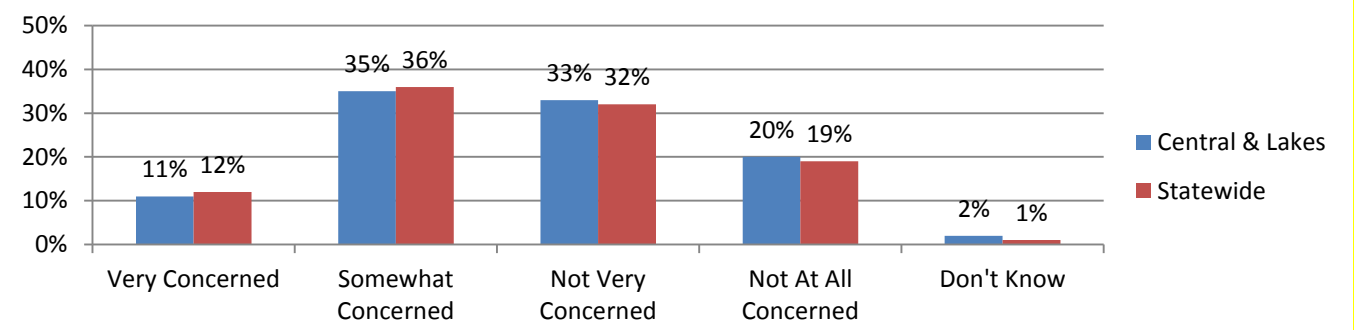
Figure 14: How Concerned Are You About Weather Related Events In Your Community? (q14)



Only 11% of residents are very concerned about their community's level of preparedness in weather-related situations, while 35% are somewhat concerned, 33% are not very concerned, 20% are not at all concerned and 2% don't know.

- Households earning less than $20,000 are *more likely* to be very concerned with their community's preparedness.

Figure 15: Concerned about Your Community's Level of Preparedness? (q15)

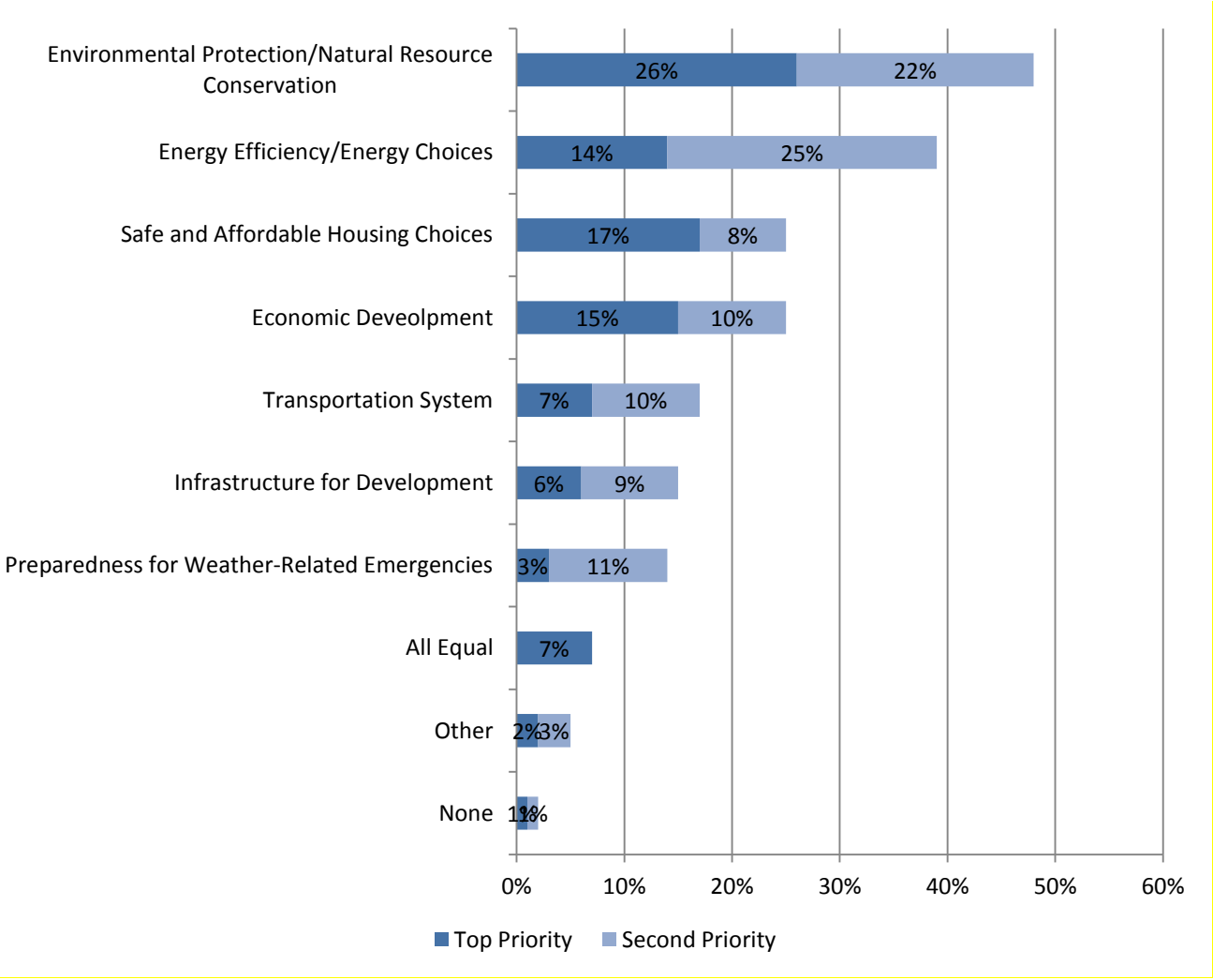


Priorities for Investing Public Dollars

Residents' top priority for investing public dollars is environmental protection (26%), followed by safe and affordable housing (17%), economic development (15%), energy efficiency (14%), transportation system (7%), infrastructure for development (6%), preparedness for weather-related or other emergencies (3%), all priorities are equal (7%), something else (2%) and none of the above (1%).

When the top two responses are combined environmental protection (48%) and energy efficiency (39%) are the two most cited priorities.

Figure 16: Priorities for Investing Public Dollars (q17)



Broadband

Nearly all (93%) residents have internet access in their home, while just 7% do not **(Figure 11).** For those who do not have internet access at home, a plurality (29%) says that they don't have it because they don't need it, followed by it is not available where they live (15%), they don't know how to use it (11%), and they have access at another place like their job (10%), they don't have an adequate computer (8%), and it is too expensive (7%).There were also 18% who cited another reason and 2% who didn't know **(Figure 12).**

- Those who are 70 or older, those with a high school education or less and households earning less than $20,000 are *less likely* to have internet access at home.

Figure 17: Do You Have Internet Access At Home?

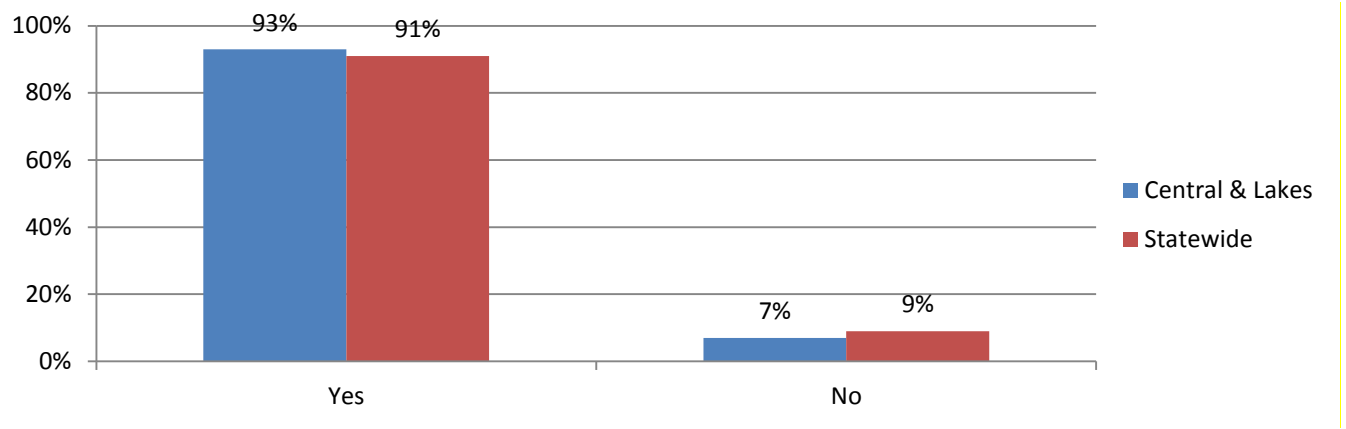
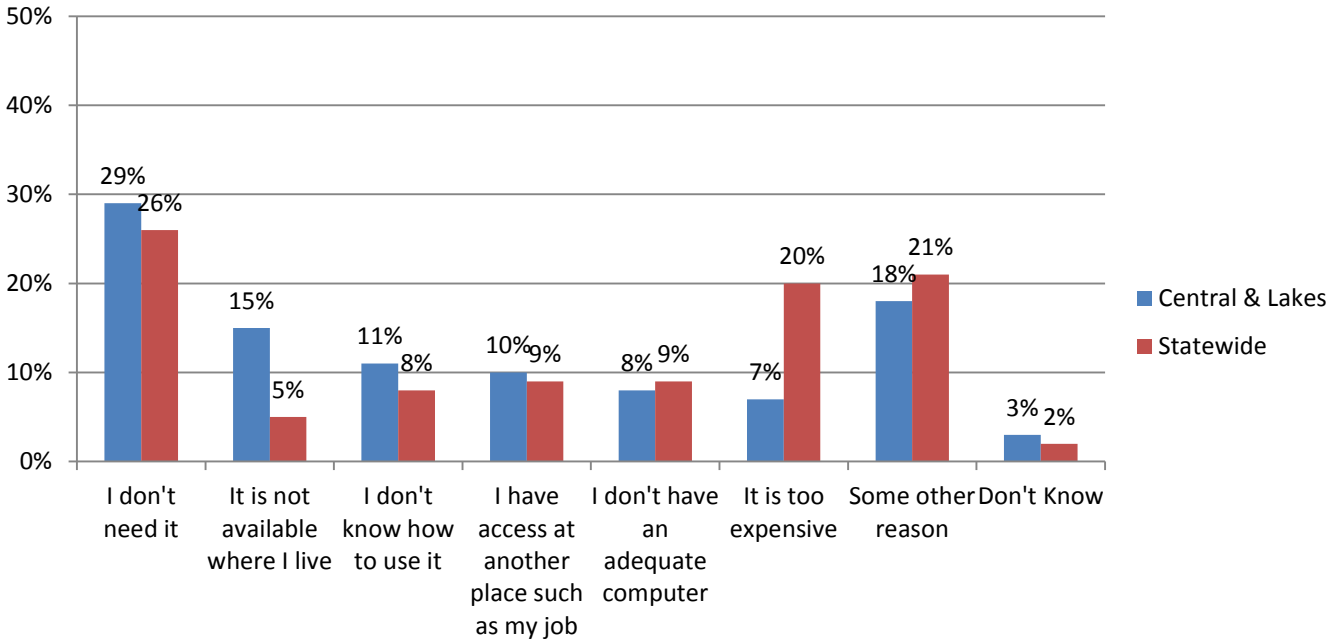


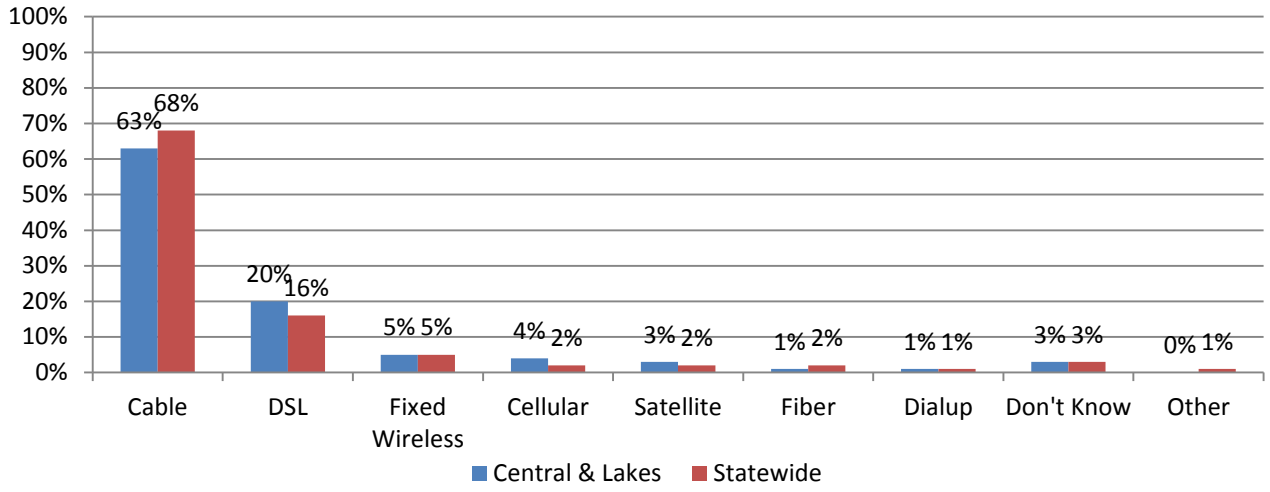
Figure 18: Most important reason why you don't have internet access at home?



The majority (63%) of residents have a cable internet connection, followed by those with DSL (20%), fixed wireless (5%), cellular (4%), satellite (3%), fiber (1%) and dialup (1%). There was less than 1% who said they have another type of connection and 3% didn't know.

- Households earning less than $40,000 are *more likely* to have DSL and less like to have cable internet.

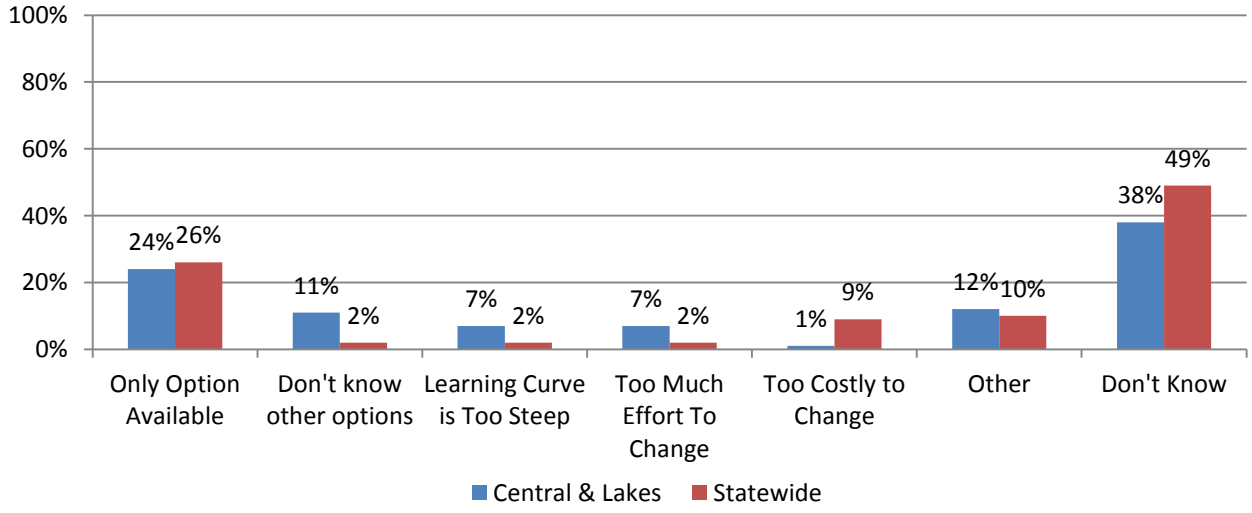
Figure 19: What type of internet connection do you have at home?



For those who do have a dialup or satellite connection, 38% say that they don't know why, followed it being the only option available (24%), not knowing other options (11%), the learning curve being too steep (7%), it being too much effort to change (7%) and it being too costly to change (1%). There were also 12% who said that they had another reason.

- Central & Lakes Region residents were *less likely* to say that they did not know why they have dialup or satellite internet.

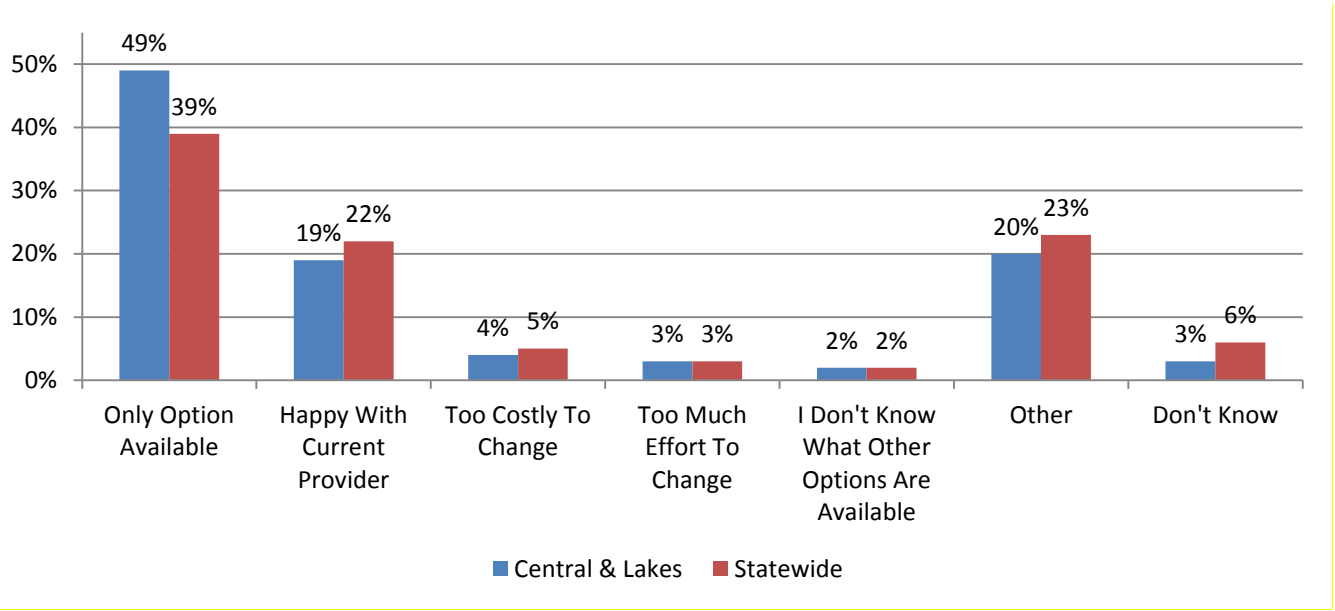
Figure 20: If you are on dialup or satellite, why?



For those who don't have satellite or dialup, almost half (49%) of residents say that they have their current internet provider because it is the only option available, followed by being happy with their current provider (19%), it being too costly to change (4%), it being too much effort to change (3%), and they don't know what other options are available (2%). There were also 20% who had another reason and 3% who didn't know.

- Central and Lakes Region residents are *more likely* than statewide residents to say they are using their current provider because it is the only option available.

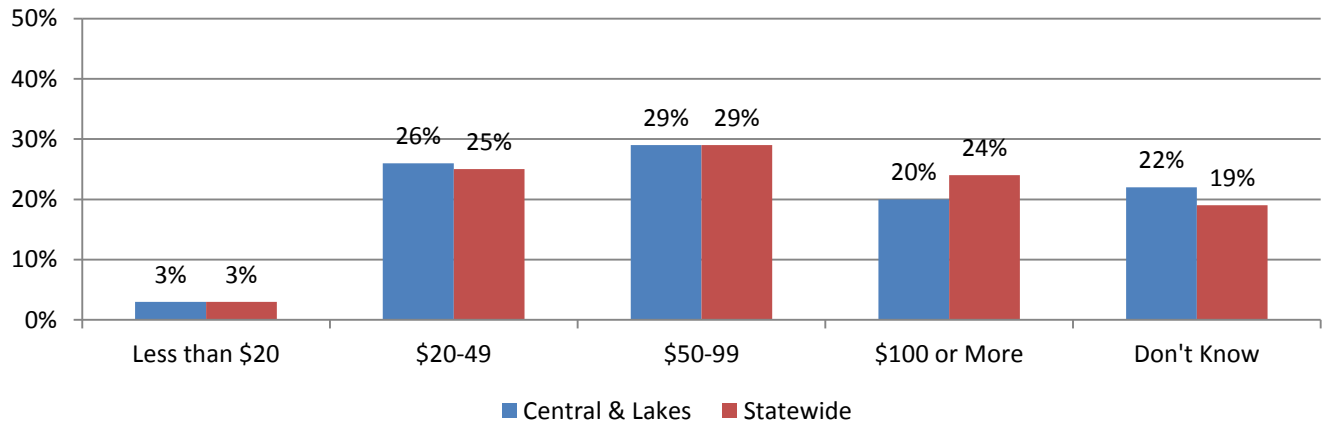
Figure 21: Why Are You Using Your Current Provider?



Only 3% of residents say that their monthly internet bill is less than $20, while 26% pay $20-49 per month, 29% pay $50-99 per month, 20% pay $100 or more per month and 22% did not know.

- Households earning between $20,000 and $39,999 are *more likely* to pay $20-49 per month for internet access. Those aged 60-69 are *more likely* to pay $100 or more per month.

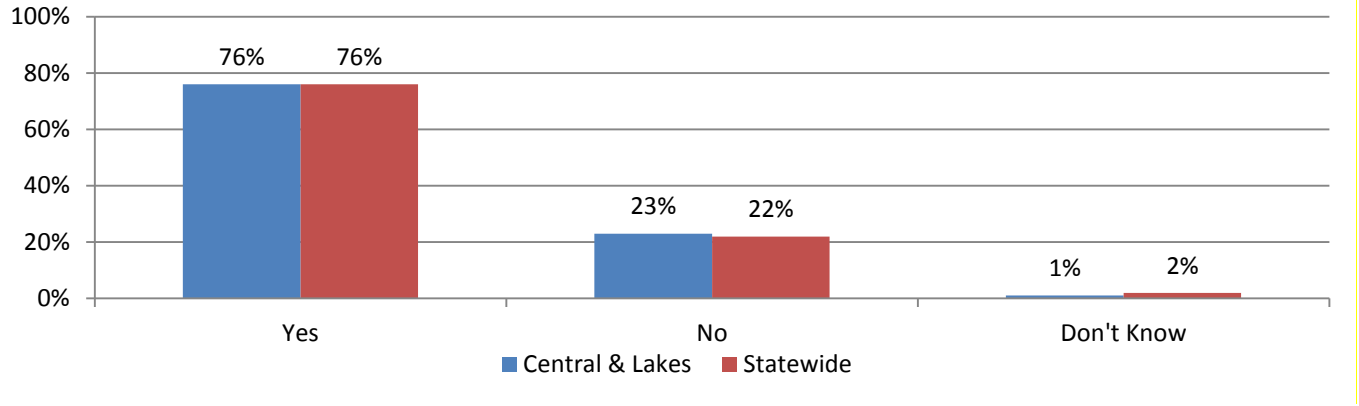
Figure 22: What is your monthly internet bill?



More than three-quarters (76%) currently pay for a bundled internet service, 23% don't have a bundled service and 1% did not know.

- Young people (18 to 29) and households earning less than $20,000 are *less likely* to pay for bundled service.

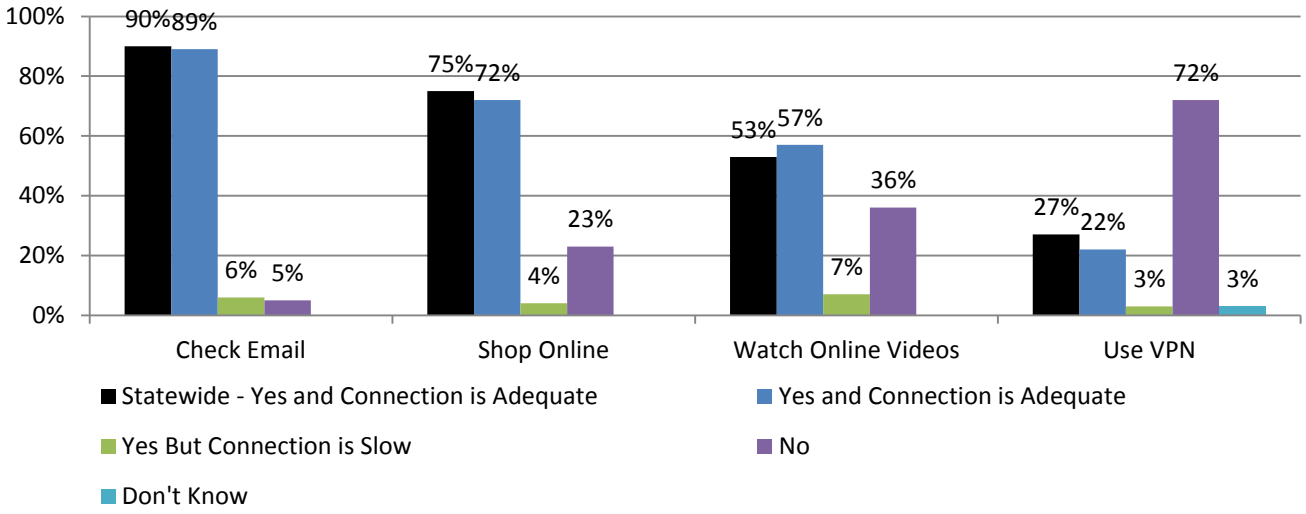
Figure 23: Do you pay for a bundled service?



Almost all (89%) residents use their home internet to check email and their connection is adequate to do so, 72% shop online with an adequate connection, 57% watch online videos and have an adequate connection and 22% use VPN and have an adequate connection to do so.

- Older people (70 or older), households earning less than $40,000, the self-employed and those with a high school education or less are *less likely* to shop online.
- Older people (60 or older) and retired people are *less likely* to watch on-line video. Conversely, younger people (18 to 39) are *more likely* to watch on-line video.
- Households earning more than $90,000 are *more* likely to use a VPN at home. Households earning less than $60,000 are *less likely* to use a VPN.

Figure 24: What Do You Use The Internet At Home For



Nearly all (91%) residents state that their internet connection is adequate for their uses, followed by 8% who say their connection is not adequate and 1% who don't know **(Figure 19).** A large majority (88%) of residents would not be willing to pay more for faster internet speeds; 9% would be willing to pay 25% more per month, 1% would be willing to pay 50% more per month and 1% don't know (**Figure 20).**

Figure 25: Do you consider your internet connection adequate for your uses?

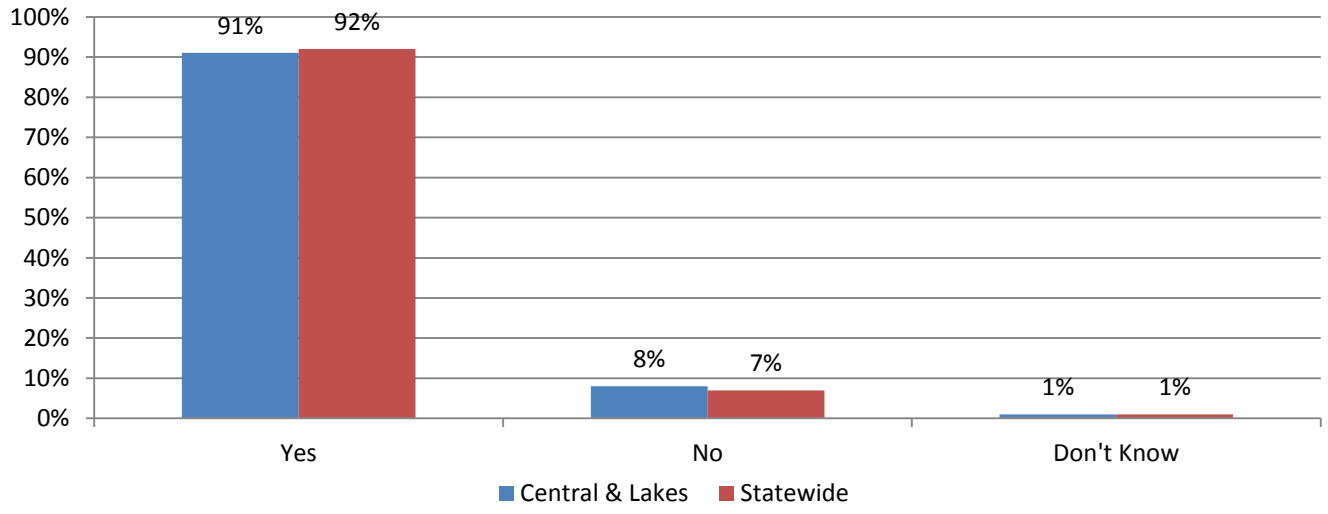
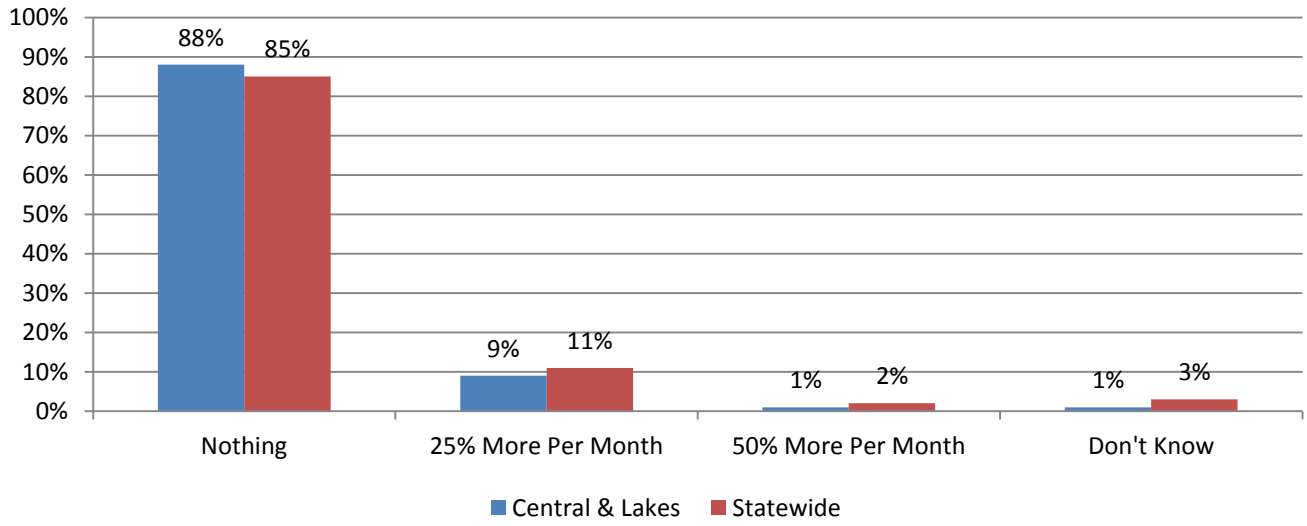


Figure 26: How much more (if any) would you be willing to pay for faster internet speeds?



Technical Report

How the Sample Was Selected

The New Hampshire Regional Planning Commissions A Granite State Future (GSF) Survey was a telephone survey of randomly selected adults in the state of New Hampshire. This survey was conducted using a procedure called Random Digit Dialing (RDD), of both landline and cellular telephone.

A sample of households in the area was selected by a procedure known as random digit dialing. The way this works is as follows. First, with the aid of a computer, one of the three digit telephone exchanges that are currently used in the state (e.g., 772) is randomly selected. The computer then randomly selects one of the "working blocks"--the first two of the last four numbers in a telephone number (e.g., 64)--and attaches it to the randomly selected exchange. Finally, the computer program then generates a two digit random number between 00 and 99 (e.g., 57) which is attached to the previously selected prefix (772), and the previously selected working block (64) resulting in a complete telephone number, i.e., 772 6457. This procedure is then repeated numerous times by the computer to generate more random numbers, so that we have a sufficient quantity to conduct the survey. The end result is that each household in the area in which there is a telephone has an equally likely chance of being selected into the sample. This procedures is done for both land line and cellular exchanges.

The random sample used in the GSF survey was purchased from Scientific Telephone Samples (STS), Foothill Ranch, CA. STS screens each selected telephone number to eliminate non-working numbers, disconnected numbers, and business numbers to improve the efficiency of the sample, reducing the amount of time interviewers spend calling non-usable numbers.

Each of these randomly generated telephone numbers is called by one of our interviewers from a centrally supervised facility at the UNH Survey Center. If the number called is found not to be a residential one, it is discarded and another random number is called. (Approximately forty-five percent of the numbers were discarded because they are found to be businesses, institutions, or not assigned.) If it is a residential number, the interviewer then randomly selects a member of the household by asking to speak with the adult currently living in the household who has had the most recent birthday. This selection process ensures that every adult (18 years of age or older) in the household has an equally likely chance of being included in the survey. No substitutions are allowed. If, for example, the randomly selected adult is not at home when the household is first contacted, the interviewer cannot substitute by selecting someone else who just happens to be there at the time. Instead, he or she must make an appointment to call back when the randomly selected adult is at home. In this way, respondent selection bias is minimized.

When the Interviewing Was Done

New Hampshire adults in the GSF survey were interviewed between May 9 and July 6, 2013. Each selected respondent was called by a professional UNH Survey Center interviewer from a centrally supervised facility at the UNH Survey Center. Telephone calls during the field period were made between 9:00 AM and 9:00 PM.

Response Rates

Interviews were completed with 2,935 randomly selected adults in New Hampshire from a sample of 25,114 randomly selected telephone numbers. Using American Association for Public Opinion (AAPOR) Response Rate 4, the response rate for the Granite State Future survey was 33% percent. The formula to calculate standard AAPOR response rate is:

$$\frac{I}{(I+P)+(R+NC+O)+e(UH+UO)}$$

I=Complete Interviews, **P**=Partial Interviews, **R**=Refusal and break off, **NC**=Non-Contact, **O**=Other, **e**=estimated portion of cases of unknown eligibility that are eligible, **UH**=Unknown household, **UO**=Unknown other.

Weighting of Data

The data have been weighted to account for known biases of telephone surveys. The data in the Granite State Future survey are weighted by the number of adults and telephone lines (landlines and cell phones) within households to equalize the chances that any one adult would be selected for inclusion. The data are also weighted by respondent sex, regional planning commission, and age of respondent.

Sampling Error

The Granite State Future survey, like all surveys, is subject to sampling error due to the fact that all residents in the area were not interviewed. For those questions asked of five hundred (500) or so respondents, the error is +/- 4.4%. For those questions where fewer than 500 persons responded, the sampling error can be calculated as follows:

$$Sampling\ Error = \pm 1.96\sqrt{\frac{P(1-P)}{N}}$$

Where P is the percentage of responses in the answer category being evaluated and N is the total number of persons answering the particular question.

For example, suppose you had the following distribution of answers to the question, "Should the state spend more money on road repair even if that means higher taxes?" Assume 1,000 respondents answered the question as follows:

YES	47%
NO	48%
DON'T KNOW	5%

The sampling error for the "YES" percentage of 47% would be

$$\pm 1.96\sqrt{\frac{47(53)}{1000}} = \pm 3.1\%$$

for the "NO" percentage of 48% it would be

$$\pm 1.96\sqrt{\frac{48(52)}{1000}} = \pm 3.1\%$$

and for the "DON'T KNOW" percentage of 5% it would be

$$\pm 1.96\sqrt{\frac{5(95)}{1000}} = \pm 1.4\%$$

In this case we would expect the true population figures to be within the following ranges:

YES	43.9% - 50.1% (i.e., 47% ±3.1%)
NO	44.9% - 51.1% (i.e., 48% ±3.1%)
DON'T KNOW	3.6% - 6.4% (i.e., 5% ±1.4%)

Appendix A: Detailed Tabular Results

Q1: "How would you classify the neighborhood where you live? Would you say you live in a downtown or town center ... a neighborhood close to your town center ... a neighborhood away from your town center ... or in a rural location away from other development?"

	Downtown or Town Center	Neighborhood Close to Town Center	Development Away from Town Center	Rural Location Away from Development	Other	Number Responding
All NH Residents	7%	37%	27%	28%	1%	2934
All Central/Lakes RPC Residents	**8%**	**32%**	**19%**	**40%**	**1%**	**424**
Sex						
Male	9%	27%	21%	43%	1%	214
Female	8%	37%	18%	36%	2%	210
Age of Respondent						
18 to 29	15%	28%	15%	39%	3%	60
30 to 39	18%	18%	21%	43%	0%	59
40 to 49	10%	38%	14%	37%	1%	87
50 to 59	3%	41%	15%	41%	0%	81
60 to 69	2%	24%	26%	48%	0%	65
70 or older	5%	30%	27%	34%	5%	56
Highest Level of Education						
High school or less	6%	40%	19%	34%	1%	101
Technical school/Some college	6%	31%	16%	42%	5%	77
College graduate	12%	28%	19%	41%	0%	140
Postgraduate work	8%	25%	23%	43%	1%	100
Household Income						
Less than $20,000	4%	37%	7%	48%	3%	32
$20,000 to $39,999	14%	35%	19%	31%	1%	35
$40,000 to $59,999	10%	33%	12%	41%	4%	56
$60,000 to $90,000	15%	29%	22%	34%	0%	71
$90,001 to $160,000	7%	26%	31%	37%	0%	81
More than $160,000	0%	25%	18%	57%	0%	27
Race of Respondent						
White	8%	32%	20%	40%	1%	389
Non-White	25%	12%	21%	38%	4%	22

Q1: "How would you classify the neighborhood where you live? Would you say you live in a downtown or town center ... a neighborhood close to your town center ... a neighborhood away from your town center ... or in a rural location away from other development?"

	Downtown or Town Center	Neighborhood Close to Town Center	Development Away from Town Center	Rural Location Away from Development	Other	Number Responding
All NH Residents	7%	37%	27%	28%	1%	2934
All Central/Lakes RPC Residents	**8%**	**32%**	**19%**	**40%**	**1%**	**424**
Children in Household						
No children	7%	28%	20%	44%	1%	267
One	8%	32%	24%	35%	0%	74
Two or more	16%	36%	14%	32%	2%	75
Years Lived In NH						
5 years or less	12%	8%	33%	45%	2%	22
6 to 10 years	10%	34%	23%	33%	0%	27
11 to 20 years	9%	24%	24%	42%	1%	78
20 or more years	8%	34%	17%	40%	2%	290
Employment Status						
Employed full-time	15%	28%	15%	41%	1%	203
Employed part-time	1%	29%	16%	54%	0%	52
Self-Employed	1%	30%	13%	54%	2%	35
Retired and not working	4%	28%	30%	35%	2%	87
Unemployed & looking for work	0%	55%	0%	45%	0%	11
Not Employed & Not Looking	3%	49%	38%	7%	3%	29
Region of Employment						
Northern NH	8%	31%	12%	50%	0%	36
Western NH	0%	27%	29%	43%	0%	3
Central/Lakes	14%	27%	17%	42%	0%	134
Hillsborough County	20%	17%	13%	50%	0%	24
Seacoast	20%	43%	12%	26%	0%	13
Other State	0%	32%	21%	47%	0%	24
Work At Home	0%	35%	14%	51%	0%	27

Q2A: "Based on what you see now in your community, do you think policy makers should invest more money on each the following aspects of the transportation system in the next 5 years? If Yes: "Are you willing to pay increased fees or taxes?"

Reduced congestion levels on major roads at rush hour"

	Yes, willing to pay more	Yes, not willing	No	Don't Know	Number Responding
All NH Residents	24%	13%	60%	3%	2908
All Central/Lakes RPC Residents	**21%**	**10%**	**68%**	**2%**	**421**
Sex					
Male	21%	9%	70%	0%	211
Female	20%	11%	65%	3%	209
Age of Respondent					
18 to 29	13%	3%	84%	0%	60
30 to 39	15%	19%	67%	0%	58
40 to 49	32%	4%	63%	1%	86
50 to 59	25%	9%	64%	2%	81
60 to 69	17%	14%	65%	4%	65
70 or older	18%	17%	61%	4%	55
Highest Level of Education					
High school or less	15%	12%	72%	1%	101
Technical school/Some college	22%	10%	65%	3%	77
College graduate	22%	11%	67%	1%	139
Postgraduate work	25%	8%	66%	2%	99
Household Income					
Less than $20,000	33%	13%	52%	3%	32
$20,000 to $39,999	12%	7%	74%	7%	35
$40,000 to $59,999	33%	11%	56%	0%	54
$60,000 to $90,000	16%	3%	80%	1%	70
$90,001 to $160,000	24%	8%	66%	2%	80
More than $160,000	25%	8%	66%	0%	27
Race of Respondent					
White	20%	10%	68%	2%	386
Non-White	24%	11%	65%	0%	22

Q2A: "Based on what you see now in your community, do you think policy makers should invest more money on each the following aspects of the transportation system in the next 5 years? If Yes: "Are you willing to pay increased fees or taxes?"

Reduced congestion levels on major roads at rush hour"

	Yes, willing to pay more	Yes, not willing	No	Don't Know	Number Responding
All NH Residents	24%	13%	60%	3%	2908
All Central/Lakes RPC Residents	**21%**	**10%**	**68%**	**2%**	**421**
Children in Household					
No children	19%	10%	69%	3%	265
One	30%	11%	59%	0%	74
Two or more	21%	9%	70%	0%	74
Years Lived In NH					
5 years or less	16%	8%	72%	4%	22
6 to 10 years	23%	6%	71%	0%	26
11 to 20 years	18%	1%	78%	2%	78
20 or more years	22%	13%	64%	1%	287
Employment Status					
Employed full-time	20%	10%	68%	1%	201
Employed part-time	17%	2%	79%	2%	52
Self-Employed	32%	5%	62%	0%	35
Retired and not working	18%	16%	62%	5%	86
Unemployed & looking for work	11%	6%	83%	0%	11
Not Employed & Not Looking	32%	10%	57%	0%	29
Region of Employment					
Northern NH	10%	0%	90%	0%	34
Western NH	0%	0%	100%	0%	3
Central/Lakes	22%	13%	64%	1%	134
Hillsborough County	36%	2%	62%	0%	24
Seacoast	20%	14%	66%	0%	13
Other State	16%	4%	78%	2%	24
Work At Home	33%	4%	63%	0%	27

Q2B: "Based on what you see now in your community, do you think policy makers should invest more money on each the following aspects of the transportation system in the next 5 years?" If Yes: "Are you willing to pay increased fees or taxes?"

Maintaining roads, highways and bridges"

	Yes, Willing to Pay More	Yes, Not Willing	No	Don't Know	Number Responding
All NH Residents	53%	21%	25%	1%	2924
All Central/Lakes RPC Residents	**54%**	**23%**	**21%**	**2%**	**423**
Sex					
Male	54%	22%	21%	3%	214
Female	53%	23%	21%	2%	209
Age of Respondent					
18 to 29	35%	22%	36%	8%	60
30 to 39	57%	12%	28%	3%	59
40 to 49	62%	20%	17%	2%	87
50 to 59	52%	33%	13%	1%	81
60 to 69	64%	20%	15%	0%	65
70 or older	53%	21%	23%	2%	56
Highest Level of Education					
High school or less	54%	25%	15%	7%	101
Technical school/Some college	48%	28%	24%	0%	77
College graduate	51%	22%	26%	2%	140
Postgraduate work	64%	16%	20%	0%	100
Household Income					
Less than $20,000	58%	28%	13%	1%	32
$20,000 to $39,999	53%	25%	20%	1%	34
$40,000 to $59,999	52%	18%	23%	8%	56
$60,000 to $90,000	54%	15%	31%	1%	71
$90,001 to $160,000	65%	20%	15%	0%	81
More than $160,000	55%	30%	9%	5%	27
Race of Respondent					
White	55%	22%	21%	2%	388
Non-White	47%	26%	27%	0%	22

Q2B: "Based on what you see now in your community, do you think policy makers should invest more money on each the following aspects of the transportation system in the next 5 years?" If Yes: "Are you willing to pay increased fees or taxes?"

Maintaining roads, highways and bridges"

	Yes, Willing to Pay More	Yes, Not Willing	No	Don't Know	Number Responding
All NH Residents	53%	21%	25%	1%	2924
All Central/Lakes RPC Residents	**54%**	**23%**	**21%**	**2%**	**423**
Children in Household					
No children	54%	24%	21%	1%	266
One	61%	19%	12%	8%	74
Two or more	50%	19%	29%	2%	75
Years Lived In NH					
5 years or less	52%	9%	33%	7%	22
6 to 10 years	62%	15%	24%	0%	27
11 to 20 years	57%	20%	16%	6%	78
20 or more years	53%	25%	21%	1%	289
Employment Status					
Employed full-time	58%	22%	19%	1%	203
Employed part-time	46%	17%	25%	12%	52
Self-Employed	48%	27%	23%	1%	35
Retired and not working	50%	28%	20%	1%	86
Unemployed & looking for work	54%	0%	46%	0%	11
Not Employed & Not Looking	63%	11%	26%	0%	29
Region of Employment					
Northern NH	54%	4%	25%	17%	36
Western NH	100%	0%	0%	0%	3
Central/Lakes	57%	25%	19%	0%	134
Hillsborough County	33%	45%	22%	0%	24
Seacoast	88%	0%	12%	0%	13
Other State	68%	15%	16%	2%	24
Work At Home	41%	13%	38%	7%	27

Q2C: "Based on what you see now in your community, do you think policy makers should invest more money on each the following aspects of the transportation system in the next 5 years?" If Yes: "Are you willing to pay increased fees or taxes?"

The availability of bike paths or shoulder bike routes"

	Yes, Willing to Pay More	Yes, Not Willing	No	Don't Know	Number Responding
All NH Residents	39%	14%	44%	3%	2912
All Central/Lakes RPC Residents	**36%**	**14%**	**49%**	**2%**	**421**
Sex					
Male	34%	11%	53%	2%	213
Female	37%	17%	44%	2%	208
Age of Respondent					
18 to 29	29%	25%	46%	0%	60
30 to 39	49%	15%	34%	3%	58
40 to 49	44%	8%	47%	0%	87
50 to 59	32%	16%	49%	3%	80
60 to 69	36%	6%	56%	2%	65
70 or older	26%	13%	57%	4%	55
Highest Level of Education					
High school or less	23%	20%	52%	4%	101
Technical school/Some college	22%	11%	64%	3%	77
College graduate	39%	13%	47%	1%	138
Postgraduate work	56%	11%	33%	0%	100
Household Income					
Less than $20,000	15%	21%	61%	3%	32
$20,000 to $39,999	26%	18%	54%	3%	35
$40,000 to $59,999	35%	11%	54%	0%	56
$60,000 to $90,000	47%	9%	41%	3%	70
$90,001 to $160,000	48%	13%	39%	0%	81
More than $160,000	43%	11%	46%	0%	25
Race of Respondent					
White	35%	14%	49%	2%	386
Non-White	57%	15%	28%	0%	22

Q2C: "Based on what you see now in your community, do you think policy makers should invest more money on each the following aspects of the transportation system in the next 5 years?" If Yes: "Are you willing to pay increased fees or taxes?"

The availability of bike paths or shoulder bike routes"

	Yes, Willing to Pay More	Yes, Not Willing	No	Don't Know	Number Responding
All NH Residents	39%	14%	44%	3%	2912
All Central/Lakes RPC Residents	**36%**	**14%**	**49%**	**2%**	**421**
Children in Household					
No children	29%	11%	58%	2%	265
One	39%	18%	43%	0%	74
Two or more	61%	21%	16%	2%	74
Years Lived In NH					
5 years or less	33%	0%	58%	8%	22
6 to 10 years	39%	25%	33%	3%	27
11 to 20 years	48%	15%	35%	1%	78
20 or more years	33%	14%	52%	2%	287
Employment Status					
Employed full-time	44%	10%	44%	1%	203
Employed part-time	38%	25%	33%	5%	51
Self-Employed	34%	14%	53%	0%	33
Retired and not working	26%	13%	58%	3%	86
Unemployed & looking for work	11%	20%	70%	0%	11
Not Employed & Not Looking	20%	22%	59%	0%	29
Region of Employment					
Northern NH	52%	13%	29%	6%	36
Western NH	57%	0%	43%	0%	3
Central/Lakes	40%	12%	47%	1%	134
Hillsborough County	21%	19%	56%	3%	24
Seacoast	57%	34%	9%	0%	13
Other State	57%	9%	34%	0%	24
Work At Home	48%	16%	35%	0%	24

Q2D: "Based on what you see now in your community, do you think policy makers should invest more money on each the following aspects of the transportation system in the next 5 years?" If Yes: "Are you willing to pay increased fees or taxes?"

Sidewalks and crosswalk areas"

	Yes, Willing to Pay More	Yes, Not Willing	No	Don't Know	Number Responding
All NH Residents	28%	10%	61%	1%	2921
All Central/Lakes RPC Residents	**23%**	**8%**	**68%**	**1%**	**420**
Sex					
Male	19%	9%	71%	1%	213
Female	27%	6%	66%	1%	208
Age of Respondent					
18 to 29	21%	4%	71%	4%	60
30 to 39	48%	3%	49%	0%	58
40 to 49	16%	8%	75%	1%	87
50 to 59	26%	8%	66%	0%	81
60 to 69	20%	6%	74%	0%	64
70 or older	15%	14%	68%	3%	55
Highest Level of Education					
High school or less	20%	11%	66%	2%	99
Technical school/Some college	10%	6%	82%	2%	76
College graduate	30%	7%	63%	0%	140
Postgraduate work	27%	6%	67%	0%	100
Household Income					
Less than $20,000	18%	8%	69%	5%	32
$20,000 to $39,999	19%	15%	65%	0%	34
$40,000 to $59,999	20%	3%	77%	0%	56
$60,000 to $90,000	33%	4%	60%	4%	71
$90,001 to $160,000	35%	6%	59%	0%	81
More than $160,000	29%	3%	68%	0%	27
Race of Respondent					
White	23%	8%	68%	1%	385
Non-White	28%	8%	64%	0%	22

Q2D: "Based on what you see now in your community, do you think policy makers should invest more money on each the following aspects of the transportation system in the next 5 years?" If Yes: "Are you willing to pay increased fees or taxes?"

Sidewalks and crosswalk areas"

	Yes, Willing to Pay More	Yes, Not Willing	No	Don't Know	Number Responding
All NH Residents	28%	10%	61%	1%	2921
All Central/Lakes RPC Residents	**23%**	**8%**	**68%**	**1%**	**420**
Children in Household					
No children	16%	8%	75%	1%	264
One	34%	6%	56%	4%	74
Two or more	38%	8%	54%	0%	74
Years Lived In NH					
5 years or less	35%	4%	58%	3%	21
6 to 10 years	9%	13%	78%	0%	27
11 to 20 years	36%	3%	58%	3%	78
20 or more years	20%	8%	71%	1%	288
Employment Status					
Employed full-time	30%	7%	63%	0%	203
Employed part-time	19%	4%	72%	5%	50
Self-Employed	31%	0%	69%	0%	35
Retired and not working	10%	12%	77%	2%	85
Unemployed & looking for work	34%	9%	56%	0%	11
Not Employed & Not Looking	16%	10%	72%	2%	29
Region of Employment					
Northern NH	26%	7%	67%	0%	34
Western NH	73%	0%	27%	0%	3
Central/Lakes	28%	6%	64%	2%	134
Hillsborough County	25%	16%	59%	0%	24
Seacoast	30%	0%	70%	0%	13
Other State	24%	3%	73%	0%	24
Work At Home	45%	3%	52%	0%	27

Q2E: "Based on what you see now in your community, do you think policy makers should invest more money on each the following aspects of the transportation system in the next 5 years?" If Yes: "Are you willing to pay increased fees or taxes?"

Improving the availability to public transportation to get around in your community and surrounding communities"

	Yes, Willing to Pay More	Yes, Not Willing	No	Don't Know	Number Responding
All NH Residents	29%	11%	58%	3%	2913
All Central/Lakes RPC Residents	**26%**	**7%**	**65%**	**2%**	**420**
Sex					
Male	24%	7%	66%	3%	212
Female	27%	8%	64%	1%	208
Age of Respondent					
18 to 29	30%	0%	70%	0%	60
30 to 39	31%	2%	59%	8%	59
40 to 49	27%	3%	69%	1%	84
50 to 59	27%	14%	58%	1%	81
60 to 69	22%	9%	66%	3%	64
70 or older	21%	15%	62%	1%	55
Highest Level of Education					
High school or less	21%	9%	68%	1%	101
Technical school/Some college	27%	11%	59%	4%	76
College graduate	23%	3%	72%	2%	137
Postgraduate work	35%	9%	54%	2%	100
Household Income					
Less than $20,000	23%	13%	63%	1%	32
$20,000 to $39,999	32%	9%	60%	0%	35
$40,000 to $59,999	17%	7%	74%	1%	56
$60,000 to $90,000	37%	4%	57%	2%	68
$90,001 to $160,000	33%	7%	58%	1%	81
More than $160,000	17%	2%	79%	2%	27
Race of Respondent					
White	26%	8%	64%	2%	385
Non-White	38%	6%	56%	0%	22

Q2E: "Based on what you see now in your community, do you think policy makers should invest more money on each the following aspects of the transportation system in the next 5 years?" If Yes: "Are you willing to pay increased fees or taxes?"

Improving the availability to public transportation to get around in your community and surrounding communities"

	Yes, Willing to Pay More	Yes, Not Willing	No	Don't Know	Number Responding
All NH Residents	29%	11%	58%	3%	2913
All Central/Lakes RPC Residents	**26%**	**7%**	**65%**	**2%**	**420**
Children in Household					
No children	23%	9%	67%	1%	264
One	29%	7%	62%	2%	74
Two or more	34%	4%	57%	4%	75
Years Lived In NH					
5 years or less	19%	7%	59%	15%	22
6 to 10 years	14%	4%	82%	0%	27
11 to 20 years	42%	5%	51%	2%	78
20 or more years	24%	9%	67%	1%	286
Employment Status					
Employed full-time	28%	4%	68%	0%	200
Employed part-time	32%	4%	58%	7%	51
Self-Employed	17%	8%	67%	8%	35
Retired and not working	17%	18%	63%	2%	86
Unemployed & looking for work	54%	0%	46%	0%	11
Not Employed & Not Looking	34%	7%	58%	0%	29
Region of Employment					
Northern NH	26%	4%	65%	4%	35
Western NH	0%	0%	100%	0%	3
Central/Lakes	30%	5%	64%	1%	131
Hillsborough County	13%	9%	78%	0%	24
Seacoast	40%	0%	60%	0%	13
Other State	34%	0%	61%	6%	24
Work At Home	30%	4%	64%	2%	27

Q2F: "Based on what you see now in your community, do you think policy makers should invest more money on each the following aspects of the transportation system in the next 5 years?" If Yes: "Are you willing to pay increased fees or taxes?"

Traffic safety"

	Yes, Willing to Pay More	Yes, Not Willing	No	Don't Know	Number Responding
All NH Residents	26%	11%	60%	3%	2913
All Central/Lakes RPC Residents	**26%**	**9%**	**63%**	**2%**	**418**
Sex					
Male	24%	8%	67%	1%	210
Female	28%	9%	60%	3%	207
Age of Respondent					
18 to 29	25%	7%	69%	0%	60
30 to 39	41%	11%	48%	0%	58
40 to 49	35%	5%	58%	1%	85
50 to 59	22%	10%	66%	3%	81
60 to 69	19%	7%	71%	3%	62
70 or older	17%	16%	61%	6%	55
Highest Level of Education					
High school or less	21%	14%	65%	0%	97
Technical school/Some college	22%	6%	70%	3%	76
College graduate	26%	8%	63%	3%	140
Postgraduate work	37%	7%	54%	1%	99
Household Income					
Less than $20,000	25%	15%	58%	1%	31
$20,000 to $39,999	15%	19%	63%	3%	35
$40,000 to $59,999	40%	12%	47%	2%	53
$60,000 to $90,000	33%	10%	56%	2%	71
$90,001 to $160,000	28%	5%	63%	5%	81
More than $160,000	29%	5%	66%	0%	27
Race of Respondent					
White	25%	9%	63%	2%	382
Non-White	42%	8%	51%	0%	22

Q2F: "Based on what you see now in your community, do you think policy makers should invest more money on each the following aspects of the transportation system in the next 5 years?" If Yes: "Are you willing to pay increased fees or taxes?"

Traffic safety"

	Yes, Willing to Pay More	Yes, Not Willing	No	Don't Know	Number Responding
All NH Residents	26%	11%	60%	3%	2913
All Central/Lakes RPC Residents	**26%**	**9%**	**63%**	**2%**	**418**
Children in Household					
No children	20%	8%	69%	3%	262
One	41%	6%	52%	1%	74
Two or more	34%	12%	52%	1%	74
Years Lived In NH					
5 years or less	15%	8%	76%	2%	22
6 to 10 years	26%	8%	62%	4%	27
11 to 20 years	42%	4%	52%	1%	78
20 or more years	23%	10%	65%	2%	283
Employment Status					
Employed full-time	31%	8%	59%	2%	201
Employed part-time	28%	3%	67%	1%	52
Self-Employed	23%	8%	67%	1%	35
Retired and not working	10%	14%	71%	4%	86
Unemployed & looking for work	34%	9%	56%	0%	11
Not Employed & Not Looking	42%	6%	52%	0%	25
Region of Employment					
Northern NH	34%	4%	57%	4%	34
Western NH	27%	0%	73%	0%	3
Central/Lakes	34%	8%	58%	1%	134
Hillsborough County	39%	6%	53%	2%	24
Seacoast	20%	4%	77%	0%	13
Other State	22%	5%	69%	4%	24
Work At Home	33%	11%	55%	2%	27

Q2G: "Based on what you see now in your community, do you think policy makers should invest more money on each the following aspects of the transportation system in the next 5 years?" If Yes: "Are you willing to pay increased fees or taxes?"

Improving availability of senior and special need transportation"

	Yes, Willing to Pay More	Yes, Not Willing	No	Don't Know	Number Responding
All NH Residents	42%	13%	34%	11%	2910
All Central/Lakes RPC Residents	**43%**	**10%**	**38%**	**9%**	**420**
Sex					
Male	37%	8%	45%	10%	212
Female	49%	12%	31%	7%	208
Age of Respondent					
18 to 29	36%	4%	48%	12%	60
30 to 39	51%	4%	30%	14%	59
40 to 49	43%	6%	41%	9%	84
50 to 59	48%	16%	29%	7%	81
60 to 69	39%	19%	36%	7%	64
70 or older	42%	12%	41%	5%	55
Highest Level of Education					
High school or less	32%	10%	49%	9%	101
Technical school/Some college	50%	9%	34%	7%	77
College graduate	43%	10%	38%	10%	137
Postgraduate work	50%	13%	29%	9%	100
Household Income					
Less than $20,000	44%	9%	45%	3%	32
$20,000 to $39,999	41%	14%	33%	12%	35
$40,000 to $59,999	49%	7%	41%	3%	56
$60,000 to $90,000	52%	11%	28%	10%	68
$90,001 to $160,000	52%	9%	33%	6%	81
More than $160,000	41%	12%	34%	13%	27
Race of Respondent					
White	42%	10%	38%	9%	385
Non-White	57%	10%	33%	0%	22

Q2G: "Based on what you see now in your community, do you think policy makers should invest more money on each the following aspects of the transportation system in the next 5 years?" If Yes: "Are you willing to pay increased fees or taxes?"

Improving availability of senior and special need transportation"

	Yes, Willing to Pay More	Yes, Not Willing	No	Don't Know	Number Responding
All NH Residents	42%	13%	34%	11%	2910
All Central/Lakes RPC Residents	**43%**	**10%**	**38%**	**9%**	**420**
Children in Household					
No children	42%	12%	38%	9%	262
One	38%	7%	43%	12%	74
Two or more	52%	10%	32%	6%	75
Years Lived In NH					
5 years or less	37%	2%	38%	23%	22
6 to 10 years	30%	15%	47%	9%	27
11 to 20 years	54%	8%	29%	8%	78
20 or more years	42%	11%	39%	8%	285
Employment Status					
Employed full-time	44%	10%	35%	11%	200
Employed part-time	53%	5%	31%	11%	51
Self-Employed	47%	12%	36%	5%	35
Retired and not working	34%	15%	48%	3%	86
Unemployed & looking for work	28%	6%	34%	32%	11
Not Employed & Not Looking	49%	8%	39%	3%	29
Region of Employment					
Northern NH	57%	6%	28%	8%	36
Western NH	29%	0%	71%	0%	3
Central/Lakes	44%	9%	33%	14%	131
Hillsborough County	38%	14%	46%	2%	24
Seacoast	58%	7%	36%	0%	12
Other State	51%	8%	38%	3%	24
Work At Home	48%	8%	29%	16%	27

Q2H: "Based on what you see now in your community, do you think policy makers should invest more money on each the following aspects of the transportation system in the next 5 years?" If Yes: "Are you willing to pay increased fees or taxes?"

Expanding bus or rail service for commuting between major cities"

	Yes, Willing to Pay More	Yes, Not Willing	No	Don't Know	Number Responding
All NH Residents	37%	13%	47%	4%	2909
All Central/Lakes RPC Residents	**35%**	**13%**	**48%**	**4%**	**418**
Sex					
Male	32%	12%	53%	3%	210
Female	37%	15%	44%	4%	208
Age of Respondent					
18 to 29	33%	10%	55%	2%	60
30 to 39	32%	3%	56%	9%	59
40 to 49	37%	12%	47%	4%	84
50 to 59	41%	19%	39%	1%	80
60 to 69	37%	17%	46%	1%	64
70 or older	30%	14%	51%	4%	55
Highest Level of Education					
High school or less	18%	16%	60%	7%	99
Technical school/Some college	34%	13%	51%	2%	77
College graduate	37%	13%	47%	4%	137
Postgraduate work	50%	12%	37%	2%	100
Household Income					
Less than $20,000	27%	15%	54%	4%	30
$20,000 to $39,999	30%	16%	45%	10%	35
$40,000 to $59,999	22%	10%	68%	0%	56
$60,000 to $90,000	44%	7%	47%	3%	67
$90,001 to $160,000	41%	12%	42%	4%	81
More than $160,000	46%	7%	47%	0%	27
Race of Respondent					
White	34%	13%	49%	4%	383
Non-White	48%	17%	33%	2%	22

Q2H: "Based on what you see now in your community, do you think policy makers should invest more money on each the following aspects of the transportation system in the next 5 years?" If Yes: "Are you willing to pay increased fees or taxes?"

Expanding bus or rail service for commuting between major cities"

	Yes, Willing to Pay More	Yes, Not Willing	No	Don't Know	Number Responding
All NH Residents	37%	13%	47%	4%	2909
All Central/Lakes RPC Residents	**35%**	**13%**	**48%**	**4%**	**418**
Children in Household					
No children	33%	18%	46%	4%	261
One	28%	10%	60%	2%	74
Two or more	49%	2%	46%	2%	75
Years Lived In NH					
5 years or less	18%	7%	58%	18%	22
6 to 10 years	33%	7%	54%	6%	27
11 to 20 years	47%	8%	43%	3%	78
20 or more years	33%	16%	50%	2%	283
Employment Status					
Employed full-time	38%	10%	50%	2%	200
Employed part-time	47%	3%	42%	7%	50
Self-Employed	24%	19%	51%	5%	35
Retired and not working	26%	20%	51%	3%	85
Unemployed & looking for work	9%	49%	8%	34%	11
Not Employed & Not Looking	37%	13%	50%	0%	29
Region of Employment					
Northern NH	28%	9%	54%	8%	35
Western NH	27%	0%	73%	0%	3
Central/Lakes	43%	9%	46%	2%	131
Hillsborough County	34%	6%	53%	7%	24
Seacoast	43%	17%	40%	0%	13
Other State	47%	0%	47%	6%	24
Work At Home	43%	16%	39%	2%	26

Q3A: "How important is it to have the following in your community? Medical Offices"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Don't Know	Number Responding
All NH Residents	47%	33%	15%	5%	0%	2930
All Central/Lakes RPC Residents	**42%**	**35%**	**14%**	**8%**	**1%**	**424**
Sex						
Male	38%	38%	15%	7%	2%	214
Female	47%	31%	13%	9%	0%	210
Age of Respondent						
18 to 29	53%	32%	3%	12%	0%	60
30 to 39	30%	58%	3%	9%	0%	59
40 to 49	36%	35%	21%	8%	0%	87
50 to 59	41%	38%	18%	3%	0%	81
60 to 69	41%	26%	13%	16%	4%	65
70 or older	54%	19%	20%	3%	4%	56
Highest Level of Education						
High school or less	33%	37%	19%	9%	2%	101
Technical school/Some college	50%	29%	11%	9%	1%	77
College graduate	40%	41%	12%	7%	0%	140
Postgraduate work	48%	29%	14%	8%	1%	100
Household Income						
Less than $20,000	40%	35%	5%	20%	0%	32
$20,000 to $39,999	64%	21%	9%	4%	2%	35
$40,000 to $59,999	36%	36%	22%	5%	0%	56
$60,000 to $90,000	33%	42%	20%	5%	0%	71
$90,001 to $160,000	40%	41%	10%	8%	1%	81
More than $160,000	43%	28%	16%	13%	0%	27
Race of Respondent						
White	42%	35%	14%	8%	1%	389
Non-White	57%	28%	12%	2%	0%	22

Q3A: "How important is it to have the following in your community? Medical Offices"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Don't Know	Number Responding
All NH Residents	47%	33%	15%	5%	0%	2930
All Central/Lakes RPC Residents	**42%**	**35%**	**14%**	**8%**	**1%**	**424**
Children in Household						
No children	47%	29%	15%	8%	2%	267
One	32%	42%	18%	8%	0%	74
Two or more	39%	46%	5%	10%	0%	75
Years Lived In NH						
5 years or less	38%	31%	12%	19%	0%	22
6 to 10 years	38%	44%	9%	8%	0%	27
11 to 20 years	45%	36%	9%	10%	0%	78
20 or more years	42%	34%	16%	7%	2%	290
Employment Status						
Employed full-time	37%	40%	14%	8%	0%	203
Employed part-time	35%	47%	15%	4%	0%	52
Self-Employed	40%	25%	12%	21%	2%	35
Retired and not working	52%	25%	19%	4%	1%	87
Unemployed & looking for work	86%	0%	0%	14%	0%	11
Not Employed & Not Looking	45%	32%	3%	12%	8%	29
Region of Employment						
Northern NH	26%	51%	17%	6%	0%	36
Western NH	29%	71%	0%	0%	0%	3
Central/Lakes	38%	41%	13%	7%	1%	134
Hillsborough County	31%	43%	26%	0%	0%	24
Seacoast	55%	8%	17%	20%	0%	13
Other State	57%	32%	3%	8%	0%	24
Work At Home	26%	37%	19%	18%	0%	27

Q3B: "How important is it to have the following in your community? Grocery stores"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Number Responding
All NH Residents	46%	36%	12%	6%	2931
All Central/Lakes RPC Residents	**43%**	**37%**	**13%**	**7%**	**424**
Sex					
Male	39%	40%	12%	9%	214
Female	47%	34%	15%	5%	210
Age of Respondent					
18 to 29	47%	39%	3%	12%	60
30 to 39	31%	52%	12%	5%	59
40 to 49	41%	37%	17%	5%	87
50 to 59	52%	32%	13%	3%	81
60 to 69	41%	27%	19%	13%	65
70 or older	46%	37%	11%	6%	56
Highest Level of Education					
High school or less	40%	41%	14%	6%	101
Technical school/Some college	48%	38%	8%	6%	77
College graduate	38%	37%	16%	9%	140
Postgraduate work	53%	30%	12%	6%	100
Household Income					
Less than $20,000	50%	28%	4%	18%	32
$20,000 to $39,999	47%	49%	2%	2%	35
$40,000 to $59,999	34%	31%	28%	6%	56
$60,000 to $90,000	42%	44%	9%	5%	71
$90,001 to $160,000	44%	37%	12%	7%	81
More than $160,000	42%	34%	21%	3%	27
Race of Respondent					
White	44%	37%	12%	7%	389
Non-White	51%	25%	24%	0%	22

Q3B: "How important is it to have the following in your community? Grocery stores"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Number Responding
All NH Residents	46%	36%	12%	6%	2931
All Central/Lakes RPC Residents	**43%**	**37%**	**13%**	**7%**	**424**
Children in Household					
No children	45%	34%	14%	7%	267
One	35%	41%	16%	8%	74
Two or more	50%	39%	7%	4%	75
Years Lived In NH					
5 years or less	40%	34%	5%	21%	22
6 to 10 years	41%	40%	15%	5%	27
11 to 20 years	46%	34%	13%	7%	78
20 or more years	43%	37%	14%	6%	290
Employment Status					
Employed full-time	39%	39%	17%	6%	203
Employed part-time	42%	46%	9%	3%	52
Self-Employed	34%	42%	7%	17%	35
Retired and not working	50%	32%	14%	4%	87
Unemployed & looking for work	62%	24%	0%	14%	11
Not Employed & Not Looking	65%	14%	5%	16%	29
Region of Employment					
Northern NH	27%	45%	23%	5%	36
Western NH	73%	27%	0%	0%	3
Central/Lakes	39%	45%	11%	5%	134
Hillsborough County	45%	33%	15%	7%	24
Seacoast	47%	22%	16%	14%	13
Other State	50%	43%	7%	0%	24
Work At Home	40%	31%	22%	8%	27

Q3C: "How important is it to have the following in your community? Restaurants"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Don't Know	Number Responding
All NH Residents	25%	44%	23%	8%	0%	2928
All Central/Lakes RPC Residents	**23%**	**44%**	**25%**	**8%**	**1%**	**424**
Sex						
Male	24%	44%	23%	8%	1%	214
Female	21%	44%	26%	9%	1%	210
Age of Respondent						
18 to 29	10%	58%	24%	3%	4%	60
30 to 39	20%	31%	36%	13%	0%	59
40 to 49	28%	41%	30%	1%	0%	87
50 to 59	20%	50%	19%	11%	0%	81
60 to 69	22%	44%	14%	19%	1%	65
70 or older	24%	43%	25%	7%	1%	56
Highest Level of Education						
High school or less	22%	33%	33%	10%	2%	101
Technical school/Some college	17%	45%	26%	12%	0%	77
College graduate	17%	50%	27%	6%	0%	140
Postgraduate work	32%	45%	13%	8%	1%	100
Household Income						
Less than $20,000	16%	35%	42%	7%	0%	32
$20,000 to $39,999	28%	46%	17%	10%	0%	35
$40,000 to $59,999	17%	52%	26%	5%	0%	56
$60,000 to $90,000	17%	43%	28%	9%	3%	71
$90,001 to $160,000	29%	43%	20%	8%	1%	81
More than $160,000	25%	48%	19%	7%	0%	27
Race of Respondent						
White	22%	44%	25%	9%	1%	389
Non-White	22%	50%	26%	2%	0%	22

Q3C: "How important is it to have the following in your community? Restaurants"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Don't Know	Number Responding
All NH Residents	25%	44%	23%	8%	0%	2928
All Central/Lakes RPC Residents	**23%**	**44%**	**25%**	**8%**	**1%**	**424**
Children in Household						
No children	20%	44%	25%	10%	0%	267
One	26%	42%	26%	3%	3%	74
Two or more	25%	48%	18%	9%	0%	75
Years Lived In NH						
5 years or less	21%	31%	43%	5%	0%	22
6 to 10 years	33%	43%	15%	9%	0%	27
11 to 20 years	22%	45%	23%	7%	3%	78
20 or more years	21%	45%	24%	9%	0%	290
Employment Status						
Employed full-time	25%	40%	26%	9%	0%	203
Employed part-time	11%	44%	33%	8%	4%	52
Self-Employed	16%	52%	20%	12%	0%	35
Retired and not working	28%	43%	22%	6%	1%	87
Unemployed & looking for work	20%	32%	34%	14%	0%	11
Not Employed & Not Looking	8%	67%	12%	13%	0%	29
Region of Employment						
Northern NH	11%	55%	31%	2%	0%	36
Western NH	43%	57%	0%	0%	0%	3
Central/Lakes	22%	36%	32%	8%	2%	134
Hillsborough County	30%	42%	21%	7%	0%	24
Seacoast	32%	4%	16%	48%	0%	13
Other State	17%	50%	27%	6%	0%	24
Work At Home	26%	50%	18%	7%	0%	27

Q3D: "How important is it to have the following in your community? Small businesses and retail stores"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Don't Know	Number Responding
All NH Residents	49%	36%	11%	4%	0%	2929
All Central/Lakes RPC Residents	**48%**	**37%**	**10%**	**5%**	**0%**	**422**
Sex						
Male	45%	39%	11%	5%	0%	212
Female	51%	35%	10%	4%	0%	209
Age of Respondent						
18 to 29	39%	43%	10%	9%	0%	60
30 to 39	55%	38%	7%	0%	0%	59
40 to 49	55%	26%	15%	3%	1%	87
50 to 59	47%	41%	8%	5%	0%	80
60 to 69	45%	37%	11%	7%	0%	65
70 or older	43%	38%	13%	6%	0%	56
Highest Level of Education						
High school or less	45%	38%	7%	9%	0%	99
Technical school/Some college	53%	32%	9%	6%	0%	77
College graduate	48%	34%	15%	3%	0%	140
Postgraduate work	45%	44%	9%	2%	0%	100
Household Income						
Less than $20,000	52%	25%	2%	21%	0%	32
$20,000 to $39,999	49%	29%	7%	15%	0%	35
$40,000 to $59,999	47%	35%	15%	3%	0%	54
$60,000 to $90,000	48%	34%	16%	2%	0%	71
$90,001 to $160,000	53%	32%	13%	2%	1%	81
More than $160,000	44%	48%	5%	3%	0%	27
Race of Respondent						
White	47%	38%	10%	5%	0%	387
Non-White	66%	17%	12%	4%	0%	22

Q3D: "How important is it to have the following in your community? Small businesses and retail stores"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Don't Know	Number Responding
All NH Residents	49%	36%	11%	4%	0%	2929
All Central/Lakes RPC Residents	**48%**	**37%**	**10%**	**5%**	**0%**	**422**
Children in Household						
No children	46%	38%	10%	6%	0%	266
One	40%	40%	17%	4%	0%	72
Two or more	63%	28%	6%	2%	0%	75
Years Lived In NH						
5 years or less	50%	26%	15%	10%	0%	22
6 to 10 years	53%	34%	6%	7%	0%	27
11 to 20 years	47%	39%	10%	5%	0%	78
20 or more years	47%	37%	11%	4%	0%	287
Employment Status						
Employed full-time	48%	35%	13%	4%	0%	203
Employed part-time	31%	54%	11%	4%	0%	52
Self-Employed	46%	39%	2%	12%	0%	33
Retired and not working	46%	37%	12%	4%	0%	87
Unemployed & looking for work	45%	41%	0%	14%	0%	11
Not Employed & Not Looking	81%	11%	5%	3%	0%	29
Region of Employment						
Northern NH	34%	53%	11%	2%	0%	36
Western NH	100%	0%	0%	0%	0%	3
Central/Lakes	44%	42%	11%	4%	0%	134
Hillsborough County	61%	19%	20%	0%	0%	24
Seacoast	52%	21%	13%	14%	0%	13
Other State	41%	49%	9%	0%	0%	24
Work At Home	45%	40%	15%	1%	0%	25

Q3E: "How important is it to have the following in your community? Quality schools"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Don't Know	Number Responding
All NH Residents	83%	10%	3%	2%	1%	2931
All Central/Lakes RPC Residents	**83%**	**10%**	**3%**	**2%**	**3%**	**423**
Sex						
Male	80%	12%	4%	1%	4%	213
Female	86%	8%	2%	2%	1%	210
Age of Respondent						
18 to 29	94%	0%	0%	0%	6%	60
30 to 39	83%	13%	0%	4%	0%	59
40 to 49	81%	12%	6%	1%	0%	87
50 to 59	80%	14%	3%	2%	1%	81
60 to 69	80%	11%	3%	1%	4%	65
70 or older	86%	7%	1%	3%	4%	56
Highest Level of Education						
High school or less	79%	8%	5%	1%	6%	101
Technical school/Some college	78%	10%	5%	1%	5%	77
College graduate	83%	15%	0%	2%	0%	140
Postgraduate work	89%	6%	1%	2%	1%	100
Household Income						
Less than $20,000	86%	3%	0%	0%	12%	32
$20,000 to $39,999	84%	11%	0%	5%	0%	34
$40,000 to $59,999	89%	2%	7%	3%	0%	56
$60,000 to $90,000	85%	11%	2%	0%	2%	71
$90,001 to $160,000	84%	8%	3%	4%	1%	81
More than $160,000	78%	20%	3%	0%	0%	27
Race of Respondent						
White	82%	10%	3%	2%	3%	388
Non-White	100%	0%	0%	0%	0%	22

Q3E: "How important is it to have the following in your community? Quality schools"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Don't Know	Number Responding
All NH Residents	83%	10%	3%	2%	1%	2931
All Central/Lakes RPC Residents	**83%**	**10%**	**3%**	**2%**	**3%**	**423**
Children in Household						
No children	79%	13%	3%	2%	4%	266
One	90%	3%	5%	2%	0%	74
Two or more	92%	6%	0%	2%	0%	75
Years Lived In NH						
5 years or less	88%	7%	0%	3%	2%	22
6 to 10 years	78%	18%	0%	3%	2%	27
11 to 20 years	85%	8%	1%	2%	4%	78
20 or more years	83%	11%	3%	2%	2%	289
Employment Status						
Employed full-time	81%	12%	4%	2%	1%	203
Employed part-time	91%	3%	1%	1%	4%	52
Self-Employed	69%	16%	1%	2%	12%	35
Retired and not working	85%	11%	2%	1%	1%	86
Unemployed & looking for work	84%	0%	0%	16%	0%	11
Not Employed & Not Looking	89%	2%	0%	0%	8%	29
Region of Employment						
Northern NH	88%	4%	4%	0%	4%	36
Western NH	100%	0%	0%	0%	0%	3
Central/Lakes	80%	12%	5%	2%	1%	134
Hillsborough County	79%	16%	0%	0%	5%	24
Seacoast	91%	9%	0%	0%	0%	13
Other State	75%	18%	3%	4%	0%	24
Work At Home	87%	9%	2%	2%	0%	27

Q3F: "How important is it to have the following in your community? Nearby Job Opportunities"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Don't Know	Number Responding
All NH Residents	64%	23%	8%	4%	1%	2920
All Central/Lakes RPC Residents	**63%**	**22%**	**9%**	**4%**	**1%**	**423**
Sex						
Male	63%	21%	12%	3%	1%	214
Female	63%	24%	6%	6%	2%	209
Age of Respondent						
18 to 29	67%	25%	9%	0%	0%	60
30 to 39	75%	20%	3%	2%	0%	59
40 to 49	69%	14%	14%	3%	0%	87
50 to 59	59%	27%	6%	5%	2%	81
60 to 69	65%	19%	10%	4%	1%	64
70 or older	43%	27%	16%	9%	5%	56
Highest Level of Education						
High school or less	68%	18%	10%	4%	1%	101
Technical school/Some college	57%	29%	8%	4%	2%	76
College graduate	65%	19%	9%	4%	2%	140
Postgraduate work	60%	26%	10%	5%	0%	100
Household Income						
Less than $20,000	55%	24%	17%	4%	0%	32
$20,000 to $39,999	63%	26%	5%	4%	3%	34
$40,000 to $59,999	68%	16%	12%	4%	0%	56
$60,000 to $90,000	70%	14%	10%	4%	2%	71
$90,001 to $160,000	50%	28%	16%	5%	1%	81
More than $160,000	76%	20%	2%	3%	0%	27
Race of Respondent						
White	64%	22%	9%	4%	1%	388
Non-White	57%	22%	9%	13%	0%	22

Q3F: "How important is it to have the following in your community? Nearby Job Opportunities"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Don't Know	Number Responding
All NH Residents	64%	23%	8%	4%	1%	2920
All Central/Lakes RPC Residents	**63%**	**22%**	**9%**	**4%**	**1%**	**423**
Children in Household						
No children	57%	25%	10%	6%	2%	265
One	84%	7%	7%	2%	0%	74
Two or more	66%	24%	10%	0%	0%	75
Years Lived In NH						
5 years or less	61%	13%	21%	4%	2%	22
6 to 10 years	52%	22%	8%	13%	5%	27
11 to 20 years	68%	21%	9%	1%	0%	78
20 or more years	63%	23%	9%	4%	1%	289
Employment Status						
Employed full-time	63%	25%	10%	1%	0%	203
Employed part-time	67%	23%	3%	4%	2%	52
Self-Employed	55%	27%	10%	7%	0%	35
Retired and not working	56%	16%	14%	10%	4%	86
Unemployed & looking for work	100%	0%	0%	0%	0%	11
Not Employed & Not Looking	69%	21%	2%	8%	0%	29
Region of Employment						
Northern NH	64%	30%	5%	0%	0%	36
Western NH	43%	57%	0%	0%	0%	3
Central/Lakes	67%	19%	12%	2%	1%	134
Hillsborough County	47%	43%	10%	0%	0%	24
Seacoast	74%	20%	6%	0%	0%	13
Other State	56%	35%	3%	6%	0%	24
Work At Home	70%	17%	7%	4%	3%	27

Q3G: "How important is it to have the following in your community? Farm, farm stands and forestry businesses"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Don't Know	Number Responding
All NH Residents	46%	37%	13%	3%	1%	2924
All Central/Lakes RPC Residents	**54%**	**34%**	**9%**	**2%**	**1%**	**423**
Sex						
Male	53%	34%	11%	1%	1%	214
Female	56%	34%	6%	3%	1%	209
Age of Respondent						
18 to 29	53%	37%	9%	1%	0%	60
30 to 39	53%	42%	3%	2%	0%	59
40 to 49	68%	22%	8%	2%	1%	87
50 to 59	47%	41%	11%	1%	0%	81
60 to 69	55%	32%	10%	3%	1%	65
70 or older	50%	32%	11%	4%	2%	56
Highest Level of Education						
High school or less	62%	29%	4%	3%	1%	101
Technical school/Some college	50%	36%	13%	1%	1%	77
College graduate	50%	37%	10%	3%	0%	140
Postgraduate work	56%	36%	8%	0%	0%	100
Household Income						
Less than $20,000	38%	51%	7%	2%	1%	32
$20,000 to $39,999	53%	39%	6%	2%	0%	35
$40,000 to $59,999	70%	19%	5%	5%	1%	56
$60,000 to $90,000	54%	30%	11%	4%	0%	71
$90,001 to $160,000	54%	36%	8%	1%	1%	81
More than $160,000	33%	62%	6%	0%	0%	27
Race of Respondent						
White	54%	35%	9%	2%	1%	388
Non-White	66%	28%	5%	0%	0%	22

Q3G: "How important is it to have the following in your community? Farm, farm stands and forestry businesses"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Don't Know	Number Responding
All NH Residents	46%	37%	13%	3%	1%	2924
All Central/Lakes RPC Residents	**54%**	**34%**	**9%**	**2%**	**1%**	**423**
Children in Household						
No children	51%	36%	9%	2%	1%	266
One	66%	22%	9%	3%	0%	74
Two or more	57%	38%	5%	0%	0%	75
Years Lived In NH						
5 years or less	45%	42%	10%	3%	0%	22
6 to 10 years	51%	33%	14%	3%	0%	27
11 to 20 years	56%	33%	9%	1%	1%	78
20 or more years	55%	34%	8%	2%	1%	289
Employment Status						
Employed full-time	58%	35%	6%	0%	0%	203
Employed part-time	50%	39%	9%	2%	0%	52
Self-Employed	54%	29%	12%	5%	0%	35
Retired and not working	54%	32%	8%	3%	3%	86
Unemployed & looking for work	21%	33%	39%	6%	0%	11
Not Employed & Not Looking	51%	37%	7%	5%	0%	29
Region of Employment						
Northern NH	66%	27%	7%	0%	0%	36
Western NH	0%	73%	0%	27%	0%	3
Central/Lakes	52%	38%	9%	1%	0%	134
Hillsborough County	73%	22%	5%	0%	0%	24
Seacoast	55%	38%	6%	0%	0%	13
Other State	66%	23%	6%	6%	0%	24
Work At Home	63%	29%	7%	1%	0%	27

Q3H: "How important is it to have the following in your community? Cultural and recreation facilities"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Don't Know	Number Responding
All NH Residents	37%	42%	14%	6%	0%	2929
All Central/Lakes RPC Residents	**36%**	**41%**	**18%**	**4%**	**0%**	**424**
Sex						
Male	36%	38%	23%	3%	0%	214
Female	36%	43%	14%	6%	1%	210
Age of Respondent						
18 to 29	38%	48%	15%	0%	0%	60
30 to 39	39%	41%	15%	5%	0%	59
40 to 49	32%	39%	27%	2%	0%	87
50 to 59	36%	43%	15%	6%	0%	81
60 to 69	36%	39%	13%	11%	2%	65
70 or older	34%	35%	25%	5%	1%	56
Highest Level of Education						
High school or less	34%	44%	21%	2%	0%	101
Technical school/Some college	38%	30%	23%	8%	1%	77
College graduate	29%	46%	21%	4%	0%	140
Postgraduate work	45%	39%	10%	5%	1%	100
Household Income						
Less than $20,000	41%	40%	14%	5%	0%	32
$20,000 to $39,999	40%	45%	13%	2%	0%	35
$40,000 to $59,999	40%	32%	27%	0%	1%	56
$60,000 to $90,000	30%	41%	23%	5%	0%	71
$90,001 to $160,000	38%	42%	15%	4%	1%	81
More than $160,000	21%	50%	26%	3%	0%	27
Race of Respondent						
White	35%	42%	18%	5%	0%	389
Non-White	56%	19%	25%	0%	0%	22

Q3H: "How important is it to have the following in your community? Cultural and recreation facilities"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Don't Know	Number Responding
All NH Residents	37%	42%	14%	6%	0%	2929
All Central/Lakes RPC Residents	**36%**	**41%**	**18%**	**4%**	**0%**	**424**
Children in Household						
No children	36%	40%	18%	6%	1%	267
One	35%	38%	25%	3%	0%	74
Two or more	36%	48%	14%	2%	0%	75
Years Lived In NH						
5 years or less	26%	48%	19%	7%	0%	22
6 to 10 years	48%	25%	17%	10%	0%	27
11 to 20 years	45%	43%	10%	2%	1%	78
20 or more years	33%	41%	21%	5%	0%	290
Employment Status						
Employed full-time	37%	40%	20%	3%	0%	203
Employed part-time	24%	59%	15%	1%	1%	52
Self-Employed	39%	26%	24%	11%	0%	35
Retired and not working	35%	36%	21%	7%	1%	87
Unemployed & looking for work	21%	65%	0%	14%	0%	11
Not Employed & Not Looking	48%	38%	9%	5%	0%	29
Region of Employment						
Northern NH	32%	55%	13%	0%	0%	36
Western NH	43%	57%	0%	0%	0%	3
Central/Lakes	33%	39%	26%	2%	0%	134
Hillsborough County	51%	29%	17%	3%	0%	24
Seacoast	31%	54%	9%	6%	0%	13
Other State	26%	41%	18%	15%	0%	24
Work At Home	34%	44%	15%	7%	0%	27

Q3I: "How important is it to have the following in your community? That many places you want to go are within walking distance"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Don't Know	Number Responding
All NH Residents	19%	26%	32%	22%	1%	2889
All Central/Lakes RPC Residents	**17%**	**23%**	**36%**	**25%**	**0%**	**411**
Sex						
Male	19%	21%	40%	19%	0%	203
Female	15%	24%	31%	30%	0%	209
Age of Respondent						
18 to 29	23%	28%	31%	17%	0%	56
30 to 39	10%	20%	43%	27%	0%	59
40 to 49	18%	23%	42%	17%	0%	84
50 to 59	18%	23%	32%	27%	0%	78
60 to 69	14%	18%	35%	32%	1%	64
70 or older	17%	23%	29%	30%	1%	56
Highest Level of Education						
High school or less	25%	16%	32%	28%	0%	94
Technical school/Some college	8%	30%	35%	27%	1%	76
College graduate	13%	30%	35%	23%	0%	137
Postgraduate work	21%	14%	41%	23%	1%	99
Household Income						
Less than $20,000	6%	11%	30%	51%	1%	32
$20,000 to $39,999	35%	30%	21%	15%	0%	34
$40,000 to $59,999	15%	26%	40%	19%	0%	49
$60,000 to $90,000	25%	20%	37%	18%	0%	67
$90,001 to $160,000	10%	29%	40%	22%	0%	81
More than $160,000	9%	23%	30%	35%	2%	26
Race of Respondent						
White	16%	23%	36%	24%	0%	377
Non-White	33%	2%	37%	28%	0%	22

Q3I: "How important is it to have the following in your community? That many places you want to go are within walking distance"

	Very Important	Somewhat Important	Not Very Important	Not At All Important	Don't Know	Number Responding
All NH Residents	19%	26%	32%	22%	1%	2889
All Central/Lakes RPC Residents	**17%**	**23%**	**36%**	**25%**	**0%**	**411**
Children in Household						
No children	14%	26%	34%	27%	0%	261
One	19%	19%	47%	14%	0%	67
Two or more	25%	16%	32%	27%	0%	75
Years Lived In NH						
5 years or less	25%	20%	27%	29%	0%	22
6 to 10 years	15%	26%	29%	30%	0%	27
11 to 20 years	14%	19%	37%	29%	0%	74
20 or more years	17%	23%	36%	23%	0%	282
Employment Status						
Employed full-time	18%	20%	43%	19%	0%	200
Employed part-time	19%	33%	26%	22%	0%	46
Self-Employed	6%	12%	33%	48%	2%	33
Retired and not working	19%	20%	34%	25%	1%	85
Unemployed & looking for work	17%	65%	0%	18%	0%	11
Not Employed & Not Looking	11%	24%	24%	41%	0%	29
Region of Employment						
Northern NH	7%	18%	42%	32%	0%	31
Western NH	0%	27%	73%	0%	0%	3
Central/Lakes	19%	26%	44%	11%	0%	131
Hillsborough County	36%	13%	31%	20%	0%	24
Seacoast	22%	9%	29%	39%	0%	13
Other State	6%	17%	32%	45%	0%	24
Work At Home	13%	20%	37%	29%	2%	23

Q4: "In your opinion, how affordable is housing in your town FOR PURCHASE … very affordable…somewhat affordable…not very affordable…or, not affordable at all?"

	Very Affordable	Somewhat Affordable	Not Very Affordable	Not Affordable At All	Don't Know	Number Responding
All NH Residents	9%	56%	24%	5%	6%	2917
All Central/Lakes RPC Residents	**9%**	**61%**	**22%**	**3%**	**4%**	**421**
Sex						
Male	7%	65%	22%	4%	2%	212
Female	11%	57%	23%	3%	6%	209
Age of Respondent						
18 to 29	10%	58%	28%	5%	0%	60
30 to 39	14%	61%	21%	5%	0%	59
40 to 49	8%	64%	23%	1%	4%	87
50 to 59	7%	65%	22%	3%	3%	81
60 to 69	10%	61%	20%	3%	7%	62
70 or older	8%	49%	27%	3%	13%	56
Highest Level of Education						
High school or less	10%	55%	27%	3%	5%	98
Technical school/Some college	2%	62%	25%	6%	5%	77
College graduate	14%	60%	21%	3%	2%	140
Postgraduate work	9%	66%	18%	2%	6%	100
Household Income						
Less than $20,000	4%	46%	34%	10%	5%	32
$20,000 to $39,999	6%	58%	15%	11%	10%	35
$40,000 to $59,999	15%	55%	23%	4%	3%	56
$60,000 to $90,000	12%	62%	24%	0%	2%	71
$90,001 to $160,000	11%	68%	17%	2%	2%	81
More than $160,000	3%	57%	36%	0%	5%	27
Race of Respondent						
White	9%	60%	23%	3%	4%	386
Non-White	9%	73%	11%	4%	2%	22

Q4: "In your opinion, how affordable is housing in your town FOR PURCHASE … very affordable…somewhat affordable…not very affordable…or, not affordable at all?"

	Very Affordable	Somewhat Affordable	Not Very Affordable	Not Affordable At All	Don't Know	Number Responding
All NH Residents	9%	56%	24%	5%	6%	2917
All Central/Lakes RPC Residents	**9%**	**61%**	**22%**	**3%**	**4%**	**421**
Children in Household						
No children	10%	56%	25%	3%	6%	264
One	5%	68%	22%	2%	2%	74
Two or more	11%	68%	16%	4%	1%	75
Years Lived In NH						
5 years or less	7%	61%	21%	5%	6%	22
6 to 10 years	22%	51%	27%	0%	0%	27
11 to 20 years	1%	76%	18%	2%	3%	78
20 or more years	11%	57%	24%	4%	5%	287
Employment Status						
Employed full-time	13%	62%	20%	3%	2%	203
Employed part-time	2%	76%	19%	3%	0%	51
Self-Employed	4%	58%	31%	4%	4%	35
Retired and not working	11%	53%	22%	2%	12%	87
Unemployed & looking for work	0%	74%	6%	20%	0%	11
Not Employed & Not Looking	6%	42%	45%	4%	4%	26
Region of Employment						
Northern NH	2%	82%	8%	6%	2%	36
Western NH	0%	100%	0%	0%	0%	3
Central/Lakes	13%	60%	24%	1%	2%	134
Hillsborough County	17%	63%	12%	7%	0%	24
Seacoast	0%	76%	24%	0%	0%	13
Other State	17%	58%	23%	2%	0%	24
Work At Home	0%	68%	28%	2%	2%	27

Q5: "In your opinion, how affordable is housing in your town FOR RENT … very affordable…somewhat affordable…not very affordable…or, not affordable at all?"

	Very Affordable	Somewhat Affordable	Not Very Affordable	Not Affordable At All	Don't Know	Number Responding
All NH Residents	7%	39%	19%	7%	27%	2903
All Central/Lakes RPC Residents	**8%**	**36%**	**19%**	**6%**	**32%**	**417**
Sex						
Male	11%	40%	18%	3%	27%	209
Female	5%	31%	19%	8%	37%	208
Age of Respondent						
18 to 29	12%	30%	26%	13%	19%	57
30 to 39	9%	44%	13%	2%	32%	59
40 to 49	13%	36%	17%	5%	29%	87
50 to 59	5%	34%	19%	5%	36%	81
60 to 69	6%	35%	22%	6%	31%	62
70 or older	3%	33%	17%	3%	43%	55
Highest Level of Education						
High school or less	5%	41%	20%	5%	29%	97
Technical school/Some college	11%	29%	26%	10%	24%	76
College graduate	11%	41%	17%	4%	27%	140
Postgraduate work	5%	29%	14%	5%	46%	99
Household Income						
Less than $20,000	3%	28%	32%	22%	14%	28
$20,000 to $39,999	3%	48%	21%	0%	28%	35
$40,000 to $59,999	12%	38%	19%	6%	25%	55
$60,000 to $90,000	8%	36%	20%	5%	32%	71
$90,001 to $160,000	9%	29%	22%	5%	37%	80
More than $160,000	0%	31%	17%	9%	43%	27
Race of Respondent						
White	8%	36%	18%	5%	32%	382
Non-White	6%	39%	31%	1%	23%	22

Q5: "In your opinion, how affordable is housing in your town FOR RENT … very affordable…somewhat affordable…not very affordable…or, not affordable at all?"

	Very Affordable	Somewhat Affordable	Not Very Affordable	Not Affordable At All	Don't Know	Number Responding
All NH Residents	7%	39%	19%	7%	27%	2903
All Central/Lakes RPC Residents	**8%**	**36%**	**19%**	**6%**	**32%**	**417**
Children in Household						
No children	7%	34%	18%	7%	34%	260
One	10%	48%	17%	0%	25%	74
Two or more	9%	31%	21%	8%	31%	75
Years Lived In NH						
5 years or less	9%	29%	6%	6%	50%	22
6 to 10 years	9%	44%	11%	4%	31%	27
11 to 20 years	9%	35%	11%	6%	39%	74
20 or more years	8%	36%	21%	6%	29%	287
Employment Status						
Employed full-time	11%	30%	18%	7%	34%	203
Employed part-time	10%	45%	19%	0%	26%	51
Self-Employed	9%	39%	26%	9%	17%	31
Retired and not working	5%	39%	16%	3%	37%	84
Unemployed & looking for work	0%	66%	11%	0%	24%	11
Not Employed & Not Looking	0%	40%	18%	13%	28%	29
Region of Employment						
Northern NH	6%	57%	20%	3%	14%	36
Western NH	27%	73%	0%	0%	0%	3
Central/Lakes	13%	30%	18%	7%	33%	134
Hillsborough County	10%	36%	21%	4%	29%	23
Seacoast	0%	33%	22%	14%	30%	13
Other State	9%	25%	15%	9%	42%	24
Work At Home	3%	36%	23%	3%	36%	27

Q6: "Which of the following kinds of residential opportunities do you think your town should encourage … Check all that apply. Percentages may add to more than 100 percent.

	Single family detached housing	Apartment buildings	Accessory apartments such as in-law apartments	Townhouses	Clusters of single family homes	Attached homes such as Duplexes and tri-plexes
All NH Residents	78%	42%	60%	51%	62%	47%
All Central/Lakes RPC Residents	**77%**	**38%**	**62%**	**42%**	**64%**	**44%**
Sex						
Male	72%	43%	61%	42%	60%	44%
Female	82%	34%	62%	41%	67%	43%
Age of Respondent						
18 to 29	72%	43%	36%	52%	54%	40%
30 to 39	75%	31%	64%	29%	68%	45%
40 to 49	83%	44%	71%	41%	67%	49%
50 to 59	70%	37%	73%	46%	59%	43%
60 to 69	82%	34%	65%	53%	66%	43%
70 or older	76%	45%	56%	33%	64%	45%
Highest Level of Education						
High school or less	68%	39%	54%	43%	61%	40%
Technical school/Some college	75%	40%	65%	46%	54%	50%
College graduate	83%	37%	62%	34%	66%	39%
Postgraduate work	78%	40%	67%	50%	71%	50%
Household Income						
Less than $20,000	68%	47%	56%	32%	73%	45%
$20,000 to $39,999	73%	62%	54%	15%	47%	51%
$40,000 to $59,999	70%	28%	63%	50%	60%	53%
$60,000 to $90,000	89%	41%	61%	52%	62%	36%
$90,001 to $160,000	80%	37%	65%	44%	75%	47%
More than $160,000	73%	26%	49%	39%	62%	35%
Race of Respondent						
White	77%	39%	63%	44%	64%	45%
Non-White	81%	38%	48%	24%	64%	48%

Q6: "Which of the following kinds of residential opportunities do you think your town should encourage … Check all that apply. Percentages may add to more than 100 percent.

	Single family detached housing	Apartment buildings	Accessory apartments such as in-law apartments	Townhouses	Clusters of single family homes	Attached homes such as Duplexes and tri-plexes
All NH Residents	78%	42%	60%	51%	62%	47%
All Central/Lakes RPC Residents	**77%**	**38%**	**62%**	**42%**	**64%**	**44%**
Children in Household						
No children	77%	36%	60%	44%	64%	46%
One	76%	37%	69%	39%	52%	47%
Two or more	76%	49%	60%	38%	73%	36%
Years Lived In NH						
5 years or less	88%	29%	28%	39%	64%	52%
6 to 10 years	84%	48%	42%	28%	68%	30%
11 to 20 years	74%	38%	56%	49%	69%	43%
20 or more years	76%	39%	68%	42%	62%	45%
Employment Status						
Employed full-time	81%	40%	66%	37%	61%	42%
Employed part-time	63%	28%	43%	55%	51%	39%
Self-Employed	67%	44%	67%	42%	78%	46%
Retired and not working	76%	37%	56%	41%	66%	44%
Unemployed & looking for work	73%	45%	31%	15%	79%	65%
Not Employed & Not Looking	86%	45%	92%	54%	81%	67%
Region of Employment						
Northern NH	59%	18%	65%	35%	65%	30%
Western NH	73%	73%	43%	57%	100%	57%
Central/Lakes	80%	43%	60%	41%	57%	43%
Hillsborough County	76%	32%	53%	30%	50%	50%
Seacoast	73%	44%	70%	58%	58%	37%
Other State	84%	48%	57%	59%	67%	38%
Work At Home	82%	32%	71%	49%	71%	49%

Q6: "Which of the following kinds of residential opportunities do you think your town should encourage …

	Manufactured housing	Housing for adults over 55 years old	Housing in areas with a mix of residences and businesses	Assisted living facilities	No Opinion	Number Responding
All NH Residents	36%	66%	53%	74%	2%	2874
All Central/Lakes RPC Residents	**35%**	**63%**	**56%**	**72%**	**2%**	**413**
Sex						
Male	39%	61%	61%	71%	3%	207
Female	31%	65%	51%	73%	2%	206
Age of Respondent						
18 to 29	34%	51%	61%	54%	4%	57
30 to 39	10%	55%	44%	68%	5%	59
40 to 49	32%	53%	67%	74%	1%	87
50 to 59	44%	69%	52%	78%	0%	78
60 to 69	43%	73%	51%	78%	0%	61
70 or older	44%	80%	57%	79%	2%	56
Highest Level of Education						
High school or less	42%	72%	55%	73%	3%	98
Technical school/Some college	41%	64%	55%	73%	3%	74
College graduate	29%	62%	55%	71%	1%	137
Postgraduate work	33%	56%	59%	71%	0%	99
Household Income						
Less than $20,000	43%	65%	43%	66%	0%	32
$20,000 to $39,999	45%	64%	56%	79%	6%	35
$40,000 to $59,999	38%	62%	47%	69%	2%	55
$60,000 to $90,000	30%	67%	70%	69%	0%	71
$90,001 to $160,000	28%	60%	61%	72%	0%	80
More than $160,000	25%	44%	46%	63%	6%	25
Race of Respondent						
White	36%	64%	55%	73%	2%	378
Non-White	29%	58%	82%	59%	0%	22

Q6: "Which of the following kinds of residential opportunities do you think your town should encourage …

	Manufactured housing	Housing for adults over 55 years old	Housing in areas with a mix of residences and businesses	Assisted living facilities	No Opinion	Number Responding
All NH Residents	36%	66%	53%	74%	2%	2874
All Central/Lakes RPC Residents	**35%**	**63%**	**56%**	**72%**	**2%**	**413**
Children in Household						
No children	40%	70%	53%	74%	1%	256
One	26%	46%	70%	76%	0%	73
Two or more	30%	56%	53%	63%	7%	75
Years Lived In NH						
5 years or less	30%	70%	47%	75%	7%	22
6 to 10 years	22%	64%	59%	78%	0%	27
11 to 20 years	37%	55%	61%	66%	0%	77
20 or more years	37%	65%	55%	74%	2%	280
Employment Status						
Employed full-time	29%	57%	60%	73%	2%	198
Employed part-time	37%	60%	53%	65%	3%	52
Self-Employed	34%	55%	51%	67%	5%	35
Retired and not working	45%	78%	55%	75%	2%	86
Unemployed & looking for work	27%	91%	56%	100%	0%	7
Not Employed & Not Looking	55%	70%	42%	75%	0%	26
Region of Employment						
Northern NH	24%	50%	42%	63%	1%	35
Western NH	43%	100%	57%	73%	0%	3
Central/Lakes	27%	57%	62%	72%	4%	131
Hillsborough County	12%	52%	68%	55%	0%	24
Seacoast	51%	56%	58%	67%	0%	12
Other State	34%	53%	51%	83%	0%	24
Work At Home	33%	71%	62%	68%	5%	27

Q7A: "Assuming choices were equally safe and affordable, would you choose to live in a small home with a small backyard, if it means you have a short trip to work, school or shopping, OR would you choose to live in a large home with a large backyard, with a long trip to work, school or shopping?"

	Small home, small yard	Large home, large yard	Don't Know	Number Responding
All NH Residents	53%	44%	3%	2908
All Central/Lakes RPC Residents	**53%**	**44%**	**3%**	**420**
Sex				
Male	50%	46%	4%	213
Female	56%	43%	2%	208
Age of Respondent				
18 to 29	41%	53%	6%	60
30 to 39	52%	48%	0%	59
40 to 49	44%	54%	1%	86
50 to 59	51%	45%	3%	80
60 to 69	64%	34%	2%	64
70 or older	65%	31%	4%	55
Highest Level of Education				
High school or less	48%	51%	2%	101
Technical school/Some college	50%	48%	3%	76
College graduate	54%	43%	3%	139
Postgraduate work	58%	40%	3%	99
Household Income				
Less than $20,000	43%	52%	4%	31
$20,000 to $39,999	76%	24%	0%	35
$40,000 to $59,999	48%	52%	0%	56
$60,000 to $90,000	59%	41%	0%	71
$90,001 to $160,000	42%	50%	7%	81
More than $160,000	34%	64%	2%	26
Race of Respondent				
White	53%	45%	2%	386
Non-White	44%	48%	8%	21

Q7A: "Assuming choices were equally safe and affordable, would you choose to live in a small home with a small backyard, if it means you have a short trip to work, school or shopping, OR would you choose to live in a large home with a large backyard, with a long trip to work, school or shopping?"

	Small home, small yard	Large home, large yard	Don't Know	Number Responding
All NH Residents	53%	44%	3%	2908
All Central/Lakes RPC Residents	**53%**	**44%**	**3%**	**420**
Children in Household				
No children	56%	41%	3%	263
One	55%	44%	2%	74
Two or more	40%	59%	1%	75
Years Lived In NH				
5 years or less	58%	42%	0%	22
6 to 10 years	52%	44%	3%	26
11 to 20 years	51%	48%	2%	78
20 or more years	52%	44%	3%	287
Employment Status				
Employed full-time	50%	47%	3%	201
Employed part-time	49%	51%	0%	52
Self-Employed	34%	60%	6%	34
Retired and not working	70%	28%	2%	86
Unemployed & looking for work	89%	11%	0%	11
Not Employed & Not Looking	34%	62%	3%	29
Region of Employment				
Northern NH	34%	64%	2%	36
Western NH	27%	73%	0%	3
Central/Lakes	60%	36%	3%	133
Hillsborough County	34%	60%	5%	24
Seacoast	32%	68%	0%	13
Other State	41%	59%	0%	23
Work At Home	21%	74%	5%	27

Q7B: "Assuming choices were equally safe and affordable, would you choose to live in a neighborhood with a mix of residences and businesses where you can walk to stores, schools, and services, OR would you choose to live in a residential-only neighborhood where you needed to drive a car to get to stores, schools, and services?"

	Mix of residences and businesses - walk	Residential neighborhood - drive	Don't Know	Number Responding
All NH Residents	42%	56%	1%	2905
All Central/Lakes RPC Residents	**47%**	**52%**	**1%**	**421**
Sex				
Male	47%	52%	1%	214
Female	46%	53%	1%	207
Age of Respondent				
18 to 29	62%	38%	0%	60
30 to 39	36%	64%	0%	58
40 to 49	45%	55%	1%	87
50 to 59	37%	61%	2%	81
60 to 69	53%	45%	2%	65
70 or older	52%	45%	3%	54
Highest Level of Education				
High school or less	42%	57%	1%	100
Technical school/Some college	46%	53%	1%	76
College graduate	49%	50%	1%	140
Postgraduate work	49%	48%	2%	99
Household Income				
Less than $20,000	54%	46%	0%	32
$20,000 to $39,999	46%	54%	0%	35
$40,000 to $59,999	52%	46%	2%	55
$60,000 to $90,000	53%	47%	0%	70
$90,001 to $160,000	32%	66%	2%	81
More than $160,000	27%	71%	3%	27
Race of Respondent				
White	46%	53%	1%	386
Non-White	63%	37%	0%	22

Q7B: "Assuming choices were equally safe and affordable, would you choose to live in a neighborhood with a mix of residences and businesses where you can walk to stores, schools, and services, OR would you choose to live in a residential-only neighborhood where you needed to drive a car to get to stores, schools, and services?"

	Mix of residences and businesses - walk	Residential neighborhood - drive	Don't Know	Number Responding
All NH Residents	42%	56%	1%	2905
All Central/Lakes RPC Residents	**47%**	**52%**	**1%**	**421**
Children in Household				
No children	49%	50%	1%	265
One	38%	61%	2%	73
Two or more	50%	49%	1%	75
Years Lived In NH				
5 years or less	47%	53%	0%	22
6 to 10 years	53%	44%	3%	27
11 to 20 years	57%	42%	2%	78
20 or more years	43%	55%	1%	287
Employment Status				
Employed full-time	42%	56%	2%	202
Employed part-time	43%	55%	2%	52
Self-Employed	49%	51%	0%	34
Retired and not working	57%	42%	1%	86
Unemployed & looking for work	46%	54%	0%	11
Not Employed & Not Looking	53%	47%	0%	29
Region of Employment				
Northern NH	26%	69%	5%	36
Western NH	0%	100%	0%	3
Central/Lakes	50%	50%	0%	134
Hillsborough County	29%	66%	5%	24
Seacoast	47%	53%	0%	13
Other State	44%	53%	3%	23
Work At Home	35%	65%	0%	26

Q8: "Where should future development occur in your part of the state … in already developed areas of your region in order to preserve natural areas, and make use of existing utilities and services, OR in undeveloped areas in order to avoid higher densities?"

	Growth in developed areas	Growth in undeveloped areas	Don't Know	Number Responding
All NH Residents	70%	23%	7%	2894
All Central/Lakes RPC Residents	**74%**	**20%**	**6%**	**420**
Sex				
Male	72%	21%	6%	212
Female	76%	19%	5%	208
Age of Respondent				
18 to 29	83%	14%	3%	60
30 to 39	72%	25%	3%	59
40 to 49	79%	18%	3%	85
50 to 59	75%	17%	8%	81
60 to 69	70%	22%	7%	64
70 or older	62%	28%	10%	54
Highest Level of Education				
High school or less	62%	26%	12%	100
Technical school/Some college	72%	21%	7%	77
College graduate	80%	18%	2%	138
Postgraduate work	81%	17%	2%	100
Household Income				
Less than $20,000	80%	9%	10%	31
$20,000 to $39,999	57%	25%	18%	34
$40,000 to $59,999	63%	37%	0%	55
$60,000 to $90,000	84%	14%	2%	71
$90,001 to $160,000	71%	28%	1%	80
More than $160,000	84%	15%	1%	27
Race of Respondent				
White	75%	20%	5%	385
Non-White	61%	27%	13%	22

Q8: "Where should future development occur in your part of the state … in already developed areas of your region in order to preserve natural areas, and make use of existing utilities and services, OR in undeveloped areas in order to avoid higher densities?"

	Growth in developed areas	Growth in undeveloped areas	Don't Know	Number Responding
All NH Residents	70%	23%	7%	2894
All Central/Lakes RPC Residents	**74%**	**20%**	**6%**	**420**
Children in Household				
No children	74%	19%	7%	265
One	75%	22%	3%	74
Two or more	77%	22%	1%	73
Years Lived In NH				
5 years or less	68%	30%	2%	22
6 to 10 years	63%	28%	9%	26
11 to 20 years	76%	22%	1%	76
20 or more years	76%	18%	6%	288
Employment Status				
Employed full-time	77%	19%	4%	201
Employed part-time	76%	15%	9%	52
Self-Employed	73%	25%	1%	35
Retired and not working	66%	26%	8%	85
Unemployed & looking for work	86%	14%	0%	11
Not Employed & Not Looking	77%	15%	8%	29
Region of Employment				
Northern NH	44%	48%	8%	36
Western NH	57%	43%	0%	3
Central/Lakes	89%	9%	2%	132
Hillsborough County	74%	26%	0%	24
Seacoast	83%	5%	12%	13
Other State	70%	30%	0%	24
Work At Home	60%	38%	2%	27

Q9A: "How high a priority would you place on the following issue in your community over the next 10 years …

Protecting the quality of water for recreational purposes like swimming and fishing"

	High Priority	Medium Priority	Low Priority	Don't Know	Number Responding
All NH Residents	77%	19%	4%	0%	2932
All Central/Lakes RPC Residents	**81%**	**16%**	**3%**	**0%**	**424**
Sex					
Male	82%	14%	4%	0%	214
Female	80%	18%	2%	1%	210
Age of Respondent					
18 to 29	76%	24%	0%	0%	60
30 to 39	83%	14%	0%	2%	59
40 to 49	84%	10%	6%	0%	87
50 to 59	81%	13%	6%	0%	81
60 to 69	79%	19%	2%	0%	65
70 or older	80%	19%	0%	1%	56
Highest Level of Education					
High school or less	78%	19%	2%	0%	101
Technical school/Some college	81%	18%	1%	0%	77
College graduate	84%	13%	2%	1%	140
Postgraduate work	79%	14%	6%	0%	100
Household Income					
Less than $20,000	89%	11%	0%	0%	32
$20,000 to $39,999	87%	4%	7%	1%	35
$40,000 to $59,999	81%	17%	2%	0%	56
$60,000 to $90,000	85%	12%	0%	2%	71
$90,001 to $160,000	75%	23%	2%	0%	81
More than $160,000	80%	14%	5%	0%	27
Race of Respondent					
White	80%	16%	3%	0%	389
Non-White	89%	9%	0%	2%	22

Q9A: "How high a priority would you place on the following issue in your community over the next 10 years …

Protecting the quality of water for recreational purposes like swimming and fishing"

	High Priority	Medium Priority	Low Priority	Don't Know	Number Responding
All NH Residents	77%	19%	4%	0%	2932
All Central/Lakes RPC Residents	**81%**	**16%**	**3%**	**0%**	**424**
Children in Household					
No children	79%	19%	2%	0%	267
One	79%	12%	7%	2%	74
Two or more	88%	10%	2%	0%	75
Years Lived In NH					
5 years or less	77%	23%	0%	0%	22
6 to 10 years	90%	10%	0%	0%	27
11 to 20 years	80%	17%	3%	0%	78
20 or more years	80%	16%	3%	1%	290
Employment Status					
Employed full-time	84%	12%	4%	0%	203
Employed part-time	76%	21%	3%	0%	52
Self-Employed	69%	23%	2%	5%	35
Retired and not working	83%	17%	0%	0%	87
Unemployed & looking for work	68%	32%	0%	0%	11
Not Employed & Not Looking	83%	13%	4%	0%	29
Region of Employment					
Northern NH	81%	16%	2%	0%	36
Western NH	100%	0%	0%	0%	3
Central/Lakes	84%	10%	6%	0%	134
Hillsborough County	91%	3%	6%	0%	24
Seacoast	58%	42%	0%	0%	13
Other State	62%	32%	0%	6%	24
Work At Home	69%	26%	3%	2%	27

Q9B: "How high a priority would you place on the following issue in your community over the next 10 years …

Protecting the quality of drinking water supplies"

	High Priority	Medium Priority	Low Priority	Number Responding
All NH Residents	96%	3%	1%	2933
All Central/Lakes RPC Residents	**97%**	**3%**	**0%**	**424**
Sex				
Male	95%	5%	0%	214
Female	99%	1%	0%	210
Age of Respondent				
18 to 29	100%	0%	0%	60
30 to 39	98%	2%	0%	59
40 to 49	95%	4%	1%	87
50 to 59	95%	5%	0%	81
60 to 69	97%	3%	0%	65
70 or older	98%	2%	0%	56
Highest Level of Education				
High school or less	97%	3%	0%	101
Technical school/Some college	94%	6%	0%	77
College graduate	99%	1%	0%	140
Postgraduate work	96%	3%	1%	100
Household Income				
Less than $20,000	100%	0%	0%	32
$20,000 to $39,999	91%	9%	0%	35
$40,000 to $59,999	97%	3%	0%	56
$60,000 to $90,000	97%	3%	0%	71
$90,001 to $160,000	97%	2%	1%	81
More than $160,000	97%	3%	1%	27
Race of Respondent				
White	97%	3%	0%	389
Non-White	95%	5%	0%	22

Q9B: "How high a priority would you place on the following issue in your community over the next 10 years …

Protecting the quality of drinking water supplies"

	High Priority	Medium Priority	Low Priority	Number Responding
All NH Residents	96%	3%	1%	2933
All Central/Lakes RPC Residents	**97%**	**3%**	**0%**	**424**
Children in Household				
No children	97%	3%	0%	267
One	94%	4%	1%	74
Two or more	100%	0%	0%	75
Years Lived In NH				
5 years or less	100%	0%	0%	22
6 to 10 years	100%	0%	0%	27
11 to 20 years	96%	3%	1%	78
20 or more years	96%	4%	0%	290
Employment Status				
Employed full-time	96%	4%	0%	203
Employed part-time	99%	1%	0%	52
Self-Employed	95%	3%	2%	35
Retired and not working	98%	2%	0%	87
Unemployed & looking for work	100%	0%	0%	11
Not Employed & Not Looking	100%	0%	0%	29
Region of Employment				
Northern NH	92%	8%	0%	36
Western NH	100%	0%	0%	3
Central/Lakes	97%	3%	0%	134
Hillsborough County	100%	0%	0%	24
Seacoast	91%	9%	0%	13
Other State	97%	3%	0%	24
Work At Home	93%	4%	3%	27

Q9C: "How high a priority would you place on the following issue in your community over the next 10 years …

Protecting aquatic and marine habitats"

	High Priority	Medium Priority	Low Priority	Don't Know	Number Responding
All NH Residents	76%	18%	5%	1%	2921
All Central/Lakes RPC Residents	**81%**	**14%**	**4%**	**1%**	**424**
Sex					
Male	79%	14%	5%	1%	214
Female	82%	14%	3%	0%	210
Age of Respondent					
18 to 29	75%	25%	0%	0%	60
30 to 39	86%	8%	6%	0%	59
40 to 49	82%	12%	5%	1%	87
50 to 59	78%	15%	6%	0%	81
60 to 69	86%	10%	5%	0%	65
70 or older	77%	19%	3%	1%	56
Highest Level of Education					
High school or less	80%	13%	7%	0%	101
Technical school/Some college	75%	23%	2%	0%	77
College graduate	82%	14%	4%	0%	140
Postgraduate work	86%	10%	4%	0%	100
Household Income					
Less than $20,000	73%	26%	0%	1%	32
$20,000 to $39,999	80%	6%	15%	0%	35
$40,000 to $59,999	92%	8%	0%	0%	56
$60,000 to $90,000	82%	14%	3%	1%	71
$90,001 to $160,000	72%	19%	8%	1%	81
More than $160,000	82%	12%	5%	0%	27
Race of Respondent					
White	81%	15%	4%	0%	389
Non-White	88%	9%	3%	0%	22

Q9C: "How high a priority would you place on the following issue in your community over the next 10 years …

Protecting aquatic and marine habitats"

	High Priority	Medium Priority	Low Priority	Don't Know	Number Responding
All NH Residents	76%	18%	5%	1%	2921
All Central/Lakes RPC Residents	**81%**	**14%**	**4%**	**1%**	**424**
Children in Household					
No children	82%	14%	4%	0%	267
One	79%	19%	2%	0%	74
Two or more	79%	12%	8%	0%	75
Years Lived In NH					
5 years or less	78%	14%	8%	0%	22
6 to 10 years	85%	15%	0%	0%	27
11 to 20 years	84%	10%	5%	0%	78
20 or more years	80%	16%	4%	0%	290
Employment Status					
Employed full-time	84%	13%	3%	0%	203
Employed part-time	84%	11%	5%	0%	52
Self-Employed	74%	23%	2%	0%	35
Retired and not working	81%	15%	2%	1%	87
Unemployed & looking for work	68%	32%	0%	0%	11
Not Employed & Not Looking	63%	16%	20%	0%	29
Region of Employment					
Northern NH	84%	9%	7%	0%	36
Western NH	100%	0%	0%	0%	3
Central/Lakes	88%	10%	3%	0%	134
Hillsborough County	81%	13%	6%	0%	24
Seacoast	54%	41%	5%	0%	13
Other State	72%	24%	4%	0%	24
Work At Home	75%	22%	3%	0%	27

Q9D: "How high a priority would you place on the following issue in your community over the next 10 years …

Protecting access to recreation land and scenic views"

	High Priority	Medium Priority	Low Priority	Don't Know	Number Responding
All NH Residents	67%	28%	5%	0%	2932
All Central/Lakes RPC Residents	**69%**	**27%**	**3%**	**1%**	**423**
Sex					
Male	71%	25%	4%	1%	214
Female	68%	29%	2%	0%	209
Age of Respondent					
18 to 29	73%	27%	0%	0%	60
30 to 39	63%	37%	0%	0%	59
40 to 49	72%	21%	7%	0%	87
50 to 59	66%	28%	6%	0%	81
60 to 69	68%	29%	1%	2%	65
70 or older	76%	19%	3%	2%	55
Highest Level of Education					
High school or less	76%	21%	3%	0%	101
Technical school/Some college	61%	37%	2%	1%	77
College graduate	67%	29%	4%	1%	140
Postgraduate work	73%	24%	3%	0%	100
Household Income					
Less than $20,000	74%	25%	1%	0%	32
$20,000 to $39,999	74%	21%	2%	3%	35
$40,000 to $59,999	65%	31%	1%	2%	56
$60,000 to $90,000	68%	29%	3%	0%	71
$90,001 to $160,000	72%	22%	6%	0%	81
More than $160,000	68%	24%	9%	0%	27
Race of Respondent					
White	69%	27%	3%	0%	388
Non-White	78%	16%	4%	2%	22

Q9D: "How high a priority would you place on the following issue in your community over the next 10 years …

Protecting access to recreation land and scenic views"

	High Priority	Medium Priority	Low Priority	Don't Know	Number Responding
All NH Residents	67%	28%	5%	0%	2932
All Central/Lakes RPC Residents	**69%**	**27%**	**3%**	**1%**	**423**
Children in Household					
No children	69%	27%	3%	1%	266
One	72%	24%	4%	0%	74
Two or more	66%	32%	2%	0%	75
Years Lived In NH					
5 years or less	55%	39%	7%	0%	22
6 to 10 years	60%	40%	0%	0%	27
11 to 20 years	75%	20%	5%	0%	78
20 or more years	70%	27%	3%	1%	289
Employment Status					
Employed full-time	69%	29%	2%	0%	203
Employed part-time	70%	22%	9%	0%	52
Self-Employed	73%	20%	5%	1%	35
Retired and not working	72%	24%	1%	2%	86
Unemployed & looking for work	51%	49%	0%	0%	11
Not Employed & Not Looking	66%	30%	4%	0%	29
Region of Employment					
Northern NH	56%	40%	4%	0%	36
Western NH	57%	43%	0%	0%	3
Central/Lakes	74%	23%	3%	0%	134
Hillsborough County	79%	12%	9%	0%	24
Seacoast	45%	55%	0%	0%	13
Other State	55%	37%	8%	0%	24
Work At Home	71%	24%	3%	2%	27

Q9E: "How high a priority would you place on the following issue in your community over the next 10 years …

Protecting forests for timber production"

	High Priority	Medium Priority	Low Priority	Don't Know	Number Responding
All NH Residents	58%	29%	12%	1%	2919
All Central/Lakes RPC Residents	**64%**	**26%**	**9%**	**1%**	**423**
Sex					
Male	61%	26%	11%	2%	214
Female	67%	25%	7%	0%	208
Age of Respondent					
18 to 29	56%	32%	4%	8%	60
30 to 39	65%	26%	8%	0%	59
40 to 49	70%	23%	7%	0%	87
50 to 59	58%	24%	17%	0%	81
60 to 69	66%	26%	8%	0%	65
70 or older	72%	18%	10%	0%	55
Highest Level of Education					
High school or less	75%	19%	6%	0%	101
Technical school/Some college	67%	20%	11%	2%	76
College graduate	57%	30%	10%	2%	140
Postgraduate work	62%	29%	9%	0%	100
Household Income					
Less than $20,000	67%	22%	11%	0%	32
$20,000 to $39,999	60%	18%	22%	0%	35
$40,000 to $59,999	65%	28%	7%	0%	56
$60,000 to $90,000	62%	29%	9%	0%	71
$90,001 to $160,000	57%	34%	8%	0%	81
More than $160,000	73%	12%	15%	0%	27
Race of Respondent					
White	64%	25%	9%	1%	387
Non-White	75%	16%	9%	0%	22

Q9E: "How high a priority would you place on the following issue in your community over the next 10 years …

Protecting forests for timber production"

	High Priority	Medium Priority	Low Priority	Don't Know	Number Responding
All NH Residents	58%	29%	12%	1%	2919
All Central/Lakes RPC Residents	**64%**	**26%**	**9%**	**1%**	**423**
Children in Household					
No children	64%	23%	12%	2%	266
One	62%	30%	8%	0%	74
Two or more	69%	29%	2%	0%	75
Years Lived In NH					
5 years or less	58%	26%	15%	0%	22
6 to 10 years	63%	30%	2%	6%	27
11 to 20 years	61%	33%	6%	0%	78
20 or more years	66%	23%	10%	1%	288
Employment Status					
Employed full-time	59%	32%	9%	0%	203
Employed part-time	67%	18%	12%	3%	52
Self-Employed	72%	19%	9%	0%	35
Retired and not working	70%	22%	9%	0%	86
Unemployed & looking for work	48%	20%	0%	32%	11
Not Employed & Not Looking	75%	18%	7%	0%	29
Region of Employment					
Northern NH	58%	36%	7%	0%	36
Western NH	73%	27%	0%	0%	3
Central/Lakes	58%	30%	12%	0%	134
Hillsborough County	61%	24%	14%	0%	24
Seacoast	70%	13%	6%	12%	13
Other State	68%	13%	18%	0%	24
Work At Home	72%	28%	0%	0%	27

Q9F: "How high a priority would you place on the following issue in your community over the next 10 years …

Preserving farms and agricultural land"

	High Priority	Medium Priority	Low Priority	Don't Know	Number Responding
All NH Residents	79%	18%	4%	0%	2930
All Central/Lakes RPC Residents	**83%**	**15%**	**2%**	**0%**	**424**
Sex					
Male	78%	19%	3%	1%	214
Female	88%	11%	1%	0%	210
Age of Respondent					
18 to 29	84%	14%	2%	0%	60
30 to 39	89%	11%	0%	0%	59
40 to 49	86%	11%	3%	0%	87
50 to 59	77%	19%	4%	0%	81
60 to 69	81%	19%	0%	0%	65
70 or older	85%	13%	2%	0%	56
Highest Level of Education					
High school or less	87%	10%	3%	0%	101
Technical school/Some college	80%	16%	3%	0%	77
College graduate	81%	18%	1%	0%	140
Postgraduate work	85%	15%	1%	0%	100
Household Income					
Less than $20,000	83%	12%	5%	0%	32
$20,000 to $39,999	86%	14%	0%	0%	35
$40,000 to $59,999	88%	11%	1%	0%	56
$60,000 to $90,000	84%	16%	0%	0%	71
$90,001 to $160,000	83%	13%	4%	0%	81
More than $160,000	70%	24%	7%	0%	27
Race of Respondent					
White	83%	15%	2%	0%	389
Non-White	82%	18%	0%	0%	22

Q9F: "How high a priority would you place on the following issue in your community over the next 10 years …

Preserving farms and agricultural land"

	High Priority	Medium Priority	Low Priority	Don't Know	Number Responding
All NH Residents	79%	18%	4%	0%	2930
All Central/Lakes RPC Residents	**83%**	**15%**	**2%**	**0%**	**424**
Children in Household					
No children	82%	15%	2%	0%	267
One	84%	14%	2%	0%	74
Two or more	85%	15%	0%	0%	75
Years Lived In NH					
5 years or less	79%	21%	0%	0%	22
6 to 10 years	72%	26%	2%	0%	27
11 to 20 years	82%	15%	2%	0%	78
20 or more years	85%	13%	2%	0%	290
Employment Status					
Employed full-time	82%	16%	2%	0%	203
Employed part-time	90%	10%	0%	0%	52
Self-Employed	87%	8%	5%	0%	35
Retired and not working	80%	19%	1%	0%	87
Unemployed & looking for work	80%	9%	11%	0%	11
Not Employed & Not Looking	87%	13%	0%	0%	29
Region of Employment					
Northern NH	83%	14%	2%	0%	36
Western NH	73%	27%	0%	0%	3
Central/Lakes	83%	17%	1%	0%	134
Hillsborough County	100%	0%	0%	0%	24
Seacoast	70%	30%	0%	0%	13
Other State	80%	5%	15%	0%	24
Work At Home	90%	7%	3%	0%	27

Q9G: "How high a priority would you place on the following issue in your community over the next 10 years …

Protecting air quality"

	High Priority	Medium Priority	Low Priority	Number Responding
All NH Residents	85%	12%	3%	2934
All Central/Lakes RPC Residents	**87%**	**10%**	**2%**	**423**
Sex				
Male	84%	14%	2%	213
Female	91%	6%	3%	210
Age of Respondent				
18 to 29	88%	12%	0%	60
30 to 39	86%	12%	2%	59
40 to 49	87%	9%	4%	87
50 to 59	84%	13%	3%	81
60 to 69	93%	5%	2%	65
70 or older	88%	11%	1%	56
Highest Level of Education				
High school or less	88%	7%	4%	101
Technical school/Some college	82%	15%	3%	77
College graduate	88%	11%	1%	140
Postgraduate work	90%	9%	2%	100
Household Income				
Less than $20,000	96%	4%	0%	32
$20,000 to $39,999	73%	24%	3%	35
$40,000 to $59,999	90%	9%	1%	56
$60,000 to $90,000	88%	10%	2%	71
$90,001 to $160,000	85%	11%	4%	81
More than $160,000	96%	3%	1%	27
Race of Respondent				
White	88%	10%	2%	389
Non-White	83%	17%	0%	22

Q9G: "How high a priority would you place on the following issue in your community over the next 10 years …

Protecting air quality"

	High Priority	Medium Priority	Low Priority	Number Responding
All NH Residents	85%	12%	3%	2934
All Central/Lakes RPC Residents	**87%**	**10%**	**2%**	**423**
Children in Household				
No children	89%	9%	2%	266
One	88%	9%	2%	74
Two or more	84%	13%	3%	75
Years Lived In NH				
5 years or less	82%	10%	9%	22
6 to 10 years	88%	10%	2%	27
11 to 20 years	92%	6%	2%	78
20 or more years	86%	11%	2%	290
Employment Status				
Employed full-time	86%	11%	2%	203
Employed part-time	91%	6%	2%	52
Self-Employed	80%	18%	2%	35
Retired and not working	89%	10%	1%	86
Unemployed & looking for work	100%	0%	0%	11
Not Employed & Not Looking	92%	5%	3%	29
Region of Employment				
Northern NH	70%	22%	8%	36
Western NH	100%	0%	0%	3
Central/Lakes	92%	7%	1%	134
Hillsborough County	95%	5%	0%	24
Seacoast	76%	24%	0%	13
Other State	86%	6%	8%	24
Work At Home	81%	17%	3%	27

Q9H: "How high a priority would you place on the following issue in your community over the next 10 years …

Managing shore land and waterfront development"

	High Priority	Medium Priority	Low Priority	Don't Know	Number Responding
All NH Residents	58%	26%	16%	1%	2893
All Central/Lakes RPC Residents	**62%**	**24%**	**14%**	**0%**	**419**
Sex					
Male	60%	23%	17%	0%	212
Female	64%	25%	11%	0%	207
Age of Respondent					
18 to 29	51%	32%	17%	0%	60
30 to 39	55%	26%	19%	0%	58
40 to 49	64%	26%	9%	0%	86
50 to 59	64%	20%	16%	0%	81
60 to 69	69%	16%	13%	1%	64
70 or older	65%	21%	13%	2%	55
Highest Level of Education					
High school or less	57%	28%	15%	0%	98
Technical school/Some college	56%	29%	14%	1%	76
College graduate	62%	21%	17%	0%	140
Postgraduate work	72%	19%	8%	1%	100
Household Income					
Less than $20,000	61%	28%	12%	0%	32
$20,000 to $39,999	51%	21%	26%	1%	34
$40,000 to $59,999	72%	18%	11%	0%	55
$60,000 to $90,000	66%	25%	9%	0%	71
$90,001 to $160,000	64%	20%	15%	1%	80
More than $160,000	71%	10%	18%	0%	27
Race of Respondent					
White	60%	25%	15%	0%	385
Non-White	91%	4%	5%	0%	22

Q9H: "How high a priority would you place on the following issue in your community over the next 10 years …

Managing shore land and waterfront development"

	High Priority	Medium Priority	Low Priority	Don't Know	Number Responding
All NH Residents	58%	26%	16%	1%	2893
All Central/Lakes RPC Residents	**62%**	**24%**	**14%**	**0%**	**419**
Children in Household					
No children	60%	27%	13%	1%	262
One	67%	15%	18%	0%	74
Two or more	66%	19%	15%	0%	75
Years Lived In NH					
5 years or less	47%	36%	15%	2%	22
6 to 10 years	79%	12%	8%	0%	27
11 to 20 years	60%	25%	14%	0%	78
20 or more years	62%	23%	14%	0%	286
Employment Status					
Employed full-time	62%	26%	13%	0%	200
Employed part-time	53%	35%	12%	0%	51
Self-Employed	60%	26%	11%	2%	35
Retired and not working	70%	16%	13%	1%	85
Unemployed & looking for work	30%	24%	46%	0%	11
Not Employed & Not Looking	68%	12%	20%	0%	29
Region of Employment					
Northern NH	59%	21%	20%	0%	35
Western NH	73%	0%	27%	0%	3
Central/Lakes	62%	27%	11%	1%	132
Hillsborough County	75%	14%	11%	0%	24
Seacoast	44%	43%	13%	0%	12
Other State	32%	54%	14%	0%	24
Work At Home	61%	26%	13%	0%	27

Q11A: "Do you favor or oppose - using municipal funds to provide the following utilities to existing and potential development? Water Lines"
"IF FAVOR: Would you be willing to pay higher fees or taxes to pay for it?"

	Favor Higher Taxes	Favor No Taxes	Oppose	Don't Know	Number Responding
All NH Residents	47%	20%	28%	5%	2902
All Central/Lakes RPC Residents	**46%**	**21%**	**29%**	**4%**	**415**
Sex					
Male	48%	18%	30%	4%	210
Female	43%	24%	28%	4%	205
Age of Respondent					
18 to 29	51%	8%	33%	8%	60
30 to 39	39%	34%	22%	5%	57
40 to 49	48%	19%	32%	1%	87
50 to 59	41%	25%	34%	0%	80
60 to 69	56%	22%	21%	1%	62
70 or older	43%	19%	24%	14%	55
Highest Level of Education					
High school or less	42%	18%	36%	4%	100
Technical school/Some college	43%	27%	22%	8%	75
College graduate	48%	23%	25%	4%	136
Postgraduate work	49%	18%	33%	1%	99
Household Income					
Less than $20,000	54%	19%	28%	0%	31
$20,000 to $39,999	51%	13%	29%	7%	34
$40,000 to $59,999	50%	12%	36%	2%	55
$60,000 to $90,000	47%	21%	31%	1%	70
$90,001 to $160,000	54%	22%	20%	4%	81
More than $160,000	54%	18%	28%	0%	26
Race of Respondent					
White	46%	21%	29%	4%	381
Non-White	52%	22%	24%	2%	22

Q11A: "Do you favor or oppose - using municipal funds to provide the following utilities to existing and potential development? Water Lines"
"IF FAVOR: Would you be willing to pay higher fees or taxes to pay for it?"

	Favor Higher Taxes	Favor No Taxes	Oppose	Don't Know	Number Responding
All NH Residents	47%	20%	28%	5%	2902
All Central/Lakes RPC Residents	**46%**	**21%**	**29%**	**4%**	**415**
Children in Household					
No children	48%	21%	25%	6%	260
One	46%	18%	35%	1%	72
Two or more	40%	22%	36%	2%	75
Years Lived In NH					
5 years or less	56%	12%	18%	14%	22
6 to 10 years	32%	20%	43%	6%	27
11 to 20 years	51%	18%	31%	0%	78
20 or more years	45%	22%	28%	4%	282
Employment Status					
Employed full-time	50%	22%	26%	1%	200
Employed part-time	46%	8%	40%	7%	50
Self-Employed	28%	12%	58%	1%	35
Retired and not working	45%	24%	23%	8%	83
Unemployed & looking for work	44%	0%	17%	39%	11
Not Employed & Not Looking	42%	38%	20%	0%	29
Region of Employment					
Northern NH	48%	17%	35%	0%	35
Western NH	71%	0%	29%	0%	3
Central/Lakes	49%	25%	24%	1%	134
Hillsborough County	64%	8%	26%	2%	22
Seacoast	40%	0%	37%	22%	13
Other State	35%	14%	51%	0%	24
Work At Home	40%	15%	43%	2%	26

Q11B: "Do you favor or oppose - using municipal funds to provide the following utilities to existing and potential development? Sewer Lines"
"IF FAVOR: Would you be willing to pay higher fees or taxes to pay for it?"

	Favor Higher Taxes	Favor No Taxes	Oppose	Don't Know	Number Responding
All NH Residents	45%	18%	31%	5%	2902
All Central/Lakes RPC Residents	**44%**	**18%**	**34%**	**4%**	**415**
Sex					
Male	51%	18%	30%	2%	211
Female	37%	19%	38%	6%	205
Age of Respondent					
18 to 29	37%	21%	33%	9%	60
30 to 39	36%	24%	38%	2%	57
40 to 49	50%	13%	35%	2%	85
50 to 59	49%	18%	31%	3%	80
60 to 69	49%	19%	30%	2%	63
70 or older	43%	13%	36%	8%	55
Highest Level of Education					
High school or less	39%	20%	37%	4%	101
Technical school/Some college	41%	27%	25%	7%	76
College graduate	50%	17%	33%	1%	134
Postgraduate work	45%	10%	40%	5%	99
Household Income					
Less than $20,000	35%	21%	44%	0%	32
$20,000 to $39,999	46%	15%	35%	4%	34
$40,000 to $59,999	57%	10%	32%	2%	55
$60,000 to $90,000	45%	18%	32%	5%	70
$90,001 to $160,000	53%	10%	33%	4%	81
More than $160,000	58%	15%	24%	3%	24
Race of Respondent					
White	45%	18%	34%	3%	380
Non-White	36%	15%	30%	19%	22

Q11B: "Do you favor or oppose - using municipal funds to provide the following utilities to existing and potential development? Sewer Lines"
"IF FAVOR: Would you be willing to pay higher fees or taxes to pay for it?"

	Favor Higher Taxes	Favor No Taxes	Oppose	Don't Know	Number Responding
All NH Residents	45%	18%	31%	5%	2902
All Central/Lakes RPC Residents	**44%**	**18%**	**34%**	**4%**	**415**
Children in Household					
No children	44%	19%	32%	4%	260
One	48%	15%	37%	1%	72
Two or more	42%	14%	37%	6%	75
Years Lived In NH					
5 years or less	54%	24%	22%	0%	21
6 to 10 years	43%	7%	42%	8%	27
11 to 20 years	38%	6%	51%	5%	77
20 or more years	45%	21%	30%	4%	284
Employment Status					
Employed full-time	45%	19%	31%	4%	200
Employed part-time	41%	14%	41%	4%	50
Self-Employed	38%	12%	48%	1%	35
Retired and not working	45%	13%	35%	6%	83
Unemployed & looking for work	41%	32%	27%	0%	11
Not Employed & Not Looking	51%	25%	24%	0%	29
Region of Employment					
Northern NH	35%	19%	45%	0%	35
Western NH	0%	0%	100%	0%	3
Central/Lakes	46%	23%	27%	5%	134
Hillsborough County	50%	8%	40%	2%	21
Seacoast	49%	0%	29%	22%	13
Other State	42%	9%	47%	3%	24
Work At Home	52%	14%	32%	2%	26

Q11C: "Do you favor or oppose - using municipal funds to provide the following utilities to existing and potential development? Broadband Access"
"IF FAVOR: Would you be willing to pay higher fees or taxes to pay for it?"

	Favor Higher Taxes	Favor No Taxes	Oppose	Don't Know	Number Responding
All NH Residents	26%	16%	51%	6%	2910
All Central/Lakes RPC Residents	**28%**	**13%**	**53%**	**7%**	**421**
Sex					
Male	32%	12%	50%	6%	214
Female	23%	14%	55%	8%	207
Age of Respondent					
18 to 29	29%	8%	61%	3%	60
30 to 39	25%	10%	63%	2%	59
40 to 49	29%	13%	54%	5%	87
50 to 59	31%	15%	49%	6%	81
60 to 69	30%	20%	45%	5%	64
70 or older	25%	17%	40%	18%	55
Highest Level of Education					
High school or less	18%	13%	62%	7%	101
Technical school/Some college	19%	21%	50%	10%	75
College graduate	35%	13%	48%	4%	139
Postgraduate work	35%	8%	50%	6%	100
Household Income					
Less than $20,000	7%	19%	67%	7%	32
$20,000 to $39,999	38%	10%	45%	7%	34
$40,000 to $59,999	25%	11%	56%	7%	55
$60,000 to $90,000	22%	16%	60%	2%	71
$90,001 to $160,000	40%	11%	44%	4%	81
More than $160,000	29%	10%	60%	1%	27
Race of Respondent					
White	29%	14%	51%	6%	386
Non-White	12%	5%	66%	17%	22

Q11C: "Do you favor or oppose - using municipal funds to provide the following utilities to existing and potential development? Broadband Access"
"IF FAVOR: Would you be willing to pay higher fees or taxes to pay for it?"

	Favor Higher Taxes	Favor No Taxes	Oppose	Don't Know	Number Responding
All NH Residents	26%	16%	51%	6%	2910
All Central/Lakes RPC Residents	**28%**	**13%**	**53%**	**7%**	**421**
Children in Household					
No children	27%	15%	48%	9%	264
One	38%	6%	56%	0%	74
Two or more	20%	15%	62%	2%	75
Years Lived In NH					
5 years or less	25%	20%	51%	4%	22
6 to 10 years	18%	14%	55%	13%	27
11 to 20 years	34%	9%	55%	2%	78
20 or more years	28%	14%	51%	7%	286
Employment Status					
Employed full-time	34%	11%	52%	3%	203
Employed part-time	30%	13%	51%	7%	51
Self-Employed	18%	13%	62%	7%	35
Retired and not working	21%	17%	48%	14%	85
Unemployed & looking for work	20%	8%	72%	0%	11
Not Employed & Not Looking	21%	19%	53%	7%	29
Region of Employment					
Northern NH	31%	16%	50%	3%	35
Western NH	0%	0%	100%	0%	3
Central/Lakes	33%	13%	51%	4%	134
Hillsborough County	27%	5%	67%	0%	24
Seacoast	26%	6%	45%	22%	13
Other State	42%	1%	57%	0%	24
Work At Home	38%	20%	38%	4%	27

Q12: "Which of the following things should be actively encouraged in your community?" Check all that apply. Percentages may add to more than 100 percent.

	Promoting tourism	Protecting historic buildings and neighborhoods	Attracting more stores and shops	Attracting more non polluting light industry	Expanding or promoting current businesses	Promoting local agriculture	Sponsoring special cultural or sporting events	Promoting other recreational activities
All NH Residents	55%	86%	51%	76%	83%	90%	67%	76%
All Central/Lakes RPC Residents	**64%**	**90%**	**54%**	**77%**	**84%**	**93%**	**68%**	**77%**
Sex								
Male	62%	90%	55%	77%	83%	91%	71%	81%
Female	66%	90%	53%	77%	86%	95%	66%	74%
Age of Respondent								
18 to 29	49%	88%	54%	81%	85%	99%	71%	85%
30 to 39	64%	88%	47%	78%	91%	97%	69%	76%
40 to 49	66%	93%	58%	73%	90%	94%	74%	82%
50 to 59	66%	91%	57%	73%	83%	87%	67%	74%
60 to 69	61%	96%	50%	82%	74%	93%	58%	73%
70 or older	67%	90%	51%	79%	84%	93%	67%	70%
Highest Level of Education								
High school or less	73%	94%	61%	78%	86%	92%	73%	86%
Technical school/Some college	56%	86%	49%	83%	86%	95%	67%	75%
College graduate	59%	90%	53%	72%	84%	94%	63%	72%
Postgraduate work	65%	91%	53%	80%	83%	92%	72%	77%
Household Income								
Less than $20,000	56%	86%	66%	73%	83%	90%	63%	79%
$20,000 to $39,999	83%	92%	68%	76%	89%	96%	71%	81%
$40,000 to $59,999	68%	100%	37%	84%	90%	96%	67%	84%
$60,000 to $90,000	54%	91%	56%	81%	90%	91%	74%	80%
$90,001 to $160,000	62%	91%	50%	72%	88%	92%	72%	77%
More than $160,000	66%	92%	64%	72%	83%	87%	62%	68%
Race of Respondent								
White	64%	91%	53%	77%	85%	93%	68%	77%
Non-White	53%	71%	79%	90%	94%	96%	71%	78%

Q12: "Which of the following things should be actively encouraged in your community?" Check all that apply. Percentages may add to more than 100 percent.

	Promoting tourism	Protecting historic buildings and neighborhoods	Attracting more stores and shops	Attracting more non polluting light industry	Expanding or promoting current businesses	Promoting local agriculture	Sponsoring special cultural or sporting events	Promoting other recreational activities
All NH Residents	55%	86%	51%	76%	83%	90%	67%	76%
All Central/Lakes RPC Residents	**64%**	**90%**	**54%**	**77%**	**84%**	**93%**	**68%**	**77%**
Children in Household								
No children	62%	90%	52%	73%	82%	91%	68%	75%
One	71%	93%	54%	82%	92%	98%	67%	82%
Two or more	61%	90%	63%	91%	88%	97%	73%	80%
Years Lived In NH								
5 years or less	69%	85%	50%	76%	77%	90%	45%	82%
6 to 10 years	75%	71%	64%	83%	85%	97%	73%	60%
11 to 20 years	59%	91%	61%	79%	80%	90%	78%	87%
20 or more years	63%	93%	52%	77%	86%	94%	67%	76%
Employment Status								
Employed full-time	62%	93%	51%	73%	88%	94%	69%	77%
Employed part-time	66%	90%	50%	82%	79%	92%	66%	84%
Self-Employed	61%	90%	64%	74%	79%	95%	71%	75%
Retired and not working	68%	90%	59%	86%	86%	92%	64%	70%
Unemployed & looking for work	62%	62%	38%	83%	54%	100%	75%	84%
Not Employed & Not Looking	55%	86%	60%	79%	84%	94%	77%	89%
Region of Employment								
Northern NH	75%	88%	40%	79%	84%	94%	71%	75%
Western NH	100%	100%	57%	73%	100%	73%	27%	100%
Central/Lakes	64%	94%	56%	76%	90%	96%	73%	82%
Hillsborough County	54%	100%	65%	84%	85%	95%	68%	72%
Seacoast	56%	77%	32%	57%	88%	94%	88%	80%
Other State	46%	95%	43%	61%	66%	82%	46%	57%
Work At Home	72%	91%	40%	85%	93%	97%	69%	76%

Q12: "Which of the following things should be actively encouraged in your community?"

	Increasing access to ponds, lakes and rivers	Increasing access to forests and trails	Expanding recreational fields	Promoting safe places to walk or bike	Other	Number Responding
All NH Residents	69%	75%	59%	85%	6%	2872
All Central/Lakes RPC Residents	**68%**	**74%**	**57%**	**83%**	**5%**	**418**
Sex						
Male	66%	69%	52%	81%	3%	209
Female	69%	80%	61%	86%	7%	209
Age of Respondent						
18 to 29	68%	80%	62%	89%	6%	60
30 to 39	50%	66%	60%	85%	5%	58
40 to 49	75%	82%	58%	91%	5%	87
50 to 59	70%	75%	49%	76%	7%	80
60 to 69	62%	71%	52%	80%	5%	62
70 or older	74%	69%	55%	82%	2%	56
Highest Level of Education						
High school or less	67%	67%	66%	82%	1%	98
Technical school/Some college	73%	82%	63%	84%	4%	76
College graduate	56%	70%	47%	81%	5%	140
Postgraduate work	81%	82%	53%	89%	10%	99
Household Income						
Less than $20,000	79%	76%	59%	81%	2%	32
$20,000 to $39,999	73%	77%	63%	75%	5%	35
$40,000 to $59,999	65%	71%	71%	85%	3%	56
$60,000 to $90,000	72%	78%	53%	91%	16%	71
$90,001 to $160,000	68%	88%	56%	83%	2%	79
More than $160,000	57%	62%	53%	73%	5%	27
Race of Respondent						
White	67%	75%	58%	84%	4%	383
Non-White	85%	80%	42%	88%	23%	22

Q12: "Which of the following things should be actively encouraged in your community?"

	Increasing access to ponds, lakes and rivers	Increasing access to forests and trails	Expanding recreational fields	Promoting safe places to walk or bike	Other	Number Responding
All NH Residents	69%	75%	59%	85%	6%	2872
All Central/Lakes RPC Residents	**68%**	**74%**	**57%**	**83%**	**5%**	**418**
Children in Household						
No children	67%	74%	54%	80%	3%	262
One	68%	70%	58%	90%	9%	74
Two or more	68%	80%	59%	91%	8%	74
Years Lived In NH						
5 years or less	62%	56%	62%	93%	0%	22
6 to 10 years	70%	81%	30%	94%	9%	27
11 to 20 years	70%	77%	59%	88%	11%	77
20 or more years	67%	75%	58%	80%	3%	286
Employment Status						
Employed full-time	69%	77%	54%	83%	8%	201
Employed part-time	55%	69%	66%	92%	3%	52
Self-Employed	58%	67%	48%	73%	7%	34
Retired and not working	72%	73%	57%	79%	1%	87
Unemployed & looking for work	44%	51%	34%	92%	0%	11
Not Employed & Not Looking	86%	92%	75%	94%	0%	26
Region of Employment						
Northern NH	56%	56%	68%	87%	5%	36
Western NH	57%	57%	57%	100%	0%	3
Central/Lakes	66%	80%	55%	86%	10%	131
Hillsborough County	78%	86%	49%	93%	4%	24
Seacoast	60%	82%	51%	75%	8%	13
Other State	63%	68%	48%	76%	2%	24
Work At Home	64%	72%	66%	82%	5%	27

Q13A: "Which, if any, of the following policy changes would you support to improve energy efficiency and energy choices? Please indicate your level of support for the following responses using a scale of 1 to 5 where 1 means "Strongly Oppose" and 5 means "Strongly Support":

Higher energy efficiency standards in new buildings"

	Strongly Oppose	2	3	4	Strongly Support	Don't Know	Number Responding
All NH Residents	5%	4%	16%	20%	54%	1%	2928
All Central/Lakes RPC Residents	**4%**	**3%**	**14%**	**20%**	**58%**	**1%**	**423**
Sex							
Male	6%	3%	13%	19%	58%	1%	213
Female	3%	3%	15%	21%	58%	1%	210
Age of Respondent							
18 to 29	0%	0%	8%	30%	60%	3%	60
30 to 39	4%	4%	18%	15%	57%	2%	59
40 to 49	9%	2%	20%	24%	46%	0%	87
50 to 59	6%	3%	14%	21%	55%	1%	81
60 to 69	0%	2%	8%	13%	76%	0%	65
70 or older	4%	5%	11%	16%	62%	2%	55
Highest Level of Education							
High school or less	4%	2%	14%	14%	64%	1%	101
Technical school/Some college	4%	3%	19%	20%	52%	2%	77
College graduate	5%	4%	14%	21%	54%	1%	140
Postgraduate work	3%	1%	8%	25%	62%	0%	100
Household Income							
Less than $20,000	2%	0%	14%	24%	60%	0%	32
$20,000 to $39,999	7%	10%	15%	9%	59%	0%	35
$40,000 to $59,999	0%	1%	6%	20%	73%	0%	56
$60,000 to $90,000	2%	3%	13%	19%	64%	0%	71
$90,001 to $160,000	4%	0%	10%	32%	53%	2%	81
More than $160,000	11%	2%	14%	25%	49%	0%	27
Race of Respondent							
White	4%	3%	13%	21%	58%	1%	388
Non-White	9%	0%	9%	9%	73%	0%	22

Q13A: "Which, if any, of the following policy changes would you support to improve energy efficiency and energy choices? Please indicate your level of support for the following responses using a scale of 1 to 5 where 1 means "Strongly Oppose" and 5 means "Strongly Support":

Higher energy efficiency standards in new buildings"

	Strongly Oppose	2	3	4	Strongly Support	Don't Know	Number Responding
All NH Residents	5%	4%	16%	20%	54%	1%	2928
All Central/Lakes RPC Residents	**4%**	**3%**	**14%**	**20%**	**58%**	**1%**	**423**
Children in Household							
No children	4%	2%	15%	18%	59%	2%	266
One	7%	4%	12%	19%	58%	0%	74
Two or more	2%	3%	9%	28%	58%	0%	75
Years Lived In NH							
5 years or less	2%	10%	20%	13%	54%	0%	22
6 to 10 years	3%	3%	19%	14%	56%	6%	27
11 to 20 years	0%	3%	9%	34%	54%	0%	78
20 or more years	6%	2%	14%	17%	60%	1%	289
Employment Status							
Employed full-time	6%	2%	15%	22%	55%	1%	203
Employed part-time	0%	5%	10%	27%	56%	3%	52
Self-Employed	6%	2%	15%	18%	59%	0%	34
Retired and not working	3%	4%	12%	14%	65%	1%	87
Unemployed & looking for work	0%	6%	24%	0%	70%	0%	11
Not Employed & Not Looking	2%	0%	13%	27%	57%	0%	29
Region of Employment							
Northern NH	7%	10%	9%	14%	61%	0%	36
Western NH	0%	0%	0%	29%	71%	0%	3
Central/Lakes	5%	2%	15%	19%	59%	0%	133
Hillsborough County	0%	0%	17%	41%	43%	0%	24
Seacoast	9%	0%	32%	11%	26%	22%	13
Other State	15%	0%	10%	25%	50%	0%	24
Work At Home	4%	0%	10%	13%	72%	0%	27

Q13B: "Which, if any, of the following policy changes would you support to improve energy efficiency and energy choices? Please indicate your level of support for the following responses using a scale of 1 to 5 where 1 means "Strongly Oppose" and 5 means "Strongly Support":

Expand incentives for home energy efficiency improvements"

	Strongly Oppose	2	3	4	Strongly Support	Don't Know	Number Responding
All NH Residents	5%	3%	15%	25%	52%	1%	2931
All Central/Lakes RPC Residents	**4%**	**2%**	**16%**	**21%**	**55%**	**1%**	**423**
Sex							
Male	6%	3%	17%	21%	51%	1%	213
Female	2%	1%	15%	21%	59%	2%	209
Age of Respondent							
18 to 29	1%	2%	20%	18%	56%	3%	60
30 to 39	2%	4%	16%	28%	44%	5%	59
40 to 49	8%	1%	16%	23%	52%	0%	87
50 to 59	6%	4%	15%	18%	56%	1%	81
60 to 69	1%	0%	13%	18%	68%	0%	65
70 or older	6%	2%	18%	16%	56%	2%	56
Highest Level of Education							
High school or less	5%	4%	18%	16%	55%	2%	101
Technical school/Some college	4%	4%	17%	19%	52%	4%	77
College graduate	4%	1%	18%	24%	52%	1%	139
Postgraduate work	4%	1%	11%	24%	61%	0%	100
Household Income							
Less than $20,000	4%	5%	29%	24%	38%	0%	32
$20,000 to $39,999	6%	10%	12%	19%	52%	1%	35
$40,000 to $59,999	1%	0%	13%	12%	73%	0%	56
$60,000 to $90,000	2%	2%	9%	25%	62%	0%	71
$90,001 to $160,000	3%	0%	12%	28%	55%	2%	81
More than $160,000	17%	2%	17%	21%	44%	0%	27
Race of Respondent							
White	4%	2%	16%	22%	55%	1%	388
Non-White	13%	0%	4%	16%	65%	2%	22

Q13B: "Which, if any, of the following policy changes would you support to improve energy efficiency and energy choices? Please indicate your level of support for the following responses using a scale of 1 to 5 where 1 means "Strongly Oppose" and 5 means "Strongly Support":

Expand incentives for home energy efficiency improvements"

	Strongly Oppose	2	3	4	Strongly Support	Don't Know	Number Responding
All NH Residents	5%	3%	15%	25%	52%	1%	2931
All Central/Lakes RPC Residents	**4%**	**2%**	**16%**	**21%**	**55%**	**1%**	**423**
Children in Household							
No children	5%	2%	21%	16%	54%	2%	265
One	7%	1%	8%	31%	53%	0%	74
Two or more	1%	3%	5%	26%	63%	2%	75
Years Lived In NH							
5 years or less	2%	5%	30%	14%	42%	7%	22
6 to 10 years	3%	0%	26%	26%	39%	6%	27
11 to 20 years	3%	4%	12%	28%	53%	0%	78
20 or more years	5%	2%	15%	19%	58%	1%	289
Employment Status							
Employed full-time	5%	1%	17%	25%	51%	1%	203
Employed part-time	1%	4%	10%	15%	64%	6%	52
Self-Employed	8%	0%	19%	22%	49%	1%	35
Retired and not working	5%	1%	18%	16%	60%	1%	86
Unemployed & looking for work	0%	11%	24%	17%	49%	0%	11
Not Employed & Not Looking	0%	7%	2%	26%	65%	0%	29
Region of Employment							
Northern NH	2%	6%	5%	31%	55%	0%	36
Western NH	27%	0%	29%	0%	43%	0%	3
Central/Lakes	3%	2%	21%	25%	48%	1%	134
Hillsborough County	0%	0%	17%	16%	67%	0%	24
Seacoast	9%	0%	10%	22%	37%	22%	13
Other State	15%	0%	9%	17%	59%	0%	24
Work At Home	7%	0%	5%	21%	65%	2%	27

Q13C: "Which, if any, of the following policy changes would you support to improve energy efficiency and energy choices? Please indicate your level of support for the following responses using a scale of 1 to 5 where 1 means "Strongly Oppose" and 5 means "Strongly Support":

Public charging stations for electric vehicles"

	Strongly Oppose	2	3	4	Strongly Support	Don't Know	Number Responding
All NH Residents	19%	15%	30%	13%	21%	2%	2923
All Central/Lakes RPC Residents	**16%**	**14%**	**33%**	**12%**	**22%**	**3%**	**420**
Sex							
Male	16%	13%	39%	11%	17%	4%	213
Female	15%	14%	27%	13%	28%	3%	206
Age of Respondent							
18 to 29	8%	15%	34%	13%	28%	3%	60
30 to 39	10%	20%	35%	15%	14%	5%	59
40 to 49	24%	6%	41%	9%	14%	5%	87
50 to 59	17%	12%	30%	9%	29%	4%	79
60 to 69	14%	7%	31%	16%	31%	0%	65
70 or older	17%	16%	30%	12%	21%	5%	54
Highest Level of Education							
High school or less	15%	12%	24%	9%	36%	5%	100
Technical school/Some college	21%	13%	29%	13%	14%	10%	76
College graduate	16%	16%	38%	13%	15%	2%	140
Postgraduate work	10%	13%	39%	14%	25%	0%	99
Household Income							
Less than $20,000	16%	9%	39%	3%	21%	11%	32
$20,000 to $39,999	15%	28%	21%	6%	26%	5%	34
$40,000 to $59,999	12%	8%	34%	14%	30%	2%	56
$60,000 to $90,000	14%	9%	35%	11%	31%	0%	71
$90,001 to $160,000	12%	12%	44%	18%	12%	2%	81
More than $160,000	33%	14%	35%	5%	13%	0%	27
Race of Respondent							
White	15%	14%	34%	12%	21%	4%	385
Non-White	17%	10%	12%	8%	53%	0%	22

Q13C: "Which, if any, of the following policy changes would you support to improve energy efficiency and energy choices? Please indicate your level of support for the following responses using a scale of 1 to 5 where 1 means "Strongly Oppose" and 5 means "Strongly Support":

Public charging stations for electric vehicles"

	Strongly Oppose	2	3	4	Strongly Support	Don't Know	Number Responding
All NH Residents	19%	15%	30%	13%	21%	2%	2923
All Central/Lakes RPC Residents	**16%**	**14%**	**33%**	**12%**	**22%**	**3%**	**420**
Children in Household							
No children	15%	13%	34%	11%	23%	4%	262
One	20%	13%	30%	9%	25%	3%	74
Two or more	10%	16%	33%	19%	20%	2%	75
Years Lived In NH							
5 years or less	8%	28%	37%	7%	13%	7%	22
6 to 10 years	19%	21%	30%	2%	16%	13%	27
11 to 20 years	7%	9%	34%	17%	31%	1%	78
20 or more years	18%	13%	33%	12%	21%	3%	286
Employment Status							
Employed full-time	17%	14%	34%	12%	21%	2%	202
Employed part-time	11%	10%	34%	14%	23%	8%	51
Self-Employed	23%	15%	42%	4%	16%	0%	34
Retired and not working	16%	15%	29%	14%	21%	4%	86
Unemployed & looking for work	14%	24%	11%	0%	52%	0%	11
Not Employed & Not Looking	2%	10%	31%	14%	34%	9%	29
Region of Employment							
Northern NH	12%	17%	26%	20%	24%	0%	35
Western NH	0%	0%	73%	0%	27%	0%	3
Central/Lakes	15%	12%	36%	9%	25%	1%	132
Hillsborough County	20%	12%	51%	3%	14%	0%	24
Seacoast	6%	4%	39%	24%	5%	22%	13
Other State	34%	17%	20%	20%	9%	0%	24
Work At Home	11%	27%	44%	0%	18%	0%	27

Q13D: "Which, if any, of the following policy changes would you support to improve energy efficiency and energy choices? Please indicate your level of support for the following responses using a scale of 1 to 5 where 1 means "Strongly Oppose" and 5 means "Strongly Support":

Promote renewable energy sources such as solar, wind and geothermal energy."

	Strongly Oppose	2	3	4	Strongly Support	Don't Know	Number Responding
All NH Residents	7%	5%	14%	19%	54%	1%	2929
All Central/Lakes RPC Residents	**7%**	**4%**	**13%**	**20%**	**54%**	**2%**	**423**
Sex							
Male	8%	4%	12%	20%	53%	2%	213
Female	5%	4%	15%	20%	55%	2%	210
Age of Respondent							
18 to 29	1%	0%	21%	18%	58%	3%	60
30 to 39	2%	4%	7%	36%	46%	5%	59
40 to 49	14%	4%	17%	14%	51%	0%	87
50 to 59	5%	5%	13%	23%	50%	4%	81
60 to 69	6%	2%	12%	14%	66%	0%	65
70 or older	10%	3%	10%	18%	58%	1%	56
Highest Level of Education							
High school or less	6%	1%	14%	18%	58%	3%	101
Technical school/Some college	6%	7%	19%	13%	50%	4%	77
College graduate	6%	3%	12%	25%	54%	1%	140
Postgraduate work	8%	4%	11%	21%	54%	1%	100
Household Income							
Less than $20,000	7%	0%	28%	19%	46%	0%	32
$20,000 to $39,999	3%	3%	13%	23%	55%	3%	35
$40,000 to $59,999	4%	1%	11%	16%	67%	0%	56
$60,000 to $90,000	4%	4%	8%	15%	69%	0%	71
$90,001 to $160,000	5%	3%	21%	17%	51%	3%	81
More than $160,000	15%	23%	17%	16%	30%	0%	27
Race of Respondent							
White	6%	3%	14%	21%	53%	2%	389
Non-White	9%	0%	8%	12%	71%	0%	22

Q13D: "Which, if any, of the following policy changes would you support to improve energy efficiency and energy choices? Please indicate your level of support for the following responses using a scale of 1 to 5 where 1 means "Strongly Oppose" and 5 means "Strongly Support":

Promote renewable energy sources such as solar, wind and geothermal energy."

	Strongly Oppose	2	3	4	Strongly Support	Don't Know	Number Responding
All NH Residents	7%	5%	14%	19%	54%	1%	2929
All Central/Lakes RPC Residents	**7%**	**4%**	**13%**	**20%**	**54%**	**2%**	**423**
Children in Household							
No children	6%	2%	12%	18%	59%	2%	267
One	10%	5%	15%	18%	50%	2%	74
Two or more	4%	5%	13%	33%	43%	2%	75
Years Lived In NH							
5 years or less	5%	0%	27%	32%	25%	11%	22
6 to 10 years	8%	5%	17%	24%	40%	6%	27
11 to 20 years	5%	4%	10%	23%	57%	2%	78
20 or more years	7%	4%	12%	19%	58%	1%	290
Employment Status							
Employed full-time	6%	4%	13%	22%	53%	1%	203
Employed part-time	5%	1%	10%	22%	56%	6%	52
Self-Employed	12%	10%	19%	21%	38%	0%	35
Retired and not working	9%	3%	13%	18%	57%	1%	87
Unemployed & looking for work	0%	0%	8%	24%	69%	0%	11
Not Employed & Not Looking	0%	0%	24%	13%	63%	0%	29
Region of Employment							
Northern NH	7%	3%	15%	23%	52%	0%	36
Western NH	27%	0%	0%	73%	0%	0%	3
Central/Lakes	4%	5%	11%	21%	57%	1%	134
Hillsborough County	6%	0%	7%	4%	78%	5%	24
Seacoast	16%	0%	26%	14%	21%	22%	13
Other State	14%	7%	7%	39%	32%	0%	24
Work At Home	9%	7%	21%	19%	43%	0%	27

Q14A: "How concerned are you about the following weather related events in your community?

Flooding"

	Very Concerned	Somewhat Concerned	Not Very Concerned	Not at all Concerned	Don't Know	Number Responding
All NH Residents	13%	29%	29%	29%	0%	2932
All Central/Lakes RPC Residents	**11%**	**25%**	**34%**	**30%**	**1%**	**424**
Sex						
Male	9%	22%	36%	33%	0%	214
Female	12%	27%	32%	27%	1%	210
Age of Respondent						
18 to 29	5%	37%	46%	11%	0%	60
30 to 39	12%	19%	46%	23%	0%	59
40 to 49	4%	27%	34%	32%	2%	87
50 to 59	10%	22%	26%	41%	1%	81
60 to 69	13%	21%	35%	31%	0%	65
70 or older	21%	19%	22%	37%	0%	56
Highest Level of Education						
High school or less	17%	24%	29%	28%	2%	101
Technical school/Some college	7%	25%	35%	33%	0%	77
College graduate	6%	27%	36%	31%	0%	140
Postgraduate work	12%	23%	37%	28%	0%	100
Household Income						
Less than $20,000	23%	34%	24%	19%	0%	32
$20,000 to $39,999	17%	14%	29%	41%	0%	35
$40,000 to $59,999	11%	27%	42%	20%	0%	56
$60,000 to $90,000	10%	31%	34%	22%	3%	71
$90,001 to $160,000	9%	27%	31%	33%	0%	81
More than $160,000	4%	17%	30%	49%	0%	27
Race of Respondent						
White	10%	24%	36%	29%	1%	389
Non-White	13%	43%	10%	34%	0%	22

Q14A: "How concerned are you about the following weather related events in your community?

Flooding"

	Very Concerned	Somewhat Concerned	Not Very Concerned	Not at all Concerned	Don't Know	Number Responding
All NH Residents	13%	29%	29%	29%	0%	2932
All Central/Lakes RPC Residents	**11%**	**25%**	**34%**	**30%**	**1%**	**424**
Children in Household						
No children	12%	25%	31%	32%	0%	267
One	7%	18%	45%	28%	3%	74
Two or more	7%	30%	39%	24%	0%	75
Years Lived In NH						
5 years or less	7%	20%	52%	21%	0%	22
6 to 10 years	6%	20%	22%	51%	0%	27
11 to 20 years	11%	27%	35%	28%	0%	78
20 or more years	11%	24%	34%	29%	1%	290
Employment Status						
Employed full-time	9%	28%	35%	28%	0%	203
Employed part-time	5%	14%	50%	26%	4%	52
Self-Employed	7%	44%	25%	25%	0%	35
Retired and not working	18%	15%	28%	38%	0%	87
Unemployed & looking for work	20%	0%	24%	56%	0%	11
Not Employed & Not Looking	8%	35%	38%	19%	0%	29
Region of Employment						
Northern NH	10%	26%	39%	25%	0%	36
Western NH	27%	43%	29%	0%	0%	3
Central/Lakes	6%	24%	44%	24%	2%	134
Hillsborough County	10%	56%	6%	28%	0%	24
Seacoast	11%	9%	52%	27%	0%	13
Other State	13%	18%	29%	40%	0%	24
Work At Home	0%	38%	35%	26%	0%	27

Q14B: "How concerned are you about the following weather related events in your community?

Power outages"

	Very Concerned	Somewhat Concerned	Not Very Concerned	Not at all Concerned	Don't Know	Number Responding
All NH Residents	32%	37%	18%	12%	0%	2935
All Central/Lakes RPC Residents	**25%**	**37%**	**22%**	**15%**	**0%**	**424**
Sex						
Male	23%	39%	23%	15%	0%	214
Female	28%	35%	21%	15%	0%	210
Age of Respondent						
18 to 29	26%	43%	21%	9%	0%	60
30 to 39	20%	46%	17%	17%	0%	59
40 to 49	22%	25%	32%	21%	0%	87
50 to 59	21%	42%	23%	12%	1%	81
60 to 69	38%	36%	18%	9%	0%	65
70 or older	28%	32%	17%	22%	0%	56
Highest Level of Education						
High school or less	32%	33%	14%	21%	0%	101
Technical school/Some college	25%	41%	20%	15%	0%	77
College graduate	23%	40%	23%	14%	0%	140
Postgraduate work	21%	37%	32%	10%	0%	100
Household Income						
Less than $20,000	27%	52%	17%	4%	0%	32
$20,000 to $39,999	23%	31%	10%	36%	0%	35
$40,000 to $59,999	35%	37%	20%	8%	0%	56
$60,000 to $90,000	21%	43%	26%	9%	0%	71
$90,001 to $160,000	21%	39%	26%	14%	0%	81
More than $160,000	33%	34%	9%	24%	0%	27
Race of Respondent						
White	24%	37%	23%	15%	0%	389
Non-White	30%	47%	7%	15%	0%	22

Q14B: "How concerned are you about the following weather related events in your community?

Power outages"

	Very Concerned	Somewhat Concerned	Not Very Concerned	Not at all Concerned	Don't Know	Number Responding
All NH Residents	32%	37%	18%	12%	0%	2935
All Central/Lakes RPC Residents	**25%**	**37%**	**22%**	**15%**	**0%**	**424**
Children in Household						
No children	26%	37%	22%	14%	0%	267
One	29%	36%	20%	15%	0%	74
Two or more	17%	41%	25%	17%	0%	75
Years Lived In NH						
5 years or less	14%	34%	22%	30%	0%	22
6 to 10 years	11%	31%	26%	32%	0%	27
11 to 20 years	25%	47%	19%	9%	0%	78
20 or more years	27%	36%	23%	14%	0%	290
Employment Status						
Employed full-time	21%	41%	24%	14%	0%	203
Employed part-time	33%	34%	18%	15%	0%	52
Self-Employed	12%	50%	25%	13%	0%	35
Retired and not working	30%	33%	21%	17%	0%	87
Unemployed & looking for work	20%	18%	0%	62%	0%	11
Not Employed & Not Looking	46%	25%	25%	5%	0%	29
Region of Employment						
Northern NH	33%	50%	10%	8%	0%	36
Western NH	0%	71%	29%	0%	0%	3
Central/Lakes	19%	42%	28%	11%	0%	134
Hillsborough County	19%	46%	19%	16%	0%	24
Seacoast	25%	38%	26%	11%	0%	13
Other State	31%	15%	26%	29%	0%	24
Work At Home	21%	38%	23%	17%	0%	27

Q14C: "How concerned are you about the following weather related events in your community?

Wind damage"

	Very Concerned	Somewhat Concerned	Not Very Concerned	Not at all Concerned	Don't Know	Number Responding
All NH Residents	17%	38%	27%	18%	0%	2932
All Central/Lakes RPC Residents	**16%**	**38%**	**27%**	**19%**	**0%**	**423**
Sex						
Male	18%	36%	26%	20%	0%	213
Female	14%	39%	29%	17%	0%	210
Age of Respondent						
18 to 29	15%	23%	41%	21%	0%	60
30 to 39	15%	31%	27%	27%	0%	59
40 to 49	10%	33%	36%	20%	0%	87
50 to 59	14%	48%	21%	16%	1%	81
60 to 69	26%	44%	18%	12%	0%	65
70 or older	21%	43%	16%	20%	0%	55
Highest Level of Education						
High school or less	20%	41%	19%	20%	0%	101
Technical school/Some college	20%	30%	29%	22%	0%	77
College graduate	13%	38%	32%	17%	0%	140
Postgraduate work	14%	40%	28%	18%	0%	100
Household Income						
Less than $20,000	28%	43%	17%	12%	0%	32
$20,000 to $39,999	13%	48%	8%	30%	0%	35
$40,000 to $59,999	19%	36%	32%	12%	0%	56
$60,000 to $90,000	17%	39%	37%	7%	0%	71
$90,001 to $160,000	14%	37%	29%	19%	0%	81
More than $160,000	17%	41%	19%	23%	0%	27
Race of Respondent						
White	15%	38%	27%	19%	0%	389
Non-White	20%	30%	36%	14%	0%	22

Q14C: "How concerned are you about the following weather related events in your community?

Wind damage"

	Very Concerned	Somewhat Concerned	Not Very Concerned	Not at all Concerned	Don't Know	Number Responding
All NH Residents	17%	38%	27%	18%	0%	2932
All Central/Lakes RPC Residents	**16%**	**38%**	**27%**	**19%**	**0%**	**423**
Children in Household						
No children	16%	42%	24%	18%	0%	266
One	19%	36%	31%	14%	0%	74
Two or more	14%	26%	35%	25%	0%	75
Years Lived In NH						
5 years or less	24%	21%	32%	23%	0%	22
6 to 10 years	17%	41%	19%	23%	0%	27
11 to 20 years	19%	35%	22%	25%	0%	78
20 or more years	15%	40%	29%	17%	0%	289
Employment Status						
Employed full-time	12%	38%	32%	17%	0%	203
Employed part-time	27%	22%	20%	31%	0%	52
Self-Employed	15%	35%	35%	14%	0%	35
Retired and not working	17%	48%	20%	15%	0%	86
Unemployed & looking for work	0%	26%	0%	74%	0%	11
Not Employed & Not Looking	24%	37%	29%	10%	0%	29
Region of Employment						
Northern NH	29%	50%	11%	10%	0%	36
Western NH	0%	73%	27%	0%	0%	3
Central/Lakes	11%	35%	41%	13%	0%	134
Hillsborough County	14%	42%	17%	28%	0%	24
Seacoast	22%	30%	32%	16%	0%	13
Other State	26%	6%	17%	51%	0%	24
Work At Home	15%	29%	36%	20%	0%	27

Q14D: "How concerned are you about the following weather related events in your community?

Drought"

	Very Concerned	Somewhat Concerned	Not Very Concerned	Not at all Concerned	Don't Know	Number Responding
All NH Residents	10%	23%	36%	30%	0%	2932
All Central/Lakes RPC Residents	**11%**	**24%**	**36%**	**29%**	**0%**	**423**
Sex						
Male	11%	22%	35%	32%	0%	214
Female	10%	26%	37%	26%	1%	209
Age of Respondent						
18 to 29	0%	18%	58%	25%	0%	60
30 to 39	5%	10%	43%	42%	0%	59
40 to 49	10%	19%	38%	34%	0%	87
50 to 59	15%	28%	24%	32%	1%	80
60 to 69	17%	36%	29%	18%	0%	65
70 or older	16%	36%	21%	27%	1%	56
Highest Level of Education						
High school or less	9%	25%	41%	25%	0%	100
Technical school/Some college	20%	24%	31%	25%	1%	77
College graduate	6%	25%	38%	31%	0%	140
Postgraduate work	10%	24%	31%	35%	0%	100
Household Income						
Less than $20,000	12%	34%	36%	18%	0%	32
$20,000 to $39,999	11%	34%	17%	36%	1%	34
$40,000 to $59,999	11%	33%	41%	15%	0%	56
$60,000 to $90,000	10%	22%	35%	33%	0%	71
$90,001 to $160,000	6%	23%	43%	28%	0%	81
More than $160,000	5%	26%	27%	42%	0%	27
Race of Respondent						
White	10%	24%	37%	29%	0%	388
Non-White	22%	27%	8%	42%	0%	22

Q14D: "How concerned are you about the following weather related events in your community?

Drought"

	Very Concerned	Somewhat Concerned	Not Very Concerned	Not at all Concerned	Don't Know	Number Responding
All NH Residents	10%	23%	36%	30%	0%	2932
All Central/Lakes RPC Residents	**11%**	**24%**	**36%**	**29%**	**0%**	**423**
Children in Household						
No children	13%	27%	33%	26%	0%	265
One	6%	17%	47%	30%	0%	74
Two or more	8%	22%	33%	38%	0%	75
Years Lived In NH						
5 years or less	11%	24%	30%	35%	0%	21
6 to 10 years	5%	19%	37%	39%	0%	27
11 to 20 years	6%	20%	33%	40%	0%	78
20 or more years	12%	26%	36%	25%	0%	289
Employment Status						
Employed full-time	8%	20%	43%	30%	0%	203
Employed part-time	8%	12%	44%	36%	0%	52
Self-Employed	10%	36%	31%	23%	0%	35
Retired and not working	12%	41%	24%	22%	1%	86
Unemployed & looking for work	0%	37%	0%	63%	0%	11
Not Employed & Not Looking	37%	15%	23%	25%	0%	29
Region of Employment						
Northern NH	5%	18%	51%	27%	0%	36
Western NH	0%	0%	100%	0%	0%	3
Central/Lakes	8%	18%	48%	27%	0%	134
Hillsborough County	10%	9%	30%	51%	0%	24
Seacoast	6%	28%	46%	20%	0%	13
Other State	5%	16%	27%	53%	0%	24
Work At Home	7%	42%	30%	21%	0%	27

Q14E: "How concerned are you about the following weather related events in your community?

Snow or ice storms"

	Very Concerned	Somewhat Concerned	Not Very Concerned	Not at all Concerned	Don't Know	Number Responding
All NH Residents	34%	40%	14%	11%	0%	2932
All Central/Lakes RPC Residents	**28%**	**42%**	**16%**	**15%**	**0%**	**424**
Sex						
Male	22%	47%	16%	16%	0%	214
Female	34%	37%	16%	14%	0%	210
Age of Respondent						
18 to 29	43%	53%	5%	0%	0%	60
30 to 39	24%	40%	14%	22%	0%	59
40 to 49	23%	44%	19%	14%	0%	87
50 to 59	24%	41%	14%	20%	1%	81
60 to 69	37%	33%	15%	15%	0%	65
70 or older	21%	43%	19%	17%	0%	56
Highest Level of Education						
High school or less	33%	36%	13%	19%	0%	101
Technical school/Some college	39%	32%	13%	16%	0%	77
College graduate	19%	50%	18%	13%	1%	140
Postgraduate work	27%	44%	17%	12%	0%	100
Household Income						
Less than $20,000	48%	26%	17%	9%	0%	32
$20,000 to $39,999	32%	37%	10%	21%	0%	35
$40,000 to $59,999	36%	44%	10%	10%	0%	56
$60,000 to $90,000	25%	47%	14%	15%	0%	71
$90,001 to $160,000	15%	57%	13%	16%	0%	81
More than $160,000	23%	25%	22%	30%	0%	27
Race of Respondent						
White	29%	41%	15%	15%	0%	389
Non-White	22%	62%	2%	14%	0%	22

Q14E: "How concerned are you about the following weather related events in your community?

Snow or ice storms"

	Very Concerned	Somewhat Concerned	Not Very Concerned	Not at all Concerned	Don't Know	Number Responding
All NH Residents	34%	40%	14%	11%	0%	2932
All Central/Lakes RPC Residents	**28%**	**42%**	**16%**	**15%**	**0%**	**424**
Children in Household						
No children	27%	42%	16%	15%	0%	267
One	36%	31%	19%	14%	0%	74
Two or more	24%	53%	9%	14%	0%	75
Years Lived In NH						
5 years or less	13%	33%	22%	32%	0%	22
6 to 10 years	15%	61%	7%	17%	0%	27
11 to 20 years	30%	45%	10%	14%	0%	78
20 or more years	30%	40%	17%	14%	0%	290
Employment Status						
Employed full-time	24%	47%	15%	14%	0%	203
Employed part-time	37%	39%	9%	14%	0%	52
Self-Employed	19%	40%	21%	20%	0%	35
Retired and not working	29%	37%	19%	15%	0%	87
Unemployed & looking for work	26%	42%	0%	31%	0%	11
Not Employed & Not Looking	44%	32%	16%	8%	0%	29
Region of Employment						
Northern NH	46%	37%	7%	10%	0%	36
Western NH	0%	100%	0%	0%	0%	3
Central/Lakes	20%	49%	23%	8%	0%	134
Hillsborough County	21%	62%	0%	17%	0%	24
Seacoast	14%	46%	23%	16%	0%	13
Other State	33%	11%	13%	44%	0%	24
Work At Home	31%	41%	10%	19%	0%	27

Q14F: "How concerned are you about the following weather related events in your community?

Wildfires"

	Very Concerned	Somewhat Concerned	Not Very Concerned	Not at all Concerned	Don't Know	Number Responding
All NH Residents	13%	19%	35%	33%	0%	2934
All Central/Lakes RPC Residents	**15%**	**23%**	**37%**	**25%**	**0%**	**424**
Sex						
Male	15%	17%	41%	28%	0%	214
Female	15%	29%	34%	21%	0%	210
Age of Respondent						
18 to 29	7%	9%	64%	19%	0%	60
30 to 39	14%	25%	39%	22%	0%	59
40 to 49	10%	11%	47%	33%	0%	87
50 to 59	12%	27%	34%	26%	1%	81
60 to 69	19%	32%	20%	29%	0%	65
70 or older	31%	32%	21%	16%	0%	56
Highest Level of Education						
High school or less	18%	30%	29%	23%	0%	101
Technical school/Some college	22%	24%	31%	23%	0%	77
College graduate	10%	16%	52%	22%	0%	140
Postgraduate work	12%	24%	33%	32%	0%	100
Household Income						
Less than $20,000	20%	30%	37%	14%	0%	32
$20,000 to $39,999	15%	44%	20%	21%	0%	35
$40,000 to $59,999	21%	29%	40%	10%	0%	56
$60,000 to $90,000	16%	18%	38%	27%	0%	71
$90,001 to $160,000	9%	14%	53%	24%	0%	81
More than $160,000	0%	13%	25%	62%	0%	27
Race of Respondent						
White	15%	23%	38%	25%	0%	389
Non-White	12%	24%	33%	31%	0%	22

Q14F: "How concerned are you about the following weather related events in your community?

Wildfires"

	Very Concerned	Somewhat Concerned	Not Very Concerned	Not at all Concerned	Don't Know	Number Responding
All NH Residents	13%	19%	35%	33%	0%	2934
All Central/Lakes RPC Residents	**15%**	**23%**	**37%**	**25%**	**0%**	**424**
Children in Household						
No children	16%	28%	36%	20%	0%	267
One	10%	12%	51%	27%	0%	74
Two or more	13%	14%	35%	38%	0%	75
Years Lived In NH						
5 years or less	12%	38%	24%	26%	0%	22
6 to 10 years	7%	26%	24%	43%	0%	27
11 to 20 years	15%	10%	48%	28%	0%	78
20 or more years	16%	24%	38%	22%	0%	290
Employment Status						
Employed full-time	10%	18%	47%	25%	0%	203
Employed part-time	16%	19%	36%	29%	0%	52
Self-Employed	13%	25%	41%	21%	0%	35
Retired and not working	22%	33%	25%	21%	0%	87
Unemployed & looking for work	0%	51%	9%	39%	0%	11
Not Employed & Not Looking	26%	20%	30%	23%	0%	29
Region of Employment						
Northern NH	22%	34%	34%	9%	0%	36
Western NH	0%	0%	71%	29%	0%	3
Central/Lakes	11%	14%	53%	21%	0%	134
Hillsborough County	0%	23%	40%	37%	0%	24
Seacoast	17%	11%	63%	9%	0%	13
Other State	0%	22%	28%	50%	0%	24
Work At Home	17%	19%	34%	30%	0%	27

Q15: "How concerned are you about your community's level of preparedness for severe weather and storm events?" Are you very concerned …somewhat concerned …not very concerned…or not at all concerned?"

	Very Concerned	Somewhat Concerned	Not Very Concerned	Not at all Concerned	Don't Know	Number Responding
All NH Residents	12%	36%	32%	19%	1%	2928
All Central/Lakes RPC Residents	**11%**	**35%**	**33%**	**20%**	**2%**	**423**
Sex						
Male	11%	33%	34%	21%	1%	213
Female	11%	37%	31%	18%	2%	210
Age of Respondent						
18 to 29	11%	28%	44%	17%	0%	60
30 to 39	4%	35%	33%	25%	3%	59
40 to 49	13%	26%	36%	22%	2%	87
50 to 59	4%	40%	33%	21%	2%	81
60 to 69	17%	38%	30%	12%	2%	65
70 or older	19%	41%	18%	21%	1%	55
Highest Level of Education						
High school or less	14%	36%	30%	20%	0%	101
Technical school/Some college	19%	38%	21%	16%	5%	77
College graduate	5%	31%	42%	21%	1%	140
Postgraduate work	10%	35%	31%	22%	1%	100
Household Income						
Less than $20,000	33%	38%	13%	9%	6%	32
$20,000 to $39,999	12%	39%	25%	23%	1%	35
$40,000 to $59,999	12%	41%	32%	15%	0%	56
$60,000 to $90,000	9%	48%	35%	7%	0%	71
$90,001 to $160,000	5%	33%	43%	18%	0%	81
More than $160,000	10%	19%	25%	40%	6%	27
Race of Respondent						
White	12%	36%	31%	20%	2%	389
Non-White	3%	16%	51%	30%	0%	22

Q15: "How concerned are you about your community's level of preparedness for severe weather and storm events?" Are you very concerned …somewhat concerned …not very concerned…or not at all concerned?"

	Very Concerned	Somewhat Concerned	Not Very Concerned	Not at all Concerned	Don't Know	Number Responding
All NH Residents	12%	36%	32%	19%	1%	2928
All Central/Lakes RPC Residents	**11%**	**35%**	**33%**	**20%**	**2%**	**423**
Children in Household						
No children	12%	40%	26%	19%	2%	266
One	12%	28%	43%	17%	0%	74
Two or more	8%	19%	45%	26%	2%	75
Years Lived In NH						
5 years or less	7%	19%	46%	17%	10%	22
6 to 10 years	6%	19%	40%	26%	9%	27
11 to 20 years	11%	29%	40%	19%	1%	78
20 or more years	12%	38%	29%	20%	0%	289
Employment Status						
Employed full-time	8%	39%	37%	15%	0%	203
Employed part-time	7%	23%	38%	28%	4%	52
Self-Employed	9%	26%	35%	30%	0%	35
Retired and not working	16%	38%	21%	22%	2%	86
Unemployed & looking for work	6%	38%	24%	32%	0%	11
Not Employed & Not Looking	30%	21%	26%	15%	9%	29
Region of Employment						
Northern NH	1%	55%	32%	11%	0%	36
Western NH	0%	43%	0%	57%	0%	3
Central/Lakes	10%	30%	47%	12%	1%	134
Hillsborough County	7%	36%	42%	16%	0%	24
Seacoast	14%	25%	35%	26%	0%	13
Other State	4%	28%	9%	58%	0%	24
Work At Home	11%	29%	35%	23%	3%	27

Q16: "We are seeing more proposals for renewable energy projects such as large wind farms. How involved do you feel local communities should be in developing guidelines and standards for such renewable energy facilities … Very involved … somewhat involved … not very … or not at all involved?"

	Very Involved	Somewhat Involved	Not very Involved	Not at all Involved	Don't Know	Number Responding
All NH Residents	49%	38%	6%	6%	1%	2919
All Central/Lakes RPC Residents	**49%**	**38%**	**6%**	**6%**	**2%**	**421**
Sex						
Male	47%	39%	6%	6%	2%	213
Female	51%	38%	5%	5%	1%	209
Age of Respondent						
18 to 29	30%	57%	3%	2%	8%	60
30 to 39	41%	51%	0%	9%	0%	58
40 to 49	47%	37%	7%	6%	2%	87
50 to 59	55%	29%	10%	6%	1%	81
60 to 69	63%	30%	4%	2%	1%	65
70 or older	50%	35%	8%	8%	0%	56
Highest Level of Education						
High school or less	43%	39%	5%	10%	2%	101
Technical school/Some college	38%	37%	12%	10%	3%	76
College graduate	45%	45%	5%	2%	2%	140
Postgraduate work	69%	29%	1%	1%	0%	100
Household Income						
Less than $20,000	57%	33%	5%	5%	0%	32
$20,000 to $39,999	43%	39%	5%	10%	3%	35
$40,000 to $59,999	39%	43%	9%	7%	2%	56
$60,000 to $90,000	50%	43%	4%	2%	0%	71
$90,001 to $160,000	47%	43%	2%	8%	1%	81
More than $160,000	60%	22%	19%	0%	0%	27
Race of Respondent						
White	49%	38%	6%	5%	2%	387
Non-White	53%	38%	5%	4%	0%	22

Q16: "We are seeing more proposals for renewable energy projects such as large wind farms. How involved do you feel local communities should be in developing guidelines and standards for such renewable energy facilities … Very involved … somewhat involved … not very … or not at all involved?"

	Very Involved	Somewhat Involved	Not very Involved	Not at all Involved	Don't Know	Number Responding
All NH Residents	49%	38%	6%	6%	1%	2919
All Central/Lakes RPC Residents	**49%**	**38%**	**6%**	**6%**	**2%**	**421**
Children in Household						
No children	52%	32%	6%	8%	2%	267
One	43%	49%	5%	2%	1%	74
Two or more	43%	50%	5%	1%	0%	74
Years Lived In NH						
5 years or less	49%	48%	2%	0%	0%	21
6 to 10 years	65%	18%	5%	6%	6%	27
11 to 20 years	46%	48%	3%	3%	0%	78
20 or more years	48%	37%	7%	6%	2%	288
Employment Status						
Employed full-time	45%	44%	5%	5%	1%	203
Employed part-time	40%	51%	5%	1%	3%	50
Self-Employed	66%	23%	3%	8%	0%	35
Retired and not working	55%	30%	9%	5%	1%	87
Unemployed & looking for work	20%	31%	0%	17%	32%	11
Not Employed & Not Looking	61%	27%	2%	10%	0%	29
Region of Employment						
Northern NH	47%	51%	1%	1%	0%	36
Western NH	29%	71%	0%	0%	0%	3
Central/Lakes	48%	46%	3%	3%	1%	132
Hillsborough County	56%	44%	0%	0%	0%	24
Seacoast	54%	5%	10%	20%	12%	13
Other State	27%	47%	13%	12%	2%	24
Work At Home	58%	22%	9%	10%	0%	27

Q17_1: "We have discussed many issues facing New Hampshire communities. Which of the following do you think should be the TOP priority for investment of public dollars?"

Top Priority for Investment of Public Dollars

	Safe and Affordable Housing	Trans-portation System	Energy Efficiency /Choices	Environmental Protection Conservation	Economic Development	Infrast-ructure	Preparedness for weather	Other	All Equal	None	Number Responding
All NH Residents	15%	7%	18%	23%	14%	8%	6%	3%	6%	1%	2869
All Central/Lakes RPC Residents	**17%**	**7%**	**14%**	**26%**	**15%**	**6%**	**3%**	**2%**	**7%**	**1%**	**414**
Sex											
Male	13%	5%	15%	32%	16%	6%	2%	2%	8%	2%	209
Female	20%	10%	14%	21%	15%	6%	5%	3%	6%	0%	205
Age of Respondent											
18 to 29	22%	6%	7%	28%	19%	3%	0%	3%	12%	0%	60
30 to 39	9%	7%	15%	34%	14%	5%	2%	6%	7%	0%	59
40 to 49	16%	9%	11%	29%	21%	8%	3%	0%	2%	0%	87
50 to 59	17%	11%	18%	20%	16%	7%	4%	3%	1%	4%	79
60 to 69	11%	4%	17%	35%	13%	4%	5%	2%	7%	1%	62
70 or older	19%	6%	20%	17%	10%	6%	6%	1%	16%	0%	52
Highest Level of Education											
High school or less	19%	5%	10%	25%	12%	4%	4%	1%	16%	3%	94
Technical school/Some college	28%	5%	18%	20%	11%	4%	5%	0%	7%	2%	76
College graduate	12%	5%	15%	28%	20%	10%	4%	3%	4%	0%	139
Postgraduate work	10%	14%	16%	31%	16%	5%	0%	3%	4%	0%	100
Household Income											
Less than $20,000	29%	3%	7%	27%	9%	0%	5%	0%	19%	0%	32
$20,000 to $39,999	29%	2%	14%	11%	15%	9%	3%	0%	9%	7%	33
$40,000 to $59,999	22%	7%	11%	27%	11%	5%	5%	2%	11%	0%	53
$60,000 to $90,000	5%	18%	23%	25%	7%	8%	4%	6%	3%	0%	71
$90,001 to $160,000	18%	3%	15%	29%	20%	10%	1%	2%	2%	0%	81
More than $160,000	18%	8%	11%	26%	29%	0%	0%	8%	0%	0%	27
Race of Respondent											
White	17%	7%	15%	26%	16%	6%	3%	2%	7%	1%	379
Non-White	3%	23%	3%	36%	11%	8%	0%	4%	8%	4%	22

Q17_1: "We have discussed many issues facing New Hampshire communities. Which of the following do you think should be the TOP priority for investment of public dollars?"

Top Priority for Investment of Public Dollars

	Safe and Affordable Housing	Trans-portation System	Energy Efficiency /Choices	Environmental Protection Conservation	Economic Development	Infrast-ructure	Preparedness for weather	Other	All Equal	None	Number Responding
All NH Residents	15%	7%	18%	23%	14%	8%	6%	3%	6%	1%	2869
All Central/Lakes RPC Residents	**17%**	**7%**	**14%**	**26%**	**15%**	**6%**	**3%**	**2%**	**7%**	**1%**	**414**
Children in Household											
No children	19%	7%	16%	25%	15%	5%	3%	2%	7%	1%	258
One	11%	8%	20%	26%	11%	11%	4%	4%	3%	0%	72
Two or more	11%	9%	7%	32%	23%	5%	2%	1%	11%	1%	75
Years Lived In NH											
5 years or less	14%	6%	22%	23%	18%	8%	2%	0%	7%	0%	22
6 to 10 years	14%	5%	7%	39%	10%	10%	4%	0%	7%	3%	26
11 to 20 years	14%	5%	14%	33%	17%	5%	4%	0%	6%	1%	78
20 or more years	16%	8%	15%	24%	15%	6%	3%	3%	8%	1%	281
Employment Status											
Employed full-time	14%	10%	16%	28%	17%	4%	2%	3%	4%	2%	200
Employed part-time	10%	5%	11%	31%	24%	9%	2%	0%	8%	0%	51
Self-Employed	9%	3%	17%	28%	21%	7%	4%	7%	2%	2%	33
Retired and not working	17%	4%	17%	19%	10%	10%	5%	2%	16%	0%	84
Unemployed & looking for work	30%	0%	0%	55%	0%	0%	6%	0%	8%	0%	11
Not Employed & Not Looking	40%	9%	9%	16%	5%	3%	6%	0%	13%	0%	26
Region of Employment											
Northern NH	9%	8%	20%	36%	12%	1%	0%	0%	12%	3%	35
Western NH	0%	0%	0%	73%	27%	0%	0%	0%	0%	0%	3
Central/Lakes	11%	9%	14%	26%	20%	8%	3%	2%	5%	2%	133
Hillsborough County	23%	2%	11%	52%	7%	5%	0%	0%	0%	0%	24
Seacoast	28%	4%	6%	26%	16%	0%	0%	21%	0%	0%	12
Other State	4%	15%	20%	5%	45%	0%	5%	6%	0%	0%	24
Work At Home	8%	13%	19%	18%	17%	17%	4%	0%	3%	2%	24

Q17_2: "We have discussed many issues facing New Hampshire communities. Which of the following do you think should be the TOP priority for investment of public dollars?"

Second Priority for Investment of Public Dollars

	Safe and Affordable Housing	Trans-portation System	Energy Efficiency	Environmental Protection Protect	Economic Development	Infrast-ructure	Preparedness for weather	Other	All Equal	None	Number Responding
All NH Residents	11%	10%	21%	21%	12%	10%	11%	3%	1%	1%	2541
All Central/Lakes RPC Residents	**8%**	**10%**	**25%**	**22%**	**10%**	**9%**	**11%**	**3%**	**1%**	**1%**	**361**
Sex											
Male	9%	10%	23%	19%	10%	13%	11%	2%	2%	2%	178
Female	8%	10%	26%	25%	9%	6%	11%	5%	0%	1%	183
Age of Respondent											
18 to 29	5%	12%	54%	8%	4%	6%	10%	0%	0%	0%	52
30 to 39	10%	3%	34%	26%	13%	4%	10%	0%	0%	0%	51
40 to 49	14%	12%	16%	21%	10%	8%	9%	8%	3%	0%	79
50 to 59	8%	12%	15%	28%	9%	13%	7%	6%	0%	3%	71
60 to 69	7%	13%	24%	23%	7%	15%	6%	5%	0%	1%	55
70 or older	6%	7%	20%	20%	18%	5%	19%	0%	1%	5%	43
Highest Level of Education											
High school or less	9%	9%	24%	21%	11%	4%	16%	4%	0%	2%	74
Technical school/Some college	8%	13%	24%	24%	11%	8%	10%	0%	0%	1%	64
College graduate	8%	8%	24%	24%	11%	12%	8%	3%	2%	2%	129
Postgraduate work	9%	12%	29%	17%	6%	10%	11%	7%	1%	0%	91
Household Income											
Less than $20,000	2%	16%	25%	27%	7%	0%	15%	0%	0%	8%	27
$20,000 to $39,999	5%	2%	24%	14%	27%	9%	16%	4%	0%	0%	28
$40,000 to $59,999	11%	6%	32%	21%	4%	10%	13%	2%	0%	0%	46
$60,000 to $90,000	8%	7%	18%	28%	13%	3%	19%	0%	4%	0%	64
$90,001 to $160,000	7%	15%	27%	21%	6%	11%	5%	8%	0%	0%	78
More than $160,000	0%	12%	7%	39%	13%	15%	6%	9%	0%	0%	24
Race of Respondent											
White	9%	10%	24%	22%	10%	9%	11%	3%	1%	1%	334
Non-White	0%	13%	53%	16%	5%	2%	1%	9%	0%	0%	18

Q17_2: "We have discussed many issues facing New Hampshire communities. Which of the following do you think should be the TOP priority for investment of public dollars?"

Second Priority for Investment of Public Dollars

	Safe and Affordable Housing	Trans-portation System	Energy Efficiency	Environmental Protection Protect	Economic Development	Infrast-ructure	Preparedness for weather	Other	All Equal	None	Number Responding
All NH Residents	11%	10%	21%	21%	12%	10%	11%	3%	1%	1%	2541
All Central/Lakes RPC Residents	**8%**	**10%**	**25%**	**22%**	**10%**	**9%**	**11%**	**3%**	**1%**	**1%**	**361**
Children in Household											
No children	7%	11%	22%	23%	9%	10%	12%	3%	0%	2%	227
One	9%	6%	23%	28%	13%	7%	10%	4%	0%	0%	65
Two or more	12%	10%	36%	14%	7%	8%	3%	5%	4%	0%	64
Years Lived In NH											
5 years or less	21%	2%	41%	20%	2%	8%	2%	5%	0%	0%	21
6 to 10 years	2%	24%	39%	15%	11%	3%	7%	0%	0%	0%	22
11 to 20 years	4%	12%	31%	12%	14%	4%	16%	7%	0%	0%	69
20 or more years	9%	9%	21%	26%	9%	11%	10%	3%	1%	2%	243
Employment Status											
Employed full-time	10%	7%	26%	25%	8%	7%	9%	5%	1%	1%	180
Employed part-time	8%	15%	41%	9%	3%	8%	16%	0%	0%	0%	46
Self-Employed	3%	9%	19%	24%	15%	13%	15%	2%	0%	0%	30
Retired and not working	7%	12%	19%	23%	13%	7%	12%	3%	1%	4%	69
Unemployed & looking for work	0%	11%	26%	0%	7%	45%	11%	0%	0%	0%	10
Not Employed & Not Looking	11%	19%	13%	24%	18%	9%	0%	7%	0%	0%	22
Region of Employment											
Northern NH	0%	2%	27%	30%	13%	9%	16%	3%	0%	0%	30
Western NH	0%	57%	43%	0%	0%	0%	0%	0%	0%	0%	3
Central/Lakes	15%	6%	28%	20%	7%	8%	11%	2%	2%	2%	117
Hillsborough County	0%	14%	34%	11%	10%	6%	17%	7%	0%	0%	24
Seacoast	16%	0%	30%	21%	0%	21%	0%	11%	0%	0%	9
Other State	0%	10%	33%	27%	2%	11%	5%	11%	0%	0%	23
Work At Home	9%	23%	8%	35%	14%	4%	6%	0%	0%	0%	23

Q17: "We have discussed many issues facing New Hampshire communities. Which of the following do you think should be the TOP priority for investment of public dollars?"

Top 2 Combined

	Safe and Affordable Housing	Trans-portation System	Energy Efficiency	Environmental Protection Protect	Economic Development	Infrast-ructure	Preparedness for weather	Other	All Equal	None	Number Responding
All NH Residents	25%	15%	37%	42%	25%	16%	15%	5%	6%	2%	2869
All Central/Lakes RPC Residents	**24%**	**16%**	**36%**	**45%**	**24%**	**14%**	**13%**	**5%**	**8%**	**2%**	**414**
Sex											
Male	21%	13%	34%	48%	25%	16%	11%	4%	10%	4%	209
Female	27%	19%	38%	43%	22%	12%	15%	7%	6%	0%	205
Age of Respondent											
18 to 29	27%	16%	53%	36%	23%	9%	9%	3%	12%	0%	60
30 to 39	17%	10%	44%	56%	25%	8%	10%	6%	7%	0%	59
40 to 49	29%	20%	26%	48%	30%	16%	11%	7%	5%	0%	87
50 to 59	24%	22%	31%	45%	23%	19%	11%	8%	1%	6%	79
60 to 69	17%	16%	38%	56%	19%	18%	10%	6%	7%	2%	62
70 or older	23%	11%	37%	33%	24%	10%	21%	1%	18%	4%	52
Highest Level of Education											
High school or less	26%	12%	29%	42%	21%	7%	17%	5%	16%	5%	94
Technical school/Some college	35%	16%	38%	40%	21%	10%	14%	0%	7%	3%	76
College graduate	19%	12%	37%	50%	30%	20%	11%	6%	5%	2%	139
Postgraduate work	18%	25%	42%	47%	21%	14%	10%	10%	5%	0%	100
Household Income											
Less than $20,000	31%	16%	28%	50%	16%	0%	18%	0%	19%	6%	32
$20,000 to $39,999	33%	4%	34%	23%	37%	16%	17%	3%	9%	7%	33
$40,000 to $59,999	32%	12%	38%	45%	14%	14%	15%	4%	11%	0%	53
$60,000 to $90,000	12%	24%	40%	50%	19%	11%	21%	6%	7%	0%	71
$90,001 to $160,000	24%	17%	42%	49%	26%	21%	6%	9%	2%	0%	81
More than $160,000	18%	19%	17%	61%	41%	14%	5%	16%	0%	0%	27
Race of Respondent											
White	25%	15%	36%	45%	24%	14%	13%	5%	8%	2%	379
Non-White	3%	34%	48%	49%	15%	10%	1%	12%	8%	4%	22

Q17: "We have discussed many issues facing New Hampshire communities. Which of the following do you think should be the TOP priority for investment of public dollars?"

Top 2 Combined

	Safe and Affordable Housing	Trans-portation System	Energy Efficiency	Environmental Protection Protect	Economic Development	Infrast-ructure	Preparedness for weather	Other	All Equal	None	Number Responding
All NH Residents	25%	15%	37%	42%	25%	16%	15%	5%	6%	2%	2869
All Central/Lakes RPC Residents	**24%**	**16%**	**36%**	**45%**	**24%**	**14%**	**13%**	**5%**	**8%**	**2%**	**414**
Children in Household											
No children	25%	17%	35%	45%	23%	14%	14%	5%	8%	3%	258
One	19%	14%	41%	51%	23%	18%	13%	8%	3%	0%	72
Two or more	21%	17%	37%	43%	29%	11%	5%	6%	14%	1%	75
Years Lived In NH											
5 years or less	34%	8%	60%	41%	20%	15%	4%	4%	7%	0%	22
6 to 10 years	16%	26%	40%	51%	19%	13%	10%	0%	7%	3%	26
11 to 20 years	18%	16%	42%	44%	29%	9%	18%	6%	6%	1%	78
20 or more years	24%	16%	33%	46%	23%	15%	12%	6%	9%	3%	281
Employment Status											
Employed full-time	23%	17%	38%	51%	24%	11%	11%	7%	5%	3%	200
Employed part-time	17%	18%	48%	39%	26%	16%	17%	0%	8%	0%	51
Self-Employed	12%	11%	34%	50%	34%	19%	18%	8%	2%	2%	33
Retired and not working	22%	14%	33%	38%	20%	16%	15%	5%	17%	3%	84
Unemployed & looking for work	30%	11%	24%	55%	6%	41%	17%	0%	8%	0%	11
Not Employed & Not Looking	49%	25%	19%	35%	20%	10%	6%	6%	13%	0%	26
Region of Employment											
Northern NH	9%	10%	43%	61%	22%	9%	14%	2%	12%	3%	35
Western NH	0%	57%	43%	73%	27%	0%	0%	0%	0%	0%	3
Central/Lakes	24%	15%	39%	43%	26%	15%	12%	4%	7%	3%	133
Hillsborough County	23%	16%	46%	63%	17%	11%	17%	7%	0%	0%	24
Seacoast	39%	4%	27%	42%	16%	16%	0%	29%	0%	0%	12
Other State	4%	24%	52%	31%	47%	10%	10%	17%	0%	0%	24
Work At Home	16%	34%	27%	51%	31%	21%	10%	0%	3%	2%	24

NET1: "Do you have access to the internet at home?"

	Yes	No	Number Responding
All NH Residents	91%	9%	2925
All Central/Lakes RPC Residents	**93%**	**7%**	**419**
Sex			
Male	92%	8%	211
Female	93%	7%	208
Age of Respondent			
18 to 29	91%	9%	60
30 to 39	96%	4%	59
40 to 49	99%	1%	85
50 to 59	96%	4%	79
60 to 69	96%	4%	65
70 or older	73%	27%	56
Highest Level of Education			
High school or less	82%	18%	98
Technical school/Some college	87%	13%	77
College graduate	97%	3%	139
Postgraduate work	100%	0%	100
Household Income			
Less than $20,000	73%	27%	32
$20,000 to $39,999	90%	10%	32
$40,000 to $59,999	87%	13%	56
$60,000 to $90,000	96%	4%	71
$90,001 to $160,000	100%	0%	81
More than $160,000	100%	0%	25
Race of Respondent			
White	92%	8%	385
Non-White	96%	4%	22

NET1: "Do you have access to the internet at home?"

	Yes	No	Number Responding
All NH Residents	91%	9%	2925
All Central/Lakes RPC Residents	**93%**	**7%**	**419**
Children in Household			
No children	92%	8%	262
One	93%	7%	74
Two or more	97%	3%	75
Years Lived In NH			
5 years or less	90%	10%	22
6 to 10 years	94%	6%	27
11 to 20 years	92%	8%	76
20 or more years	93%	7%	287
Employment Status			
Employed full-time	99%	1%	199
Employed part-time	82%	18%	51
Self-Employed	96%	4%	35
Retired and not working	82%	18%	86
Unemployed & looking for work	89%	11%	11
Not Employed & Not Looking	100%	0%	29
Region of Employment			
Northern NH	77%	23%	36
Western NH	100%	0%	3
Central/Lakes	100%	0%	131
Hillsborough County	100%	0%	22
Seacoast	91%	9%	13
Other State	98%	2%	24
Work At Home	96%	4%	27

NET2: "Which of the following is the most important reason why you don't have internet access at home?"

	It is not available where I live	I have access at another place such as my job	It is too expensive	I don't know how to use it	I don't need it	I don't have an adequate computer	Some other reason	Don't Know	Number Responding
All NH Residents	5%	9%	20%	8%	26%	9%	21%	2%	262
All Central/Lakes RPC Residents	**15%**	**10%**	**7%**	**11%**	**29%**	**8%**	**18%**	**3%**	**31**
Sex									
Male	26%	0%	3%	11%	19%	12%	22%	5%	17
Female	0%	22%	11%	10%	40%	2%	13%	2%	14
Age of Respondent									
18 to 29	80%	0%	0%	0%	0%	0%	20%	0%	6
30 to 39	0%	0%	0%	0%	0%	43%	57%	0%	3
40 to 49	0%	0%	100%	0%	0%	0%	0%	0%	1
50 to 59	0%	10%	30%	0%	24%	0%	36%	0%	3
60 to 69	0%	45%	0%	0%	43%	13%	0%	0%	3
70 or older	0%	0%	3%	23%	48%	7%	12%	7%	14
Highest Level of Education									
High school or less	26%	3%	8%	12%	23%	0%	22%	5%	17
Technical school/Some college	0%	15%	6%	6%	38%	17%	18%	0%	10
College graduate	0%	30%	0%	20%	32%	12%	0%	7%	4
Postgraduate work	0%	0%	0%	0%	0%	100%	0%	0%	0
Household Income									
Less than $20,000	0%	0%	5%	6%	35%	6%	47%	0%	9
$20,000 to $39,999	0%	0%	15%	36%	49%	0%	0%	0%	3
$40,000 to $59,999	63%	8%	8%	15%	6%	0%	0%	0%	7
$60,000 to $90,000	0%	19%	19%	0%	47%	15%	0%	0%	3
Race of Respondent									
White	15%	10%	7%	11%	27%	8%	19%	4%	30
Non-White	0%	0%	0%	0%	100%	0%	0%	0%	1

NET2: "Which of the following is the most important reason why you don't have internet access at home?"

	It is not available where I live	I have access at another place such as my job	It is too expensive	I don't know how to use it	I don't need it	I don't have an adequate computer	Some other reason	Don't Know	Number Responding
All NH Residents	5%	9%	20%	8%	26%	9%	21%	2%	262
All Central/Lakes RPC Residents	**15%**	**10%**	**7%**	**11%**	**29%**	**8%**	**18%**	**3%**	**31**
Children in Household									
No children	0%	7%	7%	15%	37%	11%	18%	5%	22
One	89%	0%	11%	0%	0%	0%	0%	0%	5
Two or more	0%	0%	0%	0%	35%	0%	65%	0%	2
Years Lived In NH									
5 years or less	0%	0%	0%	20%	15%	0%	65%	0%	2
6 to 10 years	0%	0%	0%	46%	54%	0%	0%	0%	1
11 to 20 years	76%	0%	0%	0%	0%	6%	19%	0%	6
20 or more years	0%	8%	10%	11%	39%	11%	15%	5%	20
Employment Status									
Employed full-time	0%	25%	36%	0%	0%	39%	0%	0%	3
Employed part-time	49%	16%	0%	0%	5%	0%	29%	0%	9
Self-Employed	0%	61%	39%	0%	0%	0%	0%	0%	1
Retired and not working	0%	0%	3%	22%	49%	8%	11%	7%	15
Unemployed & looking for work	0%	0%	0%	0%	0%	0%	100%	0%	1
Region of Employment									
Northern NH	54%	22%	0%	0%	6%	0%	18%	0%	8
Central/Lakes	0%	100%	0%	0%	0%	0%	0%	0%	0
Seacoast	0%	0%	0%	0%	0%	100%	0%	0%	1
Other State	0%	0%	100%	0%	0%	0%	0%	0%	0
Work At Home	0%	0%	100%	0%	0%	0%	0%	0%	1

NET3: "What type of connection do you have to the internet at home?"

	Dialup	DSL	Cable	Fixed wireless	Cellular	Satellite	Fiber	Other	Don't Know	Number Responding
All NH Residents	1%	16%	68%	5%	2%	2%	2%	1%	3%	2646
All Central/Lakes RPC Residents	**1%**	**20%**	**63%**	**5%**	**4%**	**3%**	**1%**	**0%**	**3%**	**387**
Sex										
Male	1%	18%	68%	3%	3%	3%	1%	0%	3%	194
Female	2%	21%	57%	6%	5%	3%	2%	1%	4%	193
Age of Respondent										
18 to 29	0%	27%	51%	5%	8%	6%	0%	0%	4%	55
30 to 39	3%	20%	61%	3%	5%	0%	4%	0%	4%	56
40 to 49	0%	18%	67%	6%	3%	3%	2%	0%	1%	85
50 to 59	3%	19%	68%	5%	2%	0%	0%	1%	1%	75
60 to 69	0%	15%	68%	6%	2%	7%	1%	0%	1%	62
70 or older	4%	21%	60%	3%	2%	2%	0%	0%	7%	41
Highest Level of Education										
High school or less	2%	22%	54%	5%	7%	6%	1%	0%	3%	81
Technical school/Some college	1%	16%	62%	6%	5%	3%	0%	2%	5%	67
College graduate	2%	21%	63%	5%	3%	2%	1%	0%	3%	135
Postgraduate work	1%	18%	70%	3%	2%	3%	3%	0%	1%	100
Household Income										
Less than $20,000	0%	34%	29%	15%	19%	0%	0%	0%	3%	23
$20,000 to $39,999	2%	33%	41%	10%	0%	7%	2%	0%	5%	29
$40,000 to $59,999	0%	17%	65%	0%	8%	8%	0%	0%	3%	49
$60,000 to $90,000	2%	15%	68%	4%	3%	3%	0%	1%	4%	68
$90,001 to $160,000	0%	18%	68%	3%	2%	1%	5%	0%	3%	81
More than $160,000	0%	16%	76%	3%	3%	3%	0%	0%	0%	25
Race of Respondent										
White	1%	20%	63%	5%	4%	3%	1%	0%	3%	355
Non-White	7%	24%	64%	4%	0%	0%	0%	0%	1%	21

NET3: "What type of connection do you have to the internet at home?"

	Dialup	DSL	Cable	Fixed wireless	Cellular	Satellite	Fiber	Other	Don't Know	Number Responding
All NH Residents	1%	16%	68%	5%	2%	2%	2%	1%	3%	2646
All Central/Lakes RPC Residents	**1%**	**20%**	**63%**	**5%**	**4%**	**3%**	**1%**	**0%**	**3%**	**387**
Children in Household										
No children	1%	22%	59%	6%	5%	3%	0%	0%	2%	240
One	3%	16%	66%	4%	0%	4%	4%	0%	5%	69
Two or more	0%	16%	71%	3%	3%	2%	2%	0%	3%	73
Years Lived In NH										
5 years or less	0%	22%	67%	2%	0%	4%	0%	0%	5%	20
6 to 10 years	5%	19%	58%	0%	0%	9%	0%	0%	10%	25
11 to 20 years	1%	14%	66%	2%	5%	2%	7%	0%	4%	70
20 or more years	1%	21%	63%	6%	4%	3%	0%	0%	1%	266
Employment Status										
Employed full-time	1%	18%	61%	7%	7%	3%	2%	0%	2%	196
Employed part-time	0%	19%	67%	7%	0%	5%	0%	2%	0%	42
Self-Employed	7%	40%	49%	1%	0%	2%	0%	0%	0%	34
Retired and not working	1%	14%	70%	2%	3%	3%	1%	0%	6%	71
Unemployed & looking for work	7%	27%	55%	0%	0%	12%	0%	0%	0%	9
Not Employed & Not Looking	0%	20%	72%	0%	0%	0%	0%	0%	8%	29
Region of Employment										
Northern NH	1%	17%	56%	8%	10%	3%	0%	4%	0%	28
Western NH	0%	43%	57%	0%	0%	0%	0%	0%	0%	3
Central/Lakes	0%	16%	61%	8%	5%	3%	3%	0%	3%	131
Hillsborough County	0%	35%	57%	8%	0%	0%	0%	0%	0%	22
Seacoast	0%	0%	71%	0%	16%	13%	0%	0%	0%	12
Other State	6%	32%	52%	4%	3%	3%	0%	0%	0%	24
Work At Home	0%	34%	64%	2%	0%	0%	0%	0%	0%	26

NET3A: "If you are on dialup or satellite, why?"

	Only option available	Too costly to change	Too much effort to change	Learning curve is too steep	I don't know what other options are available	Other	Don't Know	Number Responding
All NH Residents	26%	9%	2%	2%	2%	10%	49%	158
All Central/Lakes RPC Residents	24%	1%	7%	7%	11%	12%	38%	28
Sex								
Male	30%	3%	17%	0%	0%	13%	36%	12
Female	19%	0%	0%	12%	19%	11%	39%	16
Age of Respondent								
18 to 29	33%	0%	27%	0%	0%	0%	40%	6
30 to 39	0%	0%	0%	36%	0%	0%	64%	4
40 to 49	73%	0%	0%	0%	0%	0%	27%	3
50 to 59	0%	0%	0%	0%	47%	21%	31%	3
60 to 69	38%	0%	0%	0%	29%	16%	18%	5
70 or older	8%	8%	12%	10%	0%	18%	43%	5
Highest Level of Education								
High school or less	32%	0%	0%	0%	33%	9%	26%	9
Technical school/Some college	9%	0%	28%	9%	0%	0%	55%	5
College graduate	22%	4%	0%	17%	0%	18%	40%	9
Postgraduate work	37%	0%	14%	0%	0%	27%	23%	4
Household Income								
Less than $20,000	0%	0%	0%	0%	0%	0%	100%	1
$20,000 to $39,999	0%	0%	0%	0%	0%	72%	28%	4
$40,000 to $59,999	47%	0%	0%	0%	28%	0%	25%	5
$60,000 to $90,000	32%	0%	0%	25%	0%	0%	43%	6
$90,001 to $160,000	27%	0%	0%	0%	0%	0%	73%	3
More than $160,000	100%	0%	0%	0%	0%	0%	0%	1
Race of Respondent								
White	27%	2%	8%	8%	6%	14%	36%	25
Non-White	0%	0%	0%	0%	87%	0%	13%	2

NET3A: "If you are on dialup or satellite, why?"

	Only option available	Too costly to change	Too much effort to change	Learning curve is too steep	I don't know what other options are available	Other	Don't Know	Number Responding
All NH Residents	26%	9%	2%	2%	2%	10%	49%	158
All Central/Lakes RPC Residents	24%	1%	7%	7%	11%	12%	38%	28
Children in Household								
No children	27%	2%	14%	3%	10%	18%	26%	15
One	32%	0%	0%	18%	0%	9%	41%	8
Two or more	0%	0%	0%	0%	37%	0%	63%	4
Years Lived In NH								
5 years or less	0%	0%	0%	0%	0%	45%	55%	2
6 to 10 years	12%	0%	26%	8%	0%	12%	43%	6
11 to 20 years	0%	0%	12%	0%	0%	24%	64%	5
20 or more years	42%	3%	0%	10%	21%	6%	19%	14
Employment Status								
Employed full-time	54%	0%	0%	0%	14%	0%	32%	11
Employed part-time	23%	0%	77%	0%	0%	0%	0%	2
Self-Employed	12%	0%	18%	45%	0%	26%	0%	3
Retired and not working	0%	6%	0%	7%	23%	12%	52%	7
Unemployed & looking for work	0%	0%	0%	0%	0%	100%	0%	2
Not Employed & Not Looking	0%	0%	0%	0%	0%	0%	100%	2
Region of Employment								
Northern NH	100%	0%	0%	0%	0%	0%	0%	1
Central/Lakes	56%	0%	0%	0%	0%	0%	44%	8
Seacoast	0%	0%	100%	0%	0%	0%	0%	2
Other State	32%	0%	0%	68%	0%	0%	0%	2

NET5: "Why are you using your current provider?"

	I'm happy with current provider	Only option available	Too costly to change	Too much effort to change	I don't know what other options are available	Other	Don't Know	Number Responding
All NH Residents	22%	39%	5%	3%	2%	23%	6%	2631
All Central/Lakes RPC Residents	**19%**	**49%**	**4%**	**3%**	**2%**	**20%**	**3%**	**382**
Sex								
Male	21%	49%	3%	4%	1%	21%	1%	190
Female	18%	48%	5%	2%	3%	20%	5%	192
Age of Respondent								
18 to 29	23%	43%	10%	6%	0%	19%	0%	55
30 to 39	13%	59%	3%	0%	0%	18%	7%	56
40 to 49	19%	52%	2%	5%	4%	18%	0%	85
50 to 59	27%	40%	3%	3%	2%	22%	2%	74
60 to 69	13%	62%	3%	1%	3%	19%	0%	62
70 or older	25%	34%	6%	2%	1%	20%	13%	40
Highest Level of Education								
High school or less	27%	43%	4%	3%	6%	16%	2%	81
Technical school/Some college	16%	39%	6%	5%	1%	30%	4%	66
College graduate	19%	51%	3%	4%	1%	19%	3%	133
Postgraduate work	17%	57%	5%	0%	0%	18%	2%	99
Household Income								
Less than $20,000	43%	26%	4%	3%	0%	21%	3%	23
$20,000 to $39,999	20%	53%	5%	2%	1%	15%	4%	29
$40,000 to $59,999	20%	48%	2%	2%	6%	22%	1%	49
$60,000 to $90,000	13%	50%	3%	4%	3%	19%	7%	68
$90,001 to $160,000	17%	57%	1%	2%	2%	18%	3%	81
More than $160,000	22%	51%	0%	0%	0%	26%	0%	25
Race of Respondent								
White	20%	48%	4%	3%	2%	20%	3%	351
Non-White	16%	60%	5%	5%	0%	11%	3%	21

NET5: "Why are you using your current provider?"

	I'm happy with current provider	Only option available	Too costly to change	Too much effort to change	I don't know what other options are available	Other	Don't Know	Number Responding
All NH Residents	22%	39%	5%	3%	2%	23%	6%	2631
All Central/Lakes RPC Residents	**19%**	**49%**	**4%**	**3%**	**2%**	**20%**	**3%**	**382**
Children in Household								
No children	18%	50%	4%	3%	1%	21%	3%	238
One	19%	53%	5%	5%	2%	15%	1%	69
Two or more	25%	43%	5%	0%	4%	19%	4%	71
Years Lived In NH								
5 years or less	34%	45%	3%	2%	0%	13%	3%	20
6 to 10 years	26%	18%	10%	0%	0%	29%	17%	24
11 to 20 years	12%	61%	8%	4%	2%	11%	1%	70
20 or more years	20%	49%	2%	3%	2%	22%	2%	263
Employment Status								
Employed full-time	20%	53%	2%	3%	2%	18%	3%	194
Employed part-time	19%	35%	14%	9%	0%	21%	2%	42
Self-Employed	18%	49%	1%	3%	4%	23%	0%	34
Retired and not working	21%	42%	4%	1%	3%	21%	6%	69
Unemployed & looking for work	0%	38%	7%	0%	0%	55%	0%	9
Not Employed & Not Looking	21%	56%	6%	0%	0%	17%	0%	29
Region of Employment								
Northern NH	1%	74%	8%	3%	0%	14%	0%	28
Western NH	29%	43%	0%	27%	0%	0%	0%	3
Central/Lakes	23%	49%	1%	4%	1%	19%	3%	131
Hillsborough County	38%	50%	0%	0%	0%	13%	0%	22
Seacoast	10%	20%	13%	0%	12%	40%	6%	12
Other State	21%	37%	16%	10%	0%	16%	0%	24
Work At Home	9%	49%	2%	4%	6%	22%	8%	26

NET6: "What is your monthly internet bill?"

	Less than $20	$20-49	$50-99	$100 or more	Don't Know	Number Responding
All NH Residents	3%	25%	29%	24%	19%	2590
All Central/Lakes RPC Residents	**3%**	**26%**	**29%**	**20%**	**22%**	**381**
Sex						
Male	2%	27%	25%	19%	26%	189
Female	5%	24%	33%	21%	17%	192
Age of Respondent						
18 to 29	0%	35%	33%	14%	19%	55
30 to 39	10%	29%	31%	17%	13%	56
40 to 49	4%	28%	29%	12%	28%	85
50 to 59	3%	25%	30%	29%	13%	75
60 to 69	2%	12%	28%	32%	26%	60
70 or older	1%	25%	25%	19%	31%	39
Highest Level of Education						
High school or less	2%	32%	28%	13%	26%	80
Technical school/Some college	1%	31%	28%	15%	25%	65
College graduate	7%	21%	27%	27%	18%	134
Postgraduate work	1%	24%	34%	20%	21%	100
Household Income						
Less than $20,000	6%	51%	23%	8%	12%	23
$20,000 to $39,999	2%	29%	21%	25%	23%	29
$40,000 to $59,999	3%	28%	41%	23%	5%	49
$60,000 to $90,000	10%	26%	31%	14%	19%	68
$90,001 to $160,000	3%	21%	30%	23%	23%	81
More than $160,000	3%	28%	19%	27%	23%	25
Race of Respondent						
White	3%	26%	28%	20%	22%	352
Non-White	5%	22%	48%	16%	9%	20

NET6: "What is your monthly internet bill?"

	Less than $20	$20-49	$50-99	$100 or more	Don't Know	Number Responding
All NH Residents	3%	25%	29%	24%	19%	2590
All Central/Lakes RPC Residents	**3%**	**26%**	**29%**	**20%**	**22%**	**381**
Children in Household						
No children	3%	28%	24%	23%	21%	236
One	1%	28%	38%	6%	27%	69
Two or more	6%	18%	36%	23%	17%	73
Years Lived In NH						
5 years or less	0%	25%	27%	12%	36%	20
6 to 10 years	13%	15%	29%	12%	31%	24
11 to 20 years	5%	21%	38%	16%	20%	69
20 or more years	2%	28%	27%	23%	20%	265
Employment Status						
Employed full-time	4%	27%	31%	20%	18%	196
Employed part-time	0%	17%	33%	20%	30%	42
Self-Employed	6%	36%	34%	13%	11%	33
Retired and not working	2%	18%	24%	23%	33%	68
Unemployed & looking for work	7%	62%	9%	22%	0%	9
Not Employed & Not Looking	6%	30%	19%	25%	20%	29
Region of Employment						
Northern NH	0%	42%	21%	23%	14%	27
Western NH	0%	27%	29%	43%	0%	3
Central/Lakes	4%	24%	34%	16%	22%	131
Hillsborough County	0%	19%	42%	24%	15%	22
Seacoast	20%	22%	28%	17%	13%	12
Other State	0%	35%	39%	9%	17%	24
Work At Home	7%	23%	27%	23%	20%	26

NET7: "Do you pay for a bundled service (internet, TV, phone)?"

	Yes	No	Don't Know	Number Responding
All NH Residents	76%	22%	2%	2624
All Central/Lakes RPC Residents	**76%**	**23%**	**1%**	**384**
Sex				
Male	78%	20%	2%	190
Female	73%	26%	0%	194
Age of Respondent				
18 to 29	62%	34%	4%	55
30 to 39	75%	25%	0%	56
40 to 49	70%	30%	0%	85
50 to 59	86%	14%	0%	75
60 to 69	89%	11%	0%	61
70 or older	77%	20%	3%	40
Highest Level of Education				
High school or less	75%	24%	0%	81
Technical school/Some college	69%	27%	4%	67
College graduate	81%	19%	0%	134
Postgraduate work	75%	25%	0%	100
Household Income				
Less than $20,000	47%	51%	2%	23
$20,000 to $39,999	89%	11%	0%	29
$40,000 to $59,999	78%	21%	1%	48
$60,000 to $90,000	71%	29%	0%	68
$90,001 to $160,000	80%	17%	3%	81
More than $160,000	89%	11%	0%	25
Race of Respondent				
White	77%	22%	1%	353
Non-White	63%	37%	0%	21

NET7: "Do you pay for a bundled service (internet, TV, phone)?"

	Yes	No	Don't Know	Number Responding
All NH Residents	76%	22%	2%	2624
All Central/Lakes RPC Residents	**76%**	**23%**	**1%**	**384**
Children in Household				
No children	80%	20%	1%	238
One	71%	25%	3%	69
Two or more	69%	31%	0%	73
Years Lived In NH				
5 years or less	93%	7%	0%	20
6 to 10 years	87%	11%	2%	24
11 to 20 years	59%	38%	4%	70
20 or more years	79%	21%	0%	266
Employment Status				
Employed full-time	73%	27%	0%	196
Employed part-time	83%	17%	0%	42
Self-Employed	70%	30%	0%	34
Retired and not working	84%	14%	2%	69
Unemployed & looking for work	81%	19%	0%	9
Not Employed & Not Looking	74%	18%	8%	29
Region of Employment				
Northern NH	64%	36%	0%	28
Western NH	73%	27%	0%	3
Central/Lakes	72%	28%	0%	130
Hillsborough County	88%	12%	0%	22
Seacoast	72%	28%	0%	12
Other State	66%	34%	0%	24
Work At Home	70%	30%	0%	26

NET8A: "Do you use the Internet to check your email at home?"
IF YES: "Is the speed of your internet connection too slow, or is the speed of your internet connection adequate for this?"

	Do not check email at home	Do, but connection speed is slow	Do, and connection speed is adequate	Don't Know	Number Responding
All NH Residents	4%	5%	90%	1%	2622
All Central/Lakes RPC Residents	**5%**	**6%**	**89%**	**0%**	**382**
Sex					
Male	6%	5%	89%	0%	190
Female	3%	7%	89%	0%	192
Age of Respondent					
18 to 29	3%	7%	90%	0%	55
30 to 39	2%	3%	95%	0%	56
40 to 49	6%	3%	91%	0%	85
50 to 59	5%	3%	91%	1%	75
60 to 69	5%	10%	85%	0%	61
70 or older	9%	11%	79%	1%	39
Highest Level of Education					
High school or less	10%	6%	84%	0%	80
Technical school/Some college	9%	11%	80%	0%	66
College graduate	1%	3%	95%	1%	134
Postgraduate work	3%	4%	92%	1%	98
Household Income					
Less than $20,000	2%	12%	86%	0%	23
$20,000 to $39,999	3%	23%	74%	0%	29
$40,000 to $59,999	6%	4%	90%	0%	48
$60,000 to $90,000	3%	1%	96%	0%	68
$90,001 to $160,000	5%	4%	91%	0%	81
More than $160,000	3%	0%	97%	0%	25
Race of Respondent					
White	5%	6%	89%	0%	351
Non-White	6%	2%	92%	0%	21

NET8A: "Do you use the Internet to check your email at home?"
IF YES: "Is the speed of your internet connection too slow, or is the speed of your internet connection adequate for this?"

	Do not check email at home	Do, but connection speed is slow	Do, and connection speed is adequate	Don't Know	Number Responding
All NH Residents	4%	5%	90%	1%	2622
All Central/Lakes RPC Residents	**5%**	**6%**	**89%**	**0%**	**382**
Children in Household					
No children	6%	6%	88%	1%	236
One	4%	5%	91%	0%	69
Two or more	3%	4%	93%	0%	73
Years Lived In NH					
5 years or less	4%	4%	91%	0%	19
6 to 10 years	6%	3%	91%	0%	24
11 to 20 years	4%	0%	96%	0%	70
20 or more years	5%	7%	87%	0%	264
Employment Status					
Employed full-time	3%	5%	91%	0%	196
Employed part-time	4%	7%	89%	0%	42
Self-Employed	6%	1%	93%	0%	34
Retired and not working	11%	11%	78%	1%	68
Unemployed & looking for work	0%	0%	100%	0%	9
Not Employed & Not Looking	5%	0%	95%	0%	29
Region of Employment					
Northern NH	0%	3%	97%	0%	28
Western NH	0%	0%	100%	0%	3
Central/Lakes	4%	3%	93%	0%	131
Hillsborough County	0%	14%	86%	0%	22
Seacoast	25%	16%	59%	0%	12
Other State	5%	3%	92%	0%	24
Work At Home	1%	2%	97%	0%	26

NET8B: "Do you use the internet to shop on-line at home?"
IF YES: "Is the speed of your internet connection too slow, or is the speed of your internet connection adequate for this?"

	Do not shop online at home	Do, but connection speed is slow	Do, and connection speed is adequate	Don't Know	Number Responding
All NH Residents	19%	5%	75%	0%	2622
All Central/Lakes RPC Residents	**23%**	**4%**	**72%**	**0%**	**382**
Sex					
Male	23%	2%	74%	0%	191
Female	23%	7%	70%	0%	191
Age of Respondent					
18 to 29	16%	3%	81%	0%	55
30 to 39	21%	5%	74%	0%	56
40 to 49	27%	2%	71%	0%	85
50 to 59	22%	6%	71%	1%	74
60 to 69	15%	7%	78%	0%	61
70 or older	46%	1%	52%	1%	39
Highest Level of Education					
High school or less	45%	5%	50%	0%	79
Technical school/Some college	20%	5%	74%	0%	66
College graduate	21%	3%	76%	1%	134
Postgraduate work	12%	4%	84%	1%	98
Household Income					
Less than $20,000	54%	7%	39%	0%	23
$20,000 to $39,999	48%	11%	40%	0%	28
$40,000 to $59,999	22%	7%	71%	0%	48
$60,000 to $90,000	17%	3%	80%	0%	68
$90,001 to $160,000	11%	4%	85%	0%	81
More than $160,000	3%	0%	97%	0%	25
Race of Respondent					
White	23%	4%	72%	0%	350
Non-White	28%	5%	68%	0%	21

NET8B: "Do you use the internet to shop on-line at home?"
IF YES: "Is the speed of your internet connection too slow, or is the speed of your internet connection adequate for this?"

	Do not shop online at home	Do, but connection speed is slow	Do, and connection speed is adequate	Don't Know	Number Responding
All NH Residents	19%	5%	75%	0%	2622
All Central/Lakes RPC Residents	**23%**	**4%**	**72%**	**0%**	**382**
Children in Household					
No children	26%	6%	67%	1%	235
One	20%	1%	79%	0%	69
Two or more	19%	1%	80%	0%	73
Years Lived In NH					
5 years or less	18%	0%	82%	0%	18
6 to 10 years	10%	3%	87%	0%	24
11 to 20 years	19%	0%	81%	0%	70
20 or more years	26%	6%	68%	0%	264
Employment Status					
Employed full-time	19%	5%	76%	0%	196
Employed part-time	20%	4%	76%	0%	42
Self-Employed	41%	1%	58%	0%	34
Retired and not working	30%	4%	66%	1%	67
Unemployed & looking for work	37%	7%	56%	0%	9
Not Employed & Not Looking	19%	3%	78%	0%	29
Region of Employment					
Northern NH	9%	22%	69%	0%	28
Western NH	27%	0%	73%	0%	3
Central/Lakes	21%	3%	76%	0%	131
Hillsborough County	18%	2%	80%	0%	22
Seacoast	42%	0%	58%	0%	12
Other State	13%	3%	84%	0%	24
Work At Home	19%	0%	81%	0%	26

NET8C: "Do you use the internet to watch on-line video, such as on YouTube or NetFlix at home?"
IF YES: "Is the speed of your internet connection too slow, or is the speed of your internet connection adequate for this?"

	Do not watch online video at home	Do, but connection speed is slow	Do, and connection speed is adequate	Don't Know	Number Responding
All NH Residents	37%	10%	53%	1%	2622
All Central/Lakes RPC Residents	**36%**	**7%**	**57%**	**0%**	**382**
Sex					
Male	30%	8%	62%	0%	191
Female	43%	5%	52%	0%	191
Age of Respondent					
18 to 29	3%	3%	93%	0%	55
30 to 39	16%	14%	69%	0%	56
40 to 49	35%	7%	58%	0%	85
50 to 59	35%	5%	58%	1%	74
60 to 69	54%	5%	40%	0%	61
70 or older	77%	2%	19%	1%	39
Highest Level of Education					
High school or less	42%	5%	53%	0%	79
Technical school/Some college	43%	7%	50%	0%	66
College graduate	30%	4%	65%	1%	134
Postgraduate work	35%	9%	55%	1%	98
Household Income					
Less than $20,000	27%	9%	64%	0%	23
$20,000 to $39,999	44%	11%	45%	0%	28
$40,000 to $59,999	49%	7%	44%	0%	48
$60,000 to $90,000	21%	6%	73%	0%	68
$90,001 to $160,000	29%	8%	63%	0%	81
More than $160,000	31%	0%	69%	0%	25
Race of Respondent					
White	36%	6%	57%	0%	350
Non-White	39%	8%	53%	0%	21

NET8C: "Do you use the internet to watch on-line video, such as on YouTube or NetFlix at home?"
IF YES: "Is the speed of your internet connection too slow, or is the speed of your internet connection adequate for this?"

	Do not watch online video at home	Do, but connection speed is slow	Do, and connection speed is adequate	Don't Know	Number Responding
All NH Residents	37%	10%	53%	1%	2622
All Central/Lakes RPC Residents	**36%**	**7%**	**57%**	**0%**	**382**
Children in Household					
No children	44%	4%	51%	1%	235
One	22%	14%	63%	0%	69
Two or more	25%	4%	71%	0%	73
Years Lived In NH					
5 years or less	21%	8%	72%	0%	18
6 to 10 years	31%	3%	67%	0%	24
11 to 20 years	23%	5%	72%	0%	70
20 or more years	41%	7%	51%	0%	264
Employment Status					
Employed full-time	26%	8%	66%	0%	196
Employed part-time	25%	2%	72%	0%	42
Self-Employed	44%	9%	47%	0%	34
Retired and not working	70%	2%	26%	1%	67
Unemployed & looking for work	19%	7%	74%	0%	9
Not Employed & Not Looking	37%	8%	54%	0%	29
Region of Employment					
Northern NH	38%	9%	52%	0%	28
Western NH	43%	0%	57%	0%	3
Central/Lakes	27%	5%	67%	0%	131
Hillsborough County	16%	12%	73%	0%	22
Seacoast	41%	0%	59%	0%	12
Other State	18%	3%	79%	0%	24
Work At Home	30%	9%	60%	0%	26

NET8D: "Do you use the internet to connect to other computers using VPN at home?"
IF YES: "Is the speed of your internet connection too slow, or is the speed of your internet connection adequate for this?"

	Do not connect to other computers at home	Do, but connection speed is slow	Do, and connection speed is adequate	Don't Know	Number Responding
All NH Residents	66%	4%	27%	2%	2612
All Central/Lakes RPC Residents	**72%**	**3%**	**22%**	**3%**	**381**
Sex					
Male	67%	3%	27%	2%	190
Female	78%	2%	16%	4%	191
Age of Respondent					
18 to 29	73%	0%	27%	0%	55
30 to 39	79%	0%	21%	0%	55
40 to 49	64%	6%	28%	2%	85
50 to 59	67%	1%	26%	6%	74
60 to 69	76%	5%	14%	5%	61
70 or older	81%	0%	11%	8%	39
Highest Level of Education					
High school or less	82%	2%	14%	2%	79
Technical school/Some college	76%	4%	15%	4%	66
College graduate	72%	1%	27%	1%	134
Postgraduate work	63%	2%	27%	7%	97
Household Income					
Less than $20,000	87%	4%	4%	4%	23
$20,000 to $39,999	92%	0%	8%	0%	28
$40,000 to $59,999	90%	0%	7%	3%	48
$60,000 to $90,000	70%	3%	27%	0%	68
$90,001 to $160,000	52%	7%	35%	7%	80
More than $160,000	48%	0%	52%	0%	25
Race of Respondent					
White	73%	2%	22%	3%	348
Non-White	62%	5%	30%	3%	21

NET8D: "Do you use the internet to connect to other computers using VPN at home?"
IF YES: "Is the speed of your internet connection too slow, or is the speed of your internet connection adequate for this?"

	Do not connect to other computers at home	Do, but connection speed is slow	Do, and connection speed is adequate	Don't Know	Number Responding
All NH Residents	66%	4%	27%	2%	2612
All Central/Lakes RPC Residents	**72%**	**3%**	**22%**	**3%**	**381**
Children in Household					
No children	74%	3%	18%	5%	235
One	66%	1%	30%	3%	69
Two or more	74%	0%	26%	0%	71
Years Lived In NH					
5 years or less	73%	0%	27%	0%	18
6 to 10 years	72%	0%	28%	0%	23
11 to 20 years	78%	1%	19%	1%	70
20 or more years	71%	3%	22%	4%	264
Employment Status					
Employed full-time	65%	2%	30%	2%	195
Employed part-time	77%	3%	17%	4%	42
Self-Employed	80%	2%	15%	2%	34
Retired and not working	85%	1%	8%	5%	67
Unemployed & looking for work	56%	0%	35%	9%	9
Not Employed & Not Looking	82%	3%	9%	5%	29
Region of Employment					
Northern NH	79%	3%	18%	0%	28
Western NH	57%	0%	43%	0%	3
Central/Lakes	68%	0%	29%	3%	131
Hillsborough County	77%	0%	23%	0%	21
Seacoast	59%	0%	28%	13%	12
Other State	50%	8%	40%	3%	24
Work At Home	74%	8%	19%	0%	26

NET9: "Overall, do you consider your internet connection at home to be adequate for your uses?"

	Yes	No	Don't Know	Number Responding
All NH Residents	92%	7%	1%	2630
All Central/Lakes RPC Residents	**91%**	**8%**	**1%**	**383**
Sex				
Male	92%	7%	1%	191
Female	90%	9%	1%	193
Age of Respondent				
18 to 29	97%	3%	0%	55
30 to 39	91%	9%	0%	55
40 to 49	88%	11%	1%	85
50 to 59	92%	7%	1%	74
60 to 69	89%	11%	0%	62
70 or older	89%	8%	3%	40
Highest Level of Education				
High school or less	89%	9%	2%	79
Technical school/Some college	91%	9%	0%	67
College graduate	94%	5%	1%	134
Postgraduate work	89%	10%	1%	98
Household Income				
Less than $20,000	93%	7%	0%	23
$20,000 to $39,999	79%	18%	3%	28
$40,000 to $59,999	96%	2%	2%	48
$60,000 to $90,000	93%	7%	0%	68
$90,001 to $160,000	89%	11%	0%	80
More than $160,000	95%	5%	0%	25
Race of Respondent				
White	92%	7%	1%	350
Non-White	80%	20%	0%	21

NET9: "Overall, do you consider your internet connection at home to be adequate for your uses?"

	Yes	No	Don't Know	Number Responding
All NH Residents	92%	7%	1%	2630
All Central/Lakes RPC Residents	**91%**	**8%**	**1%**	**383**
Children in Household				
No children	91%	8%	1%	237
One	85%	14%	1%	69
Two or more	98%	2%	0%	71
Years Lived In NH				
5 years or less	92%	4%	4%	19
6 to 10 years	97%	3%	0%	23
11 to 20 years	95%	5%	0%	70
20 or more years	90%	10%	1%	266
Employment Status				
Employed full-time	91%	9%	0%	195
Employed part-time	93%	5%	2%	42
Self-Employed	94%	6%	0%	34
Retired and not working	90%	8%	2%	68
Unemployed & looking for work	93%	7%	0%	9
Not Employed & Not Looking	88%	12%	0%	29
Region of Employment				
Northern NH	90%	10%	0%	28
Western NH	100%	0%	0%	3
Central/Lakes	93%	6%	1%	131
Hillsborough County	85%	11%	4%	21
Seacoast	100%	0%	0%	12
Other State	89%	11%	0%	24
Work At Home	93%	7%	0%	26

NET10: "How much more (if any) would you be willing to pay for faster internet speeds?"

	Nothing	25% more per month	50% more per month	Don't Know	Number Responding
All NH Residents	85%	11%	2%	3%	2622
All Central/Lakes RPC Residents	**88%**	**9%**	**1%**	**1%**	**380**
Sex					
Male	88%	11%	0%	1%	190
Female	88%	8%	2%	1%	191
Age of Respondent					
18 to 29	75%	19%	3%	3%	55
30 to 39	81%	12%	5%	1%	55
40 to 49	97%	1%	1%	1%	85
50 to 59	88%	11%	0%	1%	74
60 to 69	93%	7%	0%	0%	62
70 or older	86%	12%	0%	2%	39
Highest Level of Education					
High school or less	88%	6%	4%	2%	79
Technical school/Some college	88%	10%	0%	2%	67
College graduate	84%	13%	1%	1%	134
Postgraduate work	93%	6%	1%	0%	96
Household Income					
Less than $20,000	88%	7%	0%	5%	23
$20,000 to $39,999	95%	5%	0%	0%	27
$40,000 to $59,999	88%	4%	6%	2%	48
$60,000 to $90,000	89%	11%	0%	0%	68
$90,001 to $160,000	83%	14%	3%	0%	80
More than $160,000	94%	6%	0%	0%	24
Race of Respondent					
White	88%	9%	2%	1%	349
Non-White	88%	12%	0%	0%	21

NET10: "How much more (if any) would you be willing to pay for faster internet speeds?"

	Nothing	25% more per month	50% more per month	Don't Know	Number Responding
All NH Residents	85%	11%	2%	3%	2622
All Central/Lakes RPC Residents	**88%**	**9%**	**1%**	**1%**	**380**
Children in Household					
No children	87%	10%	2%	2%	235
One	84%	14%	1%	1%	69
Two or more	96%	4%	0%	0%	71
Years Lived In NH					
5 years or less	90%	10%	0%	0%	19
6 to 10 years	90%	4%	0%	7%	23
11 to 20 years	83%	14%	1%	2%	70
20 or more years	89%	9%	2%	1%	264
Employment Status					
Employed full-time	88%	8%	2%	1%	195
Employed part-time	82%	15%	0%	4%	42
Self-Employed	86%	12%	2%	0%	34
Retired and not working	89%	9%	0%	1%	66
Unemployed & looking for work	100%	0%	0%	0%	9
Not Employed & Not Looking	91%	9%	0%	0%	28
Region of Employment					
Northern NH	80%	10%	10%	0%	28
Western NH	100%	0%	0%	0%	3
Central/Lakes	90%	7%	1%	1%	131
Hillsborough County	85%	15%	0%	0%	21
Seacoast	81%	6%	0%	13%	12
Other State	79%	21%	0%	0%	24
Work At Home	79%	18%	3%	0%	26

Appendix B: Open-Ended Responses

Q1 "How would you classify the neighborhood where you live? Would you say you live in a downtown or town center ... a neighborhood close to your town center ... a neighborhood away from your town center ... or in a rural location away from other development?" (Other Responses)

Town	Description
Ossipee	All of the above
Concord	Business section, but not the center of town
Concord	Family Oriented town
Moultonborough	Island on a lake
Pembroke	It's a nice neighborhood
Concord	Lives in a retirement home away from the town center
Tamworth	Village center

Q12 "Which of the following things should be actively encouraged in your community?" (Other Responses)

- Alternative energy sources
- Art and music in school
- Attracting younger people to work in existing factories
- Bike trails connecting towns
- Community Gardens
- Education is probably my thing
- Expanding beach access
- Four seasonal recreation
- he'd like to see lower taxes
- higher tax on cigarettes, gas, sales tax and income tax
- Mainly sidewalks and bike paths - Commute now is slightly/ very dangerous
- Mandatory single stream recycling; increased focus on preventing domestic violence
- More trails, but for noiseless activities like walking or biking, not vehicles like ATVs.
- Natural energy resources
- Preserving lakes. reducing housing around lakes.
- preserving the farm lands that are currently here
- Private Landowners rights
- Property owners rights
- recreational indoor/community centers
- support community-based family-run businesses; no big box stores
- we are missing out on biking. Need biking trails in NH
- We need a new Community Center, the current one is falling apart-intergenerational Community Center

Q17 "We have discussed many issues facing New Hampshire communities. Which of the following do you think should be the TOP priority for investment of public dollars?" (Other Responses)

- Agriculture and Marine Protection
- budgets
- choice 5 6 and 7
- Economy
- Education
- Education
- Education
- education
- Education and Aid for Seniors and Developmentally Challenged Individuals
- education system
- farmers be more organic, small businesses
- I think New Hampshire's public school funding through local taxes is difficult for Communities, need more funding from the State and Federal levels.
- maintenance of roads
- Other
- preserving open space and wild land
- public safety, for police to put criminals away
- School systems
- Schools
- Sustainable development

Net2 "Which of the following is the most important reason why you don't have internet access at home?" (Other Responses)

- court ordered can't have it
- Does not own computer AND too expensive
- Have it on phone
- I don't care to share.
- I had it and did not like it
- I just don't use it.

Net 3A "If you are on dialup or satellite, why?" (Other Responses)

- cause it works (most of the time)
- Fairpoint is the only option and it doesn't work well
- Just access
- less expensive and just as good

Net4 "Who is your current provider? " (Other Responses)

- AOL (1)
- AT&T (2)
- Broadband (2)
- ChanceCom (1)
- Ciber Pine (1)
- Comcast (119)
- DDS (1)
- Direct TV (1)
- Dish Network (2)
- Earthlink (2)
- Fairpoint (32)
- Fios (3)
- Granite State (3)
- GSI Net (2)
- HughesNet (1)
- Metrocast (94)
- MSN
- NetZero (3)
- PBS (1)
- PDS Telecom (1)
- Phone Company (1)
- Preferred One (1)
- Roadrunner (2)

- Segtel (1)
- Straight-Talk (1)
- Tamworth Wireless (1)
- TBS (2)
- TDF (2)
- TDS (24)
- Telecom (2)
- Time Warner (33)
- TVS (1)
- U.S. Cellular (3)
- Verizon (12)
- WildBlue (1)
- Xfinity (3)

Net5 "Why are you using your current provider?" (Other Responses)

Provider	Reason
AT&T	The company I work for pays for it
broadband	reliability
ChanceCom Telephone	Comes with the phone.
Ciber Pine	Local
Comcast	affordable, good customer service
Comcast	Always had it I guess
Comcast	best deal
Comcast	best price
Comcast	I don't know my son set it up.
Comcast	package deal
Comcast	price was right to bundle
Comcast	quality and price
Comcast	Because his son uses it
Comcast	Best deal
Comcast	Best package deal so far
Comcast	Better service I guess
Comcast	I have had them for a number of years and they are perfectly fine
Comcast	I was able to bundle services
Comcast	Least expensive
Comcast	Lowest Cost
Comcast	My wife uses it
Comcast	No issues with Comcast
Comcast	Only cable in town
Comcast	Others are too expensive & no opportunity to have Fios
Comcast	Package deal
Comcast	Package deal
Comcast	Reasonable time when I signed up
Comcast	Somebody else picked it out
Comcast	To do business
Fairpoint	Always have used them, don't use it that often
Fairpoint	Bought out old company
fairpoint	don't have a reason
fairpoint	replaced previous provider
Fairpoint	they have a reasonable price
Metrocast	Best financial option
Metrocast	Bundled with television
Metrocast	Convenient and reliable
Metrocast	convenient bundle package
metrocast	easy

metrocast	got tired of dialup
Metrocast	husband's requires it
Metrocast	I had TDS for 3 years and they are liars and thieves.
Metrocast	Most affordable
metrocast	most consistent
metrocast	no particular reason
metrocast	reliable plus package deal
Metrocast	Things are running fine
Metrocast	Very high speed.
metrocast	wife said DSL sucked let’s get cable
metrocast	good deal
Metrocast.	Only one that's high-speed accessible.
Metrocast.	They offered package.
straight talk	cheap
Tamworth wireless	better quality than satellite
TDS	bundle
TDS	Bundled with phone
TDS	it was a good deal at the time
TDS	It was the only 1 avail..
TDS	Started off with them and have people she can talk to.
Time Warner	best deal at the time
time warner	convenient
Time Warner	only cable modem provider in the area
Time Warner	they're good, service is good, affordable
TimeWarner	Only one he knows about
TVS	Affordable
U.S. Cellular	better coverage, he thinks, than Verizon does
Verizon	Because it is wireless, I can take it with me
Verizon	best deal available
Verizon	Good price.
Verizon.	Because our cell phones are through them. so its all on one bill.
Xfinity, comcast.	Satellite doesn’t offer landline/internet service
Xfinity/Comcast	Cheapest

Town by Region (Unweighted)

	REGION REGION									
	1 Northern - Carroll	2 Lakes/ Central	3 UV/Southwest	4 Northern - Coos	5 Northern - Grafton	6 Southern	7 Nashua	8 Rockingham	9 Strafford	Total
Acworth	0	0	5	0	0	0	0	0	0	5
Albany	1	0	0	0	0	0	0	0	0	1
Alexandria	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
Allenstown	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
Alstead	0	0	3	0	0	0	0	0	0	3
Alton	**0**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**
Amherst	0	0	0	0	0	0	38	0	0	38
Andover	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**
Antrim	0	0	7	0	0	0	0	0	0	7
Ashland	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**
Atkinson	0	0	0	0	0	0	0	18	0	18
Auburn	0	0	0	0	0	16	0	0	0	16
Barnstead	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**
Barrington	0	0	0	0	0	0	0	0	23	23
Bartlett	4	0	0	0	0	0	0	0	0	4
Bath	0	0	0	0	1	0	0	0	0	1
Bedford	0	0	0	0	0	78	0	0	0	78
Belmont	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**
Bennington	0	0	9	0	0	0	0	0	0	9
Benton	0	0	0	0	1	0	0	0	0	1
Berlin	0	0	0	19	0	0	0	0	0	19
Bethlehem	0	0	0	0	6	0	0	0	0	6
Bow	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**
Bradford	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Brentwood	0	0	0	0	0	0	0	7	0	7
Bridgewater	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
Bristol	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**
Brookfield	0	0	0	0	0	0	0	0	1	1
Brookline	0	0	0	0	0	0	18	0	0	18
Campton	0	0	0	0	11	0	0	0	0	11
Canaan	0	0	16	0	0	0	0	0	0	16
Candia	0	0	0	0	0	9	0	0	0	9
Canterbury	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**
Carroll	0	0	0	2	0	0	0	0	0	2
Center Harbor	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
Charlestown	0	0	17	0	0	0	0	0	0	17
Chatham	2	0	0	0	0	0	0	0	0	2
Chester	0	0	0	0	0	4	0	0	0	4

	REGION REGION									
	1 Northern - Carroll	2 Lakes/ Central	3 UV/Sout hwest	4 Northern - Coos	5 Northern - Grafton	6 Southern	7 Nashua	8 Rocking ham	9 Strafford	Total
Chesterfield	0	0	2	0	0	0	0	0	0	2
Chichester	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Claremont	0	0	31	0	0	0	0	0	0	31
Clarksville	0	0	0	0	0	0	0	0	0	0
Colebrook	0	0	0	6	0	0	0	0	0	6
Columbia	0	0	0	1	0	0	0	0	0	1
Concord	**0**	**72**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**72**
Conway	18	0	0	0	0	0	0	0	0	18
Cornish	0	0	5	0	0	0	0	0	0	5
Dalton	0	0	0	4	0	0	0	0	0	4
Danbury	0	5	0	0	0	0	0	0	0	5
Danville	0	0	0	0	0	0	0	9	0	9
Deerfield	0	0	0	0	0	8	0	0	0	8
Deering	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Derry	0	0	0	0	0	74	0	0	0	74
Dorchester	0	0	3	0	0	0	0	0	0	3
Dover	0	0	0	0	0	0	0	0	71	71
Dublin	0	0	1	0	0	0	0	0	0	1
Dummer	0	0	0	1	0	0	0	0	0	1
Dunbarton	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
Durham	0	0	0	0	0	0	0	0	22	22
East Kingston	0	0	0	0	0	0	0	2	0	2
Easton	0	0	0	0	2	0	0	0	0	2
Eaton	2	0	0	0	0	0	0	0	0	2
Effingham	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**
Enfield	0	0	7	0	0	0	0	0	0	7
Epping	0	0	0	0	0	0	0	24	0	24
Epsom	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
Errol	0	0	0	1	0	0	0	0	0	1
Exeter	0	0	0	0	0	0	0	38	0	38
Farmington	0	0	0	0	0	0	0	0	8	8
Fitzwilliam	0	0	3	0	0	0	0	0	0	3
Francestown	0	0	3	0	0	0	0	0	0	3
Franconia	0	0	0	0	2	0	0	0	0	2
Franklin	0	20	0	0	0	0	0	0	0	20
Freedom	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
Fremont	0	0	0	0	0	0	0	8	0	8
Gilford	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
Gilmanton	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**
Gilsum	0	0	1	0	0	0	0	0	0	1

	REGION REGION									
	1 Northern - Carroll	2 Lakes/ Central	3 UV/Southwest	4 Northern - Coos	5 Northern - Grafton	6 Southern	7 Nashua	8 Rockingham	9 Strafford	Total
Goffstown	0	0	0	0	0	58	0	0	0	58
Gorham	0	0	0	5	0	0	0	0	0	5
Goshen	0	0	4	0	0	0	0	0	0	4
Grafton	0	0	8	0	0	0	0	0	0	8
Grantham	0	0	10	0	0	0	0	0	0	10
Greenfield	0	0	7	0	0	0	0	0	0	7
Greenland	0	0	0	0	0	0	0	8	0	8
Greenville	0	0	6	0	0	0	0	0	0	6
Groton	0	0	0	0	1	0	0	0	0	1
Hampstead	0	0	0	0	0	0	0	17	0	17
Hampton	0	0	0	0	0	0	0	51	0	51
Hampton Falls	0	0	0	0	0	0	0	3	0	3
Hancock	0	0	9	0	0	0	0	0	0	9
Hanover	0	0	13	0	0	0	0	0	0	13
Harrisville	0	0	4	0	0	0	0	0	0	4
Harts Location	0	0	0	0	0	0	0	0	0	0
Haverhill	0	0	0	0	6	0	0	0	0	6
Hebron	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
Henniker	**0**	**17**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**17**
Hillsborough	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**
Hinsdale	0	0	6	0	0	0	0	0	0	6
Holderness	**0**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**
Hollis	0	0	0	0	0	0	22	0	0	22
Hooksett	0	0	0	0	0	27	0	0	0	27
Hopkinton	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
Hudson	0	0	0	0	0	0	38	1	0	39
Jackson	2	0	0	0	0	0	0	0	0	2
Jaffrey	0	0	16	0	0	0	0	0	0	16
Jefferson	0	0	0	1	0	0	0	0	0	1
Keene	0	0	56	0	0	0	0	0	0	56
Kensington	0	0	0	0	0	0	0	6	0	6
Kingston	0	0	0	0	0	0	0	10	0	10
Laconia	**0**	**24**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24**
Lancaster	0	0	0	8	0	0	0	0	0	8
Landaff	0	0	0	0	2	0	0	0	0	2
Lebanon	0	0	25	0	0	0	0	0	0	25
Lee	0	0	0	0	0	0	0	0	17	17
Lempster	0	0	1	0	0	0	0	0	0	1
Lincoln	0	0	0	0	3	0	0	0	0	3
Lisbon	0	0	0	0	3	0	0	0	0	3

	REGION REGION									
	1 Northern - Carroll	2 Lakes/ Central	3 UV/Sout hwest	4 Northern - Coos	5 Northern - Grafton	6 Southern	7 Nashua	8 Rocking ham	9 Strafford	Total
Litchfield	0	0	0	0	0	0	12	0	0	12
Littleton	0	0	0	0	13	0	0	0	0	13
Londonderry	0	0	0	0	0	54	0	0	0	54
Loudon	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**
Lyman	0	0	0	0	1	0	0	0	0	1
Lyme	0	0	4	0	0	0	0	0	0	4
Lyndeborough	0	0	0	0	0	0	7	0	0	7
Madbury	0	0	0	0	0	0	0	0	8	8
Madison	6	0	0	0	0	0	0	0	0	6
Manchester	0	0	0	0	0	203	0	0	0	203
Marlborough	0	0	3	0	0	0	0	0	0	3
Mason	0	0	7	0	0	0	0	0	0	7
Meredith	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**
Merrimack	0	0	0	0	0	0	70	0	0	70
Middleton	0	0	0	0	0	0	0	0	3	3
Milan	0	0	0	5	0	0	0	0	0	5
Milford	0	0	0	0	0	0	51	0	0	51
Milton	0	0	0	0	0	0	0	0	7	7
Monroe	0	0	0	0	2	0	0	0	0	2
Mont Vernon	0	0	0	0	0	0	7	0	0	7
Moultonborough	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
Nashua	0	0	0	0	0	0	165	0	0	165
Nelson	0	0	4	0	0	0	0	0	0	4
New Boston	0	0	0	0	0	8	0	0	0	8
New Castle	0	0	0	0	0	0	0	3	0	3
New Durham	0	0	0	0	0	0	0	0	5	5
New Hampton	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**
New Ipswich	0	0	8	0	0	0	0	0	0	8
New London	0	0	10	0	0	0	0	0	0	10
Newbury	0	0	5	0	0	0	0	0	0	5
Newfields	0	0	0	0	0	0	0	8	0	8
Newington	0	0	0	0	0	0	0	9	0	9
Newmarket	0	0	0	0	0	0	0	0	21	21
Newport	0	0	7	0	0	0	0	0	0	7
Newton	0	0	0	0	0	0	0	5	0	5
North Hampton	0	0	0	0	0	0	0	7	0	7
Northfield	0	9	0	0	0	0	0	0	0	9
Northumberland	0	0	0	3	0	0	0	0	0	3
Northwood	0	0	0	0	0	0	0	0	20	20
Nottingham	0	0	0	0	0	0	0	0	7	7

	REGION REGION									
	1 Northern - Carroll	2 Lakes/ Central	3 UV/Sout hwest	4 Northern - Coos	5 Northern - Grafton	6 Southern	7 Nashua	8 Rocking ham	9 Strafford	Total
Ossipee	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**
Pelham	0	0	0	0	0	0	23	0	0	23
Pembroke	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**
Peterborough	0	0	18	0	0	0	0	0	0	18
Piermont	0	0	2	0	0	0	0	0	0	2
Pittsburg	0	0	0	2	0	0	0	0	0	2
Pittsfield	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**
Plainfield	0	0	3	0	0	0	0	0	0	3
Plaistow	0	0	0	0	0	0	0	6	0	6
Plymouth	0	0	0	0	10	0	0	0	0	10
Portsmouth	0	0	0	0	0	0	0	58	0	58
Randolph	0	0	0	2	0	0	0	0	0	2
Raymond	0	0	0	0	0	16	0	0	0	16
Richmond	0	0	3	0	0	0	0	0	0	3
Rindge	0	0	15	0	0	0	0	0	0	15
Rochester	0	0	0	0	0	0	0	0	73	73
Rollinsford	0	0	0	0	0	0	0	0	5	5
Roxbury	0	0	3	0	0	0	0	0	0	3
Rumney	0	0	0	0	3	0	0	0	0	3
Rye	0	0	0	0	0	0	0	16	0	16
Salem	0	0	0	0	0	0	0	40	0	40
Salisbury	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
Sanbornton	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
Sandown	0	0	0	0	0	0	0	5	0	5
Sandwich	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
Seabrook	0	0	0	0	0	0	0	20	0	20
Shelburne	0	0	0	1	0	0	0	0	0	1
Somersworth	0	0	0	0	0	0	0	0	30	30
Springfield	0	0	1	0	0	0	0	0	0	1
Stark	0	0	0	2	0	0	0	0	0	2
Stewartstown	0	0	0	1	0	0	0	0	0	1
Stoddard	0	0	4	0	0	0	0	0	0	4
Strafford	0	0	0	0	0	0	0	0	11	11
Stratford	0	0	0	1	0	0	0	0	0	1
Stratham	0	0	0	0	0	0	0	28	0	28
Sugar Hill	0	0	0	0	1	0	0	0	0	1
Sunapee	0	0	9	0	0	0	0	0	0	9
Surry	0	0	1	0	0	0	0	0	0	1
Sutton	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Swanzey	0	0	4	0	0	0	0	0	0	4

	REGION REGION									
	1 Northern - Carroll	2 Lakes/ Central	3 UV/Southwest	4 Northern - Coos	5 Northern - Grafton	6 Southern	7 Nashua	8 Rockingham	9 Strafford	Total
Tamworth	**0**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**19**
Temple	0	0	4	0	0	0	0	0	0	4
Thornton	0	0	0	0	6	0	0	0	0	6
Tilton	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**
Troy	0	0	6	0	0	0	0	0	0	6
Tuftonboro	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**
Unity	0	0	5	0	0	0	0	0	0	5
Wakefield	0	0	0	0	0	0	0	0	15	15
Walpole	0	0	7	0	0	0	0	0	0	7
Warner	**0**	**16**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**16**
Warren	0	0	0	0	2	0	0	0	0	2
Washington	0	0	1	0	0	0	0	0	0	1
Waterville Valley	0	0	0	0	0	0	0	0	0	0
Weare	0	0	0	0	0	35	0	0	0	35
Webster	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
Wentworth	0	0	0	0	4	0	0	0	0	4
Westmoreland	0	0	10	0	0	0	0	0	0	10
Whitefield	0	0	0	5	0	0	0	0	0	5
Wilmot	0	0	2	0	0	0	0	0	0	2
Wilton	0	0	0	0	0	0	11	0	0	11
Winchester	0	0	5	0	0	0	0	0	0	5
Windham	0	0	0	0	0	0	0	17	0	17
Windsor	0	0	4	0	0	0	0	0	0	4
Wolfeboro	**0**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**19**
Woodstock	0	0	0	0	1	0	0	0	0	1
Total	35	493	433	70	81	590	462	425	347	2935

Appendix C: Survey Instrument

Survey Instrument

INTRO:

"Good evening / afternoon. My name is _____ and I'm calling on behalf of New Hampshire's Regional Planning Commissions from the University of New Hampshire Survey Center. This month, the University is conducting a confidential study of public opinion in New Hampshire, and we'd really appreciate your help and cooperation."

SEAS
"Before we begin, do you live in New Hampshire all year round or are you on vacation?"

	1	LIVE IN NH YEAR ROUND
	2	SEASONAL, JUST VACATIONING → "Thank you very much, we are only interviewing year round residents."
	3	NOT A NH RESIDENT → "Thank you very much, we are only interviewing year round residents."
*	99	REFUSED → TERMINATE

TOWN
"In what town or city do you live?" ENTER NUMBER OF TOWN FROM SHEET.

	997	OTHER – TYPE IN_____
	998	DK - DO NOT PROBE
*	999	NA / REFUSED

CELL1
"First, to confirm, have I reached you on your cell phone or a land line?"

	1	CELL PHONE → SKIPTO CELL2
	2	LAND LINE → SKIPTO BIR1
	99	REFUSED → TERMINATE

CELL2
"Are you currently driving a car of doing any activity that requires your full attention?"

	1	IF YES: "Can I call back at a later time?" MAKE APPOINTMENT
	2	NO → SKIPTO AGE18
	99	NA / REFUSED → TERMINATE

AGE18
"And are you 18 years old or older?"

1 YES → SKIP TO SEX
2 NO → "Thank you very much, we are only interviewing adults 18 years old or older."

* 99 REFUSAL → "Thank you very much, we are only interviewing adults 18 years old or older."

BIR1
"In order to determine who to interview, could you tell me, of the adults aged 18 or older who currently live in your household -- including yourself -- who had the most recent birthday? I don't mean who is the youngest, but rather, who had the most recent birthday?"

1 INFORMANT →SKIP TO SEX
2 SOMEONE ELSE (SPECIFY): _____ → SKIP TO INT2
3 DON'T KNOW ALL BIRTHDAYS, ONLY SOME → CONTINUE WITH BIR2 BELOW
4 DON'T KNOW ANY BIRTHDAYS OTHER THAN OWN → SKIP TO SEX

* 99 REFUSED -- ENTER NON-RESPONSE INFORMATION

BIR2
"Of the ones that you do know, who had the most recent birthday?"

1 INFORMANT _____ → SKIP TO SEX
2 SOMEONE ELSE (SPECIFY): _____ → GO TO INT2
3 PERSON NOT AVAILABLE → MAKE APPOINTMENT

* 99 REFUSED

INT2
ASK TO SPEAK TO THAT PERSON

"Hello, this is _____ calling on behalf of New Hampshire's Regional Planning Commissions from the University of New Hampshire. This month the University is conducting a confidential study of public opinion in New Hampshire, and we'd really appreciate your help and cooperation. You have been identified as the adult in your household who had the most recent birthday. Is this correct?"

1 YES → SKIPTO SEX
2 APPOINTMENT
* 99 REFUSAL → TERMINATE

SEX
"Thank you very much for helping us with this important study. Before we begin I want to assure you that all of your answers are strictly confidential. They will be combined with answers from other people from across the state. Your telephone number was randomly selected from all families in New Hampshire. This call may be monitored for quality assurance."

"Participation is voluntary. If you decide to participate, you may decline to answer any question or end the interview at any time."

IF ASKED: "This survey will take about 20 minutes to complete."

RECORD SEX OF RESPONDENT

1 MALE
2 FEMALE

* 99 NA

Q:Q1
"How would you classify the neighborhood where you live? Would you say you live in a downtown or town center ... a neighborhood close to your town center ... a neighborhood away from your town center ... or in a rural location away from other development?"

1 DOWNTOWN OR TOWN CENTER
2 NEIGHBORHOOD CLOSE TO TOWN CENTER
3 DEVELOPMENT AWAY FROM TOWN CENTER
4 RURAL LOCATION AWAY FROM OTHER DEVELOPMENT
5 OTHER -- SPECIFY

98 DON'T KNOW/NOT SURE
99 NA/REFUSED

Q:Q2
"I am going to read you a list of aspects of the transportation system in your community.
Based on what you see now in your community, do you think policy makers should invest more money on each the following aspects of the transportation system in the next 5 years.

ROTATE Q2A – Q2H

Q:Q2A
"Reducing congestion levels on major roads at rush hour ..."

IF YES – "Are you willing to pay increased fees or taxes?"

1 YES, WILLING TO PAY MORE
2 YES, NOT WILLING
3 NO

98 DON'T KNOW
99 NA/REFUSED

Q:Q2B
"Maintaining roads, highways and bridges ..."

Q:Q2C
"The availability of bike paths or shoulder bike routes ..."

Q:Q2D
"Sidewalks and crosswalk areas ..."

Q:Q2E
"Improving the availability to public transportation to get around in your community and surrounding communities…"

Q:Q2F
"Traffic safety ..."

Q:Q2G
"Improving availability of senior and special needs transportation…"

Q:Q2H
"Expanding bus or rail service for commuting between major cities…"

Q:Q3
"Now I would like to talk about your community."

"How important is it to have the following in your community?" Very important … somewhat important… not very important… or, not at all important?"

ROTATE Q3A – Q3I

Q:Q3A
"Medical offices"

IF NEEDED: "Would you say it is very important … somewhat important… not very important… or, not at all important?"

1 VERY IMPORTANT
2 SOMEWHAT IMPORTANT
3 NOT VERY IMPORTANT
4 NOT AT ALL IMPORTANT

98 DON'T KNOW
99 NA/REFUSED

Q:Q3B
"Grocery stores"

Q:Q3C
"Restaurants"

Q:Q3D
"Small businesses and retail stores"

Q:Q3E
"Quality schools"

Q:Q3F
"Nearby job opportunities"

Q:Q3G
"Farms, farm stands, and forestry businesses"

Q:Q3H
"Cultural and recreation facilities"

Q:Q3I
"That many places you want to go are within walking distance"

Q:Q4
"In your opinion, how affordable is housing in your town FOR PURCHASE … very affordable…somewhat affordable…not very affordable…or, not affordable at all?"

1 VERY AFFORDABLE
2 SOMEWHAT AFFORDABLE
3 NOT VERY AFFORDABLE
4 NOT AFFORDABLE AT ALL

98 DON'T KNOW / NOT SURE
99 NA / REFUSED

Q:Q5
"In your opinion, how affordable is housing in your town FOR RENT … very affordable…somewhat affordable…not very affordable…or, not affordable at all?"

1 VERY AFFORDABLE
2 SOMEWHAT AFFORDABLE
3 NOT VERY AFFORDABLE
4 NOT AFFORDABLE AT ALL

98 DON'T KNOW / NOT SURE
99 NA / REFUSED

Q:Q6
"Which of the following kinds of residential opportunities do you think your town should encourage …

ROTATE LIST

READ RESPONSES AND CHECK ALL THAT APPLY

1 Single family detached housing
2 Apartment buildings,
3 Accessory apartments such as in-law apartments
4 Townhouses,
5 Clusters of single family homes,
6 Attached homes such as Duplexes and tri-plexes,
7 Manufactured housing,
8 Housing for adults over 55 years old,
9 Housing in areas with a mix of residences and businesses
10 Assisted living facilities

11 NO OPINION
98 DON'T KNOW
99 NA/REFUSED

Q:Q7
"There are often tradeoffs to be made in choosing where to live, meaning that you have to give up some things in order to have other things. For each of the following, please identify your preferences."

ROTATE A AND B

Q:Q7A
"Assuming choices were equally safe and affordable, would you choose to live in a small home with a small backyard, if it means you have a short trip to work, school or shopping, OR would you choose to live in a large home with a large backyard, with a long trip to work, school or shopping?"

ROTATE RESPONSES

1 SMALL HOME, SMALL YARD
2 LARGE HOME, LARGE YARD

98 DON'T KNOW
99 NA/REFUSED

Q:Q7B
"Assuming choices were equally safe and affordable, would you choose to live in a neighborhood with a mix of residences and businesses where you can walk to stores, schools, and services, OR would you choose to live in a residential-only neighborhood where you needed to drive a car to get to stores, schools, and services?"

ROTATE RESPONSES

1 MIX OF RESIDENCES AND BUSINESSES - WALK
2 RESIDENTIAL NEIGBORHOOD - DRIVE

98 DON'T KNOW
99 NA/REFUSED

Q:Q8
"Where should future development occur in your part of the state … in already developed areas of your region in order to preserve natural areas, and make use of existing utilities and services, OR in undeveloped areas in order to avoid higher densities?"

ROTATE RESPONSES

1 GROWTH IN DEVELOPED AREAS
2 GROWTH IN UNDEVELOPED AREAS

98 DON'T KNOW/NOT SURE
99 NA/REFUSED

Q:Q9
"I would like to change the subject to natural resources."

"How high a priority would you place on the following issues in your community over the next 10 years …a high priority, a medium priority, or a low priority?"

ROTATE Q9A – Q9H

Q:Q9A
"Protecting the quality of water for recreational purposes like swimming and fishing"

1 HIGH PRIORITY
2 MEDIUM PRIORITY
3 LOW PRIORITY

98 DON'T KNOW
99 NA/REFUSED

Q:Q9B
"Protecting the quality of drinking water supplies"

Q:Q9C
"Protecting aquatic and marine habitats"

Q:Q9D
"Protecting access to recreation land and scenic views"

Q:Q9E
"Protecting forests for timber production"

Q:Q9F
"Preserving farms and agricultural land"

Q:Q9G
"Protecting air quality "

Q:Q9H
"Managing shore land and waterfront development"

Q:Q11
"Do you favor or oppose - using municipal funds to provide the following utilities to existing and potential development?"

ROTATE A - C

Q:Q11A
"Water lines"

IF FAVOR: Would you be willing to pay higher fees or taxes to pay for it?

1 FAVOR HIGHER TAXES
2 FAVOR NO TAXES
3 OPPOSE

98 DON'T KNOW
99 NA/REFUSED

Q:Q11B
"Sewer lines"

Q:Q11C
"Broadband access"

Q:Q12
"Which of the following things should be actively encouraged in your community?"

READ RESPONSES. CHECK ALL THAT APPLY

1 Promoting tourism,
2 Protecting historic buildings and neighborhoods,
3 Attracting more stores and shops,
4 Attracting more non-polluting light industry,
5 Expanding or promoting current businesses
6 Promoting local agriculture
7 Sponsoring special cultural or sporting events,
8 Promoting other recreational activities
9 Increasing access to ponds, lakes and rivers
10 Increasing access to forests and trails
11 Expanding recreational fields
12 Promoting safe places to walk or bike
13 Or something else?" SPECIFY

98 DON'T KNOW / NOT SURE
99 NA / REFUSED

Q:Q13A
"Which, if any, of the following policy changes would you support to improve energy efficiency and energy choices? Please indicate your level of support for the following responses using a scale of 1 to 5 where 1 means "Strongly Oppose" and 5 means "Strongly Support". "First of all ..."

"Higher energy efficiency standards in new buildings ..."

1 STRONGLY OPPOSE
2
3
4
5 STRONGLY SUPPORT

98 DON'T KNOW
99 NA/REFUSED

Q:Q13B
"Expand incentives for home energy efficiency improvements ..."

Q:Q13C
"Public charging stations for electric vehicles."

Q:Q13D
"Promote renewable energy sources such as solar, wind, and geothermal energy."

Q:Q14A
"How concerned are you about the following weather related events in your community?" Are you very concerned …somewhat concerned …not very concerned…or not at all concerned?

"Flooding"

1 VERY CONCERNED
2 SOMEWHAT CONCERNED
3 NOT VERY CONCERNED
4 NOT AT ALL CONCERNED

98 DON'T KNOW
99 NA/REFUSED

Q:Q14B
"Power outages"

Q:Q14C
"Wind Damage"

Q:Q14D
"Drought"

Q:Q14E
"Snow or Ice storms"

Q:Q14E
"Wildfires"

Q:Q15
"How concerned are you about your community's level of preparedness for severe weather and storm events?" Are you very concerned …somewhat concerned …not very concerned…or not at all concerned?

1 VERY CONCERNED
2 SOMEWHAT CONCERNED
3 NOT VERY CONCERNED
4 NOT AT ALL CONCERNED

98 DON'T KNOW
99 NA/REFUSED

Q:Q16
"We are seeing more proposals for renewable energy projects such as large wind farms. How involved do you feel local communities should be in developing guidelines and standards for such renewable energy facilities … Very involved … somewhat involved … not very … or not at all involved?"

1 VERY INVOLVED
2 SOMEWHAT INVOLVED
3 NOT VERY INVOLVED
4 NOT AT ALL INVOLVED

98 DON'T KNOW
99 NA/REFUSED

Q:Q17
"We have discussed many issues facing New Hampshire communities. Which of the following do you think should be the TOP priority for investment of public dollars?" "And what do you think should be the SECOND priority?"

READ LIST AND SELECT TOP 2 IN ORDER

1 Safe and Affordable housing choices
2 Transportation system
3 Energy efficiency and energy choices
4 Environmental Protection and Natural Resource Conservation
5 Economic Development
6 Infrastructure for development
7 Preparedness for weather-related and other emergencies
8 Other - SPECIFY

9 ALL EQUAL
10 NONE

98 DON'T KNOW
99 NA/REFUSED

NET1 - Do you have access to the internet at your home?
1 Yes → SKIP to NET3
2 No

98 Don't Know/Not Sure
99 NA/Refused

NET2 - Which of the following is the most important reason why you don't have internet access at home? READ RESPONSES

1 It is not available where I live;
2 I have access at another place, such as my job;
3 It is too expensive;
4 I don't know how to use it;
5 I don't need it:
6 I don't have an adequate computer;
7 Some other reason? → SPECIFY

SKIP to NET11

NET3 – What type of connection do you have to the internet at home? READ EXAMPLES IN PARENTHESES IF NECESSARY

1 Dialup → SKIP to NET3A
2 DSL (such as FairPoint) → SKIP to NET4
3 Cable (such as Comcast, Metrocast, Time Warner) → SKIP to NET4
4 Fixed wireless (such as WiValley, Tamworth Wireless) → SKIP to NET4
5 Cellular (such as AT&T, Sprint, T-Mobile, US Cellular, Verizon) → SKIP to NET4
6 Satellite (such as WildBlue, HughesNet) → SKIP to NET3A
7 Fiber (such as Topsham Communications, TDS) → SKIP to NET4
8 Other → SKIP to NET4

98 Don't know/not sure
99 NA/refused

NET3A – If you are on dialup or satellite, why?

1 Only option available
2 Too costly to change
3 Too much effort to change
4 Learning curve is too steep
5 I don't know what other options are available
6 Other

98 Don't know/not sure
99 NA/refused

NET4 – Who is your current provider? OPEN-ENDED, RECORD RESPONSE

NET5 – Why are you using your current provider?

1 I'm happy with my current provider
2 Only option available
3 Too costly to change
4 Too much effort to change
5 Learning curve is too steep
6 I don't know what other options are available
7 Other

98 Don't know/not sure
99 NA/refused

NET6 – What is your monthly internet bill?

1 Less than $20
2 $20-49
3 $50-99
4 $100 or more

98 Don't know/Not sure
99 NA/Refused

NET7 – Do you pay for a bundled service (internet, TV, phone)?

1 Yes
2 No

98 Don't Know/Not Sure
99 NA/Refused

We are interested to know how you use the internet at home, specifically for things like checking e-mail, shopping on-line, watching video, and connecting remotely to other computers. For each of the following, please tell me if you don't do this, if you do, but that the speed of your internet connection is slow, or that you do this and the speed of your internet connection is adequate.

NET8A - Do you use the Internet to check your email at home?
IF YES: Is the speed of your internet connection too slow, or is the speed of your internet connection adequate for this?

1 Do not check email at home
2 Do, but connection speed is slow
3 Do, and connection speed is adequate

98 Don/t Know/Not Sure
99 NA / Refused

NET8B - Do you use the internet to shop on-line at home?"
IF YES: Is the speed of your internet connection too slow, or is the speed of your internet connection adequate for this?

1 Do not shop on-line at home
2 Do, but connection speed is slow
3 Do, and connection speed is adequate

98 Don/t Know/Not Sure
99 NA / Refused

NET8C - Do you use the internet to watch on-line video, such as on YouTube or NetFlix at home?
IF YES: Is the speed of your internet connection too slow, or is the speed of your internet connection adequate for this?

1 Do not watch on-line video at home
2 Do, but connection speed is slow
3 Do, and connection speed is adequate

98 Don/t Know/Not Sure
99 NA / Refused

NET8D
"Do you use the internet to connect to other computers using VPN at home?"
IF YES: "Is the speed of your internet connection too slow, or is the speed of your internet connection adequate for this?"

1 Do not connect to other computers at home
2 Do, but connection speed is slow
3 Do, and connection speed is adequate

98 Don/t Know/Not Sure
99 NA / Refused

NET9 – Overall, do you consider your internet connection at home to be adequate for your uses?

1 Yes
2 No

98 Don't Know/Not Sure
99 NA/Refused

NET10 – How much more (if any) would you be willing to pay for faster internet speeds?

1 Nothing
2 25% more per month
3 50% more per month

98 Don't know/Not sure
99 NA/Refused

NET11 "We are asking respondents to provide their street address solely so that we can use the information to help verify our broadband mapping efforts. It will not be tied to any of the other responses you have provided. May we have your street address?"

1 YES
2 NO

IF (ANSWER=1)SKIPTO NET11A
IF (ANSWER=2)SKIPTO NET11B

NET11A

RECORD STREET ADDRESS

SKIPTO D1

NET11B
"Would you be willing to give us your zip code instead?"

ENTER ZIP CODE

Q:D1
"Now a final few questions for statistical purposes."

"What is your current age?"

(RECORD EXACT NUMBER OF YEARS OLD -- E.G., 45)

96 NINETY-SIX YEARS OF AGE OR OLDER
97 REFUSED
98 DK
99 NA

Q:D2
"Do you own or rent you current home?"

1 OWN
2 RENT

98 DON'T KNOW -- DO NOT PROBE
* 99 NA / REFUSED

Q:D3
"How many of the persons who CURRENTLY live in your household are under 18 years of age, including babies and small children?"

0	NONE
1	ONE
2	TWO
3	THREE
4	FOUR
5	FIVE
6	SIX
7	SEVEN OR MORE
98	DK
99	NA / REFUSED

Q:D4
"Including yourself, how many adults CURRENTLY live in your household?"

1	ONE
2	TWO
3	THREE
4	FOUR
5	FIVE
6	SIX
7	SEVEN OR MORE
98	DON'T KNOW
99	NA/NA/REFUSED

Q:D5
"What is the highest grade in school, or level of education that you've completed and got credit for …" [READ RESPONSES]

1	Eighth grade or less,
2	Some high school,
3	High school graduate, (INCLUDES G.E.D.)
4	Technical school,
5	Some college,
6	College graduate,
7	Or postgraduate work?"
98	DON'T KNOW
99	NA/NA/REFUSED

Q:D6
"Not counting business lines, extension phones, or cellular phones -- on how many different telephone NUMBERS can your household be reached?"

	0	NO LANDLINE
	1	ONE
	2	TWO
	3	THREE
	4	FOUR
	5	FIVE
	6	SIX
	7	SEVEN OR MORE
	98	DK
*	99	NA / REFUSED

Q:D7
"And on how many different cellphone NUMBERS can your household be reached?"

	0	NO CELL PHONE
	1	ONE
	2	TWO
	3	THREE
	4	FOUR
	5	FIVE
	6	SIX
	7	SEVEN OR MORE
	98	DK
*	99	NA / REFUSED

Q:D8
"Which of the following most appropriately describes your race and ethnicity ... READ RESPONSES - CHECK ALL THAT APPLY

1	White or Caucasian;
2	Black or African American;
3	Hispanic;
4	Asian;
5	Native American;
6	Pacific Islander?"
7	OTHER - SPECIFY
8	DK / NOT SURE (DO NOT PROBE)
9	NA / REFUSED

Q:D9
"How long have you lived in New Hampshire?"

IF "ALL MY LIFE"-- "About how many years is that?"

RECORD EXACT NUMBER OF YEARS OF RESIDENCE

1 ONE YEAR OR LESS

96 96 YEARS OR MORE
97 REFUSED
98 DK
99 NA

Q:D10
"Which of the following best describes your current employment status ... Are you currently ...

READ RESPONSES. IF R GIVES 2 RESPONSES, ENTER LOWER NUMBER

1 Employed full-time,
2 Employed part-time,
3 Self-employed,
4 Retired and not working, SKIPTO INCOME
5 Unemployed and looking for work, SKIPTO INCOME
6 Homemaker, SKIPTO INCOME
7 Disabled, or a SKIPTO INCOME
8 Student?" SKIPTO INCOME

98 DK / NOT SURE (DO NOT PROBE)
99 NA / REFUSED

Q:D11
"If you work outside your house, in what town or city do you work?"

RECORD NUMBER OF TOWN FROM SHEET
BE SURE TO GET CONFIRM STATE

235 MASSACHUSETTS TOWN – SPECIFY
236 MAINE TOWN – SPECIFY
237 OTHER TOWN – SPECIFY

995 WORK IN HOME
996 DO NOT WORK
997 OTHER
998 DK - DO NOT PROBE
999 NA / REFUSED

Q:INCOME
"How much TOTAL income did you and your family receive in 2012, not just from wages or salaries but from all sources – that is, before taxes and other deductions were made? Would you say that it was less than $40,000, between $40,000 and $90,000, or more than $90,000?"

1 LESS THAN $40,000
2 $40,000 TO $90,000
3 MORE THAN $90,000
98 DK (DO NOT PROBE)
99 NA / REFUSED

IF (ANSWER = 1) SKIPTO INCLOW
IF (ANSWER = 2) SKIPTO INCMED
IF (ANSWER = 3) SKIPTO INCHIGH
IF (ANSWER > 3) SKIPTO LINES

Q:INCLOW
"OK, would you say that your total household income was more or less than $20,000?"

1 LESS THAN $20,000
2 $20,000 TO $40,000
98 DK (DO NOT PROBE)
99 NA / REFUSED

Q:INCMED
"OK, would you say that your total household income was more or less than $60,000?"

1 LESS THAN $60,000
2 $60,000 TO $90,000
98 DK (DO NOT PROBE)
99 NA / REFUSED

Q:INCHIGH
"OK, would you say that your total household income was more or less than $160,000"

1 LESS THAN $160,000
2 MORE THAN $160,000
98 DK (DO NOT PROBE)
99 NA / REFUSED

END
"Thank you for your time and participation. Your input has been very valuable."

APPENDIX B

ADVANCED MANUFACTURING AND ENTREPRENEURSHIP

Economic Impact of Promoting Advanced Manufacturing Employment and Entrepreneurship in the Lakes Region, New Hampshire

prepared by

Economic and Labor Market Information Bureau
New Hampshire Employment Security

for

Lakes Region Planning Commission

Granite State Future

June 2014

The economic impact of promoting Advanced Manufacturing employment and Entrepreneurship in the Lakes Region

Definitions:

Advanced Manufacturing: Advanced manufacturing involves the use of technology to improve products and/or processes, with the relevant technology being described as "advanced," "innovative," or "cutting edge." For example, one organization defines advanced manufacturing as industries that "increasingly integrate new innovative technologies in both products and processes. The rate of technology adoption and the ability to use that technology to remain competitive and add value define the advanced manufacturing sector

Entrepreneurship: Entrepreneurship is a process of identifying and starting a business venture, sourcing and organizing the required resources and taking both the risks and rewards associated with the venture.

Gross Domestic Product (GDP): The market value of goods and services by labor and property in the United States, regardless of nationality. As the changes made in each of these scenarios were made at the county level, GDP would refer to the value of goods and services by labor and property in Belknap and Carroll counties.

This impact analysis of promoting *Advanced Manufacturing* employment and *Entrepreneurship* in the Lakes Region was conducted using the Economic and Labor Market Information Bureau's New Hampshire Econometric Model – a REMI Policy Insight + ® model.[1] Regarding advanced manufacturing, the Lakes Region Community College and Huot Technical Center provided information.

Using this econometric model, we are able to estimate both the number of direct jobs added in Belknap County, as well as the indirect and induced jobs gained in the region (the model results will include the impact on both Belknap and Carroll counties).

The Lakes Region Planning Commission is interested in promoting economic opportunity through a vibrant economy and high quality jobs. LRPC is interested in qualitative growth and sustainable development. A scenario of an aging population combined with slow population growth could lead to a shortage of talent in manufacturing. In addition, slow population growth could decrease the number of young professionals in the region, which are usually viewed as the prime demographic group for creating new entrepreneurial businesses.

Derived from this overall slow population growth are the following two concerns for which scenarios were developed:

1. Attracting skilled workers in *Advanced Manufacturing* to support the manufacturing base in Laconia, Meredith, and Bristol.
2. Attracting more entrepreneurs

[1] Product of Regional Economic Models, Inc. of Amherst, MA.

The first scenario was built upon an initiative in the Lakes Region to facilitate the training and hiring of skilled workers in *Advanced Manufacturing*. Lakes Region Community College and the Huot Technical Center (part of Laconia High School) are currently offering educational degree programs related to *Advanced Manufacturing*. A leading manufacturing employer in the region has indicated that the company will employ any qualified persons that complete such a program.

The second scenario is an attempt to estimate the economic impact of attracting more entrepreneurs to the region. Attracting an additional 25 entrepreneurs to the region over the next five years was set as a reasonable goal.

Scenario 1: Promoting Advanced Manufacturing

Inputs and assumptions:

The estimated number of direct jobs created in Belknap County was modeled based on an input of training and hiring in incremental number of students each year over a five-year implementation period, from 2014 to 2018. The employment estimate is accumulative, so by 2018, 220 jobs would be created in Belknap County. To capture the longer term impact of this scenario, the model time period was extended another five years to 2023, without additional program completions entering the labor force. These *Advanced Manufacturing* jobs were distributed across 54 detailed manufacturing industries in proportion to 2023 forecasted employment share, to account for future growth patterns.[2]

The assumed number of direct jobs in *Advanced Manufacturing* — students completing the training program and entering the local labor force — was added accumulatively to Belknap County's economy between 2014 and 2023 as follows:

Job Training Promotion	Five year implementation period					Stabilization period				
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Advanced Manufacturing Jobs	20	50	95	150	220	220	220	220	220	220

The direct jobs created in Belknap County were added to manufacturing industry employment based on the following shares:

[2] The REMI model is based on NAICS, the North American Industry Classification System, which is used to classify business establishments according to type of economic activity (process of production) in Canada, Mexico and the United States. An establishment is typically a single physical location, though administratively distinct operations at a single location may be treated as distinct establishments. Each establishment is classified to an industry according to the primary business activity taking place there.

REMI Model detailed Manufacturing NAICS Industries	**Share of 2023 forecasted employment base**
Other fabricated metal product manufacturing	21.70%
Foundries	17.00%
Computer and peripheral equipment manufacturing	16.88%
Machine shops; turned product; and screw, nut, and bolt manufacturing	11.24%
Coating, engraving, heat treating, and allied activities	4.38%
Semiconductor and other electronic component manufacturing	3.78%
Medical equipment and supplies manufacturing	3.77%
Textile mills and textile product mills	2.72%
Cement and concrete product manufacturing	2.69%
Electrical equipment manufacturing	1.99%
Ship and boat building	1.88%
Apparel manufacturing; Leather and allied product manufacturing	1.57%
Household and institutional furniture and kitchen cabinet manufacturing	1.51%
Forging and stamping	1.37%
Other miscellaneous manufacturing	1.35%
Architectural and structural metals manufacturing	1.05%
Printing and related support activities	0.86%
Navigational, measuring, electromedical, and control instruments manufacturing	0.70%
Other wood product manufacturing	0.51%
Aerospace product and parts manufacturing	0.44%
Sawmills and wood preservation	0.43%
Engine, turbine, power transmission equipment manufacturing	0.39%
Sugar and confectionery product manufacturing	0.39%
Other electrical equipment and component manufacturing	0.34%
Beverage manufacturing	0.16%
Cutlery and handtool manufacturing	0.15%
Glass and glass product manufacturing	0.10%
Communications equipment manufacturing	0.08%
Bakeries and tortilla manufacturing	0.08%
Dairy product manufacturing	0.07%
Pulp, paper, and paperboard mills	0.06%
Petroleum and coal products manufacturing	0.06%
Motor vehicle body and trailer manufacturing	0.04%
Converted paper product manufacturing	0.03%
Rubber product manufacturing	0.03%
Soap, cleaning compound, and toilet preparation manufacturing	0.03%
Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	0.03%
Pharmaceutical and medicine manufacturing	0.03%
Paint, coating, and adhesive manufacturing	0.03%
Pesticide, fertilizer, and other agricultural chemical manufacturing	0.03%
Basic chemical manufacturing	0.02%
Other chemical product and preparation manufacturing	0.02%
Industrial machinery manufacturing	0.01%
Metalworking machinery manufacturing	0.01%
	100.00%

It is assumed that the anticipated increase in output due to these 220 *Advanced Manufacturing* jobs is driven by an increase in demand for the products from outside the Lakes Region. In other words, the output produced by these added workers is mainly exported to markets outside of Belknap County as well as outside of the United States (international exports).

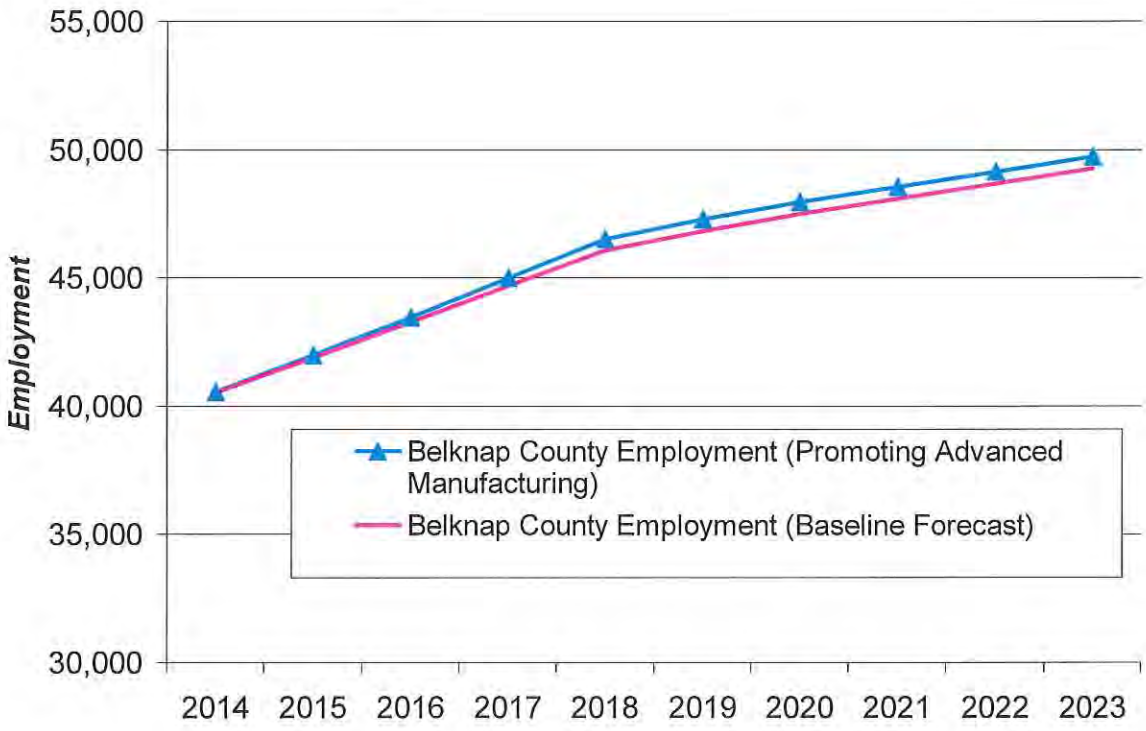
The following results are the anticipated implications of training and hiring 220 *Advanced Manufacturing* workers in Belknap County. The results include the direct jobs generated in the Belknap County, as well as the secondary (in-direct and induced) jobs added in Belknap and Carroll Counties. The results also include the impacts that this expansion will have on the region in terms of added gross domestic product, personal income and population.

Results: Impact from promoting job creation in Advanced Manufacturing

- In 2014, a total of 38 direct, indirect and induced jobs[3] would be created in Belknap County. Additionally, 1 job would be created in Carroll County.
- By 2018, at full implementation of the *Advanced Manufacturing* training and hiring scenario, total impact on jobs will have increased to 453 direct, indirect and induced jobs for the entire region. (The combined results for Belknap and Carroll counties). The jobs are mostly replacement jobs along with some new ones.
- By 2023, five years after the full implementation of the scenario, total job creation will reach 463 jobs above the employment baseline in the region. (The combined results for Belknap and Carroll counties).

[3] Employment in the REMI model is 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. The employment count in the REMI model is larger than what is regularly reported by the Economic and Labor Market Information Bureau (ELMIB), New Hampshire Employment Security, which excludes self-employment. The REMI model does not distinguish between full-time and part-time jobs.

Comparison of the baseline employment outlook for Belknap County with the employment outlook with the *Advanced Manufacturing* scenario



- By 2018, the distribution of the secondary jobs created in Carroll County would be as follows: Construction would create 56 jobs; Retail trade would create 21 jobs; and Wholesale trade would create 19 jobs. State and local government would create 64 jobs[4].

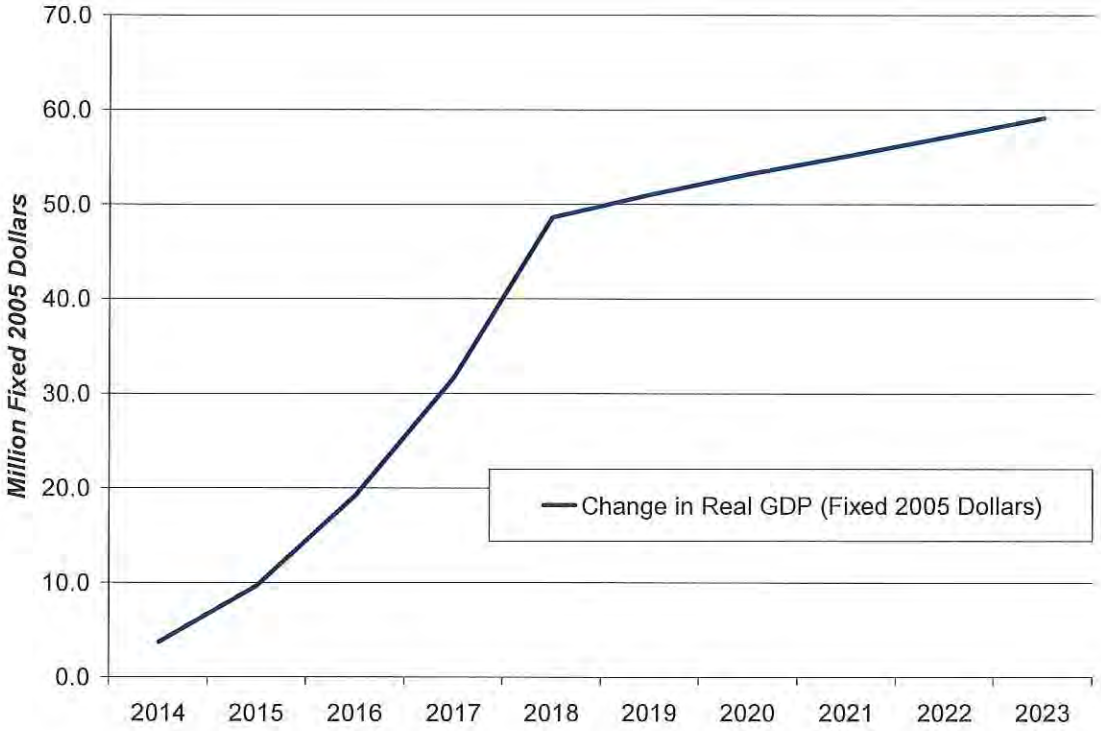
[4] The impact on local and state government jobs would best be interpreted as employment (above the baseline projected government employment) that would be required in order to provide for the overall increase in the demand for shared government services. Shared services could include education, public safety, water and sewage treatment, road construction and maintenance, and other services related to an increase in business activity and resident population.

Industry	2018	
	Direct Jobs	Total jobs created
Manufacturing	220	223
Construction		56
Retail Trade		21
Wholesale Trade		19
Administrative and Waste Management Services		13
Health Care and Social Assistance		11
Real Estate and Rental and Leasing		10
Accommodation and Food Services		10
Other Services, except Public Administration		7
Professional, Scientific, and Technical Services		6
Arts, Entertainment, and Recreation		2
Utilities		1
State and Local		64
Total Jobs	220	443

Gross Domestic Product

- For this scenario, Gross Domestic Product (GDP) in the region in 2014 will have increased above the baseline by 3.7 million in fixed 2005 dollars. By 2018, the GDP in the region will have grown to $48.7 million in fixed 2005 dollars above the baseline, and GPD will continue to grow throughout the forecast period.
- The economic activity of this scenario will account for 0.2 percent of total GDP in Belknap County. By 2018, total economic activity due to the hiring of 220 *Advanced Manufacturing* workers will account for 1.7 percent of the county's GDP.

The impact on GDP from the hiring of *Advanced Manufacturing* workers in the Lakes Region



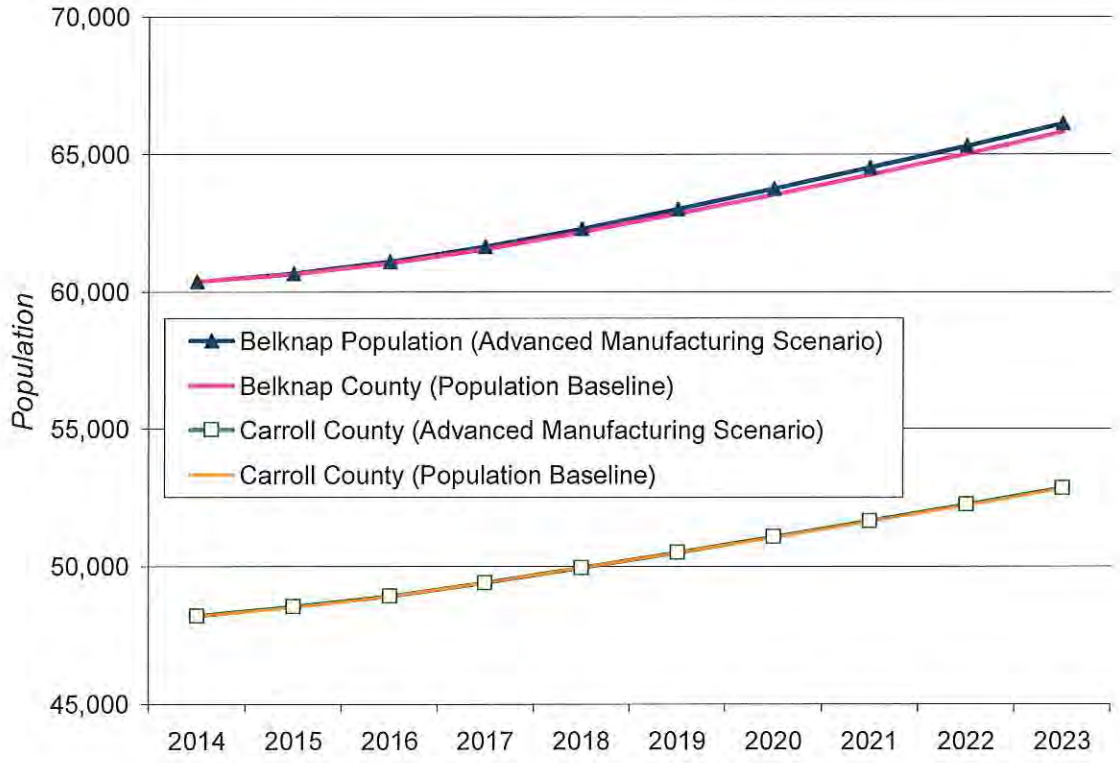
Personal Income

- Based on this scenario, total real personal income will have increased by $1.2 million in fixed 2005 dollars in 2014. By 2018, the increase in real personal income will have grown by $16.2 million in fixed 2005 dollars.
- Real personal income per capita in Belknap County will gain $15 fixed 2005 dollars in 2014. By 2018, real personal income per capita will be $153 in fixed 2005 dollars above the original baseline for the county. The impact on real personal income per capita in Carroll County will be minimal in 2014 but will increase to $12 fixed 2005 dollars in 2018.

Population

- There would be no significant changed to population in 2014. By 2018, Belknap County would gain 125 residents above the forecast baseline and Carroll County would gain 11 residents. By 2023, the population of Belknap County would gain 319 persons above the projected population baseline (a 0.5 percent increase above the forecasted baseline) and Carroll County would gain 25 residents above baseline.

The anticipated population growth in Belknap and Carroll counties due to the hiring/retaining of 220 *Advanced Manufacturing* workers



Job Multiplier

- The multiplier effect on the Lakes Region for each Advanced Manufacturing job created is between 1.9 and 2.1 jobs annually [5] — including the direct job created —over the entire simulation period.

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

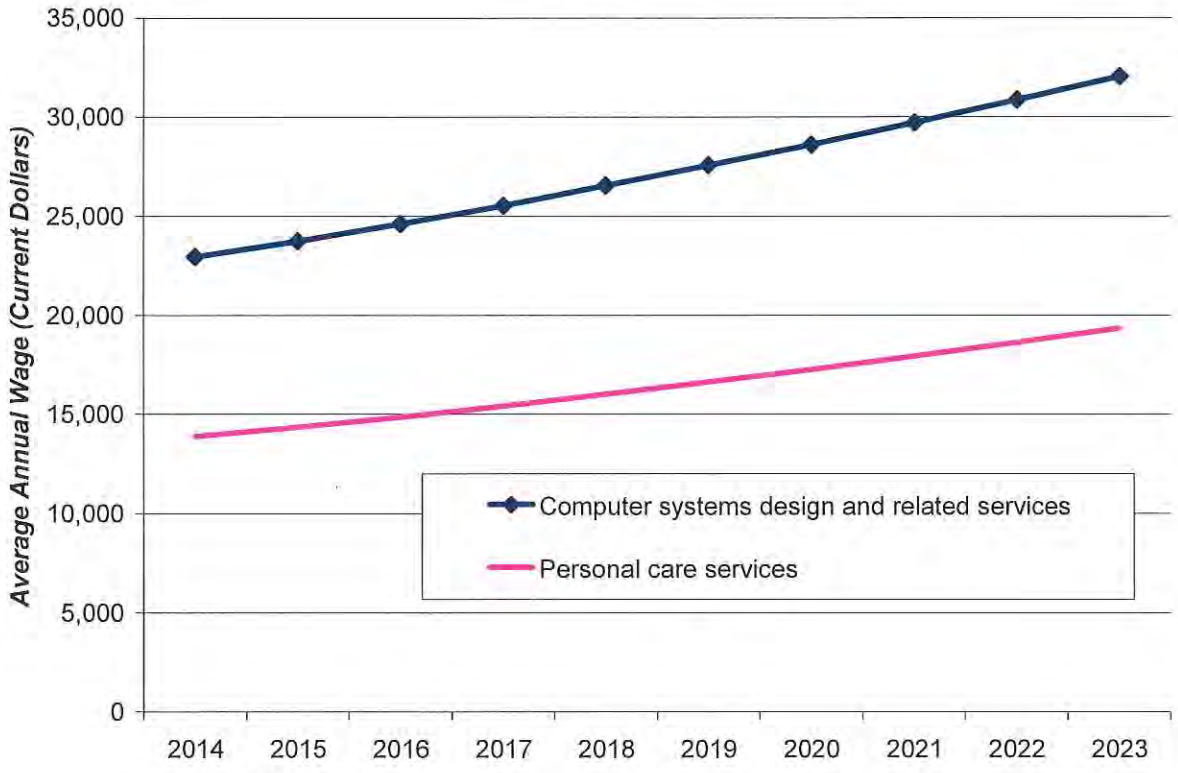
Scenario 2: Promoting Entrepreneurship

Inputs and assumptions:

The direct jobs created in Belknap County due to an increase in the number of entrepreneurs in the region were entered into the REMI model for the time period of 2014 to 2018. It was assumed that on average, four jobs would be created with each entrepreneur. These 25 entrepreneurs were phased in over a five-year period in increments of 5. It is assumed that each entrepreneur is producing 4 jobs on average, so 20 jobs will be created in the first year. Accumulatively, by 2018, 100 additional jobs will be added.

To capture the longer term impact of this scenario, the period for running the model was extended to 2023. The additional jobs created due to the increase in entrepreneurs in the region were distributed equally into the following two NAICS industries[6]: *Computer systems design and related services* and *Personal care services*.

Baseline average annual wages for Belknap County in the two selected industries



These two industries were chosen as businesses in these service-oriented industries are likely to be created by entrepreneurs, are mostly made up of small-scale operations, and are likely to be developed within the region. As the chart above indicates, the average pay rates in the two

[6] See NAICS explanation on page 3.

selected industries are very different. Keep in mind that these averages are based on both full- and part-time positions. Entrepreneurs

The assumed number of direct jobs created in Belknap County was added to the REMI model as follows:

Increased Entrepreneurship										
	Five year implementation period					Stabilization period				
NAICS Industry	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Computer systems design and related services	10	20	30	40	50	50	50	50	50	50
Personal care services	10	20	30	40	50	50	50	50	50	50
Total Jobs Created	20	40	60	80	100	100	100	100	100	100

It is assumed that the anticipated increase in output due to the increase of entrepreneurship in the region is driven by an increase in total regional demand. In other words, the output produced by these added workers is either exported to markets outside of Belknap County or the output is provided to people from outside the region, such as tourists or seasonal homeowners, or to residents that currently travel outside the region to obtain these services.

The following is the anticipated implications of increasing entrepreneurship in the region.

Results: Impact from promoting entrepreneurship in the region.

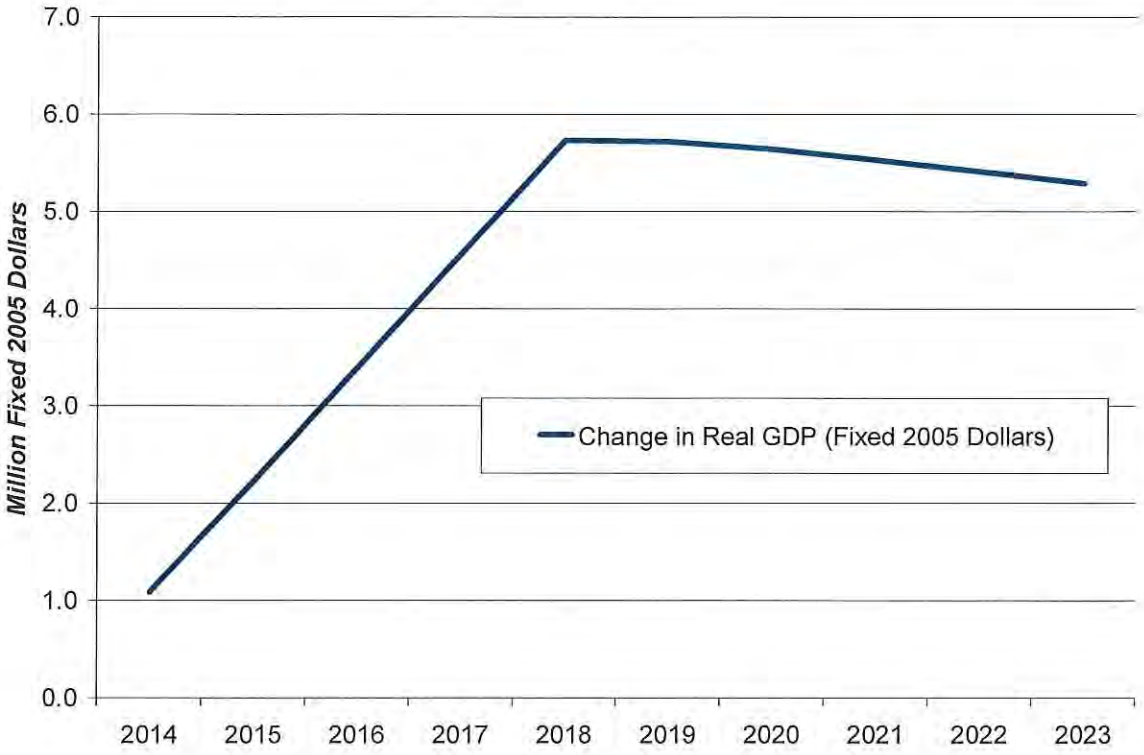
- In 2014, a total of 28 direct, indirect and induced jobs would be created in Belknap County. There would be a minimal impact on Carroll County.
- By 2018, at full implementation of the increased entrepreneurship scenario, total job impact would be 138 direct, indirect and induced jobs.
- By 2023, five years after the full implementation of the scenario, total impact on jobs has declined to 125 jobs above baseline in the region. This indicates that the secondary job impact of entrepreneurship declines over time. Based on the declining impact, a conclusion may be drawn that entrepreneurship needs to be nurtured on an ongoing basis.
- By 2018, the distribution of the secondary jobs created would be as follows: Construction would create 14 jobs; Retail trade would create 6 jobs; and *Administrative and waste management service* as well as *Health care and social assistance* each would create 3 jobs. State and local government would create 8 jobs (See footnote 4 on page 5).

Industry	2018	
	Direct Jobs	Total jobs created
Professional, Scientific, and Technical Services	50	50
Other Services, except Public Administration	50	50
Construction		14
Retail Trade		6
Administrative and Waste Management Services		3
Health Care and Social Assistance		3
Accommodation and Food Services		3
Real Estate and Rental and Leasing		2
Wholesale Trade		1
State and Local		8
Total Jobs	100	140

Gross Domestic Product

- In 2014, Gross Domestic Product (GDP) in the region will have increased above the baseline by $1.1 million in fixed 2005 dollars. By 2018, the GDP in the region will have grown to $5.7 million in fixed 2005 dollars above the baseline. After 2018, the GPD added above the forecasted baseline will start to decline.
- The economic activity of this scenario will account for 0.05 percent of total GDP in Belknap County. By 2018, total economic activity due to increased entrepreneurship in the region will account for 0.2 percent of the county's GDP.

The impact on GDP from the promoting entrepreneurship in the Lakes Region



Personal Income

- Total Real personal income will have increased by $0.8 million in fixed 2005 dollars in 2014. By 2018, the increase in real personal income will have grown by $4.7 million in fixed 2005 dollars.
- Real personal income per capita in Belknap County will gain $12 fixed 2005 dollars in 2014. By 2018, real personal income per capita will be $62 in fixed 2005 dollars above the original baseline for the county.

Population

- Belknap County's population would gain two persons above baseline in 2014. By 2018, Belknap County would gain 19 residents and by 2023, the population of Belknap County would gain 37 persons above the projected population baseline.

Job Multiplier

- The multiplier effect on the Lakes Region of each job created by entrepreneurs is 1.4 annually — including the direct job created — during the implementation period. After the implementation period, the job multiplier declines.

Summary

The two scenarios create very different results. This is partly due to the different size of the employment shock to the model; 220 *Advanced Manufacturing* jobs versus the 100 jobs created by increased entrepreneurship. But there are two comparisons important to note:

- In the *Advanced Manufacturing* scenario, GDP continued to grow throughout the entire simulation period, versus the *Increased Entrepreneurship* scenario, where the additional GDP value started to decline as the employment shock to the model was stabilized.
- The job multiplier of an Advanced Manufacturing job was between 1.9 and 2.1 jobs, whereas the job multiplier of a job created by increased entrepreneurship was 1.4.
- The total economic activity due to the hiring of 220 *Advanced Manufacturing* workers will account for 1.7 percent of the Belknap County's GDP whereas total economic activity due an increase in entrepreneurship (25 additional entrepreneurs creating a total of 100 new jobs) in the region will account for only 0.2 percent of the county's GDP.
- Despite the fact that the economic impact of an *Advanced Manufacturing* is much less than the overall impact of jobs created by entrepreneurs, an economic development strategy involving goals for multiple avenues is still important due to the need for diversification of the regional economy. There are risks associated with both strategies, but mergers and acquisitions of the larger corporations can lead to plant closure and displacement of large amount of manufacturing employment. Manufacturing employment in the Lakes Region Planning Commission dropped 27.4 percent from 2005 to 2012. However, if the region is known for highly skilled workers in a specific industry cluster, the likelihood that other highly specialized manufacturers will relocate to the area is greater.

Please note that Economic and Labor Market Information Bureau under New Hampshire Employment Security projects that there will be 55 openings, annually, in the *Production occupations* in the Lakes Region and more than 1,000 annual openings in *Production occupations* for New Hampshire. ELMIB also projected 5 annual openings for *Engineers* and *Drafters, Engineering Technicians, and Mapping Technicians.* These numbers of projected job openings are based on a Manufacturing sector that is <u>not</u> projected to experience employment growth over the ten-year period from 2010 to 2020.

The explanation below is the economic theory and empirical data behind the REMI model.

The REMI Model

REMI Policy Insight® is a structural model, meaning that it clearly includes cause-and-effect relationships. The model is based on two key underlying assumptions from mainstream economic theory: households maximize utility and producers maximize profits. Since these assumptions make sense to most people, lay people as well as trained economists can understand the model. The tool is often used by economic developers and planners to gage the potential impact on a regional economy of proposed projects such as transportation infrastructure, office and retail development, relocation or expansion of businesses, etc.

In the model, businesses produce goods and services to sell locally to other firms, investors, governments, and individuals, and to sell as exports to purchasers outside the region. The output is produced using labor, capital, fuel, and intermediate inputs. The demand, per unit of output, for labor, capital, and fuel depends on their relative costs, since an increase in the price of any one of these inputs leads to substitution away from that input to other inputs. The supply of labor in the model depends on the number of people in the population and the proportion of those people who participate in the labor force. Economic migration affects the population size. People will move into an area if the real after-tax wage rates or the likelihood of being employed increases in a region.

Supply and demand for labor determine the wage rates in the model. These wage rates, along with other prices and productivity, determine the cost of doing business for each industry in the model. An increase in the cost of doing business causes either an increase in prices or a cut in profits, depending on the market for the product. In either case, an increase in costs would decrease the share of the local and U.S. market supplied by local firms. This market share, combined with the demand described above, determines the amount of local output. Many other feedbacks are incorporated in the model. For example, changes in wages and employment impact income and consumption, while economic expansion changes investment, and population growth impacts government spending.

The effects of a change scenario to the model are determined by comparing the baseline REMI forecast with an alternative forecast that incorporates the assumptions for the change scenario.

APPENDIX C

SCENARIO PLANNING

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Scenario Planning
Using CommunityViz

Lakes Region Plan

Prepared by

Lakes Region Planning Commission
103 Main Street, Suite #3
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March 2014

Scenario Planning

The purpose of scenario planning is to gain a better understanding of how certain current policies and practices may impact future conditions. Build-out analysis is a method of scenario planning utilized by planners to help inform decisions regarding land use. In Build-out analysis, growth is projected based upon existing zoning regulations by calculating the number of buildings, dwelling units, commercial square footage or other types of development that could be built if the study area were to be developed to the full extent allowed by zoning. While build-out analysis results are hypothetical, they provide meaningful insight about the effects of zoning over time and are an exploratory tool for community leaders concerned about the future of New Hampshire's Lakes Region.

The build-out analysis process was facilitated using CommunityViz software. CommunityViz is supplementary software for ArcGIS and can be used to perform various tasks related to land use analysis and projection of growth and development. The software performs build-out calculations based upon dimensional values, constraints (see paragraph below), whether mixed land uses are allowed, the number of dwelling units per building, minimum building separation distance, and an efficiency factor (meaning the completeness of build-out). The software is designed principally for use at the community level. Since this analysis was conducted at a regional scale, it was necessary to create a limited set of hypothetical zoning districts (see Map 1). This simplified set of zoning assumptions is a general representation of actual zoning in place in Lakes Region communities. The six scenario zones listed in Table 1 were created and assigned dimensional parameters based upon a review of similar existing zoning districts in Lakes Region communities. Waterbodies (111 sq. mi.) are also listed with the six scenario zones.

Certain areas were considered constrained or otherwise unsuitable for future development (see Map 2). These constrained areas include water bodies, protected conservation and public lands, wetlands, floodplains, slopes greater than 25 percent, and land within 50 feet of a roadway or river. While a certain amount of development exists within these areas, future development would be unsafe, impractical, or unlawful. Constrained areas were removed from the total area of the region resulting in 883 sqaure miles of unconstrained area. For the purpose of this analysis, all unconstrained areas were assumed to be suitable for future development.

All Combined Constraints	395 sq mi
Unconstrained Area	883 sq mi
Total LRPC Area	1,279 sq mi

As of the 2010 US Census, there were 73,969 dwelling units in the Lakes Region, 63 percent of which were classified as "occupied" and 37 percent "vacant". The results of the build-out analysis using the regional zones described above indicate that a total of 203,776 dwelling units could theoretically exist under full build-out conditions (see Table 2). This suggests that the Lakes Region as a whole has developed 36 percent of its maximum dwelling unit potential under the regional zoning parameters. The same parameters allow for a combined total of 669,856,034 square feet of non-residential developable floor area, however there is no corresponding existing value to provide a comparison.

In 2010, the population of the Lakes Region of New Hampshire was 112,735, approximately 1.52 people per dwelling unit (occupied and vacant). Assuming that the ratio of persons to dwelling units will remain constant, the estimated Lakes Region population under build-out conditions would be 310,572. In November 2013 the New Hampshire Office of Energy and Planning published statewide population projections. These projections indicate a slow growth rate of less than 10 percent over 30 years, reaching 123,940 (40 percent of build-out capacity) by the year 2040.

Implications

In 2010 population density in the Lakes Region was roughly 88 persons per square mile. The population density of individual communities within the region ranged from 14 persons per square mile in Sandwich to 611 in Laconia, with an average density of 109 among the 30 communities. While regional population growth is projected to be slow, the build-out analysis has shown that existing zoning parameters may support a region-wide population density of 243 persons per square mile (176 percent more than the 2010 population), with the majority of dwelling units (60 percent) in rural districts. As growth occurs, it is important to understand its influence on a community and its character. Careful consideration should be given by each municipality to review the appropriateness of their zoning ordinance as it relates to the effects of future growth on infrastructure, mobility, services, natural systems, and quality of life. Adopting ordinances that facilitate development near existing services, or that do not over-burden infrastructure can be a worthwhile investment in a community's future and overall quality of life in the Lakes Region. The Lakes Region Planning Commission offers build-out analysis as a service to communities. The use of municipal-level zoning parameters allows for results that are more locally applicable than the regional model.

Map 1: Generalized Region-wide Zoning for Scenario Purposes

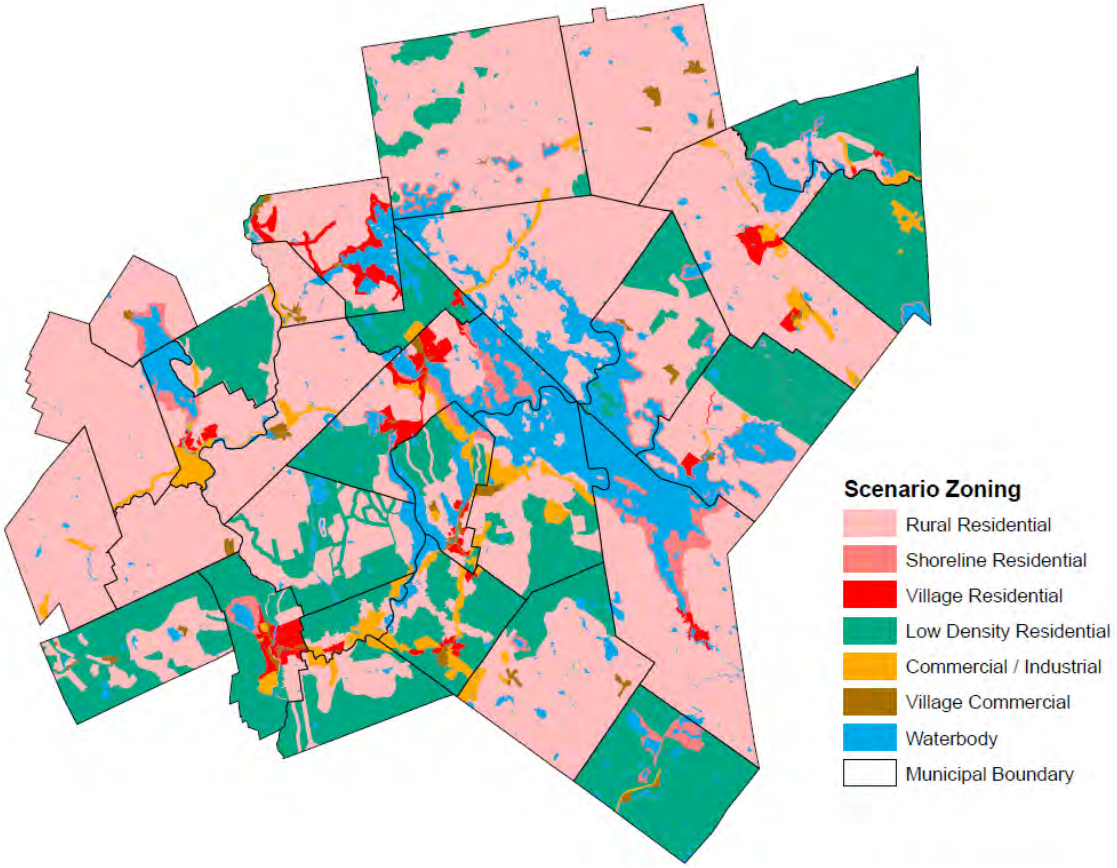

Table 1: Scenario Zoning Parameters

Zone	Minimum Lot Size (ac)	DU per Building	Mixed Use (Res/Com)	Floor Area Ratio	Setback (ft)	Efficiency	Total Area (sq mi)
Rural Residential	3	1	--	--	40	100%	728
Shoreline Residential	1	1	--	--	65	100%	35
Village Residential	0.25	1.5	--	--	30	100%	25
Low Density Residential	10	1	--	--	40	100%	333
Commercial / Industrial	1	0	--	0.75	30	100%	37
Village Commercial	0.25	1.2	30 / 70	0.65	30	100%	10
Waterbody	--	--	--	--	--	--	111

Map 2: Areas of Development Constraints

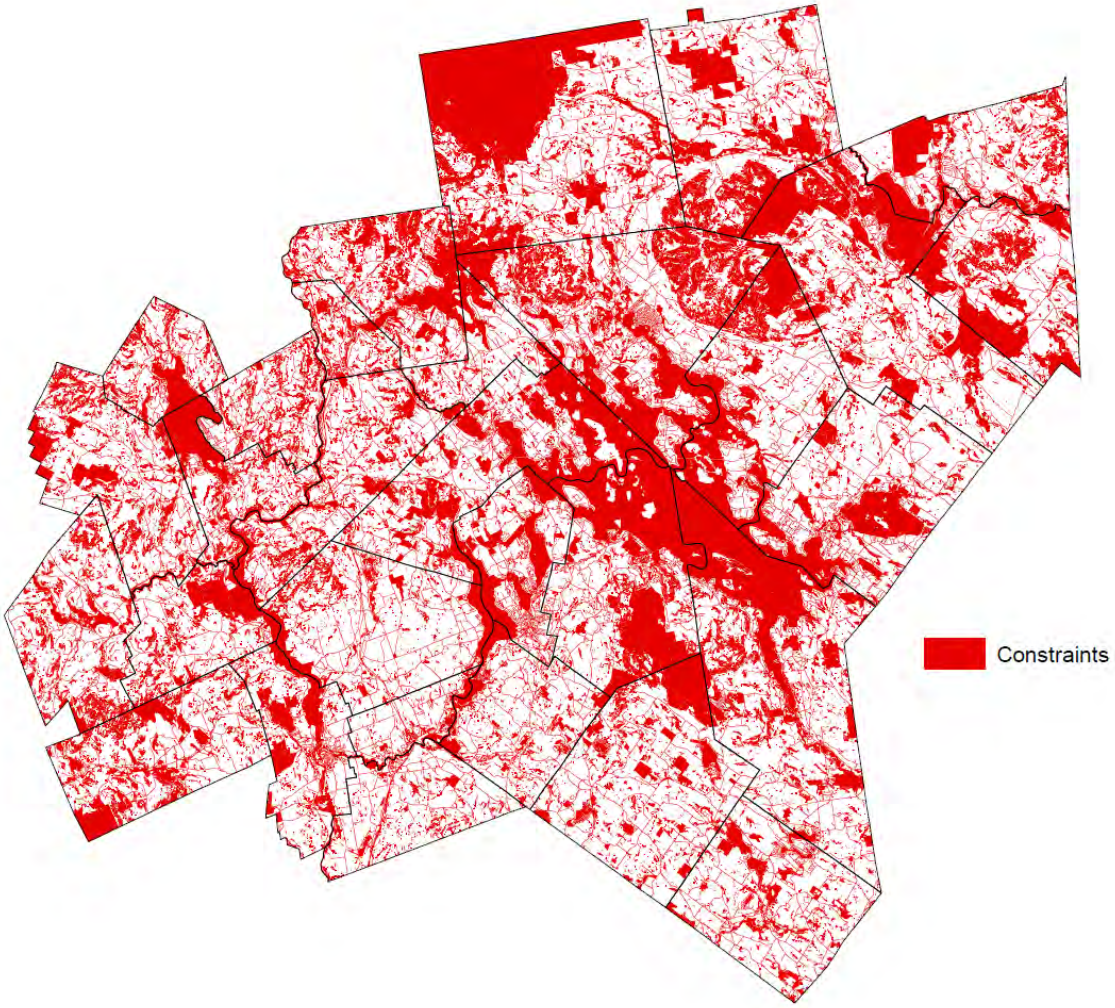

Table 2: Build-Out Dwelling Units and Non-Residential Floor Area Totals by Zone

Zone	Dwelling Units	Non-Residential (sq ft)
Rural Residential	121,853	--
Shoreline Residential	15,710	--
Village Residential	44,082	--
Low Density Residential	16,614	--
Commercial / Industrial	--	578,215,385
Village Commercial	5,517	91,640,649
Total	**203,776**	**669,856,034**

APPENDIX D

LETTER FROM JOHN EDGAR MEREDITH COMMUNITY DEVELOPMENT DIRECTOR

E-mail dated September 24, 2013 from John Edgar to Gerald Coogan:

Hi Gerry,
What follows are a few of my thoughts and observations about planning.

Local people work across political boundaries to identify issues and solve problems. This occurs in Meredith, and most assuredly it occurs throughout the Lakes Region and the State of New Hampshire. Often motivated out of a sense of necessity, vulnerability or a desire to achieve economies of scale, communities of interest voluntarily organize to address common interests. This is part of our DNA as Northern New Englanders. A few local examples:

- **Public Education**: Meredith is a member of a 3-town cooperative school district (Inter-Lakes School District) which includes the towns of Meredith, Center Harbor and Sandwich.
- **Solid Waste**: Meredith has partnered with the Town of Center Harbor to provide residents from both communities with a solid waste transfer station and recycling facility.
- **Mutual Aid**: Meredith participates in three mutual aid organizations (fire, police, public works) recognizing that individual vulnerabilities can be overcome through collective assistance.
- **Emergency Services**: Meredith and three other communities (Center Harbor, Sandwich and Moultonborough) jointly contract with a private vendor for ambulance/ EMT services.
- **Communication**: Meredith is a member of the Lakes Region Cable TV Consortium. The 14-member municipal consortium negotiates a master contract with the cable TV provider on behalf of its members.
- **Public Infrastructure**: Meredith is member of the Winnipesaukee River Basin Program (WRBP). The WRBP is a ten-member entity responsible for a regional sewer collection and treatment system. The other communities include Moultonborough, Center Harbor, Sanbornton, Laconia, Belmont, Tilton, Franklin, Northfield and Gilford.
- **Public Health**: Meredith participates as a member of the Lakes Region Partnership for Public Health (LRPPH). The LRPPH develops strategies to respond to the public health needs of our community. Partners include human service agencies, local and state government, police, fire, educators, businesses, etc.
- **Household Hazardous Waste**. Meredith together with 23 other Lakes Region communities participate in the annual Household Hazardous Waste Collection Day. This annual event is coordinated by the Lakes Region Planning Commission.
- **Municipal Finance.** Meredith is one of twenty-eight communities/school districts that jointly purchase fuel oil resulting in considerable savings to taxpayers. Additionally, the town has pooled a portion of its long term debt with that of 49 other communities to refinance at a more favorable borrowing rate.
- **Land Conservation:** The Meredith Conservation Commission has partnered with the New Hampton Conservation Commission on two occasions to conserve shorefront along

the Snake River located in New Hampton. These parcels afford significant protection to Meredith's public drinking water supply, Lake Waukewan.

Local Planning. Likewise, in a local planning context there are numerous challenges that by their very nature extend beyond the political boundaries of any one community. Communities do not exist in a vacuum. Community planning should consider issues where inter-municipal, sub-regional, regional and intra-regional cooperation serves as a means to advance locally determined interests. Local citizens are best prepared to plan for and meet the challenges facing their respective communities. Local citizens are most directly vested in issues and outcomes. However with local control comes substantial local responsibility. Local planning needs to: (1) reflect the collective interests of the community's, (2) respect the rights of private citizens, (3) reflect upon the longer range consequences of local action or inaction; and (4) consider the whole emphasizing the interrelatedness between plans, plan elements and implementation strategies.

Regional Planning. In New Hampshire, regional plans do not have the force of law. This too is part of our DNA in New Hampshire. The regional plan can and should be a resource available to communities as they develop and implement their own plans and coordinate with other willing communities seeking some level of cross-community horizontal relationship. The regional plan should not represent a challenge to local planning authority, but rather a means to contextualize and inform it. In this light, the regional plan can serve as an important resource (together with other resources) to aid our citizenry in addressing the challenges facing our communities. In doing so, meaningful progress can be made on important broader issues facing communities, the planning regions and the state.

How can regional plans/ the regional planning process be structured so as to assist communities as they develop and implement their own plans and coordinate with one another?

For purposes of this discussion, consider this analogy. We take a hot air balloon ride to photograph our landscape. At our highest elevation the view is broad with considerably context, but lacks detail. As we come down in elevation, the breadth of the view is less, but features and details become much more discernible. As the balloon descends closer to ground elevation, the breadth of the view becomes much more limited, however the detail within this view is sharp, focused and very informative. No one view of the landscape is more important than the other. Together the photographs taken at the three elevations are distinctly different yet afford a continuum of perspective that is transitory and related. As we describe challenges and strategies in the regional plan, we need to provide perspective from two distinctly different elevations. First, the descriptions and strategies should be of sufficient breadth (higher elevation) to effectively convey the regional significance, and in some instances intra-regional significance which in turn will contribute to discussion of vertical relationships of interest to statewide policy-makers. Secondly, and equally important if not more important, the descriptions and strategies should have sufficient depth (lower elevation) to effectively convey opportunities for municipal, inter-municipal or sub-regional consideration.

Participation.

Everyone has the right to opinion, expression and ideological belief. The planning process, however messy must provide meaningful opportunities for constructive engagement with our citizenry, the intended beneficiaries of our plans and plan implementation. This can lead to a

multiplicity of positions that can become difficult to reconcile into a cohesive plan. No one said planning is easy. Identifying shared values, such as the importance of local control over land use matters is foundational. To do otherwise would result in a plan lacking credibility and utility.

Regards,

John C. Edgar, AICP
Community Development Director
Town of Meredith